

EXPLORING THE DEVELOPMENT OF IDENTITY AS A LIFELONG AND LIFEWIDE  
LEARNER THROUGH THE PURSUIT OF AN INTEREST IN PERMACULTURE

by

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A THESIS SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE  
DEGREE OF

DOCTOR OF PHILOSOPHY

in

THE SCHULICH SCHOOL OF EDUCATION

NIPISSING UNIVERSITY

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EXPLORING THE DEVELOPMENT OF IDENTITY AS A LIFELONG AND LIFEWIDE LEARNER THROUGH THE PURSUIT OF AN INTEREST IN PERMACULTURE

is accepted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

March 26, 2025

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## **Abstract**

This dissertation explores the development of identity as a lifelong and lifewide learner through the pursuit of an interest in permaculture, emphasizing the value of informal, self-directed learning outside formal academic settings. Grounded in social constructivism and holism, the study adopts a subjective, interpretivist, and exploratory approach to self, using permaculture as both a metaphor and a foundation for a transformational inner journey. The research questions explore how my interest in permaculture has contributed to the growth and development of my identity as a lifelong and lifewide learner, how reflection on this process has shaped how I engage with the world, and what this journey has taught me about who I am and who I am becoming. The research approach was fluid, emergent, and organic, incorporating a unique blend of narrative, self-study, autobiographical, and reflective methodologies. Methods included journaling, engagement with critical friends who supported re-storying and reframing, and observation, with a recursive approach to data analysis. Themes of learning to sit with uncertainty and trusting and relaxing in the learning process emerged from my multi-year reflective journal, where I shifted between my own voice and the voices of others. I challenged myself to move from reading to active learning, navigating the tension of control, and contemplating paradoxes. This research contributes to the current body of literature by offering a novel methodological approach and unique insights that highlight considerations for supporting learners in their self-directed journeys towards identity development as lifelong and lifewide learners.

*Keywords:* permaculture; lifelong learning; lifewide learning; identity development; self-directed learning; social constructivism; holism; transformational learning

## **Preface**

This dissertation is the original, unpublished, independent work by the author, Nicole A. Enns. This study was approved by the Research Ethics Board, Office of Research Services, Nipissing University (File No: 102551).

## **Acknowledgements**

I have been blessed to have had many incredible teachers along my journey who have nurtured the innate spark of joy that comes from learning. To the late Miss Ida Iberg (preschool), Mrs. Joanne LeDressay (Elementary Music), Ms. Jane Cannon (UCFV), and Ms. Velma Alford (UCFV) – thank you for your support and commitment to your students; you likely have no idea what an impact you have had on me.

To my friends who engaged in dialogue and provided feedback on excerpts, who helped me reframe and re-story my experiences, thank you for pushing me to the edge of growth, and for witnessing and walking alongside me throughout this journey.

Thank you to my supervisor, Dr. Michelann Parr, for your encouragement and feedback. You are a skilled mentor with a gift for knowing just how much to push and when to allow things to unfold in their own time. I have appreciated it immensely.

To my mother and late father, I could not have accomplished this without your love and support. To my siblings and extended family, thank you for always being there. I am grateful to have you in my life.

To my children, I am driven to be a better person because of you. It has been an honour to share my life with you, to grow together and to watch you become independent young adults. Thank you for your support during this journey.

I have spent most of this doctoral journey as an uninvited guest on the traditional lands of the T'Souke, Xwsepsum, and Songhees Nations. I am grateful to reside here, and I have tried to steward the land and live in a good way in return. I raise my hands to you. Hay'sxw'qa si'em!

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## Chapter 1: Beginning with Permaculture:

### Principles, Frameworks, and Foundations

When I mention to others that I am pursuing research on permaculture and self-identity as a lifelong learner, the most common response is, "What is permaculture?" This question seems like a good place to begin this chapter, followed by an explanation of how and why I arrived in this space, and where I intend to take my inquiry.

The word permaculture is a contraction of the words permanent and agriculture (or culture), implying that sustainable systems are persistent, adaptive, and in alignment with Indigenous or traditional knowledge and worldviews, in contrast to the design of many modern systems. As a systems design theory originally developed and applied to food production in Australia in the 1970s, permaculture mimics regenerative and sustainable patterns found in nature and applies them to human systems (Mollison & Holmgren, 1978). Permaculture is based on three ethical pillars – care for the earth first and foremost, care for people, and fair share or return of surplus (Holmgren, 2002). Twelve principles guide permaculture design: *observe and interact, catch and store energy, obtain a yield, apply self-regulation and accept feedback, use and value renewable resources and services, produce no waste, design from patterns to details, integrate rather than segregate, use slow and small solutions, use and value diversity, use the edges and value the marginal, and creatively use and respond to change* (Mollison & Holmgren, 1978; Note: throughout the document, the principles are italicized but not referenced). Holmgren's (2002) image of the permaculture flower (see Figure 1) places ethics and design principles at the center surrounded by petals representing different domains of human living to which permaculture can be applied: the built

environment, tools and technology, culture and education, health and spiritual well-being, finance and economics, land tenure and community, and land and nature stewardship.

**Figure 1**

### **Permaculture Flower**

#### Permaculture Flower

The permaculture journey begins with the Ethics and Design Principles and moves through the key domains required to create a sustainable culture. The spiral evolutionary path joins together these domains, initially at a personal and local level, and then proceeding to the collective and global level. Some of the specific fields, design systems and solutions that have been associated with the wider view of permaculture are listed below.

##### Land & Nature Stewardship

Bio-intensive gardening	Holistic Rangeland Management
Forest gardening	Natural Sequence Farming
Seed saving	Agroforestry
Organic agriculture	Nature-based forestry
Biodynamics	Integrated aquaculture
Natural Farming	Wild harvesting & hunting
Keyline water harvesting	Cleaning

##### Building

Passive solar design	Earth sheltered construction
Natural construction materials	Natural disaster resistant construction
Water harvesting & Waste Reuse	Owner building
Bioculture	Pattern Language

##### Tools & Technology

Reuse & creative recycling	Bio-char from forest wastes
Hand Tools	Co-generation
Bicycles and electric bikes	Micro-hydro & small scale wind
Efficient & low pollution wood stoves	Grid-tied renewable power generation
Fuels from organic wastes	Energy storage
Wood Gasification	Transition engineering

##### Education & Culture

Home Schooling	Social ecology
Waldorf education	Action Research
Participatory arts and music	Transition culture

##### Health & Spiritual Well-Being

Home birth & Breast feeding	Spirit of place, indigenous
Complementary & Wholistic Medicine	cultural revival
Yoga, Tai Chi & other	Djing with dignity
body/mind/spirit disciplines	

##### Finances & Economics

Local and regional currencies	WWOOFing & similar networks
Carpooling, Ride sharing & Car share	Tradable Energy Quotas
Ethical Investment & Fair Trade	Life Cycle Analysis & Emergey
Farmers markets & Community	Accounting
Supported Agriculture (CSA)	

##### Land Tenure & Community Governance

Cooperatives & Body Corporates	Open Space Technology &
Cohousing & Ecovillages	Consensus Decision Making
Native Title and traditional use rights	



permacultureprinciples.com



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Note. The Permaculture Flower model applies the ethics and design principles to seven domains of action. From Holmgren (2002) <https://holmgren.com.au/about-permaculture/>. Permission granted to use.

From a design perspective, the ethics and principles of permaculture can be applied to all aspects of human life. At the theoretical or macro level, this decision-making framework aligns human systems design with the holistic elements inherent in natural systems, and at a practical or micro level, it provides constructive and pragmatic applications of the theory to various domains of our lives. For the purposes of this

research, it serves as an exploration of the development of identity as a lifelong and lifewide learner through the pursuit of an interest in permaculture.

When explaining my research, I share that identity as a lifelong and lifewide learner can be developed through varied personal interests: perhaps one has a passion for horses, hockey, decorating cakes, or tinkering. As researchers, we are often asked to explore and seek an understanding of what draws us to our research topic. With reflection, I have observed that I gravitate toward alternative interests in an effort to live in alignment with, and have less impact on, the world around me. As I explored this inclination, I became increasingly curious about how my experiences influenced the development of my interest in permaculture, and how I showed up in the world as a lifelong and lifewide learner.

From the beginning of my doctoral program, I intuited that my research would have something to do with permaculture, and yet, the precise question initially eluded me. In the beginning, I wondered: *What was the connection between people's core values and the self-directed learning interests they pursued? Are certain types of people more likely to be drawn to permaculture? What do they have in common? What do they do with their knowledge of permaculture? How do people share this knowledge with others and leave a positive legacy? How does learning happen outside of formal educational settings? Is the more unstructured, organic process of learning permaculture different from learning in more formal settings?*

Sitting with the uncertainty of not knowing my exact research query and delving deeper into permaculture, I found myself grappling with questions about my identity and who I am as a learner: *What did this interest in permaculture tell me about who I was*

*becoming and who I was as a learner? How could I begin to acknowledge and define my learning journey in a way that valued the invisible learning that happens outside of formalized educational institutions and settings, the informal learning that I pursued for personal reasons?*

### **Research Questions and Goals for Research**

With time and attention, my research interest came into focus, and I found a deep desire to better understand myself as guided by the following questions: *How has the pursuit of an interest in permaculture led to the growth and development of my identity as a lifelong and lifewide learner? How have I come to see myself as a lifelong and lifewide learner? How has this awareness of, and reflection on, the process of becoming a lifelong and lifewide learner affected how I show up in the world? What has my pursuit of permaculture taught me about who I am and who I am becoming?*

It is toward these questions that I have shifted my interest, setting as my primary goals the following: i) to gain a deeper understanding of who I am as a (lifelong and lifewide) learner through the exploration of a persistent interest in permaculture; ii) to find my voice; and iii) to share the story of this inquiry. By reflecting on my learning journey through permaculture, I hope to weave a thread, and tell the story of my journey towards self-identification as a lifelong and lifewide learner.

### **Situating Myself in the Research: A Retrospective Context**

I first came across the term permaculture nearly twenty-five years ago. When my son was an infant, I struggled with the shift in identity from concurrently working full-time and studying towards my master's degree to being a full-time stay-at-home mother. I spent long days at home feeling isolated on our rural acreage; to pass the time, I began

reading library books on various topics including, but not limited to, gardening, self-sufficiency, homesteading, canning and preserving food, natural buildings such as cob and straw bale, tiny homes, intentional communities and ecovillages, minimalism, Reiki, and permaculture. Over a period of several years, I took workshops, toured local gardens, natural buildings, a nearby ecovillage, and other homesteads designed with permaculture principles. I felt a growing responsibility to steward the land around me in a good way and to leave a positive legacy for my son. As my connection to the land deepened, I implemented the principles and ethics of permaculture in my life in small, but personally meaningful ways: purchasing shares in a community-supported agriculture (CSA) box program at the local organic farm, participating in a bulk food cooperative, volunteering on a local farm in exchange for produce, hanging laundry on the clothesline to dry. As the years passed and I continued to explore the facets of permaculture, I became increasingly curious why I was drawn to permaculture and its ethics and principles. I sensed that to deny the exploration and deepening of my interest in permaculture was to deny a vital part of myself that I had yet to fully understand but enjoyed in its being and becoming. In 2018, I took a seventeen-day course at One United Resource (OUR) ecovillage in Shawnigan Lake, British Columbia, with teachers Starhawk and Charles Williams, where I received my Permaculture Design Certificate (PDC), an internationally recognized certification on permaculture. Since my very first encounter with permaculture over two decades ago, I have remained curious about what my interest in permaculture can teach me about myself.

Mooney (1957) writes, "Research is a personal venture which, quite aside from its social benefits, is worth doing for its direct contribution to one's own self-realization"

(p. 155). Inherent in this personal venture is an examination of the experiences that extend from my initial interest in permaculture, an inquiry into why this interest has grown and persisted, and an exploration of how I have grown because of the development and pursuit of this interest. For almost a quarter of a century, I have been interested in permaculture; much in my life has changed during this time, *as have I*. My identity has shifted throughout this research journey; “to me, carving out a new life entails a willingness to carve up old visions of self, and in my experience, it is both a painful and elating process” (Shields et al., 2011, p. 65). As I explore how I have grown and developed by delving deeper into permaculture and become increasingly aware of what I’ve let go of in exchange for staying true to this part of myself, I have developed tenacity and surrendered to vulnerability.

