UN/WIND UN/WOUND

Metaphor, Embodiment, and Meaning-Making in the Digital Age

by

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Abstract

Integrating research on embodiment (Baber, 2022; Lakoff & Johnson, 2003; Shapiro, 2019), memory (Glenberg, 1997), trauma (Culbertson, 1995), new media (McLuhan, 1994), and multiliteracies (Cope & Kalantzis, 2009), this arts-based research explores the use of smartphone technology as a means of embodied artmaking. Using an adapted version of the methodology of artography (Irwin, 2013) based on the practice of paddling, I developed two research-supported artistic practices. The first involved recording myself enacting metaphors I had previously written in my poetry as a means of developing an embodied understanding of the metaphor. The second involved composing poetry orally while engaged physically (running, skating, etc.). The results of these practice came together through the creation of a 24-minute experimental film. I showed this film to a public audience in a classroom I converted into an immersive video installation that included three handmade screens and several atmospheric elements. In this thesis, I discuss the video/event and the artmaking process through four themes, (1) enacting metaphors to facilitate the development of an embodied understanding of those metaphors, (2) instances of the liminal during embodied creative practice, (3) the ways smartphone technology extends perception and memory outside the body, and (4) wonder and the spiritual in the context of embodied artmaking. Integrated through the discussion are propositions (Manning & Massumi, 2014) related to contemporary education and arts-based research.

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Chapter 1: Situating

Before beginning this project, I primarily considered myself a poet. For much of my adult life, poetry has been my main means of safely processing emotional memories. I view my creative work as the process of finding ways to communicate an essence of a memory, emotion, or idea. Deciding on a word, image, or metaphor helps me to make sense of experience, allowing me to develop new understandings that can be integrated into the shifting shape of my life. When I share my work—typically through publishing in literary magazines—others may benefit from connecting with it and using it to make sense of their own experiences. When writing, I am seeking the words/images that make me utter the "quiet internal 'yes'" (Saunders, 2017), the words that resonate with the felt sense of the experience the piece explores. I feel situated, present, and embodied as I create.

Though always feeling the pull toward the creative, I have not always written poetry. For a long time, I did not understand poetry. I enjoyed individual poems but did not feel drawn to engage with the form in my own creative life. Instead, I wrote songs and short stories craving the structure and shape those genres provide. In late 2016, two poems emerged late one night. I was puzzled by these poems—their genesis and significance—and wanted guidance. I reached out to John K. Samson and Christine Fellows who were joint writers in residence (WIR) at Winnipeg Public Library (WPL). I received positive feedback on this work and began to work hard writing poetry, producing dozens of poems over the next couple of months. They introduced me to Jennifer Still, who was the WIR, first at University of Manitoba and then at WPL. Working with Jennifer, I moved closer to finding a poetic voice and developed an early version of a poetry manuscript. I used this manuscript to apply to the Sheldon Oberman Mentorship Program offered through the Manitoba Writers Guild. I was accepted to the program and was mentored by Meira

Cook for six months, receiving intensive feedback and reworking the manuscript. I have continued to add to/play with the manuscript since that time.

The manuscript, currently titled *the shore is the mending site,* is composed of five fictionalized lyric narratives, each set in a different social institution (the hospital, the school, the church, the hockey world, and the family). I envision these individual narratives functioning as stars in a constellation, together creating an outline of the imperfect, often harmful, ways institutions interact with the traumatized and trauma-adjacent individuals who staff them and whom they are meant to serve. By trauma-adjacent individuals, I mean those who butt-up against the trauma of others in various ways, such as within their families, communities, or as a service provider within a formal institution.

In the opening narrative of the manuscript, "trepanning," a young man keeps vigil over his friend who is intubated in the ICU after suffering a traumatic brain injury during a night of partying. In the second narrative, "the education of storm," a girl drifts through a school system unable to meet her needs. In the third narrative, "undone," a child struggles to relearn intimacy after being sexually abused by a religious leader. In the fourth narrative, "top prospect," a highly skilled hockey player crumbles under intense pressure from his father to succeed. In the final narrative, "on the shores of your arteries, in the wreckage of your heart," much remains unsaid as the youngest member of an intensely religious family reckons with familial history, physical and mental illness, and the sudden death of his spiritual father.

Upon reflection, this manuscript project signaled the beginning of me thinking around the ideas, tensions, and questions that I have explored in this thesis. My experiences through this master's program, including engaging with literature in media studies, embodiment, cognition, creativity, metaphor, and arts-based research, prompted me to shift my understanding of literacy,

meaning-making, and technology. In response to these shifts, I began experimenting with new artistic practices to explore and extend some of the same issues and tensions at the heart of *the shore is the mending site.* In this project, using these new practices and forms, I explore memory processing, healing, technology, embodiment, and tensions between the human and the institutional.

Also critical in providing context for this project is my experience as an athlete. I am an experienced paddler and canoe-tripper having spent formative summers between the ages of 16 and 22 at a canoe-tripping summer camp, first volunteering, then eventually working on the four-month staff team. This experience included leading and participating in numerous canoe trips on flat and moving water, some as long as twelve days. Since learning to paddle at camp, I have continued to paddle and canoe-trip on my own, with friends and my partner. I feel most at home and at peace on the shores of a lake or river, resting after a long day on the water. I also played junior hockey and have started marathon running in the last few years. Running and skating have become part of my creative process, using those practices as gateways to embodied creativity. I will discuss links between my experience as a paddler/athlete and the proposed project in the methodology section.

The tension at the heart of much of my previous creative practice was between the human and the institution, (in)forming a lens through which I have viewed the world for almost a decade. This thesis continues the exploration of that tension, extending it into new modes. Integrating research on metaphor, embodiment, creativity, memory, media, and trauma processing, I employed an autoethnographic (Adams et al., 2014), mobile (Boas et al., 2020), artographical (Springgay et al., 2005) methodology through a living inquiry. I approach this living inquiry through an artographical understanding (see Leggo et al., 2011; Snowber, 2016;

Springgay et al., 2005). While my discussion of living inquiry bears similarities to Meyer's (2010) methodology of the same name, I only began engaging with that research orientation near the end of the analysis portion of the research. I discuss the distinctions between the living inquiry in artography and Meyer's research in more detail in the methodology section.

Through this research, I created a 24-minute video installation made up of a series of linked video poems (Tremlett, 2020). This project seeks to extend understandings of embodiment as it relates to education and creativity. It provides an account of my experiences using digital media to make meaning in emerging, experimental forms. This research also makes methodological and theoretical contributions to the field of artography through the presentation and application of a paddling artography and through a deep exploration of the liminal in artographical research. Before discussing my methodology and the artmaking itself, I will provide a review of the relevant literature.

Embodiment

The body, in patriarchal Western thought dating back to Plato, has been presented in dualist contrast to the intellect and thus viewed with suspicion. In this dualist view, the body is the feminine elicitor of irrationality, intensity, and emotionality that threatens the higher masculine realm of detached ideas and logical rationality (Deligiannis, 2018). Work on embodiment in various fields, including neuroscience, recenters the body and explores the ways in which the body is central to human experience (Ellingson, 2017). Unlike some other senses, senses connected to bodily experience, such as touch, kinesthesia, and proprioception, cannot be turned off, making it an omnipresent part of consciousness:

> Unlike vision, hearing, taste, and smell, kinesthesia cannot be closed off or dampened except pathologically: we cannot shut out our kinaesthetically-felt bodies as we can shut

> out vision by closing our eyes, shut out noise by clamping our ears, shut out smells by pinching our nose, shut off tastes by closing our mouths. Our primordial animation is with us from the beginning to the end of our lives, and with it, our kinesthetic sense modality. (Koch et al., 2012, p. 45)

Not only is embodied experience always activated during wakefulness, the body is also an important part of the process of cognition (Shapiro, 2019).

Despite considerable interest in ideas around the importance of the body and embodied understandings of cognition, these ideas have not progressed within the field of education and embodiment remains on the fringes of educational thought. Stoltz (2021), in his introduction to a special issue focusing on embodiment research in education, says: “Education and educational research fails miserably to account for the role of the body and embodiment in educational contexts in suitably informed ways” (p. 2). In my view, by largely ignoring embodiment, the field of education has built walls around important mechanisms of memory, learning, and creativity, limiting possibilities for fulfilment and transformation in the lives of teachers and students and perpetuating a hyper-masculine culture of disembodied rationality.

Embodied Cognition

In his book on the topic, Shapiro (2019) presents embodied cognition in contrast to computational or information processing understandings of cognition, which state that cognition occurs (a) in the brain rather than within the whole organism, (b) before action rather than concurrently with action, (c) and that before action can be taken the brain must first create a mental model of the environment from the sensory information it receives. These understandings of cognition grew in prominence in the 1950s and 1960s when computer technology became more widespread and prominent (Lewandowsky & Farrell, 2011). In this view, the computer is a

general metaphor for the mind, which has coding or programming that function as its rules for cognition or thought. It is a high structured system in which cognition is understood as a stepped process or series of events (Baber, 2022).

In embodied understandings of cognition, the need for a mental model before action is unnecessary. In Baber's (2022) model, cognition occurs (a) within the whole organism, (b) concurrently with action, (c) through dynamic systems interactions between an individual, their environment, and artifacts. Baber, who explores embodied cognition through the lens of design, highlights that a computational approach separates the thinking mind from the world in which it is situated and separates action from perception. Instead, Baber suggests "the brain is for acting rather than representing" (2022, p. 9).

In his overview of the subject, Shapiro (2019) identifies three key themes within embodied cognition research: (1) conceptualization—showing that the concepts an organisms can use to understand its environment depend on its body, (2) replacement—showing that because experience and cognition are continuous, a computational understanding of cognition should be replaced by a dynamic systems theory understanding, and (3) constitution—showing that the body and the world are constituent parts of cognition, rather than simply causal influences on cognition (Shapiro, 2019).

Embodied and computational understandings and approaches to cognition are sometimes presented as fully at odds with one another (Baber, 2022)—that one is wrong and the other is right—however, others suggest that embodied and computational understandings of cognition are complementary and employed depending on a variety of contextual factors including the cognitive task one is trying to complete and the individual engaging in the cognition (Shapiro,

2019). For example, in the complementary approach, computational cognition, relying on mental representations, is seen as necessary for higher-order thinking tasks (Malinin, 2019).

Embodied Metaphor

Metaphors, in which one entity is perceived in terms of another, have been a source of fascination for linguists, poets, philosophers, and psychologists for centuries (Holyoak & Stamenković, 2018). Research into embodied metaphor suggests that "physical human experiences form the basis of a very large number of metaphors, and most, if not all, abstract phenomena are understood through metaphors, many of which are based on bodily experiences" (Littlemore, 2019, p. 2). In fact, the earliest explorations of embodied cognition followed from the study of embodied metaphor (Lakoff, 2014).

Metaphorical thought precedes language learning and can function separately from language (Johnson, 1999). That said, metaphorical thought is central to how language works. This idea is succinctly summarized in what is considered the founding text of the field of metaphor that informs this thesis: "Metaphors as linguistic expressions are possible precisely because there are metaphors in a person's conceptual system" (Lakoff & Johnson, 2003). Lakoff and Johnson suggest that, while conceptual metaphors can vary from culture to culture, the use of conceptual metaphor is central to how humans think. The conceptual metaphors a culture adapts impact behaviour and attitudes. For example, one conceptual metaphor in Western culture is 'time is money.' This conceptual metaphor indicates that time is a limited, valuable resource. This influences how culture is organized. Individuals are paid by the hour, day, week, or year. If you commit a crime, you have a debt to society that you pay with time. It also influences how we think about relationships. Spending time with a friend or partner is often thought of as investing

in the relationship. These behaviours do not exist across culture or history, but they have a powerful impact on how society is organized (Lakoff & Johnson, 2003).

Experimental applied research in embodied metaphors suggests that embodying metaphors can increase one's understanding of the concept the metaphor sets out to explain or illuminate (see Koch et al., 2012; Kolter et al., 2012; Leung et al., 2012). When embodying, enacting, or performing metaphors as I do with various metaphors in UN/WIND UN/WOUND, layers of meanings and understandings may emerge:

> The mover experiences 'being' both the embodied and the abstract meaning of a metaphor by accessing the physical sensation at the same moment as the abstract idea thus consciously experiencing the source domain and the target domain connected in the same instance. (Konopatsch & Payne, 2012, pp. 346–347)

The impact and experience of embodying metaphor is central to this inquiry. The film's through-line is a series of clips of a baseball being unravelled, which is a metaphor from a poem I wrote about processing traumatic memory. Later, I discuss the specific layers of understanding that emerged through the process of enacting or performing metaphors in the concrete world.

Embodied Creativity

One important function of our cognitive system is creativity. Creativity is a broad area of study within the various fields, including neuroscience, embodiment, media studies, and education (Walia, 2019). Creativity has a large number definitions and frameworks depending on context (Hawkins, 2016). For some, being able to adopt diverse approaches to creativity can be seen as a positive (Walia, 2019), while others call for greater standardization within creativity studies (Runco, 2010). That said, most standard definitions of creativity include two non-

negotiable elements for something to be considered creative: originality and effectiveness (Runco & Jaeger, 2012).

As in other fields, embodiment has received less attention in creativity studies than more purely cognitive approaches to creativity (Griffith, 2021). Despite this, a growing body of research is drawing attention to the need to shift understandings of creativity as an embodied practice and skill (see Frith et al., 2020 for a review of the research). Though embodied understandings of cognition are supported in the literature, they have yet to be widely incorporated into educational practice or settings (Malinin, 2019).

Baber (2022) distinguishes between computational and embodied approaches to creativity. Within a computational, brain-centered understanding of creativity, before engaging in creativity or design, one first must have developed a clear representation or mental model of their final goals or product. Contrarily, in embodied creativity, one does not have a fully formed set end goal that they are hoping to create. Instead, the creative process involves engaging with the environment and artifacts with certain acceptability criterion in mind and allowing powerful creative work to occur within this dynamic system: “The views can be distinguished by their focus on ‘world-in-the-mind’ versus ‘mind-in-the-world’” (Baber, 2022, p. 27).

To provide an example in the context of English Language Arts, a computational approach to creativity would follow a staged writing process that is often taught in schools through the framework of the 6-step writing process. I personally had this process posted in my classroom for a few years early in my career. By strictly delineating between prewriting, planning, drafting, revising, editing, and publishing, we close the door to more organic, emergent forms of creation and operate from a computational understanding of cognition. Despite the widespread use of the 6-step writing process, it does not align with the experiences of working

artists, including my own experiences with creativity. Furthermore, emerging research on effective writing instruction suggests that more organic, recursive, emergent processes should be incorporated into practice (Young & Ferguson, 2020).

Some research in the field of embodied creativity focuses specifically on movement and motion as being especially interconnected with creativity, including walking (Oppezzo & Schwartz, 2014), dance (Winther, 2012), running (Koski, 2015), among other forms of movement. As I was planning and beginning work on this project, I was drawn to handheld digital technology as a tool for making the creative process embodied, mobile, and accessible, and thus, an organic part of a living inquiry. The idea of a living inquiry is central to artographical research:

> To render research is to commit to living inquiry through text and visual images. So too, the roles of artist, researcher, and teacher must become active processes and practices of living a life deeply. Deep inquiry into our lives requires a/r/tographers [sic] to make meaning through their senses, bodies, minds, and emotions. It is a research process that is fluid, uncertain, and temporal. (Springgay et al., 2005, p. 908)

In this framework, the research is not separate from the researcher or cordoned off in cognitive realms of the self. Instead, embodiment is understood as an essential prerequisite to the work of artography: “It is our embodiment that gives us the capacity to engage in art making, researching, teaching, and other aspects of our daily life. It is our embodied selves that elicit ethical relationships and provide access to the diverse ways of meaning making” (La Jevic & Springgay, 2008). In this research, I have developed embodied artmaking practices that employ movement and exercise to create from embodied states. By creating while engaged in intense exercise, I seek to quiet the internal editor and connect to body memory. By enacting or

performing metaphors, I hope to extend the weight and impact of those metaphors, deepening understandings for both me and audiences.

Memory

Memory is central to education. Curriculum can be understood as the skills, knowledge, values, theories, and processes that the public education system—an institutional arm of larger governmental and societal organization—wants children to remember into their future (Bellino & Williams, 2017), a process Gifford (2011) criticizes calling it:

> political and sterile…the phrase 'need to know" suggests content (a few pounds of physics, an ounce or two of poetry, and plenty of computer time) when what they really need are the verbal and mapmaking skills that form the basis and textures of human memory. (p. 48)

Put another way, curriculum outlines not only the knowledge and skills a society values, but also deeply influences those who operate within institutions and are acted upon by institutions. Curriculum provides a codified lens through which individuals make sense of experience. Because the curriculum is designed by those with power, it has been argued that it typically solidifies existing power imbalances and social injustice (Apple, 2018). Failing to consciously, intentionally address that codified lens, as is often the case, causes the default mode of operating to continue.

While the school is a place of memory development, it is also a gathering place attended and staffed by students and teachers, each carrying a lifetime's worth of memories that underlie every interaction. These memories span the emotional spectrum, from the intensely positive, to the mundane, to the intensely negative:

> I'm often overwhelmed when I pause and allow myself to feel the enormity of human experience in classrooms. How can one room possibly contain it all? The joys, sorrows, open-armed greetings, and hard good-byes. So much love and disappointment. The presences and absences of so many people and places. So much pain inflicted, by others and the systems they build, nearby, far away, known and seen, or hidden from view. The hovering pasts, both haunting and comforting; the apparitional futures, shimmering with promise of beauty and threat of disaster. How can one space hold all the important tiny, mundane, and extraordinary stories of lives? The walls should burst. The windows should shatter. (Dutro, 2019, p. 2)

I use the word 'carried' to communicate how memories exist corporeally. Like most human endeavors, memory can be understood as an embodied phenomenon (Glenberg, 1997; Riva, 2018; Skillman, 2013). Body memory exists in different forms. Fuchs (2012) has developed a framework to explain the phenomenon of body memory, identifying five categories of body memory. They are: (1) procedural body memory, which refers to skill memory for motor processes such as riding a bike; (2) situational body memory, which refers to familiarity with interior and exterior spaces; (3) intercorporeal body memory, which refers to an internalized way of knowing how to deal with others; (4) incorporative body memory, which refers to adopting familial and cultural habits such as poses and gender roles; and (5) traumatic body memory, which refers to intensely painful (physical or psychological) experiences that are stored in the body.

Understanding how memories, and especially intensely emotional memories, are connected to bodily experience is important to understanding the experience of being a human in the educational institution. Glenberg (1997), a key figure in the field of embodied memory,

pushes back against disembodied understandings of memory that commonly model human memory after the memory systems that operate within computers. Instead of this retrieval-based understanding, he promotes an embodied understanding of memory in which individuals internalize or adapt patterns of action based on their experiences. New experiences mesh with previously embodied patterns, adding layers of meaning to their understanding of the world and informing their approach to living (Glenberg, 1997).