While this research is indeed a personal venture, its value expands by sharing the story with others, for “sharing our life story with others beyond our immediate ties links us to the circle of life that crosses time and culture. Stories thus serve to awaken a feeling of wonder and reverence toward life” (Atkinson, 1995, p. 11). I have come to embrace the holistic functions of storytelling: psychological, social, spiritual-mystical, and cosmological (Atkinson, 1995), and spiritual, emotional, physical, and mental (Thomas, 2005). I have sought to make sense of and lend legitimacy to my experiences and feelings, to create opportunities for change and transformation, *to gain a deeper understanding of personal identity*, and to create opportunities that acknowledge the common experiences of humanity. As I story and re-story how my identity as a lifelong and lifewide learner has been shaped by permaculture, I have borrowed elements from

various research approaches, including narrative, self-study, autobiography, and reflectivity.

### **Purpose and Rationale**

Burrell and Morgan (1979) discuss the conceptual frameworks of social science research along four dimensions: ontology on a continuum from realism to nominalism, epistemology on a continuum from positivism to anti-positivism, human nature on a continuum from determinism to voluntarism, and methodology on a continuum from nomothetic to ideographic. The ontological basis of this research inquiry is subjective, personal, and socially constructed. Its epistemological approach is grounded in anti-positivism or relativism as opposed to scientific realism or positivism that defines quantitative research or pragmatism that characterizes mixed research. Research questions emerged from an interpretive perspective, where it was

not assumed that there are predetermined social facts which can be collected and analyzed, but rather that the social world exists in a state of fluid interaction, and that it has to be interpreted to be at least partially understood. (Oliver, 2014, p. 29)

Correspondingly, this inquiry is grounded in interpretivism and not radical humanism; “unlike the interpretivists, in their attempt to interpret individual and collective experiences, radical humanists look to ongoing struggles between various social groups” (Wignall, 1989, p. 4). The research, therefore, takes an exploratory as opposed to confirmatory approach, where knowledge is generated from, and throughout, the research process.

Exploring the question of who I am as a lifelong and lifewide learner and who I am becoming as a result of my interest in permaculture, I pondered why I should be the one to conduct this inquiry. Like Tanaka (2016), “My personal teaching actions are motivated by concerns for humanity, ecology, and spirituality” (p. 9), with a moral imperative underlying my search for meaning. Throughout this journey, I have struggled with overwhelming self-doubt but found solace in Clandinin and Connelly’s (1991) assertion that, “in Dewey’s dialectic, doubt and uncertainty are the hallmarks of any meaningful social inquiry” (p. 263). Bochner and Ellis (2016) further supported this unsettling of self: “...throughout our lives we constantly revise, reframe, and reinterpret our lives, yet feel a desire to view our life as a continuous and coherent whole... We write our stories with conviction but pepper them with doubt” (p. 255). Although there is uncertainty, I push through, recognizing if not me, then who? “We think someone else – someone smarter than us, someone more capable, with more resources – will solve that problem. But there isn’t anyone else” (Dugan, 2012, 17:14). I humbly step forth into the inquiry, trusting that the research will prove meaningful for myself and others; “I choose the uncertain path of storyteller, with the intent and willingness to share what I hold, to help good change to happen through this writing” (Tanaka, 2016, p. 13).

### **Significance of the Research**

As I embarked upon this research and as the research questions began to crystallize, I wondered who – other than myself – would this research benefit? What knowledge would be gained that might be of value to others? Throughout, and because of, this research process, I developed an intuitive, deep sense of trust that this inquiry would be of value not only to myself but to others as well.

Humans are social creatures, evolving within community and in relationships. Our stories and the knowledge gained through them have been passed down for millennia. This research aims to help me better understand my own journey towards self-identity as a lifelong and lifewide learner, and my own motivation towards pursuing interests outside of formal, institutionalized settings: learning for its own sake, for its own reward, not simply for economic return on investment. The research also aims to promote understanding, to honour and value one another, and to foster respect for diversity and the many different paths to knowing who we are and the development of self-identity.

### **Theoretical Framework**

The longer my interest in permaculture has persisted, the more I have reflected with curiosity on the beliefs and perspectives that underscored my journey. Denzin and Lincoln (2005) refer to the “net that contains the researcher’s epistemological, ontological, and methodological premises” (p. 22) as a paradigm or interpretive framework, also referred to by Guba (1990) as a worldview or “basic set of beliefs that guide action” (p. 17). Writing about the importance of knowing one’s beliefs about the nature of existence (ontological stance) and the nature of knowledge (epistemological position), Tanaka (2016) supports my initial and persistent questioning: “What ground am I standing on? From where do my actions flow? What feeds my soul? What shapes my worldview?” (p. 10).

My inquiry is grounded in social constructivism and holism, and informed by Indigenous Ways of Knowing, as I seek to understand how I develop as a lifelong and lifewide learner while pursuing an interest in permaculture, and how I grow to value

informal and potentially invisible learning in society – the learning that I pursue for personal reasons. Through active participation, collaboration, and reflection, this inquiry examines the intersectionality between identity development and lifelong and lifewide learning through the lens of permaculture and regenerative systems design principles.

### **Social Constructivism**

One of the underlying beliefs influencing my approach is the conviction that “who we are is defined by our relationships (with ourselves, with each other, and with the Earth) and cannot be defined outside of them” (Tanaka, 2016, p. 12). This idea of a relational sense of self, that knowledge is inherently social, was also held by Dewey (1956) who wrote that “knowing, including most emphatically scientific knowledge, is not outside social activity, but is itself a form of social behaviour” (p. 17). The idea that knowledge is socially constructed is evident in a few permaculture principles: *observation and interaction, receiving and applying feedback, and valuing diversity as well as the edge or margins*. Through interaction with the world and others around us, we give and receive feedback as we come to make sense of events and experiences. A wide range of interactions provide us with greater opportunities for expanding our knowledge where “knowledge and meanings are actively and collaboratively constructed in a social context mediated by frequent social discourse” (Zheng, 2010, p. 4).

Social constructivism takes an ontological approach based on relativism, where “knowledge is a human construction, never certifiable as ultimately true but problematic and ever-changing” (Guba, 1990, p. 26). Epistemologically, Guba posits that constructivists take a subjective view because subjective interaction is the only means

of accessing the reality that exists in the individual's mind. Furthermore, Guba asserts that constructivists take a hermeneutic/dialectic methodological position; from the hermeneutic standpoint people want to depict reality as accurately as possible, and from the dialectic they are confronted with the varying realities of others and must confront and resolve the inconsistencies. Crotty (1998) suggests that constructivism is the perspective that "all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world and developed and transmitted within an essentially social context" (p. 42). Vygotsky (1978) endorsed a social constructivist approach where learning takes place in the context of interaction and relationship and not in isolation through his Zone of Proximal Development: "it is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). Learning needs to be directed just beyond the current capabilities of the learner, where interaction and dialogue support the dynamic nature of reflection, thought process, and the development of perception. The idea that meaning is socially constructed as we engage with the world around us and as we contextualize our experiences within our historical and social perspectives is important as I story my experiences with permaculture.

### **Holism**

Holism posits that we cannot understand the whole of something based upon the sum of the individual components; it stands in contrast to a mechanistic and reductionist approach to examining the world (Smuts, 1926). Johnson (n.d.) states that "any entity is

best understood by examining the principles that govern behavior within the system” (p. 1). Miller (2007) states that “holistic education attempts to bring education into alignment with the fundamental realities of nature. Nature at its core is interrelated and dynamic” (p. 1). Miller (2022) argues there is not “any one true example of ‘holistic education,’ but the term “holistic” refers to a “worldview in order to embrace diverse expressions of humanistic, spiritual, and ecological understanding” (pp. 2-3). Principles of holistic learning theory include an understanding of the learner as a whole person, interconnectedness, resilience, a strengths-based approach, and the use of a variety of approaches to constructing knowledge and understanding the world around us (Venugopal, 2009). Holistic learning theory integrates humanism (Rousseau, Emerson, and Thoreau, for example) and self-actualization (Maslow) as it examines learning through all dimensions (social, physical, emotional, intrapersonal, spiritual). Learning is viewed in relation to the whole learner, and the premise that the whole of a system is greater than the sum of its parts is also found in permaculture (Holmgren, 2002; Poplin, 1988). Finally, holism acknowledges the internal development of the learner, the social aspects of the learning process, and the development of an ecological and ethical awareness (Venugopal, 2009), aligning with the three ethics of permaculture.

In holistic education, a strengths-based approach is taken where differences rather than deficits are recognized and supported (Poplin, 1988). Dewey (1938) contended that “the purpose of education is to allow each individual to come into full possession of his or her personal power” (p. 10). The critical inquiry of holistic education “encourages young people to care about the world in which they live. Other people matter, the natural world matters. Cultural heritage, social responsibility, and ethics

matter” (Venugopal, 2009). Holism aligns with social constructivism, acknowledging that the learner is central to the learning process, that relationships support and facilitate learning, and that the sociocultural context is important (Venugopal, 2009). Miller (2018) traces the philosophical roots of holistic learning theory back to Plato and Socrates, Tolstoy and Rogers, in addition to Dewey, Montessori, Steiner, Holt, and Illich, setting the goal of education to be the edification of the learner’s potential.

### **Indigenous Ways of Knowing**

Miller (2018) states that “Indigenous peoples were the first holistic educators” (p. 5), aiming to support learners in the development of lifelong learning interests along what Toulouse (2016) describes as “a birth to death continuum that is holistic and devoted to interconnectedness” (p. 1). I acknowledge the Indigenous roots of holism and holistic learning theory since permaculture’s first ethic is care for the earth, premised in a deep and sustaining connection to nature (Hart, 2010). My interest in permaculture has led me to develop a sacred relationship with the natural world and has highlighted the responsibility I feel toward reconciliation and cultivating an ongoing active practice of decolonization. Toulouse (2016) summarizes the Indigenous pedagogical approaches shared with holism:

connections to culture (the sacred), concrete to abstract/abstract to concrete examples of the subject expectations, mini-lessons with hands-on activities, differentiated instruction/assessment, connections to real-life experiences, multileveled questions, storytelling, group talk (formal/informal), appropriate use of humour, and experiential activities (land-based) (Matilpi, 2012; Wyatt, 2009).  
(p. 5)

Although holism has similarities to Indigenous Ways of Knowing, the two are not to be confused. Indigenous frameworks must be differentiated from holism by their unique tribal epistemology, embedded protocols and rituals around reciprocity, and decolonizing purpose (Kovach, 2010). The importance of the educator as facilitator, with an emphasis on respecting differences and taking risks throughout the learning process, is shared with holistic learning theory, as is the approach's collaborative and reflexive nature. Like holism and Indigenous Ways of Knowing, permaculture adheres to the principles of *valuing diversity*, *responding to change*, and learning as social practice.

### **Overview of the Dissertation**

In this first chapter of the dissertation, I have introduced permaculture, its ethics and principles, and my connection to it. I defined the research questions and provided an overview of the theoretical framework underpinning the research that is based on social constructivism and holism. I laid the foundation for the chapters that follow, linking lifelong learning and permaculture.

In “Chapter 2: Permaculture as Metaphor,” I use permaculture as metaphor to explore identity development in academic literature. From conceptualizing lifelong and lifewide learning and defining the characteristics, skills, attributes, and benefits, I place the current research in academic literature. Additionally, the chapter delineates between self-directed, formal, non-formal, and informal approaches to learning.

In “Chapter 3: Methodology and Methods,” I explain why this research inquiry takes a qualitative approach. I describe how the research incorporated elements from narrative, self-study, autobiography, and reflective approaches. The chapter defines the data collection methods employed and examines ethical considerations and how

credibility and trustworthiness are established through the research process.

In “Chapter 4: The Journal,” I provide selected excerpts from the research journal, weaving back and forth between self-reflection to quotes from books and articles that influenced my path. I began writing what would become this chapter of journal excerpts in the fall of 2018 when I was searching for my permaculture roots and feeling lost and isolated in trying to define the research journey. As the seasons passed, I began to experience infrequent moments of connection and spent time exploring each of the twelve permaculture principles and the embodiment and expression of them in my life. Through the journal excerpts, I explored the process of defining the research journey for myself and grounding myself in the research. I continued reading and repeatedly returned to reflect on the readings in the journal, exploring systems design from a variety of angles. The broad scope of literature supports an examination of permaculture as metaphor, as themes of relationality and integration bubble up. Towards the end of the chapter, a shift in identity emerged as I began to view myself as both a writer and an activist through participation in the research journey.

The closing chapter, “Chapter 5: Circling Back to Permaculture,” explores the patterns and themes uncovered in the journal excerpts and integrates the themes with the academic literature, grounded in the theoretical framework of social constructivism and holism underpinning the research journey. In my final reflections, I offer recommendations for the education sector, and potential next steps for further research.

### **Concluding Remarks**

This inquiry is an exploration of the development of my self-identity as a lifelong and lifewide learner through the pursuit of an interest in permaculture, a regenerative

system design framework. With a theoretical framework grounded in social constructivism and holism, and informed by Indigenous Ways of Knowing, this research inquiry aims to discover what has drawn me towards this particular lifelong and lifewide learning interest, what I can learn about myself through the pursuit of my interest with regard to how I show up in the world and about who I am, and clarity on how I can acknowledge and define my learning journey in terms of my holistic development.

The focus on holistic reflectivity integrates theory and practice, reflection-*in*-action and reflection-*on*-action (Schön, 1983, 1987), and values personal experience as a site of learning. It offers a “multi-dimensional exploration of experience involving temporality (past, present, and future), interaction (personal and social), and location (place)” (Clandinin & Connelly, 2004, p. 576) that involves an exploration of emotions, actions, and behavioural responses that contribute to the knowledge base of the learner (Schön) and incorporates my reflections as I integrate new knowledge (Kolb & Kolb, 2009a). The goal of this reflective approach is to link lifelong and lifewide learning to permaculture, with an emphasis on reflectivity, transformation through participatory and active learning, collaboration, and a future orientation. It firmly grounds the approach in social constructivism through interaction and engagement, and in holism through an integrated approach to learning.

## **Chapter 2: Permaculture as Metaphor**

I begin this chapter by discussing self and identity development as a learner, which is then followed by an exploration of lifelong learning: its history, purpose, and benefits, characteristics, and the attributes of a lifelong learner, and then on to a review of lifewide and lifedeeep learning. The chapter continues by distinguishing self-directed, formal, non-formal, and informal approaches to learning. I identify the gaps in literature and position the current research in the field. I continue by exploring the use of metaphors in identity development, concluding with a rationale for the use of permaculture as a metaphor for my own learning.

### **Lifelong Learning**

In academic literature, plenty is written about lifelong learning, usually focused on the economic return on investment: learning that will pay off in the advancement of one's career, like the value of apprenticeships. Kaplan (2017) proposed that people need to be lifelong learners "in order to keep up to date with the changes in the world, sustain their occupational and intellectual development and improve their personal skills in different areas" (p. 43). The pursuit of lifelong learning – the need to continually upgrade skills and stay relevant in a job market where technology changes are swift – is often cited as an imperative; I contend that the value of lifelong learning is far greater than its economic underpinnings.

Although philosophical discussions on the nature of lifelong learning go back well before the 20<sup>th</sup> century (Reischmann, 2014), the term lifelong learning first appears in the 1920s in the writings of Yeaxlee (1925) and Lindeman (1926), although it would take decades before the term was more widely adopted and researched (Kaplan, 2017;

Smith, 2001; Yeaxlee, 1925a, 1925b). Yeaxlee's (1919) report argued that "...adult education is a permanent national necessity, an inseparable aspect of citizenship, and therefore should be both universal and lifelong" (p. 5). Yeaxlee "saw spiritual values as the basis for 'real' learning so that we may be at home in the world" (Smith, 2020). His work adopted a holistic view of education, which was grounded in the writings of Dewey and Lindeman, taking from Dewey his definition of education as "the enterprise of supplying the conditions which ensure growth, or adequacy of life, irrespective of age" (Yeaxlee, 1929, p. 38), and from Lindeman the "argument that adult education is humanist at its core because it is concerned more with people and with 'situations' than with 'subjects'" (p. 47). For Yeaxlee, learning was inseparable from living, grounded in ongoing experience, interaction, and reflection. He argued that lifelong education is both a philosophy and a way of living, a balance of informal and formal education, and he recognized that learning institutions (community centres) facilitated social solidarity and lifelong education. Decades later, Yeaxlee's work was recognized as "the first formal attempt of this century to combine the whole of the educational enterprise under a set of guiding principles with each phase of agency (formal, informal and non-formal) enjoying equal esteem" (Cross-Durrant, 2001, p. 39). Today, Yeaxlee is "largely a forgotten figure" as "the history of adult education has tended to be written by people not necessarily sympathetic to the liberal Christian perspective he represented (Field, 2007)" (Smith, 2020).

### **Conceptualizing Lifelong Learning**

Decades after Yeaxlee's (1925) work, adoption and conceptualization of lifelong learning remained ambiguous. In 2001, the European Commission (EC) defined lifelong

learning as "all learning activity undertaken throughout life, with the aim of improving knowledge, skills, and competences within a personal, civic, social and/or employment-related perspective (p. 9)" (in London, 2011, p. 3). Jarvis (2006) defined lifelong learning as

the combination of processes throughout a lifetime whereby the whole person – body (genetic, physical and biological) and mind (knowledge, skills, attitudes, values, emotions, beliefs and senses) – experiences social situations, the perceived content of which is then transformed cognitively, emotively or practically (or through any combination) and integrated into the individual person's biography resulting in a continually changing (or more experienced) person. (p. 134)

Building upon the definitions of the European Commission and Jarvis, London (2011) defined lifelong learning as "a dynamic process that varies depending on individual skills and motivation for self-regulated, generative learning and on life events that impose challenges that sometimes demand incremental/adaptive change, and other times require frame-breaking change and transformational learning" (p. 1).

### **Aims, Purposes, and a Critique on Lifelong Learning**

Lifelong learning is at once both an individual pursuit and a systemic venture that is arguably urgent and indispensable in today's world. At the turn of the twenty-first century, Fischer (2000) stated, "Lifelong learning is an essential challenge for inventing the future of our societies; it is a necessity rather than a possibility or a luxury to be considered" (p. 265). Identifying the aims and purposes of lifelong learning is a

conversation that has been taken up by many researchers over the years as will be summarized below.

Senge (1990) discussed the purpose of lifelong learning: how we think, what we want, how we interact, how we learn from one another, and systems thinking, which is social in nature. These were reinforced as pillars for learning for the future in The Delors Report (1996) as "learning to know, learning to do, learning to be, and learning to live together", the first three of which are the foundational basis of the current K-12 curricula in British Columbia (p. 37). Pedler et al. (1997) introduced the purposes of learning as "learning about things (knowledge, to do things (skills), to become ourselves (personal development) and to achieve things together (collaborative enquiry)" (p. 59).

Kaplan (2017) summarized several complementary purposes of lifelong learning:

- lifelong learning is based on the personal and occupational needs, interests and learning requirements of individuals;
- lifelong learning contributes to the development of skills and talents of individuals;
- lifelong learning has become a compulsory aspect of individuals' lives as a result of changing world conditions and developing technology; and,
- lifelong learning provides equal opportunities to individuals and removes restrictions such as learning, age, socio-economic status, and educational level.

(p. 45)

While I can accept the first three bullets, I refute the final bullet as, in my opinion and as Gartrell (2017) noted, the ability to pursue lifelong learning is *not* afforded equally to all individuals; many people who are underserved by our society's systems are unable to

wholly partake of the opportunity to pursue lifelong learning due to life circumstances beyond their control.

For many researchers, lifelong learning relates to economic power and may evoke a negative connotation (Jarvis, 2007; Kaplan, 2017; London, 2011; Walker, 2008). Walker (2008) wrote, "dominant human capital theory views education as merely instrumental – an investment to improve productivity and the level and distribution of individual earnings" (p. 17). Acknowledging the development of a global economy, Jarvis (2007) stated that the fact that individuals are "more globally mobile also means that their life-worlds are subject to massive and continuing changes" (p. 139). London (2011) added, "...the complexity of our knowledge society poses information overload, the advent of high-functioning systems, and a climate of rapid technological change demands continuous learning (Fischer, 2000)" (p. 6). Like Jarvis (2007), I note that there is a tendency in literature to dehumanize people and view them as "resources that are to be developed for the sake of the organization and ultimately for the sake of capital itself rather than for their own enrichment" (p. 148).

Learning serves different purposes and is often differentiated for the organization, the market, and society (Jarvis, 2007). At an organizational level, businesses benefit from trained staff; learning organizations exist to build the social capital of the community and region. The learning market refers to the pressure for organizations to promote the commodification of lifelong learning, for example, post-secondary institutions' continuing education courses. Zee (1998) defined a learning society as one "in which learning is the whole of life and the whole of life is learning" (p. 78). For Jarvis (2007), a learning society is

A society in which people are enabled, even encouraged, to learn, but they have to take responsibility for that learning; it is the individuals who learn and not the society, and that society may be changed, even transformed, as a result of the learning of members. (p. 100)

This tension between the individual and the system in lifelong learning is clear: "people do the learning and must be motivated and take action to learn. The organization needs to provide the resources to enable and reward learning" (London, 2011, p. 9). There is ongoing pressure for individuals to continually engage in lifelong learning:

People are being forced to learn, informally and almost incidentally, in order to live... Structural change caused by globalization results in culture change. A culture of learning has been created. Incidental learning in order to live in a rapidly changing technological society is a sign of the learning society. (Jarvis, 2007, p. 106)

Graduate degrees have become "the entry level" for some professions (Jarvis, 2007, p. 131), where "having an educational qualification is also a key to social inclusion" (p. 151).

Jackson (2012) shared how a learning society is information and knowledge rich: An information society is a society where the creation, distribution, use, integration and manipulation of information is a significant economic, political, and cultural activity. The knowledge economy is its economic counterpart, whereby wealth is created through the economic exploitation of understanding. Such societies need highly skilled knowledge workers to function and maintain

their competitive advantage and concepts of lifelong/lifewide learning are very much connected with sustaining the knowledge production enterprise. (p. 16)

As Jackson asserted, “the significance of lifewide education for a knowledge society lies in its potential to embrace all of learners’ life spaces: their spaces for thinking, knowing, developing and using all these different forms of knowledge and knowing” (p. 17).

### **Validation of Lifelong Learning**

Colardyn and Bjørnåvold (2004) argued in favour of accreditation and validation of lifelong learning that happens both within and outside of formal learning situations:

The process of *validation* is the process of identifying, assessing and recognising a wider range of skills and competencies which people develop through their lives and in different contexts, e.g., through education, work and leisure activities.

In lifelong and life-wide learning, 'validation' is a crucial element to ensure *visibility* and to indicate appropriate *value* of the learning that took place anywhere and at any time in the life of the individual. (p. 71)

Writing about the challenges associated with establishing robust standards and methods for validating non-formal and informal lifelong learning and accreditation of daily life experience, Colardyn and Bjørnåvold (2004) raised considerations related to impartiality, credibility, reliability, and validity, and confidence in the transparency of the process (p. 85). Of note, they cautioned against the power afforded to social partners and stakeholders who "exert a strong presence" in the validation process (p. 76). They devised five categories of methods for collecting evidence of learning, skills, or competencies, incorporating both formative and summative assessment methodologies:

"examination, declarative, observation, simulation, and evidence extracted from work (or other) activities" (p. 80).

Critics against accreditation argue that it becomes "a mechanism of control" that pushes the learning market to be driven "not by concern for the learner but by concern for the provider" (Jarvis, 2007, pp. 129/132), as employers pressure employees to engage in learning through heightened expectations. While Illich (1971) advocated strongly for society to move towards "deschooling," with a learner-centered paradigm, as noted by Jarvis (2007), Illich was "suspicious of what was happening and so he warned us against being imprisoned in a global classroom (Illich & Verne, 1976) by learning demanded by employing organizations" (p. 101).