The idea of embodied memory has been taken up by various fields including neuroscience (Riva, 2018), psychotherapy (Leuzinger-Bohleber & Pfeifer, 2002), literary studies (Skillman, 2013), education (Nathan, 2022; Stolz, 2021), and in the study of various artistic practices (Dennis et al., 2022; Snowber, 2016). In this understanding, "memory is not to be conceived as stored structures but as a function of the whole organism, as a complex, dynamic, recategorizing, and interactive process, which is always 'embodied'" (Leuzinger-Bohleber, 2019, p. xxxviii). Collections or fragments of these embodied memories are accessed during the recalling process and placed together in a process that has been compared to dreaming (Engel, 1999). One's life story can be understood as the way these fragments combine together into a narrative (Marles, 2015). In another understanding, Gifford (2011), exploring the intersection of memory, consciousness, and time, adopts water metaphors as he attempts to understand memory:

> Awash in memory, in its multi-channeled, riverine behavior, its rapids and deep pools, its eddies and backwaters; the flow of its current, the odd ways it has of floating things to the surface or carrying them under—sometimes with the feeling that the flotations and disappearances are from the body and the surround as well as from the "in here" of the brain case. Aqueous and especially riverine metaphors have come to dominate my summer thinking about memory. (p. 20)

The rich connections Gifford makes between remembering and water resonate throughout this work.

Another element of embodied memory that connects to the artmaking I undertook through this thesis relates to research done by arts practitioners and movement-based therapists exploring connections between movement and memory. This work suggests that "Memories can be triggered through a certain movement, a body position, at other times a memory can be the initial impulse to move. Either way, the cognitive recollection is connected to the body experience" (Konopatsch & Payne, 2012, p. 346). In one example, a participant, through the act of holding their own hand, became connected to a memory of holding their late aunt's hand and experience or process the emotions around that memory and the death of their aunt through improvised movement (Konopatsch & Payne, 2012). This research is very similar in scope and design to the research exploring metaphor embodiment discussed above. These findings point to deep connections between physical experience in the concrete world unlocking new ways of understanding experience.

Affect Theory

The deep connections between affect, literacy education, and meaning making is a burgeoning field of educational research. Within this field, "affect theorists are concerned with energy of contact as things come together—they work the conjunction 'and.' At the site of this conjunction—this coming-together—are raw flows of undifferentiated energy or intensities" (Leander & Ehret, 2019, p. 5). More than simply centering the emotional within education, affect theorists are uncomfortable with the typically constructivist approach to emotion which seeks to provide a clear representational description or summation of the felt sense of an intense moment, experience, or exchange. Much of the work in affect theory in literacy takes the form of

evocative writing that gives context and provides details of an encounter in an attempt to communicate, acknowledge, and value intensely evocative and powerful nature of literacy events (Ehret, 2018).

While I find some of the discussions around traditional literacy curriculum within affect theory to be unnecessarily dismissive, I do resonate with the need for literacy education to begin valuing the affective encounters that can emerge when educators open themselves and their pedagogy to the emergence of intensities that transcend standard curriculum. I have felt such intensities throughout my career, notably when teaching the end of *The Road* by Cormac McCarthy (2007) in the week after returning from the bereavement leave followed the sudden death of my father.

Through the exploration of affective moments and intensities, affect theory also explores the place of trauma within literacy education. Before continuing, I want to take a quick detour to discuss terminology. The term ‘trauma’ traces its origins to the Greek word for wound and has different uses depending on context (Parnes et al., 2020). For example, in the DSM-V, the term trauma is reserved for extreme events such as death, death threats, serious injury, or sexual violence, whether experienced or witnessed (American Psychological Association, 2022). Elizabeth Dutro, one of the leading contributors to the ongoing discussion around trauma in literacy research in education, uses the term ‘trauma’ almost interchangeably with ‘difficult experiences,’ ‘the difficult,’ and other similar terms (Dutro, 2011, 2019). In this project, I will follow Dutro’s example of using the term ‘trauma’ to mean a difficult experience that an individual understands to be wounding and will use other terms besides ‘trauma’ as is appropriate and to add variety for the reader.

While acknowledging discussions of trauma in the classroom need to be undertaken with a sense of great care, Dutro (2011) believes it is better to witness than to not witness because those experiences need to be processed. Ehret and Rowsell (2021), in their introduction to their recent special issue on affect and literacy education, highlight the ways welcoming affect into the literacy classroom is a way of letting go of the need to always be in control (p. 201). Examining the importance of affect for literacy teachers, Gannon and Davies (2007) conclude "that the pedagogical encounter—whether mediated by persons, texts or tasks—is deeply affective, fraught with emotion and fuelled by passion" (p. 97). The desire for control and fear around handling difficult experiences are understandable as engaging in the affective is difficult and intense.

In the realm of arts-based education research, researcher George Belliveau (2018) has explored the nature of traumatic memories in their play *Brother*, which centers on their brother's death. In *Brother*, they outline the ways in which traumatic memories surface at unexpected times. They talk about the genre of memory plays and how such plays can impact performers and playwrights:

> In the face of crisis, playwrights, and sometimes actors, can use memory plays as a form of psychological recovery from trauma. In a theatric retelling, artists can look back at what happened, contextualizing the traumatic events within their life story while using creative expression as a form of coping and healing. (p. 129)

These memory plays are not only impactful on the creators and performer of the plays, but they can also work on the audience, revealing to them the ways in which individuals process, cope with, and come to understand traumatic memories:

> Audiences who witness memory plays (whether performed by the playwrights themselves or not) are brought into a dynamic interplay between past and present, seeing both the historical trauma and the way that individuals cope in the present and try to move forward. Within this interplay of time and space, audiences make meaning and often experience a measure of catharsis. Witnessing others live and overcome trauma allows a release, a letting go of what audiences might be holding on to as they enter the theatre. (pp. 137-138)

There are strong connections between traumatic experience and bodily experience and arts-based research has explored the experience of traumatic memory directly. In the upcoming sections, I move closer to personal experience as I discuss specifically traumatic memory related to childhood sexual abuse.

Processing Memories of Childhood Sexual Abuse

Sexuality in schools, including discussions around sexual orientation and gender expression, are areas of great conflict and debate in public discourse that contribute to the culture of silence around sexuality within the education system (Pakuła, 2021). Sexuality is often viewed through the lens of risk, with threats of sexual violence, unplanned pregnancy, and sexually transmitted infections dominating discussions of sexuality in schools (Gilbert, 2014). Wrapped up in idealized constructs of childhood innocence and purity, in which children and adolescents are presented as devoid of sexuality, there is a culture where “talking with children and youth about sex is a reckless act, comparable to engaging in sexual activity” (Fields et al., 2015, p. 379). In this context, there are many challenges to having discussions around sexuality and childhood sexual abuse (CSA) within schools. This project, with its arts-based, autoethnographic design occurs within this context. According to Gilbert, the story of schools and sexuality is

"unruly, uncertain, and confused" (2016, p. 115) and therefore researchers on the topic, would do well "to remember that our view of schools are tied to our histories of being schooled … and to recognise that the everyday practices of the school exceed our capacity to understand and represent" (2016, p. 115).

It is difficult to know with confidence the prevalence of CSA because so many victims do not come forward (Collin-Vézina et al., 2015). Conservative estimates are that at least 1 in 10 Canadians are sexually abused as children (Afifi et al., 2014). Despite these rates, a culture of silence around CSA and sexuality generally remains within educational institutions (Engh Kraft et al., 2017; Pryer, 2005; Rockhill, 1986).

In response to this silence, Kathy Rockhill (1986) spoke to a room full of scholars and educators at the Ontario Institute for Studies in Education about her own experiences with CSA. Discussing her decision to disclose her experiences with CSA, she says:

> It is only as I have finally found the courage to refuse to walk the split that the academic world imposes upon the life I live, that I have begun, however painfully and haltingly to find my voice again …. We need to learn ways of thinking about how to integrate the personal and the political, the emotional and the intellectual, in relation to consciousness raising. Without this we can read texts that never touch us, that we can say apply to others and claim that in some way we have remained free from the impact of ideology and social regulation. So, we might write an academic treatise on the personal as political and not experience its meaning in our bodies, and our gut and in our hearts. (Rockhill, 1986)

I resonate with the phrase 'walking the split.' Institutional pressures to divide personal experience from institutional experience are pressures that stop people from saying

uncomfortable truths. This happened in my own experience as a lifelong member of institutions: all of which have had policies around CSA, none of which, in my experience, have talked about that issue in ways that acknowledges the emotional and spiritual impact of the experience, which I have interpreted as choosing controlled silence over the uncontrollability of listening and acknowledgment.

Alison Pryer (2005), an arts-based researcher who completed her PhD in the early days of Artography at UBC, builds on Rockhill's work by writing about her own experiences as a teacher who had been sexually abused as a child. She examines the culture of silence around sexuality and CSA in the school system which "signaled [me] to keep this embodied knowledge, which has so fundamentally shaped my life and my personal sense of being, to myself" (Pryer, 2005, p. 55). In her autoethnographic writing, she highlights the ways the culture of silence perpetuated her shame related to the abuse she endured.

Silence is indeed a major part of living in the aftermath of CSA. 55%-69% of CSA survivors do not disclose their abuse until adulthood (Collin-Vézina et al., 2015). It takes, on average, between 17.2 and 21.4 years for individuals to disclose their abuse (Easton et al., 2014). There are also major discrepancies between rates of CSA gathered from formal data and rates gathered from self-reported data: "While 1 out of 8 people retrospectively report having experienced CSA, official incidence estimates indicate only 1 per 250 children" (Alaggia et al., 2019). Alaggia et al. (2019), reviewed the literature around the barriers and facilitators of CSA disclosure, identifying five themes: (1) disclosing abuse is a process, not a discrete event; (2) disclosure is best understood using a social-ecological model that includes barriers and facilitators; (3) age and gender factor into disclosure, with adults being more likely to disclose than children and men facing more barriers to disclosure than women; (4) data gathered around

CSA disclosure is missing a full-life course perspective, with few studies examining how disclosure works across the life of a survivor; (5) there is more understood about the barriers to disclosure than the facilitators of disclosure.

Looking specifically at barriers of disclosure for men, Easton et al. (2014) identify three disclosure barrier domains: (1) sociopolitical, (2) personal, and (3) interpersonal. Within the sociopolitical domain, issues related to masculinity and having limited resources required to understand the abuse were identified. Within the personal domain, internal emotions such as shame and guilt, lacking the language to name the experience, and confusion over sexual orientation were identified. Within the interpersonal domain, mistrust of others, fears of being labeled as gay, intimidation by the abuser, seeking to protect others from the abuse, and a history of negative responses were identified.

Given the low rates of CSA disclosure in childhood, the reality is that many of our classrooms contain children who have been sexually abused and who have not told anyone about it. Delayed disclosure is a major problem because it prevents children from accessing help and supports and leaves them without opportunities to process the abuse, to make sense of it and integrate it into their personal narratives. This lack of processing and integration could explain the many mental and physical health problems that are likely to accompany victimization (Alaggia et al., 2019).

Returning to Pryer's (2005) autoethnographic research on her experience of CSA, beyond exploring the effects of this silence on her psyche both as a child and as an educator, she also outlines the ways patriarchal institutions enforce codes of silence and erasure when it comes to CSA. Despite institutional attempts to erase and silence the trauma, trauma is constantly surfacing in the embodied memories of individuals within the institution. She discusses this

phenomenon in both educational and familial institutions. In the wake of this surfacing, according to Pryer, survivors often undertake the complex challenge of meaning-making through spiritual, philosophical, and, ultimately, pedagogical means. She calls for a pedagogy based on the poetics of peace, a peace that is elusive to many survivors of CSA:

> By re-imagining pedagogy as a poetics of peace, we—educators and students, including those who have been sexually abused—can begin to befriend our estranged selves through meaning making. Such a practice can help us overcome our sense of loneliness, separation, and division. Survivors of childhood violence and sexual abuse bear both wounds and hidden gifts for our society. For they—we—do indeed know devastation. (p. 72)

The code of silence discussed by Pryer (2005) and Rockhill (1986) also applies to those to whom CSA is disclosed. The literature shows that help providers often avoid addressing CSA (Engh Kraft et al., 2017), fail to report their suspicions (Goldman & Padayachi, 2005), and lack knowledge around reporting procedures (McKee & Dillenburger, 2012). Furthermore, there can be an instinct to pull away or withdraw when faced with a CSA disclosure: “Educators who deal with CSA disclosure, feel alone on all fronts: with the children, with their parents, with officials, with welfare and enforcement agencies, and finally loneliness in their own lives” (Tener & Sigad, 2019, p. 106).

In response to this silence, I wanted to answer the call put out by Pryer (2005) and Rockhill (1986) and invite my experiences with CSA into my work as a researcher. This thesis reflects an understanding of disclosure as an ongoing process across the life-course rather than a discrete event (Brazelton, 2015). Prior to beginning this project, I used my creative work to

explore the experience of carrying and processing traumatic memories through various institutions that can be silencing, as exemplified in this poem:

I the prey

he prays before dinner
my protectors close their eyes
nod along
murmur assent

we lock eyes
in the silence
I swallow
look down

god grant some place safe
he's not allowed
a shielded bay
light chop
morning light of june
safe on my father's shoulders
running my fingers
through the trembling
leaves of the poplar

no one checking
if I'm clapping along
to the songs
about faithfulness (Cain, 2020a)

This thesis extends this exploration of traumatic memory and CSA. Unlike my previous work, I do not deal with CSA directly. Instead, I focus on the idea of processing traumatic memory and finding metaphors of healing and finding a new self.

Creative Work Exploring Embodied Traumatic Memory

Traumatic memories are especially felt and carried in the body because the body sense cannot be turned off (Rifkin, 2020). The idea of traumatic memory being stored in the body has recently received mainstream attention, largely due to the publication of Bessel Von Kolk's

seminal work of popular psychology *The Body Keeps the Score* (2015). This work culminates decades of his scholarly research on the issue, though it is not without its critics, notably Richard McNally (2003) who finds many of Van Der Kolk's claims about trauma and the body to be unsubstantiated and based on a selective interpretation of the research in the field.

Phenomenological research also explores how traumatic memories live in the body (Casey, 2009) and how they surface at unexpected times:

> Such memories, it seems, possess an energy of flow that leads to their movement from whatever locked places, whatever traumatized neural pathways they inhabit, into the interstices of the everyday: in the moments of daydream, of highway hypnosis, into the open field of images before sleep, into dreams themselves. (Culbertson, 1995, p. 175)

Culbertson, through examining others' trauma narratives and her own experiences with prolonged childhood sexual abuse, explains how, in traumatic memories, time is "wild and skewed" and experiences include "other levels of reality, sensed not even by the five senses, but by the body itself, or by the spiritual mind, the interior of the body" (Culbertson, 1995, p. 176). Telling traumatic memories is important as it re-establishes the social dimension of the self lost during violation. It is also challenging because such memories are typically without language, meaning that, in the telling, the teller must replace "the protolanguage of violation, the voiced cries of anguish, with words heard and understood" (Culbertson, 1995, p. 179). This finding of the words, or *telling*, can be understood as disembodying the memories, taking away their power and allowing the teller to rejoin their community. The telling can be especially challenging when the trauma was experienced by a child because children have less language than adults to understand the experience which, as discussed in the section of CSA disclosure, can serve as a barrier to disclosure. Further complicating the matter, is being situated in a child's body when

the violation occurs. The differences between the adult body of the teller and the child body of the experience creates complications. This new, different body makes it difficult to remember the experience with clarity. Exploring her own process of telling, Culbertson acknowledges that the narratives she makes of her traumatic experiences are best understood as constructed by her adult self. They are not faithful tellings of what happened from the child's perspective, with the focus on the *then* of the violation. Culbertson instead focuses on the *now* by finding a third story, featuring a non-existent, all-knowing observer/narrator who functions as a new self for the narrative, who while fictional, bears markers of a real being, suggesting the possibility of rebirth: "The survivor survives twice: survives the violation; and survives the death that follows it, reborn as a new person, the one who tells the story. Hence the compulsion to tell" (Culbertson, 1995, p. 191).

I resonated with Culbertson's phenomenological account of telling childhood trauma, finding that writing through traumatic memories from childhood gave language and precision to some of my own experiences, including poems included in UN/WIND UN/WOUND. Reading Culbertson's and others' accounts (Pryer, 2010; Wissman & Wiseman, 2011) of the telling process, experimenting with—and learning about—videopoetry (Tremlett, 2020) (a genre I will discuss later in this proposal), and further reflecting on my experiences led me to further explore the metaphors at the heart of my writing about traumatic experiences and transpose them into new modes.

Memory Reconsolidation

Transformational change in the wake of trauma has been shown to be possible. One theory for explaining and understanding transformation in the wake of trauma is memory reconsolidation (Ecker et al., 2022). Memory reconsolidation integrates relatively recent findings

from neuroscience related to emotional learning with observations from therapeutic practice about the process of change. Memory reconsolidation can be used to understand the powerful transformational work that occurs in various fields of therapy, including, but not limited to, coherence therapy, emotional-focused therapy, eye movement desensitization and reprocessing therapy, and accelerated experiential dynamic psychotherapy (Welling, 2012). In the work supported by memory reconsolidation, those seeking change, with assistance and support, attend to autobiographical memories, semantic structures, and emotional responses (Lane et al., 2015). Out of the theory of memory reconsolidation comes a hypothesis of a common principle for change: "The essence of this principle seems to be to bring about the activation of a negative (problematic) emotional state followed by the activation of a positive (adaptive) emotional state(s)" (Welling, 2012, p. 123). Central to the work of memory reconsolidation and change is the activation of difficult memories so that new emotional learning can replace what was originally learned in the wake of that event, rather than simply develop alongside them. It is the elimination of the original maladaptive emotional learning that occurred in the immediate aftermath of the event that is transformative. The autobiographical specifics of the event do not change, but the emotional learning attached to the event and view of self generated as a result of the emotional learning are replaced by more adaptive understandings and self-concepts (Ecker et al., 2022).

The artistic practices that I developed and engaged in through this process can be understood through the process of memory reconsolidation. They include activating difficult or traumatic memories that had been accompanied by maladaptive emotional learning followed by creative engagement that seeks to develop new narratives and understandings of those events or memories. Language and imagery that emerged through these art practices was originally

developed through engaging with emotionally focused therapy, which as mentioned above, can be understood through memory reconsolidation.

New Media and Multiliteracies

Marshal McLuhan (1994) discusses how societies respond to, and are changed by, new technologies and media. In his seminal work *Understanding Media*, originally published in 1964, McLuhan discusses how various technology, including the printing press, the radio, the film, and the television, have extended consciousness outside the body and altered the ratios between our different sensory apparatuses. In it, he also discusses the implications changes in media will have within education:

> The American stake in literacy as a technology of uniformity applied to every level of education, government, industry, and social life is totally threated by the electric technology. … We are numb, deaf, blind, and mute about its encounter with the Gutenberg technology. (McLuhan, 1994, pp. 17–18)

It is important to note here that McLuhan does not suggest that books or writing will cease to exist to be important. Rather, he says that the book will lose its monopoly on communication and information as other forms of media rise in prominence.

McLuhan is far from a careful writer and much of what he wrote and presented does not stand up to scrutiny (Gushue, 1969). Still, his work is incredibly influential and many of the topics and ideas that he introduces feel to have particular impact in the current technological landscape. The smartphone has accelerated society's transition into the digital age. Book and print technology and media still matter, but they continue to be overtaken by new, emerging media and forms.