While lifelong learning may provide opportunities to overcome systemic barriers to participation for traditionally underserved populations, the power structures inherent in the institutions of the learning market continue to promote inequity. Not everyone has equal access to learning opportunities or resources, and "learning is also costly – not only economically but also socially and personally" (Jarvis, 2007, p. 133). As stated earlier, those without power in society, those from underprivileged or marginalized backgrounds, may not have equal opportunity to participate in the pursuit of lifelong learning. Cross (1978) argued that underserved groups "need advocates to facilitate their access to appropriate learning resources" (p. 19). Jarvis (2007) noted that "lifelong learning is not always attractive to everybody and that an element of this value orientation may be male dominated, which calls for a feminist perspective on lifelong learning to be undertaken" (p. 133). Llean and Sisco (1981) determined that "although access to information and resources was not a major issue... 'husbands' attitudes and a

lack of mobility were problems for women interested in growing and learning" (in Mocker & Spear, 1982, p. 28), suggesting that those who lack the opportunity to engage in lifelong learning are certain to miss out on its benefits.

### **Benefits of Lifelong Learning**

Tough et al. (1980) concluded that "the typical adult learner is motivated by a diversity of anticipated benefits" (p. 6). Hildebrand (2008) suggested that lifelong learning sharpens the mind, confidence, interpersonal skills, career opportunities, and the ability to communicate (p. 401). Dunn (2003) adopted a holistic, systemic view where "lifelong learning contributes to the development of society through the achievement of other social goals such as civic participation, sustainable development, improved health and wellbeing, reduced crime and greater social cohesion" (p. 8). While Laal and Salamati (2012) noted that "we all have a natural desire to learn" (p. 401), they emphasized the economic importance of lifelong learning in addition to the personal benefits an individual may incur: "a bigger paycheck, the ability to adapt to change, and a more enriching and fulfilling life" and focused on the systemic benefits of lifelong learning to the economy (p. 403).

### **Characteristics of Lifelong Learning**

Lifelong learning is the "way in which individuals or groups acquire, interpret, reorganize, change or assimilate a related cluster of information, skills, and feelings. It is also primary to the way in which people construct meaning in their personal and shared organizational lives" (Marsick, 1987, p. 88); this meaning-making characteristic of lifelong learning is consistent with social constructivism. It is described as "holistic, diverse, flexible/adaptive, available throughout life and in all life contexts, and is

knowledge-intensive, which means that education is diverse, adapted to the individual and available throughout our lives" (Laal, 2011, p. 472).

Lifelong learning is both intrapersonal and interpersonal, making it simultaneously individual and systemic. Jarvis (2004) saw it as "a complement of theoretical and individual learning," while Kaplan (2017) viewed it as "a recognition of the world and oneself," of creativity, innovation, and changed behaviour (p. 45). Kaplan (2017) wrote that "Ersoy and Yilmaz (2009) described the lifelong learning approach as 'a road with no ending' and indicated that it has an important role in the development of individuals and therefore society as a whole" (p. 45).

Many authors acknowledge the ubiquitous nature of lifelong learning in that it is accessible throughout life and in all life contexts. For example, both Jarvis (2007) and Laal (2011) referred to *life/long* learning being *lifewide* learning, "...embedded in all life contexts from the school to the workplace, the home and the community" (Laal, 2011, p. 471). From the early years to elders, lifelong learning "covers the whole spectrum of formal, non-formal and informal learning. It means that learning is a process that occurs at all times in all places" (Laal, 2011, p. 470). London (2011) articulated that "lifelong learning is knowledge-intensive and fluid" (p. 7).

Lifelong learning is all-encompassing and holistic, both *life/long* – throughout the lifespan – and *lifewide* – accessible in all circumstances – although as I noted, not equitably accessible to marginalized or underserved groups in society. I agree with Jarvis (2007) who wrote that "...learning is an essential ingredient to the growth and development of the human person; it is one of the driving forces of human becoming and enriches human living" (p. 123).

## **Lifelong Learning Skills and Attributes**

Leean and Sisco (1981) reported that "the importance of past experiences and family background was found to be significant in the content and motivation for learning as well as in approaches to learning and problem solving" (in Mocker & Spear, 1982, p. 27). Lifelong learning requires the development and application of a range of learning strategies and access to resources:

People turn to other people most frequently for assistance in learning – first to friends and relatives and then to paid experts. Books and pamphlets rival paid experts as resources, and classes are a distant fourth. Practice, reading, and discussion were the methods for learning most frequently reported. (Mocker & Spear, 1982, p. 21)

Levels of motivation will vary across lifelong learners, as well as at different points in time in their lives, depending on circumstances. Taking ownership or control over one's learning – a learning orientation – requires active engagement with planning and evaluating learning, as well as the ability to integrate and synthesize knowledge (Knapper & Cropley, 2000).

Lifelong learners need to be resilient, resourceful, and reflective, with a toolkit of learning strategies available (Claxton, 2000) and a propensity to manage their learning in a variety of contexts (Sharples, 2000; Lamb, 2005). Today's lifelong learners will need a "growth mindset" (Dweck, 2008), where they are "no longer passive receivers of knowledge" but active, collaborative co-constructors of knowledge (Laal, 2011, p. 473).

Lamb (2005) offered that lifelong learning is "about the decisions one makes and the problems one solves in everyday life" (p. 400). There's an acknowledgement in the

literature that today's formal (K-12) schooling will not adequately equip students for the contexts and situations they will face in their lives, especially with the speed and breadth of change in society. Kaplan (2017) reinforced that lifelong learning is an active state of "doing and experiencing... a continually ongoing process" (pp. 45-6). I would also argue that lifelong and lifewide learners share commonalities with self-directed learners as described below.

In sum, lifelong learners are engaged, resilient, resourceful, and reflective. They develop a variety of learning strategies and emotional intelligence and reflective capacity to know which strategies to use when. They have a growth mindset, social skills to assist with collaboration, a sense of belonging, a support network, and accessibility to resources. These attributes will support a range of approaches to lifelong learning.

### **Lifewide Learning**

Lifelong learning is defined by temporal boundaries, from 'cradle to grave,' a "series of learning experiences in successive time zones of a life" (Barnett, 2010, p. 2). Desjardins (2004) differentiated *lifelong* learning (throughout the lifespan) from *lifewide* (occurring in multiple contexts, such as at work, at home, and in our social lives). As Barnett (2011) noted, "the timeframes of lifelong learning and the spaces of lifewide learning will characteristically intermingle" (p. 25). Banks et al. (2007) elaborated further and added a third term, *lifedeep* learning, which

embraces religious, moral, ethical, and social values that guide what people believe, how they act, and how they judge themselves and others... The symbol-making and processing capacity of humans is one of the most remarkable of

human traits, underlying what they think and do and many of the ways they learn.  
(p. 12)

Banks et al. (2007) advocated for a lifewide and lifedep approach because “if educators make use of the informal learning that occurs in the homes and communities of students, the achievement gap between marginalized students and mainstream students can be reduced” (p. 5).

Reischmann (1986) is credited with the first explicit use of the term lifewide learning: “to make [us] aware of this wide ‘universe’, the whole life embracing understanding of the learning of adults I will use the expression ‘lifewide learning’” (p.3). It is, as Jackson (2012) noted, an idea “with its own life-course with dimensions of time, place and context which continually shape its meaning, value and use” (p. 2).

Reischmann (2014) wrote,

If we want to understand the specifics of the comprehensive learning of adults (“becoming a person”) in theory and praxis, it seemed necessary to overcome the hermeneutic blindness being fixed to a pedagogy that limited thinking about learning to the learning similar of children in school. (p. 293)

Jackson (2022) stated that if we are to achieve this transition towards the creation of a culture of lifelong learning and “live our lives in a sustainable, regenerative way, humanity must embrace an ecological world view within which all human activities, including learning, are understood in relationship to the world in which they are enacted” (p. 2). Learners must, as Magolda (2007) argued, disentangle what has been “uncritically assimilated from authorities to define their own purposes, values, feelings, and meanings [and this] involves far more than information and skill acquisition. It

requires a transformation of their views of knowledge, identity, and relations with others” (p. 69).

Staron et al. (2006) created a learning ecology metaphor that is dynamic and diverse, encouraging an open and adaptive orientation to learning that they called life-based learning. Life-based learning is “adaptive, self-facilitated and based on reflexive practice, making use of any strategy appropriate to the task” (Staron, 2011, p. 146). Laininen (2019) stated that to create “transformative learning for a sustainable future... Learners’ own life experiences have to become part of the learning substance, and participation in change processes within society must become part of learning” (p. 180).

Jackson (2022) differentiated between lifewide *learning* and lifewide *education*, the latter being “the pedagogical incorporation of lifewide learning into formal education (Barnett, 2011; Jackson 2011a, 2014)” (p. 9). Within a lifewide education, a lifewide *curriculum* (Jackson 2011b) “encourages learners to see the whole of their life experiences as opportunities for their own development and enable them to integrate learning and development from any aspect of their lives into their educational experience” (p. 100). “It blurs the boundaries between formal, nonformal and informal learning and views all experiences as sites with potential for learning and development” (Jackson, 2022, p. 9). A lifewide curriculum encourages capability, agency, and self-authoring through a more process-oriented model to the standard approach to curriculum.

Jackson (2012) wrote, “self-authorship is one well-researched way of representing how we develop as human beings through all of our life experiences,” noting that this arises within a *constructivist-developmental* framework: constructivist in

that humans have a tendency “to construct meaning by interpreting their experiences” and developmental in that “these constructions evolve over time through periods of stability and transition to become more complex” (p. 20). As Jackson (2011b) stated, “self-authorship enables taking advantage of learning opportunities as well as creating one’s own learning infrastructure in various contexts” (p. 98). This research is a journey of self-authorship, where I am both becoming and being as I come to understand myself better through this process.

Jackson (2022) argued that there are three narratives that underlie an ecological worldview: i) “the need to consider the earth as a whole – an interdependent and interconnected living system in which humans are an integral part of nature and partners in the processes of co-creation and co-evolution”, ii) that an ecological worldview is premised upon a relational view, and iii) that the world is “dynamic, ever-changing, emergent, and therefore continually in a state of formation” (p. 15). Jackson goes on to say, “learning that is oriented toward creating sustainable futures is achieved through experiences of doing and experiencing the effects of our doings” (p. 16), relating back to Dewey’s interactional model of continuous improvement and refinement.

Learning *en passant* (in passing’), as Reischmann (2014) called non-intentional lifewide learning, is highly individualized and retrospective. “Often this learning is holistic; it includes not only knowledge, but also reality-handling, emotions, valuing, perspective transformation” (p. 297). Reischmann differentiated learning *en passant* from ‘compositional learning’, whereby “adults compose their learning by bringing their knowledge together from many different sources and connecting, combining and

integrating it in ways that are meaningful to them” (p. 298). For Reischmann, the value of the concept of lifewide learning (both learning *en passant* and compositional learning) is that it “helps to make evident” how non-intentional lifewide learning “makes it possible to better explain and understand why adults are successful learners or not” on both the macro and micro-level (p. 299).

### **Validation and Limitations of Lifewide Learning**

Deleuze and Guattari (2007) used a metaphor of smooth and striated spaces to explain the contexts a lifewide learner inhabits. They claimed that

lifewide learners inhabit both striated spaces (the spaces of their different learning experiences, each with its own rules of procedure, however informal) and smooth spaces, the spaces of transition from one space to another, the spaces in which they can take a view of their learning and gather it into themselves. (p. 409)

Barnett (2010) argued there is a risk that the formal recognition or validation of lifewide learning experiences at the post-secondary level may “represent the sequestration of smooth space by striated space” (p. 10). For Barnett, “the benefits of students’ lifewide learning can be enhanced through structured reflection... a space in which they can draw out of themselves the learning that lies within them as a sediment of their wider experiences” (p. 11). Systems and institutions, according to Barnett, can create “opening spaces for systematic reflection,” encouraging students to undertake “complex processes of personal transition” including experience, assimilation, reflection, and accommodation (p. 12).