Despite the controversies, interest in McLuhan in the context of education has been ongoing (Dowd, 2018). McLuhan wrote extensively about education through his career, exploring how emerging electric media should change education (Gushue, 1969). The changes he suggests are grounded in a vision of education in which the classroom walls are no longer the containers of learning. He connects the design, layout, and composition of 20th century classrooms to the monopoly of the book. He traces this design back to changes in the classroom that occurred in the years following the advent of the printing press. Then, books contained within classrooms were seen as having a monopoly on valuable information, and thus learning needed to occur within a classroom. Through the transition to the electric—and now digital—age, that monopoly has ended, and structural, systemic change is needed to respond:

> Our schools are still arranged on the assumption that serious information is not available until the student reaches the classroom. For the child who lives in an environment constituted by information, such educational assumptions are unrealistic. Today the child, swamped by information overload, desperately needs to be taught the means of pattern-recognition for the sake of psychic survival. (McLuhan, 1970, p. 201)

In a documentary on the future of education (Conant, 1964), McLuhan moves beyond discussing the necessity for change and outlines strategies for change, as well as barriers to that change occurring. New media needs to be integrated into classrooms in new ways, not simply as a means of communicating information in old ways, for example showing a video of a teacher instructing in front of a faceless classroom. He likens this to the earliest motorcars being set up as horseless carriages, many of them even having storage space for whips and bridles. Adapting and integrating new forms of media, according to McLuhan, allows for learning in a more sensorially

complete manner, allowing the child's poetic experience of the world to remain unfettered by the over-visual, prosaic world of adulthood:

> An adult tends to view the world too visually to understand its poetry. A child enjoys it through all its senses: synaesthetically, through total involvement. Any situation that you enjoy through deep involvement with all your senses becomes a poetic situation…. The worm's eye view is the most involving. (Mcluhan in Conant, 1964)

This poetic, integrated view, McLuhan contends, is threatening to the specialists who make decisions within education whose status is dependent on keeping learning compartmentalized (Conant, 1964).

The title of McLuhan's final book *City as Classroom* (McLuhan et al., 1977), serves as succinct summation of his thoughts on education. Structured as an inquiry-based workbook, with exercises for teachers to give their students, it provides a series of practices he developed for education in the electric age. These exercises are designed to train students' perception, bring students into the community and prompt them to question the institutional infrastructure and architecture in which they are required to learn. Analyzing *City as Classroom* through the lens of critical media studies, Mason (2016) suggests that the practices therein could provide students with a more embodied understanding of the nuances of critical media literacy, grounded, not only in a "cognitivist conception of agency" (p. 94) , but also reflecting the notion that "most thinking is unconscious and intimately connected to sensory perceptions and bodily practices" (p. 94). Because McLuhan died before the invention of the personal computer and the modern internet, he was not able to write about how education should respond to more contemporary technology (Levinson, 1999).

Compelling work has been done examining students' use of handheld digital technology for text creation and how it can facilitate the creation of meaningful texts in various literacy settings (see Ehret & Hollett, 2014, 2014; Honeyford, 2013, 2019; Vasudevan, 2010). This research is part of the project of multiliteracies (Cope & Kalantzis, 2009), which seeks to expand definitions of literacy—and the practice of literacy teaching—to include other forms of meaning-making besides written language and adapt to the fast-changing landscape of media and technology. This is important because different modalities will reveal different layers of meaning on any give subject or inquiry topic:

> Meaning expressed in one mode cannot be directly and completely translated into another. The movie can never be the same as the novel. The image can never do the same thing as the description of a scene in language. The parallelism allows the same thing to be depicted in different modes, but the meaning is never quite the same. (Cope & Kalantzis, 2009, p. 180)

The research and artmaking practices I engaged in for the project—the creation of experimental videopoems using improvised audio composed while in motion and embodying metaphors—expands the creative work I began prior to this project. It takes my previous writing practice and products and transposes them into different modalities to explore what layers of meaning will emerge. Through this artographical thesis, I document or map my experience of experimenting with material, digital, and embodied forms of meaning-making, forms of meaning-making that the field of multiliteracies is hoping will be integrated by classroom teachers, such as myself.

Handheld digital technology facilitates embodiment in meaning-making because it can be so effectively marshalled on the move. These devices allow one to record audiovisual materials that are suitable for impactful digital artmaking, including beautiful scenery; poignant images;

audio remembrances of dreams, ideas, and experiences; and improvised texts. Instead of needing to consciously shift between constructs of artist/researcher/teacher, the handheld digital device, when marshalled mindfully, can make it easier for the artographer to live in the interstitial spaces among their roles.

Digital Memory and the Kino-Eye

Equipped with high-quality cameras and microphones and having massive memory capacity, the smartphone sees, hears, and remembers on our behalf. With the smartphone, parts of our sensory and remembering apparatus exist without rather than within. Through this arts-based research, I created a film exploring my own embodied memories using video and audio footage recorded almost exclusively on my smartphone. The presence of handheld devices able to record digital media, including sound, still images, and video are a given in contemporary life. These devices have memories of their own, which are quantifiable—my cell phone, which sits on the table as I write this, has a memory of 128 gigabytes. These devices are commonly connected to ‘a cloud,’ a server that allows information to be stored remotely and accessed using the internet—my wife and I share two terabytes of cloud storage, on which we store tens of thousands of still photographs and weeks’ worth of video footage. Compare this to the few VHS tapes of home videos and dozen or so photo albums/manila envelopes in which my parents stored the remembrances of their lives.

Technology has been used to aid remembering since even before the advent of writing, including markings on stones and skins, cave paintings, wax tablets, and knotted ropes (Moss, 2018). Tensions and differences between digital memory and human memory have been explored in the literature since the rise of personal computers, with some of the early literature concerned that disembodied nature of digital memory would cause individuals to avoid the

sometimes painful process of remembering and embrace the shallow lightness that can come from disregarding or ignoring the past (Casey, 2009). The changes digital memory and media are having on human memory and perception are happening whether we want them to or not. The past, in all its messiness, is easier to access and thus more concretely part of human experience in the now: “There was no time for reflection on the cost-benefit ratio of living in a digital society before we were irretrievably connected, before the past had attached itself as our omnipresent shadow” (Hoskins, 2018, p. 5).

This omnipresent shadow has brought with it a new way of seeing, a new way of perceiving the world:

> Every picture snapped to guard against memory loss, every camera held above one’s head to compensate for what is experienced but not seen, contribute to these new ways of seeing. We are all part of a collective ‘I’ and ‘eye’, […] an ‘optical prosthetic’ that conflates our vision with the camera operator. (Bay-Cheng, 2017, p. 338)

In response to the contemporary ubiquity of digital media, its connections to memory, the new human dilemma of navigating this space, Pogačar has coined the term ‘memonautica’:

> Navigation among memories can, complementarily, be seen as charting a sea of memories—an endeavour I call memonautica. This term alludes to the navigatory metaphoricity entailed in the term ‘surfing the internet’ and indeed in the practice of social activity online: it invokes the aspect of navigation (Gr. kybernetes), moving (and being moved), circulating, floating, amid the versatility of liminalities. Crucially, in relation to the politics of memory and practices of remembering in digital media, memonautica implies that the ‘sea’ we are charting is never calm or still. Rather, it is

> constantly changing and shifting, revealing and submerging reefs and ports of memory. (Pogačar, 2018, p. 5)

Pogačar discusses how society's shift to using audiovisual media to represent the past over concrete objects—for example a posted picture of a childhood toy rather than the toy itself—removes the memory held by the toy from the decaying realities of time, stripping the past of "chronicity" (Pogačar, 2016, p. 31) and leading to a phenomenon he calls the "extended now" (Pogačar, 2016, p. 32). According to Pogačar, this extended now, in which the past is increasingly present and the focus of attention, is partly a result of the difficulty of imagining a hopeful future in the current socio-political paradigm. He points to the need for grassroots storytelling initiatives that creatively explore digital media and memory to disrupt the default modes of communication presented by institutionalized social media platforms (Pogačar, 2016). This thesis, with its use of digital media and focus on memory, fits into this framework. For example, while I shot footage vertically the preferred format of popular social platforms TikTok and Instagram, rather than horizontally, the content and style of the videos are atypical for those spaces. While the terms portrait and landscape have been traditionally used to discuss the orientation of photos, video shot in the 9:16 aspect ratio are commonly referred to using the term vertical (Digiday, 2015; McFarland, 2021). Through this project, I hope to disrupt the abovementioned default modes of the major social media platforms.

Returning to Bay-Cheng's suggestion that the camera operates as an 'optical prosthetic,' allowing one to see what their own eyes cannot (the example Bay-Cheng uses is holding up her phone above the crowd at the finish-line of the Boston Marathon—she cannot see the finish line, but her phone can), can be traced to Soviet-filmmaker Dziga Vertov's (1985) concept of the

‘kino-eye,’ a term used to describe the camera’s ability to record motion, patterns, and angles inaccessible to the human eye:

> I am kino-eye, I am a mechanical eye. I, a machine, show you the world as only I can see it. Now and forever, I free myself from human immobility, I am in constant motion, I draw near, then away from objects, I crawl under, I climb onto them... Now I, a camera, fling myself along their resultant, maneuvering in the chaos of movement, recording movement, starting with movements composed of the most complex combinations... My path leads to the creation of a fresh perception of the world. I decipher in a new way a world unknown to you. (p. 17)

In his experimental films, most notably in *Man With a Movie Camera* (Vertov, 1929), Vertov makes montages of objects and individuals in motion, the camera lens acting as an external eye, able to see aspects of the world that would be otherwise imperceptible to the human eye. Eyes are stuck in the head and are needed to maintain balance and awareness of one’s surroundings. The camera lens can maintain its gaze from astounding vantage points for indeterminate amounts of time. Working in the early days of cinema with only bulky film cameras at his disposal, Vertov needed to build complex rigs to hold his camera to record the footage. He harnessed the possibilities of this new technology as part of his project to push back against what he considered to the pro-capitalist propaganda of Hollywood and the scripted war films popular in the Soviet Union. McLuhan also draws attention to how new technology drives consumerism and creates demand: “Nobody wants a motorcar till there are motorcars, and nobody is interested in TV until there are TV programs” (1994, p. 67). To capture this ethos, Vertov humorously opens his film Kino-Eye with the following title-card: “The first non-fiction film thing without a script, without actors, outside the studio” (Vertov, 1924).

Vertov made his experimental films outside of the constraints of narrative to draw attention to the ways in which the camera "moves in a perpetual metamorphosis—a discontinuous movement of bodies—rendering sensible new matter, new affects, and new forces" (Lazzarato, 2019, p. 21). He hoped to create a widespread movement of filmmakers in this style who could truly document the motions and movements of the working class, founding a film collective called 'Kino-Eye' (Kolchevska, 1986).

The handheld, lightweight nature of the smartphone, with its ability to record audio and video, presents new possibilities for the concept of the kino-eye. No expensive or complex rigging is needed to hold its remembering gaze on sights the biological human eye could only hope to glimpse momentarily. We are all documenters now, an amazing third eye and third ear rattles in our pockets, the years accessible through the 'magic window' of the screen (Kelly, 2005). McLuhan also references the screen as a window, humorously repurposing the line from *Romeo & Juliet:* "But soft! what light through yonder window breaks? It speaks, and yet says nothing" (Shakespeare, 1964, as cited in McLuhan, 1994, p. 9). .

Human perception, always in a state of flux, began an accelerated period of change with the advent of the film camera, that change accelerated by the increased accessibility of the video camera, an acceleration that continues as smartphone technology takes over contemporary communication and media. The smartphone can see and hear what we cannot, remember differently than we can, find patterns of movement and stasis that were previously hidden from our head-bound eyes and ears. Vertov (according to Lazzaratto) would call on the masses to embrace these changes and use them freely to resist:

> The nonhuman perception of the kino-eye points toward a new human […] For Vertov there is no opposition between human and machine because he assumes a second nature

> produced by capitalism, both as an irreversible reality and as a condition by which to move beyond the human. Kino-eye and radio-ear—today it is perhaps more accurate to speak of a computer brain—are hybrids with which the collective subject of the revolution must see, speak, and hear; a machinic body, a cyborg of vision, perception, and thought that must express itself as such, without mediation. To the technological and financial concentration of cinema, the kino-eye responds with a micropolitics that implies the socialization of know-how as well as a miniaturization of technology. (Lazzarato, 2019, p. 30)

This idea of hybridity in contemporary life is also explored in prominent writings within queer theory, including the influential "A Cyborg Manifesto" by Donna Haraway (2016), from which has followed whole fields of scholarship exploring hybridity and transhumanism.

In this research creation, I needed to harness my hybridity and embrace my machinic body. The emergent nature, loose script, focus on finding/documenting patterns, and use of montage were undertaken in the tradition of Vertov, in the hope that I may disrupt pro-consumerist and divisive messaging that I see dominating the form of the vertical video.

Research Questions

This inquiry was exploratory and unpredictable in nature in keeping with the precedents and conventions of artography, which is heavily influenced by the unpredictable construct of the rhizome (Irwin, 2013; Lee et al., 2019; Schultz & Legg, 2020; Springgay et al., 2005). Having said that, prior to beginning this research, I found it useful to have questions from which to begin. I settled on three research questions: 1) How might engaging in intentional embodied movement while making art impact meaning-making and creativity, specifically as it relates to

art related to trauma? 2) What might handheld digital technology have to offer multimodal artmakers? 3) How might mobile research methods enhance artographical research?

In the rest of this thesis, I will describe and discuss the processes and products that emerged through this inquiry. I begin with an overview of what I made and how I made it, including a discussion of the form of videopoetry. Then I discuss the video/event and the artmaking process through four themes, (1) enacting metaphors to facilitate the development of an embodied understanding of those metaphors, (2) instances of the liminal during embodied creative practice, (3) the ways smartphone technology extends perception and memory outside the body, and (4) wonder and the spiritual in the context of embodied artmaking. Integrated through this discussion are propositions (Manning & Massumi, 2014) related to contemporary education and arts-based research.

Chapter 2: Methodology

Arts-Based Research (ABR) is an approach to research that "uses artistic forms and expressions to explore, understand, represent, and even challenge human experiences" (Wang et al., 2017, p. 6). While sometimes discussed as an extension of qualitative research, it has come by many to be understood as a distinct research area altogether (Springgay et al., 2005). Arts-based researchers explore areas of inquiry holistically by repurposing approaches normally associated with the creative arts, including but not limited to dance, performance, creative writing, music, digital art, and visual art (Leavy, 2018).

My thesis is also a practice in autoethnography in that I will use "personal ('auto') experience to create a representation ('graphy') of cultural ('ethno') experiences, social expectations, and shared beliefs, values, and practices" (Adams & Holman Jones, 2018, p. 142). Through this research, I explored select difficult personal experiences of CSA and grief (auto) as well as shared beliefs and values around technology, trauma, and other topics (ethno) through the creation of an immersive video installation and this written analysis/overview (graphy).

Autoethnography embraces entanglements between the personal and the cultural while taking seriously both the research and aesthetic aspects of the work to:

> (1) critique, make contributions to, and/or extend existing research and theory; (2) embrace vulnerability as a way to understand emotions and improve social life; (3) disrupt taboos, break silences, and reclaim lost and disregarded voices; and (4) make research accessible to multiple audiences. (Adams et al., 2014, p. 36)

In autoethnographic research, one seeks to integrate their personal and scholarly selves as they conduct research that connects to cultural experiences (Ellis & Bochner, 2016). This movement toward a more holistic research approach appeals to me as I have often felt tension around what I have perceived as pressure to split myself into parts and discount experience when engaging with

the world of academia. Through this most recent experience in academia, rather than checking parts of myself at the door, I have felt empowered to generate this research from a more integrated position.

There are also strong connections between affect theory and autoethnographic research. Autoethnography is an effective approach to interrogate the nature of sensemaking, especially sensemaking in relation to difficult experiences and "sensemaking that defies logic or sits outside of language and sometimes conscious awareness" (Adams et al., 2021, p. 5), making it deeply connected to the artmaking process I engaged in through this research project, which explores the felt-sense of meaning-making around difficult experiences and operates outside of representational, explanatory emotional language.

Artography, though sometimes used synonymously with ABR, refers more specifically to the practice-based research that emerged out of the University of British Columbia Faculty of Education in the mid-90s (Sinner et al., 2006) and is defined as "a research methodology, a creative practice, and a performative pedagogy that lives in the rhizomatic practices of the liminal in-between" (Irwin, 2013, p. 199). The concept of the rhizome is borrowed from Delueze and Guattari (1987) who developed it as a critique of the binary logic of the dichotomous, which is often represented by a tree with its centralized root system. The rhizome, on the other hand, refers to a subterranean network of plant stems often found in weeds and grasses. Instead of a central root system that supports an individual tree, rhizomes shoot off in all directions, creating an underground mass of roots. The rhizome is a metaphor and strategy for action, a constantly unfolding, unlimitedly connected, and non-hierarchical philosophy that embraces multiplicity and heterogeneity.

Originally, and still in practice by some, slashes are used to separate the first three letters of the word a/r/tography to represent the complex identity of the A(rtist) / R(esearcher) / T(eacher). While compartmentalized thinking would present those identities as at odds with one another, artographers see how they are connected, part of the same rhizomatic mass, and seek to dwell in the liminal spaces among those identity markers "to make sense and create meaning out of difficult and complex questions that cannot be answered in straightforward or linear tellings" (Springgay et al., 2005, p. 902). It is becoming increasingly common, as I have done, for artographers to remove the slashes between the first three letters of the word, "to acknowledge [artography's] development and the merging of its respective components in the 'living' and non-compartmentalised research process" (Heaton et al., 2020, p. 55).

A letter away from cartography, this play on words also emerges from Delueze and Guattari (1987), who compare tracking the unfolding of a rhizome to the process of map-making. As cartographers seek to create a map of their journey through an unfamiliar land, artographers track their journey through their living inquiry by attuning themselves to the specific sensory input of experience as it unfolds in the present moment (Malilang, 2017). For artographers, this means attuning ourselves to the tensions, (in)congruencies, and experiences of being in the interstitial spaces between our various identities. Put another way, it means giving way to the unfolding nature of the rhizome through the process and experience of artmaking (Leggo & Irwin, 2018). Because exploratory artmaking is rhizomatic—unpredictable in its unfolding and resisting reproduction—mapping it makes it more likely to be of use to others (Irwin, 2013). This mapping, and the connection to cartography, helps to demystify the creation process, highlighting that the creation journey is of equal importance to the final created product.

Springgay et al. (2005) present six renderings of artography. These renderings—contiguity, living inquiry, metaphor and metonym, openings, reverberations, and excess—interact with one another and create space for additional renderings that may emerge. In this research, I focus most on living inquiry. Renderings are not meant to serve the same prescriptive function as the methods section of the conventional research paper, but are instead considered to be "theoretical spaces through which to explore artistic ways of knowing and being research" (Springgay et al., 2005, p. 899). Within artography, contiguity, which definitionally means "the state of bordering or being in direct contact" refers to the ways the artist, research, and teacher elements of the artographer are in direct contact with another, sometimes creating tension and highlighting the need to embrace uncertainty (Springgay et al., 2005). Living inquiry disrupts the binarization of the rational with the corporeal by highlighting the embodied, holistic, ongoing, and subjective nature of the process (La Jevic & Springgay, 2008). Metaphor and metonym are used to play with meaning-making, both rendering meaning in a manner human senses can understand effectively, and obscuring meaning through a refusal to provide a denotative explanation (Spencer & Paisley, 2013). Openings are compared to tension-filled cuts, cracks, slits, and tears in a sheet of fabric through which the artist/researcher/teacher becomes entangled with the reader/viewer (Springgay et al., 2005). Reverberations refers to the forces that allow meanings and understandings to surface and resonate with others. Excess is about letting go of control of the research process and embracing the messiness and unpredictability (Schultz & Legg, 2020).

The idea of living inquiry is of particular importance to the practice of artography, and this research specifically as it features prominently in my analysis. As mentioned above, the term 'living inquiry' can also refer to another research orientation originating out of the Faculty of

Education at University of British Columbia and practiced predominantly by Karen Meyer (2010, 2012). While similar in practice to artography in that it is an emergent form of research that often leads to artmaking, it is less concerned with the interstitial artist/researcher/teacher positionality, and is in some ways, a less esoteric, more generalizable and concrete approach to the living inquiry. Meyer identifies themes of place, language, time and self/other to be explored through intentional living and the creation of field notes, which are then shared in a group setting and turned through writing or other forms of artmaking (Meyer, 2012).

In artography, living inquiry comes to replace traditional understandings of theory. Whereas theory is the intellectual foundation for a particular research practice, living inquiry is an embodied practice that rejects the compartmentalized worldview undergirding theory (Malilang, 2017). For example, the living inquiry of influential artographer and poet Carl Leggo (2005b) was wrapped up with some of education's most existential questions: what does it mean to live poetically (Leggo, 2018)? How do humans and texts interact (Leggo, 2016)? What is the nature of language (Leggo, 2005a)? What about the emotional and spiritual in education (Leggo, 2019)? And what are the ways institutions fail to empower individuals (Leggo, 1996)? Because Leggo's area of inquiry was far outside the purview of conventional research methods, he refused the conventions of the research article, opting to instead "lean on ruminations, fragments and poems as a way to unsettle the conservative and conventional norms of scholarly writing and knowing" (Leggo, 2005b). Put another way, the questions of the heart require the language of the heart. Artographers are mindful of the medium in which they work and understand that new understandings can emerge from the play and exploration in risk-taking with form (Leggo & Irwin, 2018).

A Paddling Artography

The mapping work of artography is often connected to walking, which is both a metaphor for artography and a way to do artography (Lee et al., 2019). Walking paths and routes are rhizomes in which new areas are explored and all is connected. It makes sense that the artographers on the west coast of Canada, an area famous for its beautiful hiking paths and trails, have found the metaphor and practice of walking to be so illuminating. For me, who grew up in the thick bush of Northwestern Ontario, walking is not the preferred mode of transportation. Unlike the trailways of the west coast, Northwestern Ontario is a complex rhizome of waterways that is constantly changing as water levels rise and fall, beavers create dams and swamps, and moving water carves new paths in the banks. For centuries, the Ojibwe, Cree, and OjiCree navigated these ever-changing waterways via the canoe, interacting with the landscape, maintaining portage trails, and establishing spots to make camp along the way. These routes and sites are still in use by contemporary paddlers and are still fished, harvested, and traversed by members of those nations.

I am not the first to make connections between the canoe trip and conducting research. I am indebted to Northern Cree scholar Herman Michell (2012), who uses the metaphor of a canoe trip to describe the practice of conducting community research:

> Metaphorically, doing community-based research is like going on a canoe trip to hunt for knowledge. When we journey out in the springtime, we bear witness to the land as it begins to re-awaken after a long winter. Dormant knowledge transforms into new life when we share our ways of knowing. It begins with a journey inward and spirals outward in the “relational way” onto our communities and onto the northern landscape. (p. 3)

Michell draws compelling connections between the different stages of a canoe trip with the different stages of a research project and highlights the sacred centrality of water to life, and so to research:

> Water is also sacred to the northern Cree. We all come from water when we come into this world. We require water for our existence. We cleanse ourselves with water. We build our birch bark canoes so that we are able to glide gently over its waves. (Michell, 2012, p. 3).

While I do not have cultural connections to canoeing, and come to this project as a white settler, canoeing is my preferred metaphor for doing artography. The birch bark canoe has also been explored as a tool of post-colonial education, an Indigenous technology that "provides opportunities to learn about each other and ourselves as we consider education, not only as discreet fragments to be memorized but as an interconnected, living process in which we all play a part" (Broderick, 2014, p. 8). Prior to beginning this research, I teased out and made meaning with this metaphor and practice as I saw it relating to this project. I have rephrased them slightly here from my proposal so that they can be applied to artographical research more broadly, not just to this research.

Canoeing Rewards Presence and Responsiveness.

To get where you're going via the canoe, you must attune yourself to the sensory input of the present moment—the direction and force of the wind, the current, the way weight is distributed in the canoe, the shape and dimensions of the canoe, the actions of those paddling alongside you—and respond to those inputs through subtle adjustments to the pitch of your paddle and the force of your stroke. Naturalist, canoeist, and filmmaker, Bill Mason, describes this communication as the most important lesson about the canoe:

> The first thing you must learn about canoeing is that the canoe is not a lifeless, inanimate object; it feels very much alive, alive with the life of the river. Life is transmitted to the canoe by the currents of the air and the water upon which it rides. The behavior and temperament of the canoe is dependent upon the elements: from the slightest breeze to a raging storm, from the smallest ripple to a towering wave, or from a meandering stream to a thundering rapid. (B. Mason, 1997)

Embarking on the journey of research, strive to be present and responsive in the artmaking process. As you do so, pay special attention to the forces that guide the institution. As the wind and waves and currents interact with the boat, so too do institutional forces interact on the individuals within them. Keep this in mind through the process.

Canoeing is a Way to Live Poetically.

Have you ever seen a highly skilled paddler moving their canoe through the water? They communicate with the water, listening to the knowledge it holds and asking it to carry them where they need to go. They move silently and smoothly, not fighting the water and wind or attempting to overcome them by force. Instead, they seek to understand how the water and wind are moving and strive to work alongside them to find an appropriate route of passage.

Sometimes this means taking indirect routes. In strong wind and waves, canoeists island-hop, opting for a zigzagged route that keeps them out of the gusts and swells so that the canoe remains righted, and precious stores of energy are conserved. Zigzagged patterns of motion are also used to avoid going broadside to waves, which is the position in which the canoe is most likely to swamp (have the boat fill with water). If filmed from a drone, the indirectness of these routes would seem ludicrous, but from the situated, embodied position of the boat, the circumstances of the present call for such indirectness. In the same way, you don’t always need

to take the most direct path when engaged in an inquiry. Instead, respond to the conditions as they unfold and trust the process, moving with patience and openness to changing routes.

As you communicate your experiences and create impactful research be open to taking indirect routes. What lingers, what is resonant may be found in the unexpected meanders that are technically off-course, but central to the journey all the same. Openness to new and unexpected routes will be especially important if the work brings you close to highly charged or emotional experience. Taking too direct a route could leave you capsized.

Canoeing Invites Deep Reflection and Airy Awareness.

Paddling puts you up close with water. When paddling a canoe, you are powerfully aware of what is happening beneath the body (of water)'s reflective surface. Different qualities of light and angles of inspection allow the canoeist to see past the reflective surface of the water, into the deep, life-supporting ecosystems that exist beneath. Water, like people, contains deep mysteries under the surface. The artographer seeks to understand what is happening beneath the surface, to attune themself to the richness unfolding underneath and within. Beneath the surface is connected to the emotional and spiritual aspects of existence.

Furthermore, paddlers need to be aware of the air they are moving through. Wind, the air within which the paddler moves, though invisible, influences the boat as it moves through the water. The best route may seem non-sensical when viewed in a vacuum, but when the wind is taken into account, the reason for the route can become apparent. Above the surface connects to the rational mind and the rules, customs, and cultures within institutions that powerfully influence how individuals move through them.

As you research, you traverse the surface, the liminal space between the rational and the emotive, the institutional and the spiritual. Be aware of these many aspects of yourself and be prepared to function in all these realms.

Canoeing is Risky.

By embarking, you make yourself vulnerable to capsizing, smashing into rocks hidden beneath the reflective surface of the water, and other calamities. Because of this danger, canoes are designed to be broken and repaired on the go, made to be patched with the materials that the paddler will encounter along the way, such as birch bark, cedar, spruce roots, and pine resin. Like canoeing, artography can be risky. Difficult, or even traumatic, moments and memories may need to be reckoned with and moved through. Like the canoe-builder, you should design yourself with this in mind. Instead of trying to make yourself impervious to damage, move through the journey aware that damage is inevitable. Make yourself amenable to mending. Birch bark canoes are repaired at the end of each day of paddling. An aluminum canoe may bounce off some rocks that would puncture a birch bark canoe, but an aluminum canoe, once punctured, cannot be repaired in the field. As you research, treat yourself tenderly, giving yourself time to find what you need to mend yourself as you get banged up along the way.

Do not journey alone. While at times, it will be a solo paddle, you need to have others accompanying you on this journey. Have a team of advisors, colleagues, collaborators, and a personal support system to help make the process fun and safe.

Canoeing is about Posture, not Technique.

Years ago, I was attempting to complete a canoeing instructor course and was having difficulty with the hardest move: the circle. I was becoming frustrated. The boat was not doing

what I wanted, and I was in jeopardy of not getting my level. It had felt like I had tried everything, adjusted the angle of my paddle, tried various versions of the strokes, went at different speeds, but nothing was working. It was at this moment that an instructor from another class called me over to the dock and said, “The problem isn’t with your stroke. It’s with your posture.” He proceeded to help me adjust my gaze and body, showing me where to look, how to orient my shoulders. I returned to my circles and completed them in a couple more tries. This story illustrates the importance of attending to posture over technique. If you’re sitting in the boat wrong, if you are not paying attention in the right way, technique is meaningless. This is also important to remember for the artographer. More important than mastering the aesthetic techniques of your medium is approaching your topic with a posture of openness and humility.

Rest / Reflect

I have written a poem that helps explain my vision of artography and living poetically through paddling imagery (Cain, 2021):

the shore is the mending site

because the river we travel reflects
forest and sky and boulders hide
beneath the moving gleam
emulate the canoe

while more rigid vessels ricochet downstream
powering past minor crashes, a serious wreck
strands them without the materials of repair
emulate the canoe

made from what it travels through
patched with birch bark
bound with boiled spruce roots
sealed with the resin that oozes
from scars in scaly bark

As you live your inquiry, immerse yourself in the rhythmic soundscape of stroke, footfall, and breath. Respond to the conditions of the waterways and the wind in the here and now, floating on the surface but keenly aware of the life unfolding beneath and above. Be mindful of your posture as you take risks with content, form, and style. Move forward, knowing that wrecks will occur. When this happens, rest and recover. What you need to be mended and keep going can be found along the way. It is within and close by.

Research in Motion

My methodology was informed by a small pocket of outdoor recreation/adventure research that explores ways to effectively capture experiences in the world in motion/movement. I have outlined above connections between movement and creative expression, connections that I marshaled in my research through the use of handheld digital technologies. There are challenges and possibilities of doing autoethnographic on the move, most notably navigating the demands of the actual trip/expedition/movement and the demands of the research (Kennedy et al., 2019). On a research paddling trip exploring balancing identities as an adventure-researcher, Kennedy had intended to journal in her notebook each night, reflecting on the day that was (see Mullins, 2009), but found herself too busy with the multitude of tasks that being on a paddling trip brings with it, such as setting up camp and cooking. Creating time for her research meant taking away from time from other critical aspects of the journey, including resting, debriefing the day, and preparing for the days to come. To compensate for this problem, Kennedy began recording her field notes on the move, using a voice recorder as she paddled. This allowed her to generate data, conducting research on the move, leaving space for the other enriching aspects of the journey (Kennedy et al., 2019). This feels in keeping with the living inquiry at the heart of artography. Rest, enjoyment, presence, and relationship-building are essential parts of the canoe-trip, the run,

and the skate. To live and created from the liminal space between artist, researcher, and teacher, I employed mobile research methods and used handheld digital technology to gather data and record field notes as part of this living inquiry. In the next chapter, I provide an overview of the genre of videopoetry, the artmaking processes that I engaged in through this inquiry, as well as descriptions of what I presented to the public as part of the UN/WIND UN/WOUND installation.

Chapter 3: What I Made and How I Made it

With the methodological mixing of artography and autoethnography described in Chapter 2, I ended up making a 24-minute experimental video made up of linked videopoems, which I installed with other elements in a classroom at the University of Manitoba. Handheld digital technology was the primary means of generating the audio and video, which I eventually edited and layered into video poems. Experimenting with the effects of movement and embodied states on creative expression, I generated much of the audiovisual material while in motion, either when running, cross-country skiing, skating, walking, portaging, or paddling. Those who would like to see the film that was installed in the space can email me at unwindunwoundvideo@gmail.com and I will send them a private link through which they can view it.

Videopoetry

More practically, over the course of this living inquiry, I played with the emerging multimodal form of videopoetry (also called poetry film or film poetry), which uses (1) video, (2) audio, and (3) text to make meaning (Tremlett, 2020). Before this project began, I was unsure about its final form, whether I would create a single extended videopoem or separate videopoems. This uncertainty was in keeping with the living inquiry and rhizomatic nature of artographical research.

Video

The footage I used for this project was generated using my iPhone (my kino-eye). My focus was on recording the body in motion, trying to find rhizomatic patterns in the natural world, and capturing what resonated with me as I moved through my living inquiry. Like Vertov, I created outside the confines of a formalized script. Montage was used to build layers of

meaning that fit with the audio tracks I assembled for the projects. As I recorded, listened to, and edited my audio tracks, I sought to develop an embodied understanding of the footage that needed to be gathered/pulled from my personal database of footage, trusting my eye and kino-eye to scan the world around me as well as my digital memory for resonances.

While I generated most of the footage organically as I moved through my living inquiry, there was one set piece that I had intended to film based off the poem "I found a baseball in a slough" (Cain, 2020b). My original plan was to film the imagery from this poem cinematically, using tripods to get steadier shots, and multiple cameras to capture different angles of the same scene. I did this with a filmmaker friend of mine one weekend in June 2023. While the footage was beautiful, I decided it did not fit with the rest of the project and rerecorded it on my own using the smartphone. While I originally only wanted to record one poem in this manner of enacted metaphor, I ended up doing the same with a different poem called "first melt." I was curious to see what performing/enacting the metaphor at the heart of these poems would do for me personally and what language would arise during this embodied process. It could also be said that I embody the action of "the shore is the mending site" (Cain, 2021) through much of this project as it is literally filmed from within a canoe.

I edited the video both on CapCut, a free video editing app available on iOS and Android, as well as in Adobe Premiere Pro, a professional video editing software. I needed to learn how to use Premiere Pro to complete this project.

Audio

Creating in self-propelled motion put me in touch with the embodied nature of creativity. My breath and the sounds of my motion (footfalls, paddle strokes, ski strides, the rubbing of fabric, etc.) ended up being the rhythm section for some of my videopoems. Audio recorded on

quick runs was faster-paced and had heavier breathing than the audio recorded on leisurely paddles. From these different forms of movement sprang forth different forms of embodied memory and creativity. In my earlier experiments with recording while running on the Nestawaya River Trail on the Red River, I was pleased with the audio quality I was able to get using the microphone on my Apple Watch, though some files became corrupted due to wind and other environmental factors. I ended up purchasing a wireless lapel microphone that connected to my smartphone and used that to record some of the audio. Regardless of microphone input, the portability allowed me to record when I felt images and language surfacing without disrupting my movement, allowing for the free flow of creativity. Furthermore, happy accidents occur during the recording, the microphone being bumped, a train passing, dogs barking, etc. that were integrated into the audio track, adding layers of resonances.

Once I had the generated the raw audio from a recording session, I listened to it and edited it down into the audio track of some sections of the piece. This process was largely intuitive. The first time I listened through a track, I would remove prolonged periods of silence or anything that clearly did not feel to fit with the piece. Sometimes there would be repetitive bits of audio that did not add to the track or said the same thing in less vivid language than other parts. I would often edit different versions of the same audio track and compare them against one another. All other things feeling equal, I would go with the shorter of the two tracks as I wanted the audio tracks to be concise and without filler. While at first, I did not have plans to use music, I ended up asking my friend Jamie Enns (Big Zen), a former Winnipegger, who is also an electronic musician and DJ in Vancouver, to provide some unused tracks for me to use as a score. I recorded some of the voiceovers for this project in my coat closet at home using a Blue Snowball microphone and some of the voiceovers at Winnipeg Public Library, which has a

recording studio available for public use at the downtown Millennium Library location. I edited and mixed the audio in Adobe Audition, which I did not have experience in previously.

Text

Not all video poems include textual, voice-over elements; some rely only on visuals and soundtrack to make meaning (Harvey, 2012). Originally, I thought my poetic voice would be featured in all my work, but I ended up leaving it off about a quarter of the film. I will discuss this decision later in this thesis. In the tracks that included my voice, the text was made from editing my improvised field recordings I made while in motion, sometimes months away from their initial recording. This occurred in a similar process to erasure poetry, where words are removed from a longer text to reveal new meanings (Le Cor, 2018). For each of these tracks, I listened through the audio, removing parts and leaving behind to be included in the final poem.

Beyond these edited, improvised texts, I also included more dramatized, voice-over readings of select poems for this project. All but one of these poems were written before this project and were recorded in my home on a personal microphone or on a more professional recording set-up available through the Winnipeg Public Library. After some inner turmoil and debate, I decided not to include subtitles or written text in the video. While I wanted to include them to be inclusive to all potential audience members, I did not have the time before the event to figure out how to include them in a way that did not detract from the film aesthetically. For example, I felt they distracted or got in the way of some of the most beautiful, detailed elements of the film visually, especially in close-ups. These shots are important for the film conceptually because they demonstrate the smartphone's ability to capture minute beauty. I am sure there is a way to integrate text in the project, perhaps through a secondary lyric video that plays concurrently with the main visual on a separate nearby screen. In this lyric video, which would

be synchronized with the main film, the oral language and delivery could be reflected, through how the text is animated on screen. Future work should explore ways to artfully integrate captioning/subtitles into these kinds of projects.

Left out Footage

It is important to note that what is featured in this 24-minute film represents only a small percentage of what was recorded for this project. Hours of audio recorded while in motion for this project remain unedited, while edited tracks equal in length to what is featured in the film did not make the final cut. As for video footage, my camera roll is predominantly made up of artistic shots of the natural world I recorded (and continue to record) because of the shifts in perception that were prompted by this project.

Ethical Considerations

Though this project was autoethnographic in nature and had no human participants outside myself, I still went through the formal ethics review process. I found this process to be somewhat frustrating but ended up getting approval. I found it challenging to fit this project into the prescribed formatting of the ethics process. Much of the confusion stemmed from the source of the visual material for my film being the camera roll on my phone. The question of when something that was a file on my phone becomes data for this kind of project is an interesting one.

Doing autoethnographic research relies on memory, and memory, in the technological present, is partly digital. This film is interesting ethically because it relates to the shared nature of memory in the digital age where so much of what/how we remember is stored digitally in our smartphones. My memories of the canoe trips I went on do not just exist in my mind, they also exist on my storage devices. These digital memories can be shared both privately—by turning on

one's phone or sending them via a text, email, or direct message on social media—and publicly—by posting to a social media site. Navigating digital memory can be a source of angst and stress of varying degrees, from mild annoyance over an unflattering picture being shared to extreme feelings of violation around the sharing of sensitive data, including screenshots of digital conversations or other private correspondence/media. Within the context of research, it would be unrealistic, and dare I say, unethical, for the ethics review board to ask that I give my advisor access to my very private camera roll. In light of these considerations, I decided to shift from my original plan and not include video footage that contained any images or sounds that could be deemed identifiable. The review process, and my own ethical musings became easier once I decided to not include identifiable figures besides myself in the video. Still, this remains a compelling ethical consideration for autoethnography in the age of digital memory.