The limitations of lifewide learning are seen as resulting from it being considered under the broader umbrella of lifelong learning and not given the autonomy it is argued to warrant, “perhaps because it adds too much complexity to the idea” (Jackson, 2022, p. 7). Reischmann (2014) acknowledged limitations of non-intentional lifewide learning – “the results are highly individualized without standards and comparability in a group. Scope, content, dimension, and quality are highly dependent on the individual learner” (p. 300). Additionally, it runs the risk of a lack of the learner not receiving feedback or guidance and could promote learning that does not support the growth of society if not checked: ideas like fascism, fundamentalism, discrimination, to name a few.

### **Self-Directed Learning**

Not to be confused with lifelong or lifewide learning, self-directed learning has often been referred to as self-planned learning, self-teaching, self-initiated, self-directed individualized learning, autonomous learning, autodidactic learning, and isolated learning (Mocker & Spear, 1982). Self-directed learning is grounded in observational learning, aligning it to the first principle of permaculture: *observe and interact*. As indicated by Mocker and Spear (1982),

The concept of social learning as set forth by Bandura (1977) suggests that much of human learning is achieved through observing other people performing roles or skills, or from reading or seeing pictures of the skilled behaviour of others. (p. 30)

Colardyn and Bjørnåvold (2004) legitimized the intensity of observational learning, suggesting that "observation is a more demanding exercise than one can imagine" (p. 81).

Candy (1991) explored "four principal domains of self-direction: personal autonomy, willingness and ability to manage one's overall learning endeavors, independent pursuit of learning without formal institutional support or affiliation, and learner-control of instruction" (in London, 2011, p. 3). As summarized by Jarvis (2007), Candy (1991) attributes the rise in interest in self-directed learning to "the democratic ideal; ideology of individualism; egalitarianism; subjective or relativist epistemology; humanistic education; and the construct of adulthood and adult education's search for identity" (p. 141). My goals, motivations, and research questions support these reasons through its subjective epistemology, grounding in holism and humanism, and in my search for identity.

As summarized by Mocker and Spear (1982), Guglielmino (1977) proposed eight factors that contribute to readiness for self-directed learning:

openness to learning opportunities, self-concept as an effective learner, initiative and independence in learning, informed acceptance of responsibility, love of learning, creativity, future orientation, and ability to use basic study and problem-solving skills. (p. 24)

Grow's (1991) Staged Self-Directed Learning (SSDL) model is useful to demonstrate how self-direction can be facilitated with learners. In the SSDL model, "teaching is matched to learners with the explicit purpose of helping them attain the knowledge, skills, motivation, and goal of becoming more autonomous in learning and in life" (p. 142). The model assumes that the goal of education is to "develop people who can live in an unpredictable world" (p. 146), which overlaps with the purpose of lifelong and lifewide learner as previously discussed. Grow contended that good teaching is

situational and "does two things: it matches the student's stage of self-direction, and it empowers the student" (p. 140). A key characteristic of the model is that "certain aspects of self-direction are transferable to new situations" (p. 127), making the whole of self-directed learning greater than the sum of its component aspects. Grow believed that fully self-directed learning is at odds with institutional, formal learning; I suggest that certain approaches to education (e.g., Montessori, Waldorf) seem to be more flexible in incorporating opportunities for self-directed learning. This inquiry, while being a significant part of my PhD process, is another example: while the creation of the dissertation is certainly part of an institutional requirement, the subject of the inquiry reflects significant self-direction over the course of a lifetime.

Knowles (1975) created a "5-step model for incorporating self-directed learning into the educational learning culture" (in Porter et al., 2020, p. 3). Knowles' articulated the assumptions of self-directed, lifelong learning:

- individuals will grow over time in their capacity to be self-directed;
- the learner's experiences (e.g., iterative successes and mistakes) should be incorporated into his or her learning process;
- students are naturally either task- or problem-centered, and ideally, learning experiences should be organized as task accomplishments or problem-solving learning projects; and,
- self-directed learning assumes learners are intrinsically motivated by self-esteem, the desire to achieve, accomplishments, the need to gain specific knowledge, and curiosity. (in Porter et al., 2020, p. 3)

## **Formal, Non-Formal, and Informal**

Regardless of whether we are engaged in lifelong, lifewide, or self-directed learning, learning takes place in a context; this might refer more to the where of learning as opposed to the motivational stances inherent in lifelong, lifewide, and self-directed learning. The where of learning is often summarized into formal, non-formal, and informal.

### **Formal Learning**

Mocker and Spear (1982) recognized that formal learning encompasses most K-12, post-secondary, vocational, and military educational programs. It can include both traditional and/or nontraditional objectives as well as traditional and/or nontraditional learning settings. They clarify that the "use of nontraditional settings and content (means and goals) in programs does not necessarily imply learner control" (p. 33), which is what differentiates non-formal learning from formal learning.

Formal learning is planned, facilitated, and instructed by more knowledgeable others, whereas non-formal and informal learning are often incidental or even self-directed by the learner. Tissot (2004) stated that formal learning consists of "learning that occurs within an organized and structured context (formal education, in-company training), and that is designed as learning. It may lead to formal recognition (diploma, certificate)" (p. 99).

### **Non-Formal Learning**

Beinart and Smith (1998) articulated four types of non-taught learning: "studying for qualifications without enrolling in a course; supervised training in the workplace; time spent keeping up to date about work by reading or attending seminars; trying to improve

knowledge and skill without taking part in a taught course" (p. 79). Bjørnåvold (2002) wrote about the assessment of non-formal learning and the link to strategies for lifelong learning with a focus on formal and non-formal learning to the exclusion of informal and self-directed learning. Colardyn and Bjørnåvold (2004) argued that "as long as learning, skills and competencies acquired outside formal education and training remain invisible and poorly valued, the ambition of lifelong learning cannot be achieved" (p. 69). I assert that the value of lifelong and lifewide learning, particularly learning that is acquired outside of formal educational channels, is not predicated upon its visibility or validation by society writ large, but rather its value is determined by the learner.

Tissot (2004) defined non-formal learning as that which consists of "learning embedded in planned activities that are not explicitly designated as learning, but which contain an important learning element such as vocational skills acquired at the workplace" (p. 183).

Jarvis (2007) discussed the impact accreditation of non-formal learning has had on education, particularly in the second half of the twentieth century (p. 134). He noted that "...there is a great emphasis placed on non-formal and informal learning in a rapidly changing society, some of which has to be recognised more widely in society" (p. 135). London (2011) noted that informal learning happens through experience and challenges, such as "career transition points... job transfers, exposure to different cultures, and being responsible for visible and difficult job assignments" (p. 9), but it is evident how this is limited in scope with a focus on career and is perhaps best categorized as non-formal learning rather than informal.

## **Informal Learning**

Tough (1978) reviewed over twenty studies on self-directed lifelong learning in the 1970s and noted that "probably 90 percent of all adults conduct at least one learning project a year. The typical learner conducts five quite distinct learning projects" (p. 5). As reported in London (2011), Livingstone (2000) conducted a Canadian study of informal learning; the nation-wide sample included 1,562 adults, and found that

More than 95% of the respondents reported being involved in some form of explicit informal learning activities that they considered significant, spending approximately 15 hours per week on informal learning on average, compared to an average of 4 hours per week in organized education courses. The most commonly cited areas of informal learning were computer skills for employment, communication skills through community volunteer activities, home renovations and cooking skills, and general interest in learning about health issues. (p. 6)

Tissot (2004) defined informal learning as "learning resulting from daily life activities related to family, work or leisure. It is often referred to as experiential learning and can, to a degree, be understood as accidental learning" (p. 111).

## **Comparing Formal, Non-Formal, and Informal Learning**

Mocker and Spear (1982) proposed a model for lifelong learning wherein the "operational definition of the concept of lifelong learning should be based on the locus of control for making decisions regarding the goals and means of learning" (p. 10). In formal learning, "the technical decisions on the *what* and *how* are not made by the learner" (p. 11). In non-formal learning, "the individual decides *what* is to be learned, but the *how* is decided by the workshop organizer" (p. 11). In informal learning, "an

individual other than the learner decides *what* is to be learned while the learner decides *how* it is to be learned" (p. 11). The model introduces a fourth type of lifelong learning, self-directed, in which "the individual has almost total control over the learning process" – both the *what* and the *how* (p. 11).

For Colardyn and Bjørnåvold (2004), both formal and non-formal learning are intentional from the learner's perspective, but informal learning is not necessarily so. Laal (2011) concurred, stating "formal learning is an intentionally planned learning activity, non-formal learning forms by intentionally planning activities, and informal is non-intentional with no planning" (p. 471).

### **Development of Self-Identity as a Learner**

Giddens (1991) stated that in the postmodern era "the self becomes a reflexive project" (p. 32), and the type of lifelong and lifewide learning required to flourish in a post-modern world is "concerned with the ongoing reflexive construction of the self in response to ongoing uncertainty and risk (Hake, 1998, 1999)" (Biesta & Zhao, 2008, p.1). In this sense, what is valued about our self-identity from the lifelong and lifewide learning perspective is reflexivity, resilience, and flexibility – our ability to adapt and change our sense of self in response to our experiences. On the other hand, Taylor (1989) argued that our self-identity is grounded and oriented in a moral space, and narrative (as a form of self-interpretation) provides a means for assessing how closely we are living out our values and moral beliefs. For Taylor, how we come to know our moral frameworks – the stories we tell ourselves about the values we live by – is in itself a learning process that feeds our self-identity. Taylor argued that our self-identity is one of constancy and stability that is defined in relation to others.

Taylor (1989) and Giddens (1991) both spoke about how lifelong and lifewide learning allows us to develop reflexive judgment as we come to understand who we are and who we are becoming. Wenger (1998) suggested that "identity formation is a dual process: identification and negotiation" (p. 188). Jenkins (2004) validated Wenger, adding that we develop our self-identity through relationship with others, and this process continues throughout our lives in response to experience; therefore, "the self is both individual and interactional" (p. 49). Adding their voice to the mix, Smeyers and Hogan (2005) wrote, "what we become as human beings is a consequence of what we experience as learners" (p. 115). Jarvis (2007) asserted that there is a meta level of self-identity: "an identity behind the identities" (p. 152) that develops early in life and carries on through socialization and interaction:

Our personal identity relates to our own experiences of ourselves and this we learn as we go through our lives, and yet it is a paradoxical phenomenon. From early on in our lives we develop a sense of self, and, despite all the experiences of social life, we still regard ourselves as the same person. (Jarvis, 2007, p. 152)

Our social identities, the roles we play at various times in our lives, can be transient, but "the stronger that we identify with these phenomena, the greater the loss – identity crisis – we experience when the changes occur" (Jarvis, 2007, p.152). Our primary identity is reinforced through lifelong learning, and our "secondary identities relate to our membership of varieties of communities of practice and, therefore, they relate to our lifewide learning" (p.153). Dall'Alba and Barnacle (2007) reinforced that learning is contextual and relational; knowing is "always situated within a personal, social, historical and cultural setting" (p. 682). Walker (2008) added,

This includes how we come to understand and judge ourselves in some ways rather than others; how we come to understand and judge others and their significance; and how we come to understand and judge the merits of our own learning. Such learning is reflexive and lifelong, rather than adaptive. (p. 27)

Trinh (2019) examined the development of identity as a lifelong learner through Kolb's experiential learning theory. In Kolb's experiential learning theory, "learning is a proactive process, coming from the holistic integration of all learning modes in the human being: experiencing, reflecting, thinking, and acting" (Trinh, 2019, p. 1). Kolb and Kolb (2009b) defined learning identity as the ability for the learner to "see themselves as learners, seek and engage life experiences with a learning attitude, and believe in their ability to learn" (p. 5). Learning identity is dependent upon openness to learning and a growth mindset and emphasizes "learning as a process in which learners intentionally take charge of their own progress... (Dewey, 1916; Kolb, 1984; Piaget, 1952)" (Trinh, 2019, p. 5).