Besides the ethical issues related to the creation of the film, I also wanted to take an ethical approach to the installation, given that much of the material in the film, while not depicting trauma directly or including graphic imagery, includes high levels of emotional intensity and explores the theme of healing in the wake of trauma. With this in mind, I wanted to ensure that those in attendance understood that they were able to leave the installation if they felt uncomfortable or emotional. I provided space outside of the installation where spectators could go if they felt the film was resonating too intensely or prompting an adverse response. This was especially important as members of my family were in the audience as I was unsure how the work would connect with them. Prior to opening the installation, I gave an artist talk in an adjoining room which remained available during the installation with food and drinks for anyone who needed to take a breather from the installation. While that space was well used, individuals also gathered in the hallway to decompress and debrief what had unfolded. The washrooms just

down the hall were also available if people needed more privacy. I also set up the space in such a way to give people options for how close they wanted to get or who they wanted to be near within the space.

Another ethical consideration while doing this kind of work connected to traumatic memory relates to care for oneself. This was something that I discussed with Dr. Watt, my advisor, throughout the process and it felt comforting to have her as a pressure-free, supportive mentor throughout this process. I also drew on my prior experience as a poet who has engaged with difficult and intense subject matter in previous projects. It was important for me to engage in these activities in what I felt to be the correct context. For me, that meant reserving it for moments where I didn't have something to do immediately afterwards. This meant that I was often generating video and audio files later in evenings or on weekends or while in remote locations. The space provided by those kinds of locations and timeslots meant that I had the emotional bandwidth and safety to focus on the work of creating around these difficult memories. The space after creative bouts was often reserved for periods of reflection and debriefing with myself. These debriefing periods included verbally processing some of what occurred or arose while walking. I also drew on my personal network, including my supportive spouse and collaborator friends, in moments where I needed support during the process.

The Installation

I presented the 24-minute video loop I made to a public audience through an immersive video installation in the Faculty of Education and the University of Manitoba. Due to the thematic importance of embodiment and place to this project, I felt it important to gather people in a shared space to experience the work, not just through their phones, but through their entire bodies and in a communal sense through the shared experience with all those in attendance.

Around sixty people attended the installation over the course of the evening. The video was looped six times.

I created a mandala to serve as a tracklist or table of contents for the piece (see Figure 1). In this tracklist, moving through the film is like moving along the outside of the baseball. Each icon on the tracklist is a symbolic, visual title for the piece. The icons on top of the seams of the baseball are different stages of the baseball being unravelled. The icons on top of the spaces between the seams are symbolic of those sequences.

The film begins on the hand, representing the first moments of acknowledging and recognizing a memory needs your attention and the first attempts to process it. Here, the memory (baseball) is picked up, felt, and first attempts to break into it are undertaken. The skate represents the winter sequences in the film, set and recorded on the Nestawaya River Trail. The knife represents processing the memory equipped with the tools to do so. With a knife, the memory is broken into and begins to be unravelled. The frog represents the transition from winter to spring. In this sequence, the world melts after winter and comes to life. The ball of yarn recognizes the transitioning of the memory. The baseball, though materially the same, is softening and expanding. The canoe represents the summer sequences in the film, which are filmed from a canoe, within the water, or on shore after paddling. The nest is the final unravelling sequence and represents the baseball's transition into a lifegiving form. The fire represents the transition to winter. During this time of short days and long cold nights, connecting to the elemental aspects of existence, the rhythms by which the world turns, makes those long, cold nights pass easier.

Figure 1

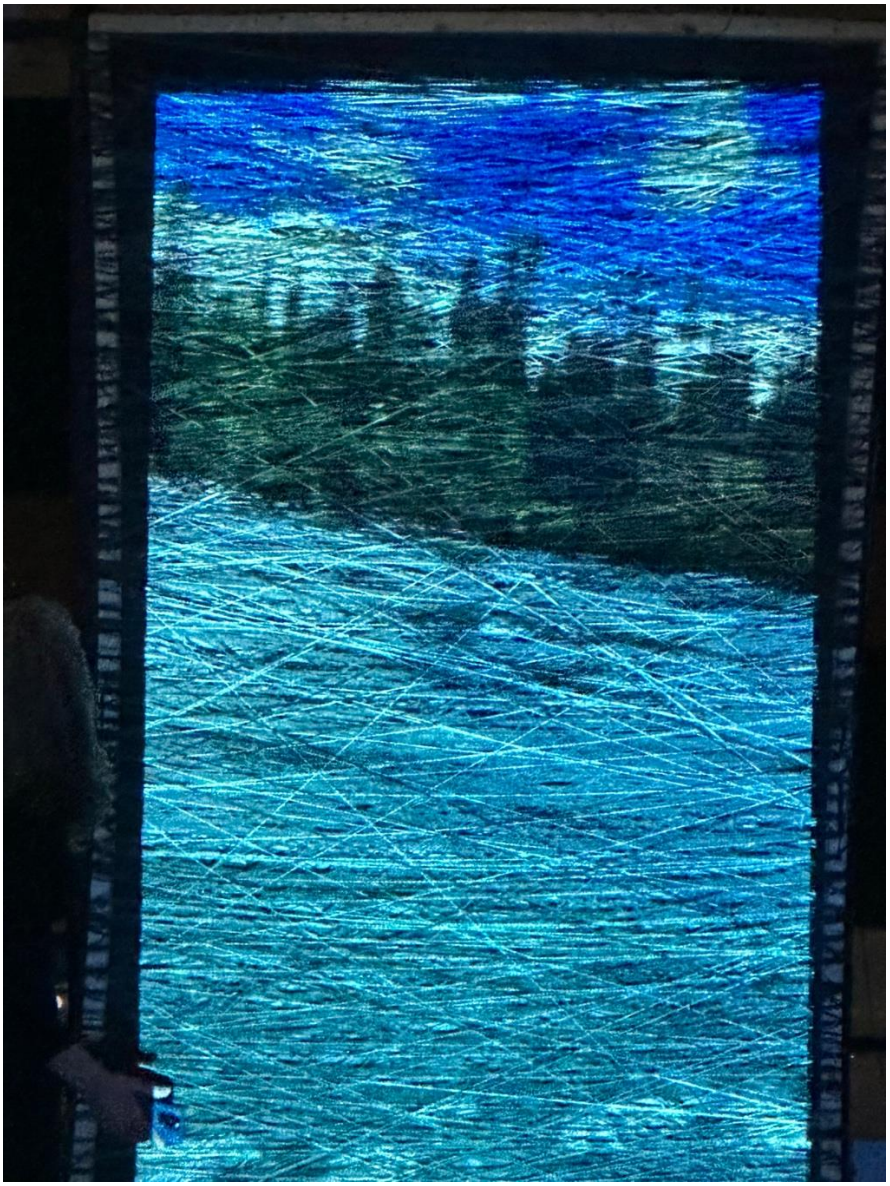
UN/WIND UN/WOUND Visual Tracklist

Note. Each of the symbols on this tracklist represents a chapter of UN/WIND UN/WOUND.

The film was projected onto three handmade screens, made to the 9:16 aspect ratio, the same vertical format of TikTok and Instagram. One was made of hundreds of meters of yarn wrapped around and across a nine and half foot tall lumber frame that was backed with craft paper (Figure 2). The other two were made of craft paper mounted using grommets on highly reflective Mylar—the shiny material used in greenhouses (Figure 3). I will discuss the significance and impact of these screens later in this thesis.

Figure 2

Yarn Screen



Note. This screen is made of hundreds of yards of yarn wrapped around a lumber frame.

Figure 3

Mylar Screen

Note. This screen was made by mounting craft paper onto a Mylar backing.

I pulled a lot of favours and gathered my friends and loved ones together to convert an arts education classroom in the University of Manitoba into an art exhibition. We moved tables and chairs, covered bookshelves in black paper, rented/borrowed audio-visual equipment, and set up several atmospheric art-pieces in the space. Each of the atmospheric elements included in the list below can be matched to a picture with the same number in Figure 4:

1) A shrine consisting of a Mylar-covered table holding unravelled and whole baseballs. The unravelled baseballs were made into nests and were lit from within using twinkle lights and headlamps. The wall behind the table also covered with a sheet of Mylar and a skate hung from the ceiling by a leather belt.
2) An old tube TV broadcasting a live feed from a ‘90s era camcorder pointed at the yarn screen. Occasionally, a figure in the room would appear on the screen, though they would be unable to see themselves as the front of the TV was pointed in a different direction. That is me in the photograph.
3) Phones covered in reflective Mylar hanging by fishhooks and fishing line. These are hanging from paddles suspended from the ceiling.
4) The projection of a tracing of the program for the night onto a blue-lined paper easel using an overhead projector.
5) An animation at the entrance of the room that tracked progress through the different phases of the video loop. Using the different sections of the baseball and icons, this image served as a moving tracklist, wordlessly showing what was going on within the installation room on-screen and how far away until the next transition. This allowed attendees who showed up in the middle of the evening to know when good times to enter the space would be.
6) The seating in the room was also an atmospheric element. The seating near the entrance of the room was arranged in the shape of the seams of a baseball. The seating in the middle of the room corresponded to a canoe. The seating at the far end of the room was meant to mimic the circular seating around a firepit.

Figure 4

Atmospheric Elements

Note. The different atmospheric elements included in the installation.

Practices: Demystifying the Creation Process

In the creation of these films, I attempted to create from a place of deep connection to my body and the natural world. To do so, I developed new artistic practices harnessing the portability and consciousness-extending affordances of the smartphone. In keeping with artographical theory which places importance on tracking the artmaking journey, I share these two practices here. My hope is that may be used by others, either in their research, their own creative practice, or their teaching. Others may use these practices as is or use them as a starting point, building and adapting them to suit the specific needs and complex factors within their own contexts.

Practice One – Motion Poems

1) **Move:** Engage in some kind of movement and bring your handheld video recording device (smartphone, video camera, etc.). I ran, walked, shuffled across ice, skated, skied, and canoed.
2) **Record:** While you are moving, compose your poem by capturing audio and video.
    a. **Audio:** For the audio, try to shut-off the internal editor and allow stream of consciousness expression to occur. Moving and exerting yourself physically helps. It can help to have an idea or memory you are looking to explore going into it, but allowing room for pure generation also works well. Using headphones or Bluetooth microphones can help with the audio quality you record.
    b. **Video:** For the video, experiment with strapping the phone to yourself in different ways, allowing it to record the world in motion from angles otherwise inaccessible through your head-bound eyes and ears. For example, I attached my phone to my skate using an old belt. Consider being brave and turning the camera on yourself. If you see something interesting, you may want to stop and try to record it from different angles.
3) **Audio Erasure:** After the fact, in a process similar to erasure poetry, in which a poet starts with a longer text and takes away words until what remains is the finished version of a poem. Edit the audio files to create the text of a poem, which then becomes the soundtrack for the videopoem. You can use free apps such as Audacity (desktop) or CapCut (desktop/smartphone), or more professional editing apps such as Adobe Audition.

4) **Compile/Edit:** Go through the video on your camera roll (both recorded during the movement and previously recorded) and create a videopoem to the soundtrack you just recorded through the erasure process. For free smartphone apps, I recommend the built-in editors within social media platforms (i.e. TikTok, Reels, YouTube) or CapCut. You may also use more professional editing apps (i.e. Final Cut, Premiere Pro, DaVinci Resolve) available on computers. These programs have functionality that will automatically generate captions for your video if you so desire.

Practice Two – Enacting Metaphor

1) **Select a poem:** Take a poem you've written or someone else has written that is built around a metaphor. You could do a step before this one writing a poem in this manner if needed. For example, I took a poem I had written that compares processing traumatic memory to taking apart a baseball.
2) **Enact and Record.** Set aside time to record yourself doing the action in the central metaphor of the poem. For the example in step 1, I actually recorded myself taking apart a baseball. You can record audio as well, but don't feel pressure to verbalise. Try to be present in your body, while maintaining some awareness of where you are in proximity to the camera. You could also have a trusted collaborator record the process. This step has the potential to be emotionally intense and illuminating (refer to the Ethical Considerations for guidance on emotional safety while creating).
3) **Select Audio:** For the audio track, you could record yourself reading the poem. You may find that too much and just have the text of the poem on the screen. Alternatively, you could let the images speak for themselves or find a relevant song, either instrumental or one with lyrics that you feel fits with the emotional tenor of the piece. Picking royalty

free music, recording your own, or working with a musical collaborator will allow you to pursue publication. Choosing a song subject to copyright, while meaningful, would limit the potential for formal publication (not a big deal!). For the baseball example, I experimented with all three options, settling on having the edited footage, accompanied with an electronic music track sent to me by a collaborator.

4) **Compile/Edit:** Once you have settled on an audio option, review the footage, and edit it into a videopoem. It may take a few false-starts and tries. Lean into the process and trust that it will lead to something powerful.

Chapter 4: Metaphor Embodiment

Over the next chapters, I attempt to connect what emerged for me in this process to relevant literature. In seeing to do so I have encountered some challenges. Many of the understandings that emerged through this process exist on a level outside of language and is difficult to convey precisely through language. Affect theory calls these difficult to describe moments encounters and views them as rich sources of meaning and value within education (Lenters & McDermott, 2020). When seeking to relay encounters from my own research, I sometimes use spiritual and mystical language in this discussion, feeling like that is as close as I can get to conveying what I want to convey.

I begin with an exploration of metaphor embodiment through the analysis of two metaphors that I enacted through my living inquiry. Experimenting with embodied metaphor became one of the most compelling and exciting elements of this project for me. Both poems I embodied were written before this project. The poems are centered around a physical metaphor that I developed to explain an essence of an experience. The first practice was translating or transposing experience to image. The second practice was carefully crafting a poem around that image, playing with language, line breaks, and syntax to evoke that image in an emotionally and conceptually precise manner. Typically, in my experience, this is where the creative process would end. I would submit the resulting poem for publication, perhaps tinker more, or let it sit. Through this project, I took my creative process one step further by recording myself performing/experiencing the action at the heart of the metaphor in the concrete world. I got the idea for this through the metaphor literature that suggests that embodying metaphor can help deepen one’s understanding of a conceptual metaphor (Koch et al., 2012; Leung et al., 2012). I began to understand and think about my poems as loose screenplays for experimental videos. My certainty in this conceptualization was solidified when I encountered the literature around

videopoetry (Tremlett, 2020). The concept resonated with me, and I felt myself pulled toward this process by something more than intellectual curiosity. My whole being was drawn to it and I could imagine myself creating in this manner. In late spring 2023, I began my experimenting with videopoetry. I created a social media page and committed to posting one videopoem per week to practice my recording skills and develop comfort with editing my work. Many of these were rough, but occasionally, magic would strike, and I'd be pleased with the result. The sharing of this work was an important aspect of it for me. I've always found that the strengths and weaknesses of a piece become crystalized for me once shared. I developed a small following and connected with some interesting creatives online. I was often surprised by what elements or work people connected with online, and sparked many conversations with friends about the work, giving me a chance to discuss the project with people close to me. Through attempting to explain it to them, I was working through the project for myself, attuning to what I wanted it to be. My confidence in this process and form solidified and I developed a style for my work. The social media page also served as test run for some concepts and I ended up pulling visual elements and sequences from that page into UN/WIND UN/WOUND. For example, the underwater sequence in "first melt," which I discuss in this section, was originally conceived for a poem posted to that page.

What follows is an exploration of the layers of meaning and understanding I developed and discovered through the process of embodying metaphors for this project. I explore these ideas through two metaphors from the film. The first metaphor explores the image of unravelling a baseball. The second, a frog surfacing in spring after winter at the bottom of a frozen swamp. Both metaphors explore the process of healing/mending/change in the wake of traumatic or difficult experiences.

“I found a baseball in a slough”

While “I found a baseball in a slough” (Cain, 2020b) is never voiced in the film directly, it’s central image and metaphor are perhaps its most prominent metaphoric element. The image of unravelling a waterlogged baseball found in a swamp, tearing it apart, and making something new from it is a metaphor for processing traumatic memory. Here is the poem:

I found a baseball in a slough

brought it to shore
dried it in the sun
worked loose its red stitches
peeled away its stained leather
unwound its grey yarn
placed its cork in the nest of parts

freeing me
to utter

how the hunter lured me
with his sweet voice
swelling fervor
heavenward palms

how I’d been wriggling
on the forest floor
like a worm who mistook
the wingbeats of a grouse
for the vibrations of rain

botched instinct
itchy sleep
crooked beak

this is the home I made
with what unravelled
this is the prayer of mending
I murmur from shore (Cain, 2020b edited since publication)

In the initial planning phases of this project, I had wanted to include this poem as a set piece within the film. I planned to gather the rest of the footage as part of my everyday life in the

technological present, which my mentor Herbert Enns brilliantly called “the age of reflexive, broadcast, and edit” (H. Enns, personal communication, April 10, 2024) while we were discussing the project one day. For this poem, though, I would take more a more intentional approach and film it cinematically.

In June of 2023, I went out to Herb and his partner Maem’s cabin on Blueberry Island, small island on Shoal Lake with Mike Linton, a filmmaker friend, to record the action of this metaphor. This island is on the threshold of a wide-open stretch of water commonly referred to as Big Shoal. The openness of this area means that the winds and waves are frequently. When there, you are connected to the power and scale of the natural world. It was a powerfully creative weekend. Using professional recording equipment, Mike recorded me taking apart two baseballs and engaging in various activities in the Canadian Shield of Northwestern Ontario. I was pleased with the footage, and I plan to use it in further research and/or artmaking. While beautiful, I did not end up including it in the film because it did not integrate well within the rest of the project, which has an intensely first-person point of view (POV), is shot vertically rather than horizontally, and is exploring the smartphone for artmaking. This speaks to the importance of trusting the rhizomatic nature of the living inquiry model at the heart of artography. In this case, I needed to deviate from what was originally planned once I had come to a new understanding of where the zigzagged route of my living inquiry was taking me. I ended up recording myself taking apart a different baseball on my own using the smartphone in the fall. Interestingly, the different season gives the sequence a different emotional feeling. In education, fall is a period of transition. A time to reflect on the summer that was and move into the next school year or chapter of life. These ideas are echoed in the taking apart of the baseball, which culminates in the image of an egg in a nest ready to hatch. While I did not use the footage from that weekend, the

creative work that we engaged in was an important part of my ongoing creative project. It was important in terms of output; I wrote a poem and, on a short break from shooting, I recorded the voice memo that ended up becoming the audio track for the climactic section of the film. A deeper analysis of this voice memo will follow later in the discussion.

Beyond the unexpected practical output of the audio file and poem, enacting the metaphor in this way—with Mike recording me—meant that I could focus entirely on the embodied experience of performing this long considered metaphor I'd developed to understand the most confusing experience of my childhood. Directed by a true filmmaker who has extensive experience working with subjects, I was able to be fully in the moment and experience the intense complexity of emotion that surfaced through this process on the shores of Blueberry Island, at the mouth of Big Shoal.

I felt the baseball's cool hardness in my hands (an echo of Heaney's "Digging" (Heaney, 1998, p. 4), I realize as I edit). I cut through the seams with my old knife that accompanied me through the years of silence. I peeled off the rawhide exterior and plucked the light white string like feathers. I unspooled yard and after yard of blue-grey yarn flecked with colour. I felt the baseball soften and expand by my hands and gather in a light pile on the granite slab. I held the red rubber ball that was hidden beneath all that yarn. I cut into it, revealing the little cork at its core. I moved my fingers through this material and realized I was gathering it into a nest, a home for new life.

This embodied understanding of the conceptual metaphor that is the heart of UN/WIND UN/WOUND carried me through the final months of this project. The experience served as an intense proof of concept, instilling in me deep confidence that the image of the unravelling baseball should be the main unifying force within the film. Months later, when I walked down to

the banks of the Red River with a baseball, a knife, two cell phones, and a couple camping mugs to hold them in place, I did so confident I would leave that creative space with the footage needed to anchor the project.

Once I gathered and edited the footage from the self-directed bout of creativity on the shores of the Red River, my understanding of the metaphor continued to grow. As the public event for installation approached, I decided to build surfaces on which to project the film. I was driven to do this because my aesthetic sensibilities were betrayed by empty space that resulted on either side of the screen when a film shot in vertical orientation (9:16) is projected onto a 16:9 screen. This need coincided with another need—to do something with the yarn from the baseball beyond arranging it into nests. After feeling the material in my hands, I felt drawn to working with it, to make something from it. I came up with the idea for a screen made of yarn.

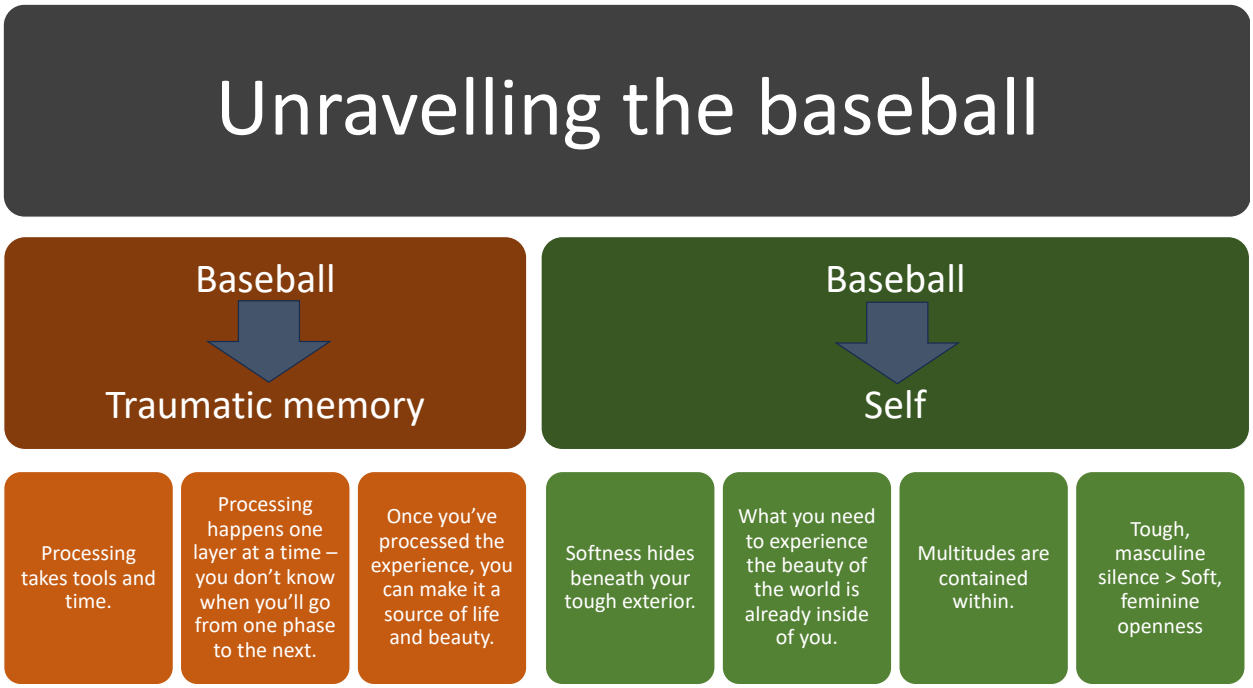
I gathered some handy friends in a garage, purchased three 12-foot 2x4s, a pile of yarn, some deck screws, a case of beer, and three pizzas. Before the end of the night, we had a screen. It stands 9.5 feet high and measures just over 5 feet. Considering the bottom six inches of the structure are supportive and don't act as a screen, the 5'1" x 9' dimensions of the screen align to the 9:16 aspect ratio of vertical video format used on TikTok and Instagram Reels. At the event, I added black craft paper behind the yarn to allow for a crisper image to be displayed.

The years-long indirect process of bringing this metaphor from idea to its current form demonstrates the importance of surrendering to artography as a living inquiry (Springgay et al., 2005) and following the unpredictably rhizomatic process of artmaking. When I first began this process, I couldn't have predicted it in this final form. Connecting it to the language I use in my paddling artography, I am near the end of the zig-zagged, roundabout route that I am taking to bring this image/metaphor into a form that feels satisfying and right. I am close to uttering that

"quiet, internal yes" (Saunders, 2017) and taking the time I need to rest and figure out what's next.

Figure 5

Unravelling the Baseball



Note. A visual breakdown of two ways to understand the central metaphor in UN/WIND UN/WOUND.

After having the experience of working with this metaphor extensively, and in such an embodied manner, I now attempt to convey/explain in language how this metaphor is operating. So far, I have developed two readings of this metaphor, though others may be emerging. It is also likely that others will develop understandings and resonances of their own. In the first possible reading, the baseball being unravelled stands in for a traumatic memory. In the second, the baseball being unravelled stands in for the self.

Thinking of the baseball as a traumatic memory was how I first understood the metaphor. By unravelling the baseball, I was unravelling or processing the memory. In this understanding,

the three insights that I developed are (1) processing takes tools and time; (2) processing happens in steps, over time; (3) once you've processed the experience it can become a source of life and beauty. Interestingly, insights I have pulled from the image of the baseball align with the literature on CSA disclosure:

1) *Processing takes tools and time*. In the example of CSA, which is the subject of the initial poem, my own experiences and the literature show that finding the right language to understand the violation and overcome feelings such as shame and fear (Easton et al., 2014) is critical to begin the healing process. In the film, I am unable to break through the rawhide surface of the baseball with my hands alone. Instead, I need to use a knife to cut through the seams. In the same way, tools are needed for CSA survivors to overcome barriers to disclosing and processing difficult memories. Time is also an important factor; only rarely do victims of CSA disclose before adulthood (Alaggia et al., 2019). In the film, this is represented by the opening shots of the baseball on the log prior to being picked up. It has been there, and life has been going on, but it is waiting to be picked up and understood.
2) *Processing happens in steps, over time.* The literature on CSA disclosure suggests that disclosure and processing is not a discrete event, but a process that occurs across life course (Brazelton, 2015). In the film, the process of going from whole baseball to a nest of its parts occurs over four sequences, broken up by videopoems of other styles. In the first sequence, represented by the hand icon on the tracklist (Figure 1), I unsuccessfully try to break through the ball without any tools. At the end of this sequence, I put the ball down. After many attempts it will stay put. This sequence conveys the experience of attempting to understand a traumatic event without having

the necessary tools to do so. In the second sequence, represented by a knife, I use a knife to cut through the seams, which allows me to peel away the outer layer and reveal the soft wispy first layer of thread. There is trepidation and risk involved in this sequence. With a slip up the knife could cut me instead of the baseball. In the third sequence, represented by the ball of yarn, I move on to unravelling the blue-gray yarn that makes up most of the baseball. The unravelling initially happens quickly at the beginning of this sequence. Part way through, though, the process slows down and hands fold around what's left of the yarn, as if in angry prayer, showing the myriad of emotions that can surface during the process of coming to understand what a given memory holds, as if realizing this can't be undone or put back together. In the fourth and final sequence, represented by a nest, the final bits of yarn are unravelled from the red rubber ball. The work is not done though. I grab a knife, break through the rubber surface, revealing the cork core and placing it the nest of yarn on the log. Before I leave it be, I hide the cork ball in the rawhide shell for a second or two, as if ashamed of it, then I hold it in front of the camera so that it can be truly seen. The final shot is of the cork in the center of a nest of yarn. The unravelling process being interspersed throughout the course of the film aligns with an understanding of disclosure that occurs across life-course (Collin-Vézina et al., 2015).

3) *Once you've processed the experience you can make it a source of life and beauty.* It is well-known that reporting, discussing, and opening up about a difficult experience is a way to transform one's understanding and narrative of that experience (Culbertson, 1995; Dutro, 2011; Polkinghorne, 1996). What you see at the end of the film, a nest with an egg in it, is materially the same as the whole baseball you see at

> the beginning of the film. Nothing has been added or taken away. But how can they be the same? One is soft. One is hard. One holds life. One hides it. In the same way, processing trauma will not materially change what happened. The experience doesn't go away. What changes is how that experience is integrated and understood in the ongoing present. It is a process of transformation, rather than replacement.

This was my initial understanding of the unravelling a baseball metaphor. Through the process of embodying the metaphor across this living inquiry, though, I developed new layers of meaning and understanding. In these new understandings, the baseball, rather than representing a discrete traumatic memory, came to represent me.

The slow transformation of a baseball, a quintessential image of North American masculinity, into a nest, an image of nurturing new life, can be understood as a metaphor for moving from a highly masculine worldview that values toughness and silence to a more balanced worldview that values tenderness and communication. I grew up in a very patriarchal world. I attended a male-dominated, conservative church where women were not allowed in leadership roles. In my teens, I competed in high level sports, including hockey and football and internalized the attitudes about relationships and violence therein. In university, I directed single cis-gender camps. These experiences, along with my prolonged silence regarding sexual abuse, meant that I developed negative patterns around communication. I harmed people I love, got into physical altercations at bars, and experienced periods of loneliness and depression. Over the years, I have been working to change these patterns through various means, including therapy, artmaking, and mindfulness practices. Reconnecting to the image of the baseball, I have always had a softness beneath my tough exterior, but it was hidden, wound up, made hard and dangerous. I am still the same me, made up of the same parts, experiences, and materials, but I'm

more connected to the multitudes, multiplicities, and layers I used to keep hidden. The metaphor of the unravelled baseball can also be understood through the lens of memory reconsolidation. As with the emotional memory in memory reconsolidation, the baseball is the same in its material composition but the understandings and meanings that accompany those materials are vastly different. They have a new affective character and a new place in my identity and narrative.

While these metaphors are powerful, they are not unique to me or this film. Softening, unwinding, and opening are commonly used in writing and speech to convey a new willingness to be kind (he softened his heart), relaxed (I used to be wound so tight), and communicative (thank you for opening up to me). This metaphorical meaning extends further through the process building a screen to project the film on out of grey yarn. Through the construction of the screen, the nest at the end of the film becomes more than something beautiful in its own right. It becomes a surface of openness and vulnerability, allowing me to share my art and myself with an audience. On the night of the installation, the screen also allowed audience members to connect to their own experiences, as what unfolded in the space reminded them of their own tightly wound memories that needed to be taken apart. All these exchanges—between myself and my art, my art, and the audience—were made possible through the process of embodying metaphor. Enacting the metaphor with my whole being allowed me to develop and share a more layered, holistic understanding that I was not able to access through cognitive means alone.

“first melt”

Another poem featured in the film is “first melt,” a 14-line sonnet built around the metaphor of a northern leopard frog coming to the surface after its first winter on the bottom of a

frozen body of water. This poem, like many using metaphors of spring and melting, speaks to feelings of hope and possibility following periods of struggle:

first melt

When I learned the freeze was not the end
I abandoned brumation for rippled
rhythms on the surface and the line.
I'm sorry that I left you on the bottom

all alone. To breathe the cold is to know
the cold and the cold was all I'd known.
My heartbeat charts a sine wave, my chest fills
and falls, my dreams like muddy rivers hold

what will be carried, what will be spilled. Faith
in sewing needles pointing north on leaves
in copper ponds, among frog song, redwing
blackbird flap, and willow wind. And I,

surfaced, brittle words upon a line,
flowing nowhere in the magic trick of time.

The text of this poem is voiced in the video over footage of the Red River and area around Winnipeg transitioning from winter to spring, connecting to some of its metaphorical meaning. The idea and feeling of surfacing, of being able to breathe after being underwater, is central to this poem, connecting to the feeling of relief that comes after processing or letting go of a difficult memory or experience.

When I wrote this poem, I had been reading a lot about northern leopard frogs, whose distribution extends as far north as the treeline. To me, their ability to survive in tough conditions symbolizes resilience. In the winter, they go to the bottom of a body of oxygen-rich water that doesn't fully freeze, like a swamp, and rest on top of the mud in a dormant state, breathing through their skin. In the spring, they rise to the surface and return to their amphibious lives. I

wrote the poem in the years following my father's sudden death as I felt myself reaching the other side of grief.

"first melt" imagines a frog at the tail end of its first winter, its first freeze. The previous spring it hatched into a tadpole, went through the stages of becoming a frog, and then, with the changing of the weather, felt itself drawn to the bottom, where it entered its winter-long state of frozen suspension. It is written from the perspective of this frog as it reflects on the realization that its frozen condition was temporary, part of a larger story of change, connecting it to the cosmic rhythm of freezing and melting, and helping it find its place in what Mary Oliver (2017) calls "the family of things" (p. 347).

Difficult or traumatic experiences can leave one suspended or frozen in a deeply embodied and spiritual sense. Such experiences connect to "other levels of reality, sensed not even by the five senses, but by the body itself, or by the spiritual mind, the interior of the body" (Culbertson, 1995, p. 176). The first time such an experience occurs is especially difficult, because there is a worry that this is how life will feel from now on, that this state of frozen suspension will be permanent. Work exploring artmaking in response to difficult events suggests that this kind of work is important because it can help one understand that those periods of suspension are part of the larger story of life. While other griefs and traumas will occur across our life course, freezing us anew, we leave each subsequent melt better equipped to understand and re-emerge from those experiences (Brazelton, 2015). We develop faith, a deeply felt knowing, expressed in my poem, that "the freeze is not the end."

Culbertson (1995) discusses the blurry edge between metaphor and experience in the wake of trauma. She suggests that writing about trauma often takes on the character of metaphor as a byproduct of using "the blunt instrument of language" (p. 177) to capture such an intensely

embodied experience. I find that when I write about my own traumatic experiences my writing can tend to take intensely symbolic, archetypal, and even mystical qualities. Culbertson explains these parallels:

> If we note that the experience of wounding at the hands of another raises fundamental questions about the boundaries of the self, then it makes sense that experiences which are essentially about transcending such boundaries—as sadhus, shamans, mystics, and others report them—might in fact occur simultaneously. (Culbertson, 1995, p. 177)

This idea of traumatic experience as mystical experience is compelling, as is the blurring between metaphor and experience.

Later in the film, this metaphor in "first melt" is presented visually through a POV sequence of the frog in "first melt" rising to the surface from the bottom of a body of water. The text of "first melt" and the metaphor of the frog leaving the bottom for the surface serve as a screenplay for this video sequence, communicating the meaning visually, rather than only through written language.

I recorded the video for this portion of the film on a canoe trip in May 2023 in Northwestern Ontario. I put my iPhone in a waterproof case and went to the bottom of the cold lake to embody my hypothetical frog. My iPhone's camera became the eyes of my frog as we went through the process of surfacing. This act of metaphor embodiment was powerful, adding layers and depth to my understanding of what it means to be on the other side of a difficult or traumatic experience. This new understanding occurred on a level outside of language, allowing me to feel the meaning in my body, and I felt an odd kinship with the frog I had written about. This new kind of knowing became further internalized through the process of reviewing the footage and editing it together. Working with the footage that I had recorded reconnected me

with the time I had spent in the water pretending to be a frog reaching for the surface after its first winter at the bottom, when it thought that life would always feel this slow, this frozen, this numb. By making it part of a larger narrative interrogating memory processing and healing—as I did in UN/WIND UN/WOUND—I developed an embodied understanding of what, before this project, I only understood conceptually.

Reflecting on this experience now, the metaphor and the experience are blurred together. I actually did leave the bottom of a cold lake. I actually did take in a large breath of air after being underwater for an extended period of time. I actually did leave a period of numbness and become reanimated, which Culbertson explains: “The world appears a different place, stuff and substance with a decidedly metaphorical quality. Was there a high mountain with trees? Yes, and no” (1995, p. 177). Was I at the bottom? Did I see the light shimmering above? Did I feel my arms and legs fill with energy, drawing me to the surface? Did I breathe deep the air of the surface? Before enacting this metaphor for this project, the metaphorical meaning was there in a way. I had a sense of it. The answer was ‘yes, and no.’ But now, thanks to the practice of enacting metaphors, I can answer a definitive yes to those questions. I was at the bottom. I did see the light shimmering above. It did draw me to the surface. I did take a large breath of air after being underwater for a long period of time.

Rest / Reflect

Embodying metaphor is a powerful practice, allowing me to generate new layers of meaning and come to a more holistic understanding of my experiences and identities. Embodying metaphor became a powerful tool for embodied artmaking and connected me to the deep purposes and benefits of creative practice, such as coming to know yourself and the world in a deeper, more nuanced way (Gannon & Davies, 2007; Young & Ferguson, 2020). Using

Pryer's (2005) language, I have "come to befriend my estranged self through meaning making, [helping me overcome my] sense of loneliness, separation, and division" (p. 72). It also led to the creation of a strong and impactful final product. I am prouder of this work than anything else I have made and believe it has great artistic value. This artmaking process was made possible for me through the affordances of smartphone technology. I investigate the new media (McLuhan, 1994) and multiliteracies (Bull & Anstey, 2019) implications of this work later in the project.

Chapter 5: The Liminal in Embodied Creative Practice

Through this inquiry, I attempted to create from a place of deep connection to my body and the natural world. Three of the poems that are voiced in UN/WIND UN/WOUND were composed vocally while in embodied states of motion as outlined in the practice outlined in Chapter 3. I had the idea to explore this type of composition after encountering the literature about embodied creativity that shows that movement and exercise can facilitate creativity (Frith et al., 2020; Griffith, 2021; Leschziner & Brett, 2019; Malinin, 2019) and help one access stored body memory (Koch et al., 2012; Konopatsch & Payne, 2012; Riva, 2018). From an artographical perspective, I was inspired by Snowber's (2016) beautiful book on embodied inquiry and composition. I remember feeling hopeful and seen when I first encountered this text. Rereading parts of it now for this analysis there is a great sense of congruence. Both our embodied practices blur boundaries between movement, composition, and spiritual practice: "My walking became my writing, my writing became my walking, and I could not distinguish from walking, listening, praying, being, writing, or dancing. All was a place to listen to the wells of inspiration" (Snowber, 2016, p. 20). In the same way, I felt that experiences blended beautifully as the regular boundaries between experiences faded. Exercising was artmaking. Artmaking was mindfulness. Walking was reflecting.

The term 'liminal' refers to being within a boundary or threshold and is a key concept within artography. Often, in artography the concept of liminality is used to explain how the artographer engages with the world and their work from the interstitial spaces among the identity markers of artist, researcher, and teacher (Irwin, 2013). However, in some artographical research (Bickel, 2020; Manathunga et al., 2022; Snowber, 2016) 'liminal' extends beyond identity and connects to the boundaries between rational, emotional, bodily, and even spiritual domains of experience and the boundaries between different states of consciousness.

Artographers have also sought liminal spaces from which they can engage in their work. For example, Manathunga et al. (2022) examine beaches as liminal spaces, boundaries between land and water, order and chaos: “Beaches act as uniquely edgy, unpredictable, liminal, generative spaces where we are free to wander both peacefully and dangerously” (p. 234). They draw attention to the creative possibilities of engaging in artographical work by moving through the liminal space of the beach as they seek a more balanced and valuable academic life. In a similar way, the poem at the heart of my paddling artography “the shore is the mending site” (Cain, 2021) centers the liminal space of the rocky shorelines of the Canadian shield.