With similarities to Grow's Staged Self-Directed Learning (SSDL) model, Kolb and Kolb (2009b) declared that learning identity develops over time as learners gradually adopt:

1. A learning stance toward life experience;
2. A more confident learning orientation;
3. A learning self who is specific to certain contexts; and,
4. A learning self-identity that permeates deeply into all aspects of the way one lives one's life. (p. 5)

Some of the characteristics that foster the development of a strong positive learning identity, from Trinh's (2016) perspective, include curiosity, a growth mindset, motivation, an organic (rather than mechanistic) worldview, learning focus, mental agility and flexibility, a "high need for achievement" and "positive self-efficacy" (p. 6). Learning *flexibility* differs from learning *agility* in that flexibility is about being able to adjust your learning style to different situations, whereas learning agility is broader: "the extent to which someone can learn from experience, engage with feedback, develop new skills, grow professionally, and change over time" (Trinh, 2019, p. 9). For Trinh (2019), "fostering a positive learning identity helps individuals adopt a learning attitude, understand the way they learn, and be able to find effective strategies to navigate unknown situations or adapt to changes" (p. 10).

My identity as a learner is about both my being and my becoming; on the one hand it has a permanence to it, but it also paradoxically continues to unfold and develop throughout life – or perhaps my being is the identity that is behind all the other identities as Jarvis (2007) might suggest. My identity is both private and socially mediated through identification, negotiation and interaction as I learn to be myself in this society I have been "born in and identify with it and its values" (Jarvis, 2007, p. 155). As is evident in this dissertation, my search for identity and this postmodern project of the self, "goes on in this new context and these new agendas for our growth and development constantly emerge" (Laal, 2011, p. 473).

### **Metaphor in Identity Development**

Thomas and Beauchamp (2011) researched the ways in which new teachers describe their burgeoning professional identities using metaphors. In *Metaphors We*

*Live By*, Lakoff and Johnson (1980) wrote, "a large part of self-understanding is the search for appropriate metaphors that make sense of our lives" (p. 233). Gillis and Johnson (2002) posited those metaphors "reveal our educational values, beliefs, and principles, (and) they contain information essential to our growth as professionals" (p. 37). Identity development is thus socially and culturally mediated, an ongoing process of making sense of experiences, of awareness and understanding and learning.

Metaphors can be insightful, providing clues to the meaning-making that people attach to their experiences; they are also revealing and culturally bound, rooted in personal histories and families of origin and communities. Metaphors are, as Thomas and Beauchamp (2011) noted, "highly reflective of personal interpretations of phenomena, which are influenced by the lenses of class, gender, race, ethnicity and educational and life experiences through which one sees the world" (p. 765). Through metaphor, complex concepts such as identity can be understood. For me, this research is a search for answers to complex questions around my identity and growth and development.

Exploring the use of metaphors for identity development, Hunt (2006) suggested that "reflection which involves the exploration and articulation of an individual's use of metaphor is an important element in the process of demystifying the passage of personal 'felt' or 'intuitive' knowledge into professional practice" (p. 328). For Hunt, reflective practice

has certainly given me what might be termed an 'embodied recognition' (i.e., directly experienced and not simply acknowledged intellectually) of the importance of metaphors/visual images and the 'sensings' from which they

emerge. For better or worse, my professional identity has now self-evidently been shaped by my attempts to make these processes public. (p. 328)

Like Hunt, I reach for embodied recognition; permaculture is my unifying metaphor for this dissertation; over many years, permaculture has served as foundation in my identity development and motivation for my lifelong and lifewide learning.

### **Permaculture as Metaphor**

I am drawn to the integration of permaculture as a metaphor through Woodruff's (2014) description of a soundscape project, and Gartrell's (2017) permaculture travel memoir.

Woodruff (2014) detailed a soundscape project to integrate ancient Indonesian musical instruments (called gamelan) with the natural landscape sounds of a community garden in Pittsburg, including the backdrop noises: the sounds of a local steel factory, nearby traffic, and the voices of volunteers interacting in the garden. Woodruff uses permaculture as a metaphor for the experience as he endeavors "to develop holistic models of composition that engage the total sensorium" (p. 3). Through an inclusive model of composition, Woodruff describes an integrative, embodied experience where the permaculture principles are noticeable. Every sound contributes to the overall acoustic experience, enlivening the permaculture principles of *produce no waste*, where no sound is devalued, as well as *integrate rather than segregate* as the music and ambient noise are merged. The latter principle crosses temporal boundaries, as evidenced by Woodruff's assertion that "gamelan is a symbol of how it might be possible to hear sound and music relate as an intersection of ancient and local wisdom" (p. 3). Through the juxtaposition of the sounds of the ancient gamelan with the modern

steel factory and traffic noises in the composition, "it becomes apparent, by listening carefully to how these sounds co-exist, that the contradictions are not intractable, and that these oppositions are in reality not actually dichotomous" (p. 3). Demonstrating the permaculture principle of *creatively use and respond to change*, Woodruff shares that "through an imaginative listening to the affinities of different phenomena on conflicting economic scales, perhaps we can eventually creatively perceive new ways, in the words of one of Mollison's core permaculture principles, that 'the problem is the solution' (Mollison, 1988, p. 15)" (p. 3).

Woodruff proceeded with an interactive composition called "Phonosynthesis," where recordings were made during children's piano lessons as they listened to the recorded soundscape of the garden mentioned above and were then invited to improvise an accompaniment piece in response. These compositions were subsequently made available for gallery visitors to play as they walked among plants brought from the community garden; the plants would absorb the sound energy within the gallery and would later be returned to the community permaculture garden. In this way, the principles of *observe and interact*, *obtain a yield*, and *catch and store energy* are all displayed. Woodruff incorporates economic integration by using the profits from the sales of the recordings and gallery donations to fundraise for the community garden. Woodruff notes how the project supported a greater sense of community, enhancement of social permaculture, and application of the ethics of permaculture: care for the earth (through the work in the garden), care for each other (as relationships were forged), and return of surplus (the cycling of energy through sharing the compositions in the gallery).

In this example, Woodruff incorporated permaculture as a metaphor for holistic, experimental, non-commercial music composition.

Gartrell (2017) offered "an appraisal of (her) own doctoral literary artifact, *Seeds: A Permaculture Travel Memoir*", where "personal anecdote interweaves with eco-critical analysis, photographs and excerpts from my doctoral creative artifact to produce an emergent picture of how the layering of identity and place-affiliation works" (p. 254). She described a seventeen-month overland journey she and her partner took from England to Australia, indicating that the concept of her research "was to apply the twelve principles of permaculture design to the analysis, contextualisation and creation of an innovative hybrid permaculture-travel memoir" (p. 256).

The structure of Gartrell's (2017) memoir was "a kind of parody, arranged formally into five 'parts' that correspond to the phases in the life cycle of a seed: dormancy, germination, flowering, fruiting and seeding" (p. 266). Through field text excerpts, Gartrell explored reflections on her physical journey overland and the spiritual journey towards greater self-awareness and connection to place. She refers to Holmgren's notion of permaculture as a "long-sustained search to find home" (p. 263), and that "the protagonist's metaphorical journey, initially typified by an emigre's sense of exile and alienation, burgeons into an eco-critical understanding of self as embedded in a rich web of ecological understanding" (p. 268). As noted by Gartrell, the sharing of personal narratives "are ubiquitous in permaculture memoirs – which is to say memoirs written by permaculture practitioners about their personal transformation through permaculture" (p. 259). I am inspired by how Gartrell weaves together the meaning-making that her experiences have yielded, the characters in her story while remaining

true to "how her interest in the environment and her burgeoning passion for permaculture unfolded" (p. 259). Her tale connects her characters' development to archetypal patterns that are culturally and socially bound.

I related strongly to Gartrell's articulation of her place of privilege; her protagonist realizes that "the growing feeling of belonging within an Earth community arises from a privileged position – socially, economically, and ethically" (p. 266). While sitting in a Moroccan cafe surrounded by men, she wondered where the local women were, and realized that "[her] white skin, [her] ethnicity, [her] university education are privileges [she'd] done nothing to deserve" (p. 267). She realized that "hers is a willful search for home, motivated by a selfish desire for self-actualization, learning, and personal and spiritual growth" (p. 266), while simultaneously accepting that "she is to some extent naïve, idealistic and ignorant of how rare her good fortune is" (p. 266). I, too, have come to this research benefiting from many privileges and partially oblivious to my own affluence.

Arriving home to Australia, Gartrell (2017) further nurtured seeds she had discovered along her journey as she tended to

the connections she has made to the people, places and non-human organisms encountered in other parts of the world. The seeds are symbols of these other people and places. The implanting of the seeds into the soil of her 'native' home offers a neat metaphor for the integration of those other places, people and experiences, into her sense of self and identity. (p. 268)

Gartrell realized that "place-making and, likewise, home-making are a matter of duration... enhanced considerably by one's commitment to staying in a place long

enough 'to see out a round of seasons' – that is, to harvest what one has sown" (p. 266), and that she never was separate from nature, but has always been connected, "deeply enmeshed in a rich and diverse web of ecological interconnections, a 'co-participant in earthly reciprocities of being, becoming and dying,'" as Garrard (2013) writes (p. 268).

Gartrell's approach is not unlike the holistic journey of my research: a reflective approach exploring my long-held interest in permaculture, and the development of greater self-awareness as I braid the meaning-making of my experiences with the understanding of culture and privilege.

### **Permaculture and Identity Development**

This work of permaculture and identity development is not without risk and effort. As Rushing (2012) wrote,

As each of us engages in difficult work, we risk becoming depleted and disillusioned for there is so much work to do... Returning to the principles of permaculture time and again, we can engage in a way that is life giving, renewing, and satisfying. For myself, and many others, permaculture has become both a spiritual practice and a positive way of engaging in the world: a way of life. (p. 8)

Rushing (2012) engaged in what Berry (1999) called "the great work" of our time and what Macy and Brown (2014) called "the work that reconnects," ultimately realizing, as I did along this process, that cultural transformation work is intertwined with a transformational inner journey. Cultivating her own well-being, Rushing noted,

Permaculture cultivates a way of being that tends to go much deeper than simply a system of ecological design. Somehow, by engaging with nature in intimate observation, we gradually become a part of the system and magically and necessarily engage in our own evolution and transformation. (p. 19)

For Rushing, permaculture involves three parts: the ethics of intention, the roots of practice, and the principles that guide our actions (p. 23). The *intention* is a vision of what is possible, where we aspire towards *abundance*. By aspiring to create something that is larger than us, our intention is thus *ethical* in that it will create good benefits for the earth and for others.

Underlying this deepest intention of permaculture is a personal *decision* or commitment to *take responsibility for our own existence and that of future generations*. This decision is profound, and by making it, we find inner resources and give ourselves permission to learn and grow. We, thus, must begin the journey with ourselves: our own inner being, inner authority, inner wisdom and deepest emotions, dreams and desires. In this ethical intention, we, by necessity, first open ourselves to a path of self-knowledge and growth. (Rushing, 2012, p. 31)

According to Rushing, the roots of permaculture are

practices that allow us to observe and analyze the entire system and to approach the design as nature does. The roots represent the way we *are*, allowing nature to work, allowing ourselves to be, cultivating our gifts and inner life, and using observation to notice the way things work, what relationships exist, how the energies work in a garden, a community or in ourselves. (p. 23)

Foundationally rooted in the ethics of permaculture, the twelve principles of permaculture guide our actions and "allow us to translate intention and observation into action...." this translation from being to action is "at the heart of *mystery* – a point that translates intention and being into decision and focus" (p. 25). I come to embody Rushing (2012) as I observe the connection between my physical practice of permaculture and the spiritual connections that emerge alongside identity development. I note how my practice begins to reflect a holistic approach to growth and development.