Much of the audio and video that ended up in UN/WIND UN/WOUND was recorded on the Nestawaya River Trail, a kilometers-long skating and walking trail that is cleared on the Red River and Assiniboine River in central Winnipeg each winter when conditions allow. The river trail connects users to the true geography of the area. Moving via the rivers is moving via ancient routes. Nestawaya, the Cree word for where the rivers meet, has been designated a National Park and is a tourist landmark in downtown Winnipeg (The Forks). It has been a meeting place of the Indigenous Peoples of the area for thousands of years. I have spent many hours on the frozen surface of these rivers, and on one level, this film is a love letter to the trail.

Contemporarily, these waterways function as a liminal space. In liquid form, they snake through the city, dividing neighbourhoods, making movement between areas that are close as the bird flies, difficult to move between. In the winter however, places that may take fifteen minutes to drive between and hours to traverse by foot are now connected by a short walk across the ice. When the river freezes, the boundary becomes habitable and traversable.

Moving via the river allows one to see the city from new angles and perspectives. Familiar landmarks, when experienced from the river, take on the character of the unfamiliar and

can have an uncanny, dream-like quality. This dream-like quality made its way into the film, which similarly shows the world from unusual perspectives, giving viewers a sense of newness and evoking the emotional and spiritual intensity of dreams.

When using the river as a travel corridor between destinations, it becomes a portal, akin to a loading screen in a video game. By not experiencing the regular sensory landmarks associated with road-based travel, you wind up at your destination by what feels like magic. Climbing the banks of the river and entering the destination neighbourhood in this way adds to its quality as a liminal space, a mysterious boundary through which you are transported from one place to another. Rivers and waterways are also often used as metaphors of memory (Gifford, 2011).

I wonder how composing while running, skating, shuffling, or paddling through this, and other, liminal spaces influenced what ended up emerging in my work. I believe that, like Manathunga et al. (2022), the liminal setting of my work influenced it greatly. By composing from between-places, I was primed to move between domains of memory and imagination, the present and the past, the rational and the spiritual, and engage with the liminal aspects inherent to artography (Irwin, 2013).

Next, I relay my experiences with embodied composition and the liminal in UN/WIND UN/WOUND. For context, “beneath” (Cain, 2023) appears in the winter section represented by the skate and “on the kitchen floor,” the emotional climax of the film, appears in the summer section represented by the canoe on the visual tracklist (Figure 1).

“beneath”

“beneath” (Cain, 2023) was mostly composed while in motion, however the sound quality of the file was quite poor due to it being recorded on a windy day. I liked what was on the

recording, though, so I transcribed and created an erasure poem (Le Cor, 2018) from the transcribed text. After that, I wrote the opening and closing lines of the poem:

> beneath the mud
> beneath the silty water
> beneath this ice
> beneath my skates
> beneath my phone
> beneath belief
> shelled creatures
> rest til spring (Cain, 2023)

The rest of this poem communicates childhood memories of playing hockey on the outdoor ice at a park near my childhood home. The video for this section is a single POV shot of my phone attached to a skate during an evening skating and creating on the Red River. The uneven surface of the ice causes the image to be blurred and the light from the streetlamps and houses on shore to dance energetically as I stride across the surface. The audio from this recording is also included in the film, providing a rumbling, carving soundscape to the sequence. After the opening passage, my voice says, “when I needed to bring my twelve-year-old self somewhere safe, I brought him to where time was nothing, to the outdoor ice at Charry Park, to this sound.” I had previously explored this image at the end of a therapy session exploring my childhood self. At the end of the session, my therapist asked me where I could put that version of myself—where would he have fun and be safe. I decided on Charry Park where I spent many evenings of my youth playing pickup hockey and baseball, among other things.

I did not set out to explore this memory of skating that evening when I went to the river trail to create. In fact, I found myself frustrated by my inability to explore topics/memories outside of skating during this creative bout. When I finally stopped resisting, leaned in, and accepted that this is what I needed to explore, the process became enjoyable, and I wound up

with a meaningful recording. Returning to the metaphors I developed for my paddling artography, I needed to open myself up to the zigzagged route that the conditions of the moment were making necessary. For a time, I resisted lines of travel outside of my original plans, leading to a feeling of frustration and minimal creative output. Once I let go and embraced the creative route that the conditions of the moment were presenting me, the creative process took on the character of ease and release, and text from this bout ended up being included in the finished version of the film, demonstrating the importance of embracing alternative and unexpected routes and responding to the needs and intensities of the moment.

It is interesting that skating in the present brought me to memories of skating in the past. When skating I was connected to the me who skates. This skater has access, perhaps, to a certain type of memory that the seated version of me may not be able to access, pointing to the powerful ways in which memory lives in the body and can be unlocked/accessed/triggered through different sensory inputs, as is discussed in the literature on embodied memory (Culbertson, 1995; Dennis et al., 2022; Engel, 1999; Koch, 2012).

Another question that arises for me as I reflect on creating this sequence is ‘where was I?’ Physically I was on the Red River on February 19, 2023. I was also in my therapist’s office in 2021 in the minutes following some deep body-based focusing therapy that has transported me to realms of memory, symbolism, and imagination. I was also on the outdoor ice at Charry Park in the years around the turn of the millennium then in the shack waiting for Dad to pick me up. I was in my body and memory and soul. I was remembering, imagining, writing, dreaming, waiting, skating, all at once. This connects to the collapsing of time, place, and mortality as explored in Lea’s research-based theatre dissertation (2013).

“on the kitchen floor”

In my opinion, “on the kitchen floor” is the most powerful sequence in UN/WIND UN/WOUND. The video footage was recorded on a canoe trip with friends to Augite Lake near Kenora on June 3, 2023. All the footage is taken from within the lake, some of it underwater, some above. I recorded the audio for the piece on a run at the aforementioned weekend at Herb and Maem Enns’s cabin on Blueberry Island, Shoal Lake on June 24, 2023. In the audio, I recount an experience I had the previous week on social media. My wife, who was out of town at the time, had sent me a link to a TikTok video that was a recording of a portion of an episode of *The Oprah Winfrey Show* dating back to 1990. In it, therapist John Bradshaw leads the audience through a guided meditation in which participants return to their childhood home in their minds. I found the experience incredibly vivid and affecting. By the end I was laughing and crying at the same time on the floor of my kitchen. While I have been unable to find the link to the original TikTok video, here is a link to the segment from the original show: https://youtu.be/YiYXEhzBpME?si=0bPfe73d6rw02aAf.

The experience of the guided meditation had stuck with me and surfaced unexpectedly during this bout of embodied creativity. Again, the question arises, ‘Where was I?’ Physically, I was running in circles on a patch of granite on a small island on Shoal Lake on June 17, 2023, a place and area rich with complex personal memory. Shoal Lake is where the summer camp I directed is located. It is where I made some of my best friends. It is where I met my life partner. Blueberry Island is located at the threshold to Big Shoal, an expanse of open water too large to see across. From this place, I was remembering being in my kitchen in Winnipeg just the week before imagining/remembering returning to the mid-90s version of my childhood home in Thunder Bay. As the transition from my kitchen in 2023 and my childhood home in the mid-90s occurs, the camera moves from above the surface to underwater and there remains for the

duration of poem recounting the experience of the guided meditation. When the memory returns to the present, the camera emerges from beneath the surface of the water. The fact all this narration occurs during a run fades out of consciousness during the sequence and the strained voice and rhythm of the footfalls and breath feel connected to the emotional strain of this kind of inner work. This type of fading or collapsing of time and location has been explored in Lea's (2013) theatre-based research in which the set was designed to be a place "where characters can physically interact despite the 'real world' borders of time, place, and mortality" (p. 164). In a similar way to what Lea found in their research exploring connecting to family members across time, through the creative process of making UN/WIND UN/WOUND, I was able to interact with different versions of myself, separated by time and space. These intensely liminal and transportive experiences were especially poignant during the bouts of embodied creative practice that led to the "beneath" (Cain, 2023) and "on the kitchen floor" sections of the film.

Artographer as amphibian

Through this living inquiry, I developed a fascination with the surface of the water. I have come to think of the surface of the water as a metaphorical threshold between the conscious mind of rationality and thought (above the surface) and the unconscious mind of spirituality and emotion (beneath the surface). Water can also be a metaphor for memory (Gifford, 2011). Water is a window and a mirror, reflecting the distorted image of the world above on its surface, while also revealing a distorted, refracted version of what lies beneath. On calm days, when the water is like glass, the surface reflects a mostly clear, slightly shimmering image of the world above. When the surface is choppy, due to winds or current, the image of the rational world is unable to form on the surface of the water and the water appears as an ambient blur of colour. On these days, the water loses its window-like qualities. You cannot see what is happening beneath when

the waters are churning. In these rough conditions, your attention turns to keeping the boat moving and afloat, rather than gathering insight or appreciating the world around you. This above the surface—rational, beneath the surface—emotional/spiritual metaphor can be easily extended into our education system. What would change if students' struggles to complete coursework, register concepts, and apply ideas were understood as being result of them being intensely engaged in keeping themselves upright and moving amid intense emotional and spiritual turmoil?

Frogs and other amphibians are a through line through the piece UN/WIND UN/WOUND. In "beneath," (Cain, 2023) frozen painted turtles lie dormant beneath the ice. In "first melt" a northern leopard frog reflects on rising to the surface and experiencing the beauty of the world again. In "on the kitchen floor" we are put into that northern leopard's frog POV visually as they move between water and air. Amphibians are symbolically important to the work and to the practice of artography because they are equipped to move between boundaries, traversing the liminal with ease. In the same way, the artographer can be asked to traverse and dwell within liminal spaces among different identities, domains of experience, and states of consciousness.

Rest / Reflect

The liminal was central to my living inquiry. I was lucky to have access to liminal spaces in which to create, including the Red River and a cabin on Shoal Lake. I believe that creating from within these spaces facilitated movement between the various domains mentioned above. Embodied movement practices were also important to facilitating liminal states. Through movement-based embodied creative practice I was able to access liminal states of consciousness where I was less bound by inhibitions and the loud voice of the internal editor. From this state,

powerful memories and language emerged. It is interesting that both examples have an inward-looking therapeutic experience as a jumping off point. In “beneath” (Cain, 2023), the image of bringing my 12-year-old self to the safe space of Charry Park emerged from my work in focusing-oriented therapy, a type of psychotherapy concerned with the felt-sense of experiences (Purton, 2010). In “on the kitchen floor” the image of going to get the child version of myself from my childhood home emerged from a guided meditation I encountered on social media. This congruence feels important. While I don’t exactly know what to make of it, there is evidence in the literature suggesting that movement practices can help one access body memory and that movement can aid in understanding experiences (Panhofer et al., 2012). Barbara Bickel’s (2020) artographical exploration of ritual and trance techniques to create from sacred, embodied states of consciousness provides another lens through which my own liminal experiences in creativity can be understood. Composing from intensely embodied states of consciousness helped to quiet the internal editor and connected me to liminal spaces of experiences.

Additionally, composing from intensely embodied states led to a blurring of the boundary markers that divide and categorize experience. For example, exercise and creativity are typically viewed as discrete activities, with different purposes, one nurturing the body, one the spirit. Through this work, I did not need to decide between being an athlete, an artist, or an adventurer. I did not need to decide between creating, exercising, or being in nature. Through these embodied, place-based creativity practices, I was simultaneously able to connect to aspects of myself that I have felt tension about keeping separate. I was freed to operate and create with my whole being. Operating from this boundary-land between identity markers was enriching for my artmaking. It is also a much-needed balm for what I view as an over-compartmentalized and fragmented educational system. Within this system, composition happens at your desk during

English Language Arts. Exercise happens in the gym during Physical Education. If pesky, difficult emotions or memories surface while you're at school, head to the counsellor's office. You're allowed outside if you stay in line and don't do anything that causes you to lose recess privileges. It has been liberating to operate outside of this compartmentalization and to be able to live and create from my whole being.

Chapter 6: The Smartphone and Embodied Creative Practice

The initial impetus for using the smartphone as a means to engage in research on the move came from a desire to create from a state of embodiment. The adventure research I encountered that used recording technology to generate data on the move (Kennedy et al., 2019) gave me my initial idea for the practices that emerged. The work on embodying metaphor which I discuss above came later in the process. My earliest experiments were with recording voice memos on my iPhone and Apple Watch, editing them into poems, and using them as soundtrack for videos.

Over the course of the inquiry, my practices became more sophisticated. I purchased a Bluetooth lapel microphone to record higher quality audio. I dug out an old phone from a drawer and experimented with using two phones while recording. I used the old phone to listen to music while recording video and audio to see how that would affect the process. I tried singing while skating. I took an old leather belt and used it to strap my phone to torso, so my hands could stay in their seal skin mitts. I used the same belt to strap my phone to my skate. I turned the camera on myself. Looked myself in the eye with my Kino-Eye. This experimenting was fun and exciting. There was a sense of possibility and freedom when I went onto the ice/water or down the shore or into the woods to see what I would find.

Figure 6

Rigging

Note. Some of the rigging used to capture the footage.

Smartphone-based composition shifted the way I see the world. It helped me to develop a new aesthetic sense. It attuned me to new ways of seeing. When I was trying explaining this to a colleague of mine, the art teacher at the high school I taught at for nearly a decade and a prolific artist in his own right, he said, “Oh, you’ve learned how to see the world as an artist.” To illustrate what he meant, he provided me with a beautiful detail he noticed walking from his vehicle to the business where we met. It was a warm sunny Sunday in October a few days following an early snowfall. There were patches of darkened pavement next to each of the cars parked on the side of the road, he said. Those patches were slightly larger than the shadows cast by the cars because the sun hadn’t yet evaporated the most recently exposed edge of the wet patch. It created a gradient effect. The light grey of the dry pavement, the middle grey of the wet

pavement free from shadow, the dark gray of shadow over wet pavement. The gradient had been moving across the pavement all morning. As he relayed this to me, he connected this ability to see such detail to his experience and posture as an artist. His experience and identity as a visual artist had become one of the key lenses through which he experienced the world, attuning him to colour and line in the world around him, not just when he is standing before his canvas, but also when he is walking from his car on a gray November day.

Through experimenting with the smartphone's ability to extend my sensory system outside my body, I was alerted to elements of experience that had always been there, but of which I wasn't conscious. For example, I became aware of new intricacies of how light interacts with water. How light bounces off the water and dances on the granite of the Canadian shield. How it makes the world shimmer and shake. How it bends light and images giving the world an absurdity. How it stirs colours together in constant fluidity. How all that changes depending on the weather—when the water changes state and becomes snow, ice, or slush. I could go on and on. The Mylar screens (Figure 3) on which I projected the film allowed me to share the dancing of the light with audience members at the installation. Fans on the ground beneath the screens caused them to billow, making light from the projector dance through the room and on the faces of those in attendance. In a way, they were in the water.

The water is just one element, I could write a similar passage on the way grass moves in the wind, or the way the thinnest branches at the top of the elm canopy criss-cross against the backdrop of the sky. By teasing out and reflecting on these patterns, I developed conceptual meanings and congruencies, which I discussed in the above section on the surface of the water as a liminal space. While those conceptual discoveries are meaningful to my work as an artographer and this research, the new way of seeing the world aesthetically, attuned to its beautiful patterns,

is now central to how I'd like to move through the world. Through this work I was able to adopt and connect the artist identity within. Connecting to this identity changed how I see the world, attuning me to the beautiful patterns therein. I'll now go through a few examples from UN/WIND UN/WOUND that illustrate how composing with the smartphone led to realizations about the sensory system that changed how I see and interact with the world.

"through the phone"

"through the phone" was the second videopoem I made with this project in mind. The first "patterns" I did not end up including in UN/WIND UN/WOUND. I recorded the voice memo from which the poem emerged at two in the morning on January 22, 2023, as I was walking home on the Nestawaya River Trail. My spirits were buoyed after a night spent with old friends. I felt an odd safety and privacy in that liminal space, as if I was nowhere at all or everywhere at once. Feeling playful, I moved from the walking trail to the skating trail and began shuffling across the surface of the ice. With my phone camera, I recorded my feet shuffling for a while before stopping to record the scenes and landscapes unfolding around me. As I generated the footage, I had a realization. Part one of the realization was that the phone allowed me to notice aspects of reality that were always there, but that I was missing because of the default sensory patterns with which I had been experiencing the world. Part two of the realization was that after putting the phone away, I was still able to notice the beautiful aspect alerted to me by my phone's framed version of reality. Part three of the realization was that, within the context of my entire field of vision and combined with my other sensory apparatus, that aspect of reality was even more interesting and beautiful than it was when viewed through the screen. As this sunk in, I returned to shuffling and began recording a voice memo. "You can't just see it through the phone, you can't just see it through the phone," I repeated as a mantra, in time with the

shuffling of my boots on the ice, the swishing of my winter gear, my breath. Before long, new language emerged as I narrated the experience I had just had as I took video footage on the river. I returned to my mantra and kept shuffling until the magic disappeared and I returned from whatever liminal space the river trail and my movement—the complete sensory experience of it—and my mood had brought me to create.

This realization had been primed by my recent discovery of Dziga Vertov, who viewed his camera as an extension of his body, allowing him to see aspects of the world that he couldn't with his human senses alone (Vertov, 1985). These ideas had been germinating in my mind, but it wasn't until I was in the creative field with my own Kino-Eye that I was able to comprehend the impact of what he found so deeply fascinating on a level in which allowed me to harness it for my own creative process. I see this as incredibly supportive of an embodied understanding of creativity and cognition. My ability to understand this concept emerged from embodied practice in the field, not through study, reading, or discussion. I needed to study, read, and discuss to have this embodied realization. It provided the foundation on which this realization could occur, but it would have remained in the purely rational realm of knowing had I not attempted to apply it in the actual world of things. Interpreting this through the lens of embodied cognition and creativity, this realization and creative event occurred through a dynamic systems interaction (Baber, 2022) among myself (organism), the river trail (environment), and my iPhone (artifact).

Using the phone to see the world was part of the process that had me realizing that the phone was not the best way to view the world. Yes, it can alert me to aspects of the world's beauty, but once it does that, engaging with the world with my whole being in my full sensory capacity, leads to a far more enriching and beautiful experience. It is likely that this kind of shift in perception could have happened through other means or ways of artmaking. But there is

something unique about the ubiquity, accessibility, and portability of the phone that separates it from other artmaking tools. To paint, you need a well-lit studio or outdoor space, a canvas, brushes, and paints. To write you need to be still or moving slowly as your visual senses and attention are absorbed in forming the words and letters on the page or screen. To record with the phone, all you need to do is hit record and move through the world.

"Drifts," "beneath," and "the shore is the mending site"

Another example of the smartphone-based embodied composition alerting me to elements of perception and the physical world comes from the skating and paddling sequences in the film. The text of "the shore is the mending site" and "beneath" (Cain, 2023) appear elsewhere in this thesis. "Drifts" is a 16-line poem written in common meter in the style of Emily Dickinson and many of the hymns of my youth. Here is the text of the poem:

Drifts

The years are gathering in drifts
like snow in prairie fields
and everything we thought we shared
is a half-remembered dream.

Following our headlights
down a dark December road,
the windshield filled with static
of horizontal snow.

Lit a fire with sad pamphlets
in the quinzhee that we dug,
a twelve-foot drifted snowbank
crackling with love.

There's a book that's hooked its meaning
through our cracked and bloodied lips.
There are years like snow in prairie fields
gathering in drifts.

Appearing early in the film, the text establishes the film's dreamlike atmosphere, while its use of common meter connects to the film's spiritual essence. Its circular construction and language around time mirror the circular construction of the film, which is a 24-minute loop, each minute of the loop representing an hour of the day. I discuss connections between the rhythms of the natural world, wonder, and this inquiry in a later section.

The film's skating sequences alerted me to aspects of perception of which I was previously unaware. These sequences were recorded by strapping my phone to my skate using a leather belt, to give me a skate's-eye-view of the experience. The most jarring aspect of this footage, especially the night footage in "beneath" (Cain, 2023) is how the phone's camera has such difficulty stabilizing the image, resulting, as mentioned above, in light dancing sporadically through the frame. The effect, while quite interesting visually, reveals the relative inadequacy of the phone's ability to make sense of and perceive a shaky scene relative to my body's visual system. Through my eyes, the scene was completely intelligible. The lights on the shore were clear and distinct. Unlike the system at work in my iPhone, my body's visual system was able to account for the vibrations of the ice and disperse them through my body, allowing me to perceive the scene in an undistorted, stable manner. This difference gave me a new appreciation for the complex beauty and intricacy of my own sensory systems and alerted me to some of the limitations of the smartphone.

The affordance of being able to hit record and move through the world (is the phrase 'set--and-forget-recording' too much? I'm going with it…) comes through clearest when examining "the shore is the mending site" and "Drifts" from a visual perspective. In both these cases, set-and-forget-recording enhanced my capacity to perceive experiences. This form of recording showed me intricacies of the world that would have been impossible to perceive with my body's

sensory systems because those systems were engaged in the movement practices of the moment. It would be impossible for me to observe the water from the angle just above the canoe's gunnel while propelling the canoe because, to make the canoe move, I need to be sitting erectly in the seat with my shoulders back and core engaged. My eyes need to be trained on the horizon to keep the canoe balanced and going in the right direction. It would be impossible to observe the surface of the ice from inches away without lying on a toboggan and having my friends pull me along. I don't think I could find any volunteers for that job.

Set-and-forget-recording is a technique of first, out-of-body perception and second, out-of-body memory. This is different than the type of recording that happens when one looks at the screen of their phone while recording. In this manner, the body's sensory systems are taking in the scene through the phone's framed visual field, meaning the perceptual experience of the scene is relatively aligned with what the phone captures. While the sounds and images perceived by my phone were not taken in by my built-in sensory apparatus, upon reviewing the footage, what was recorded with my phone blended with what I perceived with my body, resulting in a combined, or liminal, form of perceiving and remembering the world. This new integrated mode of perceiving and remembering may be unique to the digital age, the age of reflexive capture, edit, and broadcast.

Exactly how the changes in perception and memory outlined above will impact society is beyond the scope of this inquiry. There is compelling research by various scholars examining this issue. For a good overview, see the 2018 volume *Digital Memory Studies: Media Pasts in Transition* edited by Andrew Hoskins. The introduction to that volume contains this quote, which comments on the current state of affairs:

> Digital media have transformed the parameters of the past and have ushered in a new imaginary, that amazes in the very recognition of the scale of this post-scarcity culture, but that also, to repeat, makes visible our inability to encompass everything; the digital simultaneously affords a synchronic and diachronic unlimited depth of vision that at the same time makes us aware of the limits of the human capacity to arrest and to hold and to keep the archive. (Hoskins, 2018, p. 5)

Still, questions arise for me as I consider the differences between my own human memory and the digital memories I used to create the experimental film at the heart of this project. This research is grounded in an embodied understanding of memory that rejects information processing models in which memories are stored and retrieved as on a computer (Gifford, 2011; Glenberg, 1997; Riva, 2018). The emotional resonances and learnings attached to my experiential memory shifted through the activation of those memories in the artmaking process, resulting in new, more adaptive ways of making sense of those experiences. This connects to the process of change identified by memory reconsolidation research in which the negative emotional learning originally attached to an experience is replaced by new emotional learning so that new patterns of living can take hold (Ecker et al., 2022).

Digital memory functions via a computer model. The information is there, waiting to be retrieved, and when it is retrieved, it appears exactly as it was recorded. Digital memory lacks the plasticity of human memory. Here it is important to remember that the specifics of autobiographical memory are not changed during the process of memory reconsolidation, but rather the emotional learnings that were attached to autobiographical memories. Negative emotional memories do not disappear. They take on new character, allowing the maladaptive

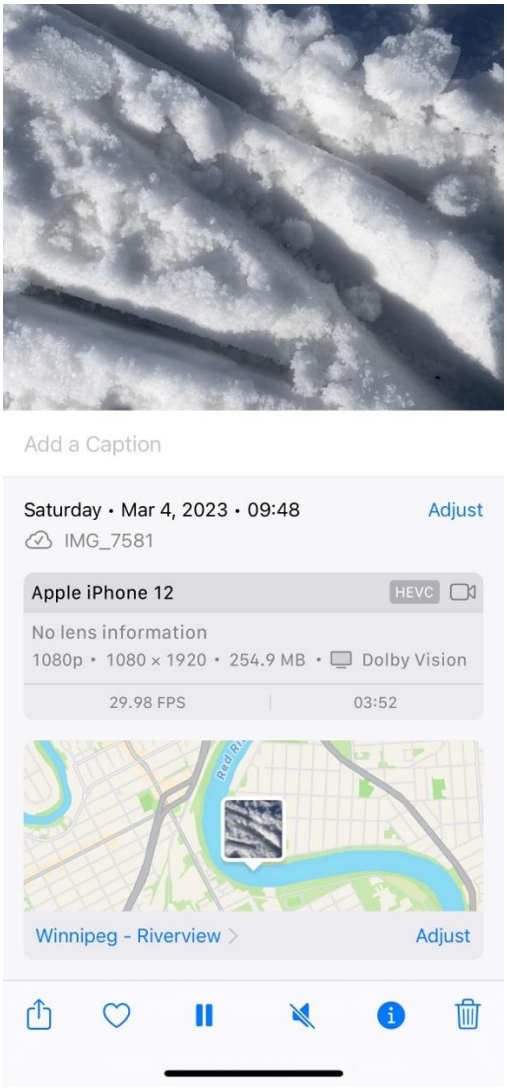
emotional learning that occurred in the immediate aftermath of the abuse to be replaced by new, more positive understandings (Lane et al., 2015).

What was happening as I reviewed the recordings I made during my bouts of embodied creativity? How is that kind of remembering different than the memory that occurs entirely within? For the video recordings, there was a surreal element to reviewing the footage. The footage was familiar experientially; the quality of light, physical geography, landmarks, sounds, etc. were similar to what I had remembered via my body-based perception. On the other hand, my phone-recorded memories provided new perspectives from which to recall the experience. In the example of reviewing the skating recordings, I became attuned of what was happening on the highly gouged and uneven surface of the ice while I was skating. As I write this, I am aware that I understand the sensory information taken in by my phone to be part of my embodied memory of the event. I can bring it to mind with even greater intensity and clarity than my body-based memory. The intensity of the recorded imprint may be because I worked with the video files so extensively during the editing process. The repeated exposure to such clearly stored imagery of the event solidified in my memory in a different manner than my non-digital memories of the event.

Another difference to note is the specificity of time and location that is attached to the memory. Looking through my camera roll, my phone has a record of the metadata of each recording included in the film, including the exact time and location at which the video was made (Figure 7). While my human memory system does not function with that level of precision it has a richness and life that digital memory lacks.

Figure 7

Metadata



Note. A screenshot of the metadata that shows the exact time and location of capture.

The memories that I have recorded on my phone have wound up functioning similarly to my own human memory. While I could look through my camera roll and know the exact time and date when that footage was recorded, I do not engage in this kind of practice. Rather, a selection of those digital memories, the ones I have viewed and re-viewed, are integrated into my human memory. The digital recordings I have of skating on the river trail have become part of the broader affective and sensory relationship I have with skating on the river. Unlike the digital

memories which exist in stark distinction from one another and cannot interact without human intervention, the digital memories and human memories I have of the river trail flow together and distinctions between the two fade. While the digital memories themselves are not in my memory, the embodied memories I have of recording, reviewing, and artmaking with those digital memories exist within me and are integrated into the narrative, conceptual, and affective relationship I have with skating on the river trail.

Rest / Reflect

By engaging in the smartphone-based embodied creative practices that I developed through this inquiry, I was able to develop and connect to an artistic identity through which I felt better able to notice and appreciate the world aesthetically. I deepened my understanding of the affordances and limitations of the smartphone as a tool of perception and had insights about the changing nature of memory in the digital age. Overall, my experience with this type of composition allowed me to create art from a space of deep connection with the natural world and my body and I view my experiences of it fondly.

Unexpectedly, my experiences of embodied composition in the natural world, were made possible by the smartphone. I say unexpectedly because smartphones use is often the catalyst for intensely disembodied experiences, such as endless scrolling on social media. Overuse of smartphone technology is a major issue of contemporary life, closing people off from the concrete world, numbing them to bodily experience, promoting discourses of divisiveness and conflict, and leading to a number of psychological, physiological, and educational issues (Bhargava & Velasquez, 2021; Elhai et al., 2017; Lopez-Fernandez, 2021). In my teaching practice, I am regularly frustrated by student cell-phone use. From what I see, it is typically used negatively, leading to a culture of distraction and anxiety.

It is interesting, then, that the smartphone-centered artistic practices I developed and engaged in, are practices of holistic, embodied creativity. These practices subvert the conventions typically associated with the form of the vertical social media video. While similar in form they are different in character: intimate rather than superficial, seeking embodied understanding rather than external validation, and connecting to emotional complexity rather than generic positivity. I sought for my work to have this effect after engaging with Vertov's films and writing (1924, 1929, 1985) and scholarship on memory and social media, specifically Pogačar's (2018) work calling for grassroot efforts that use the form and conventions of the social media video to the typically shallow content ubiquitous in that form.

It is important to note that the type of memory storage done with a smartphone or other digital recording device is vastly different from human memory, the former lacking the latter's richness and plasticity. Digital memory is marked by a static precision that, if relied on solely, could leave one stuck ruminating within inflexible and maladaptive emotional learnings. As more and more of life and schooling unfolds online, it is important to not make the mistake of over-valuing the role of digital memory. At the same time, digital memory is part of contemporary existence and stakeholders within education need to acknowledge and respond to this new reality, adapting and developing practices that allow for the measured exploration and integration of digital memory with embodied and narrative memory, perhaps through multimodal text-creation projects related to identity and/or place.

Despite my frustrations with technology in schools, this inquiry allows me some hopefulness about the potential use of smartphone technology in schools. But it won't be easy. A great challenge, it brings to mind a biblical metaphor I memorized as a child: "they shall beat their swords into ploughshares and their spears into pruning hooks" (Isaiah 2:4). This image of

the implements of war being transformed to implements of harvest aligns with what I think needs to happen with the smartphone. It is possible that, through collective experimentation and engagement by artists and educators, such as I have done in this project, the smartphone, typically a tool of numbing, can be turned into a tool of embodied creativity and insight. This optimism, I fear, is misplaced. Vertov was similarly hopeful about the camera becoming a tool of collective action and democratized artmaking, a tool that serves to unite the working class against what he perceived to be the warmongering film establishment of his homeland and the abject consumerism of Hollywood.

In the paddling artography I outlined above, I say that canoeing is about posture not technique. I think that this is an important reminder to bring into conversations and decision-making around digital media and memory in schools. Before we can address the specific teaching techniques and practices that could be made possible with the use of digital media and meaning-making, we need to adopt the appropriate posture. We need to be well-balanced in our boats, aware of the air and water through which we traverse. We cannot adopt postures of denial. We are firmly planted in the digital age. In a time of change such as this, we must acknowledge the risks and difficulties accompanying change and act accordingly. The wind blows. The waves crash around us. To stay upright, we need to keep our hips loose, lean on our paddles, and trust we'll get there, wherever there is.

Chapter 7: Wonder, Collaboration, and The Deep Rhythm

UN/WIND UN/WOUND concludes with a poem called “The Temporary of the Night.” I wrote this poem in weeks leading up to the 2021 winter solstice, amid those Pandemic years marked by feelings of isolation, uncertainty, and little hope. Everyone was low. I wrote it to be read at an outdoor solstice celebration that needed to be cancelled due to a quick ramp-up in case-counts and hospitalizations. The solstice’s metaphorical meaning and significance is directly attached to the machinations of the heavens and the planets. It is the shortest day of the year. From the winter solstice onward, the days get longer and longer, until the summer solstice, where they begin to shorten, until the winter solstice, and so the cycle continues ever onward.

The Temporary Nature of the Night

The deep rhythm rings from a circle drum,
resounds from granite, from stars, from our sun.
The brooding gloom will be shattered by the light
and we’ll remember the temporary nature of the night.

Unclench your fist; let it rattle to the floor.
Don’t let what you’re hiding haunt you anymore.
Our father, on the tundra, in the star-flecked polar night,
utters our names into the aurora’s dancing light.

Near waters paddled, walked then paddled walked again,
the people gather, boats and minds and hearts to mend.
Death’s dark shadow will be shattered by the light
and we’ll remember the temporary nature of the night.

With writing this poem, I wanted to share with my readers a feeling of peaceful certainty. That while we go about our broken lives, filled with difficult experiences, pain, and unknowns, there are certain aspects of reality that, while outside of our control, are always operating on us. To once again quote Mary Oliver, “tell me about despair, yours, and I will tell you mine /

meanwhile the world goes on" (2017, p. 347). This purpose or goal continued through to this project.

Throughout this inquiry, I felt the flattening of time, a blurring or folding over of past, present, and future. A comment or experience from the past that before was relatively meaningless, was now an intensely critical and practically applicable element of the present. And in the same way, what was occurring in the present somehow equipped my past self with the tools he needed to make it through and find success. For example, as I was converting the classroom in the Faculty of Education into an installation space, I was reminded of decorating the dining hall for end-of-session banquets when I was doing camp work. Except 'reminded is an altogether inadequate way to put it. Setting up banquets had prepared me to do this installation, yes, but there was also a sense that doing this installation somehow helped me set up banquets. This feeling of time integrating—that everything I'd already experienced helped me with the installation and this installation helped me with everything I'd already experienced—is elusive, and frankly, confusing. Still the ideas of the flattening of time stays with me, waking me up one morning with this poem:

I have felt the flattening of time

I have felt the flattening of time
Somehow traversed that edgeless blurry plane
Used what I learned last week in years gone by

In a body that was mine but none the same
I loved and longed listened breathed and watched
My bluegrey eyes set in a child's frame

I've seen that boy and with him I have walked
And on rocky shores in every kind of light
Worked on lines all tangled up in knots

What wrinkled shaking hand now with me writes
What have I future done that sparks this line

An unknown project keeps me up at night

With northern leopard frog my cosmic guide
I have felt the flattening of time

When I gathered people together at the University of Manitoba on December 1, 2023, I wanted to honour the reality that our lives are filled with difficulties and traumas that need to worked through and, through the image of the canoe, suggest a posture/way of living and teaching in light of this reality. Through the image of the baseball being unravelled, both on-screen and on the altar in the space, I wanted to give them a concrete image of the transformation from hard and closed to soft and open. Through the light that bounced off the Mylar screens and danced throughout the room, I wanted to share my aesthetic feeling of wonder at the way light interacts with water. This sense of wonder was also in the soundtrack by Jamie Enns and was evoked through the language of the poetry and the drama of the visuals of the natural world. Attuning to the cosmic and encountering a sense of wonder can provide a feeling of scale to one's own problems and neuroses (Evans, 2012). I wanted to gather my friends, mentors, family members, advisors, collaborators, and really anyone who would come in the same room so we could experience what I'd learned and made through this inquiry on a felt, embodied level, as well as on a conceptual level. This is at odds with the fractured, compartmentalized organization of our education system.

Collaboration

This project was an intensely collaborative practice, speaking to the importance of maintaining and nurturing a network of friends and advisors. Concretely, the music, animation, set-up of the space, construction of the screens, programming of media players, set up of audio-visual equipment, purchasing of snacks, delivery of various materials, and other aspects of this

project were literally done by other people. Conceptually, spiritually, and emotionally, this project was moved forward and took shape through conversations with friends and mentors who listened to me, challenged me, told me stories, and encouraged me as I sought to develop, understand, and execute a vision. Outside of my advisor, these collaborators live outside the institution. They are artists, architects, contractors, filmmakers, musicians, farmers, lawyers, psychologists, adventure guides, the list goes on. I am proud that this research was made possible through the labor and collaboration of those outside the university makes and I found it another way to decompartmentalize myself and my work.

Moving Forward

The children are not going to stop coming to school. Our economic system is organized around adults working during the day. When they work, their children need to be looked after. We teachers look after them for around six and a half hours a day, around two hundred days a year. During this time, our job is to keep them safe, build relationships with them, and facilitate learning. I don't see this changing. So, the question arises, how should we organize ourselves during those hours? Our current organizational model, meeting daily in classrooms with a single teacher and other students born in the same year, is, as McLuhan (1970, 1994; 1977) convincingly suggests, built around the monopoly of the book. That monopoly has clearly ended. We are in the digital age. Yet our way of doing education remains the same. Why? I don't believe there is a satisfying answer outside of the fact that changing how we organize our educational system would be astoundingly inconvenient and difficult. As inconvenient and difficult as it may well be, I view it as an important, worthwhile project.

So where do we go from here? I understand and share many of the concerns surrounding the integration of technology into the educational system. Smartphones are addictive and are

connected to a myriad of negative outcomes for individuals and society. I do not promote the use of technology for technology's sake or believe that the answers to what ails our educational system lie in the widespread use of smartphones throughout the school day. What I am saying is that they are not going anywhere.

Whether we like these changes, we must respond to them. The first step to mounting a response to the emergence of this technology is coming to understand its affordances and limitations. With this understanding, we can use them for what they're good at and then put them away when we're not engaged in those kinds of activities or experience. It is compelling that through my extended use of the phone for creativity and text creation, one of my biggest takeaways was that the experience of taking in the world through the screen of a phone is woefully worse than being present in the world. The phone has its uses in creative practice, and as a tool of extended perception and memory, but it should not be presented as the center of our educational project. Human interaction, collaboration, and practices developed out of holistic, embodied understandings of creativity, memory, and cognition were the real driving force behind this project. The smartphone was important as a tool that enabled and allowed for embodied expression and creativity. We need to design new educational experiences and practices around the affordances of this powerful technology as I have done in this thesis. The good folks in the field of multiliteracies have taken on this project admirably, but more work is needed.

After over a decade of creating while seated at a desk or table, this project showed me the power of creating in the world and community. It was invigorating, lifegiving, and validating to merge my creative life with my life as an athlete, to feel flow states of movement and creative output concurrently. Through the practice of embodying metaphor, I came to know myself and my work on deeply enriching levels. I gained new insights about some of my most difficult

experiences. I was able to create art and get a workout in at the same time, which is incredible if I do say so myself, and something I have missed while engaged in the process of editing the film, writing this paper, and preparing for my thesis defence! The portability and consciousness-extending affordance of smartphone technology allowed me to engage in this meaningful work. More than that, through the installation event that marked the transition between by the artmaking and thesis-writing portions of my project, I was able to share my work with my highly supportive network of friends, family, mentors, and collaborators. Without them this work would not have been possible.

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