### **Sustainable Identity Development**

Just as the ethics of permaculture practice are rooted in a commitment to take responsibility for our existence (Rushing, 2012), identity as a lifelong and lifewide learner develops out of taking responsibility for the learning process. Burns et al. (2015) discussed pedagogical practices for supporting identity development of sustainable leadership, including: "taking action based on sustainability values, leading from a living processes paradigm, and creating an inclusive, collaborative and reflective process" (p. 89). It is possible that today's curricula, with its emphasis on efficiency and predictability within a mostly hierarchical context, obstructs the emergence of the learner's identity; it does not allow for the emergence of "our inherent interconnectedness with the earth and other living beings and cultivating authentic relationships (that) are fundamental to healing the earth and human communities. Living from this perspective requires a mindful way of being (Kabat-Zinn, 2005)" (p. 90). Perhaps a slower pedagogy that allows us, as Wildhalm (2011) said, "to re-learn identity formation as a process of radical interdependence" would be advantageous (p. 8).

A transformational instructional approach, rather than today's transmissive or transactional approaches, involves shifting to holistic, systemic, connective and ecological ways of thinking and learning (Sterling, 2002), where learning activities include the core elements of "individual experience, critical reflection, dialogue, a holistic orientation, awareness of context, and authentic relationships" (Taylor, 2009, p. 4). Magolda (2011) supported a holistic view of transformational learning through "meaning-making along three dimensions – epistemological, intrapersonal, and interpersonal" – which forms the foundation of an "ability to manage and be comfortable with uncertainty, complexity, and change" (p. 77). At the confluence of these three dimensions lies a series of meaning-making structures "the evolved from relying on others, to taking responsibility for one's own meaning making" (p. 78).

The first principle of permaculture is to *observe and interact*. Activities and practices that reinforce the development of, and that flow from, observation include "asset mapping, reflective writing, autobiographical essays, or sit spots, in which learners return many times to the same place to just sit and observe, help(ing) learners to slow down and observe" (Burns et al., 2015, p. 93). As is done throughout this dissertation, we can engage in reflective practices such as journaling, dialogue, creative work, and meditation, thus providing time and opportunities for growth and development that allow the learner to "place (themselves) in the middle of the process of connecting the current situation with past experiences and knowledge as a means of achieving a desired goal" (Collier & Williams, 2005, p. 86). Reflection also offers "an opportunity for renewal, a chance for individuals to reconnect with themselves, their goals, and their

communities, in order to move forward from a place of calm rather than a place of confusion or stress" (Komives et al., 1998, in Burns et al., 2015, p. 94).

Useful to this dissertation is Collier and Williams' (2005) discussion of four types of reflection: continuous, challenging, connected, and contextualized:

- *Continuous* reflection requires a longitudinal approach because the process of self-knowing takes time. As a process of lifelong and lifewide learning, self-understanding will not occur through a single act of critical self-reflection.
- *Challenging* reflections should push learners to not only think in new ways, but to find new ways of expressing themselves through various mediums like poetry, art, movement or metaphor.
- *Connected* reflections should connect learners' past experiences, their future dreams, and their relationships with others.
- *Contextualized* reflections require activities to provide learners with the opportunity to frame their experiences within the place, time, and space in which they occurred, including external context and internal contexts, where the emotive element and affective elements of reflection can be integrated. (p. 83)

In this inquiry, my search for meaning is bound up in the understanding of everyday life. "It involves a realization that life is greater than our sphere of influence and that our future is bound up with that of others" (English, 2000, p. 30). Grounded in a social constructivist perspective, a stronger sense of self is (paradoxically) strengthened in relationships. Care, concern, and outreach to others is realized when one transcends the ego and "acknowledges the interdependence of all creation, appreciates the

uniqueness of others, and ultimately assumes responsibility for caring and being concerned about other humans and the natural order" (English, 2000, p. 30).

### **Concluding Remarks**

This research inquiry seeks to better understand the process of my identity development as a lifelong and lifewide learner through the pursuit of my interest in permaculture as a regenerative systems design theory; as will be noted in Chapter 4, this has been far from a straightforward and linear journey and has led me through overlapping explorations of lifelong and lifewide, self-directed, and formal, nonformal, and informal learning. As a field, permaculture is relatively young, having only been defined in the 1970s, leaving great opportunities to apply its permaculture's system design principles to areas outside of food production. Exploring identity development through the metaphor of permaculture, I engaged in lifelong, lifewide, and self-directed learning in a variety of contexts. Adding to the literature on the application of permaculture principles, this research explores the informal and self-directed learning that happens outside of formal, institutional settings, lending voice to that which is often silenced, invisible, and undervalued in society.

## **Chapter 3: Methodology and Methods**

For years, I have pursued a personal interest in permaculture with little understanding of why I was drawn to it. I wondered how I might begin to acknowledge and document my journey in a way that values the learning that I pursue for my own reasons, what I have, through this inquiry, come to understand as self-directed and informal lifelong and lifewide learning. To accomplish this, I adopted a qualitative research approach grounded in the theoretical frameworks of social constructivism and holism, and utilized methodological tenets of narrative, self-study, autobiography, and reflective research methods. I open this chapter by self-locating and move into an overview of the methodological approach, where I review the merger of methodologies that comprise the design of my inquiry and discuss the research methods utilized. An examination of ethical considerations pertinent to the research approach follows as the chapter concludes.

### **Self-Location**

In much the same way as I am called to permaculture, I also feel an intuitive calling to pursue this research inquiry. To forego this opportunity for exploration would be to dismiss vital parts of myself, to parcel myself into components that I (and perhaps society) may judge as having less value in contributing towards success, however defined. This tension between external influence and an emerging internal voice has been present as I proceed through a journey towards self-authorship (Kegan, 1982). Undertaking the research process with a sense of wonder and curiosity, I hoped to know myself better, to find my voice, and through the sharing of my story, to connect with others. That curiosity often masked itself as a fear of the unknown and of the path

ahead: *Will I be successful in completing this research? Are the research questions manageable in scope?* I have come to accept the vulnerability inherent in qualitative research that surfaced as I came to terms with my identity as a researcher with “a living, contradictory, vulnerable, evolving multiple self, who speaks in a partial, subjective, culture-bound voice” (Foley, 2002, p. 474). Bochner and Ellis (2016) wrote about this transition of identity that results from actively engaging in the research process: “To trust that doing work that gave meaning to my life and had the potential to offer meaning to and evoke meaning in others, was important no matter what academics called it or rejected it” (p. 30). This research inquiry was, therefore, partly about finding and laying claim to my own voice: “voice suggests relationships: the individual’s relationship to the meaning of her/his experience and hence, to language, and the individual’s relationship to the other, since understanding is a social process” (Britzman, 2012, p. 44). Through the research process, this sense of being and becoming resonated: “I am becoming who I am as I write myself to understanding of who I am” (Shields et al., 2011, p. 74).

Drawing from social constructivist (Guba, 1990; Piaget, 1959; Vygotsky, 1978) and holistic (Smuts, 1926; Venugopal, 2009) theoretical frameworks, my inquiry employed a qualitative approach to examining identity development as a lifelong and lifewide learner through the pursuit of an interest in permaculture. Qualitative research is based on “a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world” (Denzin & Lincoln, 2000, p. 3). At its core, qualitative research offers “evocative, true to life, and meaningful portraits, stories and landscapes of human experience” (Sandelowski, 1993, p. 1) and “personal experience methods connect with

fundamentally human qualities of human experience” (Clandinin & Connelly, 1994, p. 425).

### **Methodological Approach**

At the outset, I believed that a narrative self-study design would allow for an innovative, creative exploration of personal growth that might also yield relevance to others. As my research progressed, however, I increasingly found myself borrowing from other qualitative methodological approaches including autobiography and reflective as I actively learned to place myself in time, in space, and in context: “to situate oneself in time means to make a personal connection to that which has come before, to be willing to develop a relationship, to see the common thread that binds us now to those who long since died” (Makler, 1991, p. 45). The deeper knowing of who I am and who I am becoming as a learner necessitated this grounding in time, space, and context and allowed me to begin to release what no longer serves my growth. Doing so, I travelled in and out, back and forth, seeking understanding of the alignment of my past experiences with my values, and allowing for the emergence of new intentional perspectives.

### **Study Design**

The research is grounded ontologically in a subjective research paradigm. Epistemologically, I took an interpretivist approach, where reality is interpreted to understand the underlying meaning of events and activities. Exploring my identity development as a lifelong and lifewide learner through my interest in permaculture has involved narrative, self-study, autobiography, and reflective methods and techniques, aligning the study with the permaculture principle that *diversity leads to greater resilience*.

## **A Merger of Methods**

Research methods were fluid, emergent, and organic, often serving what was needed at any given moment. Narrative, self-study, autobiographical, and reflective research methodologies each performed a purpose in this inquiry.

### ***Narrative***

Clandinin and Connelly (1989) described narrative method as “the description and restorying of the narrative structure of varieties of educational experience” (p. 2). Drawing from this approach, I embraced Dewey’s idea that “education, experience, and life are inextricably intertwined,” and recognized that my life as a researcher, permaculturist, and my life writ large were deeply entangled (p. 4). One of the key tasks of narrative writing is to convey the complexity of this entanglement and to express my authentic self.

Clandinin and Connelly identified several aspects that highlight the complexity inherent in narrative method: experience, time, personal knowledge, and reflection and deliberation. This research is grounded in Connelly and Clandinin’s (1990) assertion that “humans are storytelling organisms who, individually and socially, lead storied lives” (p. 2). As Bochner and Ellis (2016) emphasized, “our lives are rooted in narratives and narrative practices” (p. 76). Connelly and Clandinin (1990) noted that “in narrative inquiry, the individual is shaped by the situation and shapes the situation in living out of the story and in the storying of the experience” (p. 15).

Clandinin and Connelly (1989) viewed time as both cyclical and rhythmic, contributing to a sense of continuity and forming part of the definition of experience. Bochner and Ellis (2016) argued that “narrativity and temporality are inextricably

connected. Every autoethnographic story is a reckoning in and with time” (p. 92). Connelly and Clandinin (1990) suggested that “time and place, plot and scene, work together to create the experiential quality of narrative” (p. 8). While place and scene may be challenging to reconstruct in narrative inquiry, plot and time provide essential structure. They explained that “narrative explanation and, therefore, narrative meaning, consist of significance, value, and intention,” helping the researcher organize their narratives in which “explanation and meaning themselves may be said to have a temporal structure” (p. 9).

As Clandinin and Connelly (1989) stated, “narrative requires a balanced treatment of past, present and future... [including] reflection [with its] ‘looking back’ sense about it, a casting back, whereas deliberation has a forward sense, a sense of preparation for the future” (p. 8). Narrative inquiry embodies both theoretical and practical dimensions that influence one another, as “every inquiry within a social movement has a horizon beyond which matters are taken for granted, considered certain, but which, at any moment, may be doubted and opened for inquiry” (p. 9). Thus, doubt and uncertainty are the hallmarks of any meaningful social inquiry, where “deliberation and reflection become, therefore, methods for charting a meaningful though uncertain course in social affairs” (p. 9). Narrative is inherently tentative, “concerned with a person’s experience in time and uncertain because the stories that are told and retold could be otherwise as indeed can the narrative threads and the intentional futures to which they attach” (p. 9). Aligned with this perspective, I did not “begin with a prespecified problem and set of hypotheses” (p. 14); instead, I was

motivated by curiosity about how my enduring interest in permaculture has shaped my identity as a learner.

“Narrative is both phenomenon and method. Narrative names the structured quality of experience to be studied, and it names the patterns of inquiry for its study” (Connelly & Clandinin, 1990, p. 2). This fluidity and murkiness manifests as the writing process evolves, intertwining original narratives with interpretive analysis. As Bochner and Ellis (2016) asserted, “stories should be recognized as fluid, co-constructed, meaning-centered performances achieved in the context of relationships” (p. 94). Throughout our lives, we continuously reframe, revise, and relive our stories (Ellis, 2009).

My research incorporated both descriptive and interpretive elements as I step back to document and make sense of my experiences. In narrative inquiry, the researcher seeks to “re-story his/her narrative in his/her practices,” while also ensuring that the story “may be read with meaning by others,” (Connelly & Clandinin, 1990, p. 16). Narrative researchers focus on “issues of representation and audience,” aiming to engage readers in questioning their own narratives and recognizing parallels to their experiences (p. 16). In this way, a narrative reader is invited to immerse themselves in another’s experience, reflecting on and reshaping their own stories in response.

Narrative inquiry employs a wide range of data collection methods, where “the sense of the whole is built from a rich data source with a focus on the concrete particularities of life that create powerful narrative tellings” (Connelly & Clandinin, 1990, p. 5). Connelly and Clandinin described narrative method as involving participant observation, shared experiences, journal records, and interview transcripts. As

participant-researcher, I occupied the roles of both the observer and the observed, with introspective journal entries and insights from critical friends providing valuable perspective. Data in narrative inquiry encompasses not only personal reflections but also “a whole array of non-storied material” (p. 12). The narrative inquiry process is characterized by a “movement from experience to researcher and practitioner field notes, transcripts, documents, and descriptive storying of the experienced narrative, to a mutual reconstruction of a narrative account” (p. 13). Richardson and St. Pierre (2005) argued that

data collection and data analysis cannot be separated when writing is a method of inquiry. And positivist concepts, such as audit trails and data saturation, become absurd and then irrelevant in post-modern qualitative inquiry in which writing is a field of play where anything can happen – and does. (p. 971)

While the journal excerpts in the Chapter 4 are presented linearly, I acknowledge that “the narrative inquiry process is not a linear one” and recognize that I continuously storied, restoried, and restory again throughout the research process (Connelly & Clandinin, 1990, p. 14).

### ***Self-Study Grounding in Dialogue***

Self-study fosters personal and professional growth through blending theory and practice during collaborative inquiry characterized by self-reflection and metacognition. Martin and Russell (2020) defined self-study as “a metacognitive and reflective practice conducted by teacher educators learning from experience” (p. 1049). Hamilton and Pinnegar (1998) defined self-study as the examination of “one’s actions, ideas, and the ‘not self,’ encompassing autobiographical, historical, cultural, and political dimensions. It

draws on personal life experiences and also critically engages with texts, interactions, and ideas relevant to teaching practice” (p. 265).

According to Samaras (2010), self-study is not merely about individual reflection or studying others' inquiries; it is a deeply personal and solitary process. Brandenburg and McDonough (2019) noted that “self-study emerged from scholarship in countries where English is the dominant language, reflecting English traditions” (p. 6). They explained that self-study research combines “reflective practice and action research methodologies (Loughran, 2006), and is characterized by self-initiation, improvement focus, interactive processes, qualitative methods, and exemplar-based validation (LaBoskey, 2004)” (p. 3).

Fletcher (2020) argued that self-study researchers inhabit a liminal space, “residing in a middle ground fraught with tensions in concepts, practices, and understandings (Berry, 2007)” (p. 2). Fletcher emphasized that “S-STEP has been referred to both as methodology *and* a way of knowing (Kuzmic, 2002; Pinnegar & Hamilton, 2009),” underscoring the link between research and practice (p. 11). Self-study research highlights the epistemological significance of “personal practical knowledge and experience” while recognizing how the researcher’s beliefs and values shape their inquiry (p. 11).

The emphasis on personal experience in S-STEP research draws from Schön (1983), who posited that “reframing experiences through reflection in- and on-action” fosters deeper understanding and improvements in practice (Fletcher, 2020, p. 11). This leads to a “a more holistic, integrated approach focused on the education of teachers as lifelong learners and enquirers into their own practice (Korthagen & Kessels, 1999)”

(Fletcher, 2020, p. 12). Self-study researchers reject traditional aims of “objectivity, predictability, and generalizability... (as) the researcher *is* the researched” (Fletcher, 2020, p. 11). According to Fletcher (2020), there remains ambiguity in rigidly defining S-STEP research, yet there is some agreement on its defining features. For instance, Bullough and Pinnegar (2001) asserted that “to study practice is simultaneously to study self: a study of self-in-relation to other” (in Fletcher, 2020, p. 14). Ovens and Fletcher (2014) highlighted community as a defining aspect of self-study, describing it as “a wide-ranging professional network of practitioners who share, research, and evolve their own practice” (in Fletcher, 2020, p. 5).

Samaras (2010) identified key methodological components of self-study, including “personal situated inquiry, critical collaborative inquiry through multiplicity in theoretical stance, method, and purpose, improved learning, a transparent and systematic research process, and knowledge generation and dissemination” (p. 10). Bullock (2020) emphasized that “collaborative self-study, grounded in dialogue conceptualized as an interaction between partners, each moving, framing, and reframing their inquiries, is best understood as a dynamic process in which we invite others to extend themselves beyond a comfort zone” (p. 12). Mittapalli and Samaras (2008) noted that successful self-study requires dispositions such as “openness, reflection, collaboration, validation with critical friends, transparent data analysis and process, and improvement-aimed work which contributes to professional knowledge” (p. 244). Self-study challenges practitioners to critically examine their routines and underlying assumptions and promotes dialogue aimed at improving research practices:

“learning and development are inseparably intertwined and emergent, [reflecting] who we are and simultaneously who we are becoming” (p. 245).

Kitchen and Butler (2024) asserted that self-study compels reflective practitioners to balance their insights with “academic rigor through the ‘checking of data and interpretations’ (Loughran, 2004, p. 20) and ‘framing and reframing’ (p. 21) as they prepare to make public their knowledge” (p. 129). They stressed the collaborative nature of self-study through engaging with critical friends to support “reflection on practice [leading] to active engagement in re-imagining professional development” (p. 130). According to Brandenburg and McDonough (2019), critical friends provide diverse perspectives that enrich understanding of practices. The role of critical friends in self-study is well-established as their feedback helps validate interpretations and findings (Loughran & Northfield, 1998; Northfield, 1996; Schuck & Russell, 2005; Schuck & Segal, 2002).

A significant aspect of collaboration is to encourage “honest conversations” about one’s practice to develop new insights (Brandenburg & McDonough, 2019, p. vi). Mittapalli and Samaras (2008) highlighted the importance of peer feedback in recognizing strengths and areas for growth. They describe their journey of continual questioning as cyclical, where

Just as a farm worker’s work is never done, it goes on in cycles – just as one crop is cut, it’s time to sow the seeds for the next season; I find myself circling around in my own questions and answers, going forth with the answers I could find but back again with new questions. (p. 254)

### ***Autobiographical Research***

Autobiographical research engages the researcher-participant's memory as a vital component. It incorporates empirical sources such as life narratives, personal documents such as diaries and other media while also utilizing techniques of triangulation and crystallization (Abrahão, 2012). The act of remembering is an active process of meaning-making that involves analyzing these sources in a way that reflects the researcher-participant's deep engagement with their past. Autobiographical research captures "records of individuals' personal experiences and the connections between them and past social events... not as established facts but as social constructions requiring further investigation and re-interpretation" (Payne & Payne, 2004).

Autoethnography is an autobiographical genre of writing and research that displays multiple layers of consciousness, connecting the personal to the cultural. Back and forth, autoethnographers gaze, first, through an ethnographic wide-angle lens, focusing outward on social and cultural aspects of their personal experience; then, they look inward, exposing a vulnerable self that is moved by and may move through, refract, and resist cultural interpretations. As they zoom backward and forward, inward and outward, distinctions between the personal and cultural become blurred, sometimes beyond recognition. (Ellis & Bochner, 2000, p. 739)

Bochner and Ellis (2016) suggested that autoethnography encapsulates narrative inquiry, depicting "acts of meaning (Bruner, 1990)," exploring how stories shape identity, how individuals use storytelling to make sense of their lived experiences, and the

relational dynamics that permeate how life is experienced and communicated (p. 52). Autoethnography occupies a liminal state between “art and science, rationality and emotionality, epistemology and ontology” (Bochner & Ellis, 2016, p. 67). Emphasizing the permaculture principle of *valuing the edges and margins*, this liminality fosters creativity. Like the first principle of *observe and interact*, an autoethnographer investigates and discovers character, translating observations into written form.

The genre of autoethnography blends macro and micro perspectives, merging cultural and historic contexts with personal and relational experiences. Aligned with the permaculture principle of *designing from patterns to detail*, autoethnography captures the complexity of human experiences while connecting them to what makes life meaningful. It addresses “some of the most serious questions of existing as a living being and [promotes] social justice as a societal imperative” (Bochner & Ellis, 2016, p. 51). As Bochner and Ellis (2016) articulated, autoethnography is “a genre of doubt and uncertainty” (p. 94), following “the consciousness of a thoughtful, introspective, flawed human being struggling to disentangle from some knotty experience and in the process tossing his or her voice into the confusion” (p. 117).

From autoethnography, I place myself as the principal subject of research, striving for emotional, vulnerable, and heartfelt writing that resonates with readers and inspires reflection and action. The exploration of my identity as a lifelong and lifewide learner is deeply introspective. Autoethnographic texts employ a first-person narrative grounded in a “reflexive, relational, dialogic and collaborative” approach (Bochner & Ellis, 2016, p. 55). The research journal excerpts in Chapter 4 illustrate the interplay between the external social and cultural dimensions of permaculture and my internal

reflections on my relationship with it, encompassing feelings, thoughts, and language. This results in a journal rich with layered reflections and diverse stylistic elements, as I navigate between the voices of others and my own emerging voice. The goal of autoethnographic writing is to elicit a response in the reader; it is “not simply academic; it’s personal and artistic too” (Bochner & Ellis, 2016, p. 80).

I was called to writing autoethnography to explore aspects of myself that had been suppressed – interests deemed alternative and undervalued by both me and society. “I felt alienated, yet I yearned to belong” (Bochner & Ellis, 2016, p. 32). I recognize that as a researcher, I am not a neutral observer. Through an autoethnographic lens, I treat my experiences as primary data, opting for an intimate, subjective, and self-reflexive expression rather than maintaining emotional distance.

As Bochner and Ellis (2016) noted, “the burden of the academic storyteller is to *find the story in the experience* (Stone, 1997)” and to present it in a way that draws the reader into the narrative (p. 93). Autoethnography strives to restore balance between telling and rendering an experience; “the act of telling is a performance, a process of interpretation and communication in which the teller and listener collaborate in sense-making” (p. 93).

### ***Layering in Reflection***

Schön (1983, 1987) defined the reflective practitioner as someone who can think while acting, responding to the uncertainty and complexity of real-world situations. Central to his framework are the concepts of “tacit knowledge,” “knowing-in-action,” and “reflection-in-action” (Adler, 1990, p. 8). “Knowing-in-action” is the intuitive, tacit knowledge developed through experience, which unfolds in practice and is not easily

articulated. Schön's idea of "reflection-in-action" referred to practitioners' ability to adapt in real-time, drawing on this tacit knowledge to address the immediate context as situations unfold.

Schön (1983) contrasted this with the concept of "technical rationality," a dominant paradigm in academic institutions that emphasizes abstract theory and the application of scientific methods (pp. 1-2). Schön critiqued technical rationality for privileging propositional knowledge over practical, experiential knowledge and argues that professional knowledge is best developed in the context of action, not separate from it, because "abstract theory does not inform practice" (Drake & Miller, 1991, p. 2). While technical rationality treats professional practice as problem-solving based on rigid rules and procedures, Schön advocated for a more dynamic, artistic process of reflection that adapts to the unpredictable challenges of practice (Drake & Miller, 1991; Schön, 1983).

Schön's model of "reflection-in-action" involved several stages: naming, framing, moving, and evaluating the situation in real-time (Chiapello & Bousbaci, 2022). This process allows practitioners to adjust their actions as the situation develops, responding intuitively to the complexities of practice. Schön's critique of technical rationality emphasized the limitations of abstract knowledge, suggesting that professionals must integrate theory and practice through experiential learning, rather than applying fixed solutions to complex, uncertain problems (Chiapello & Bousbaci, 2022).

Schön's work emphasized the importance of problem setting – the process of defining the issues to be addressed before problem-solving can occur. In the real world, problems do not present themselves clearly; they must be constructed and reframed in

ways that reflect the unique context of practice. Schön (1983) called for an epistemology of practice that recognizes the importance of intuitive, artistic judgment in professional work (pp. 39-40).

Critics like Munby (1989) argued that reflection-in-action is cyclical, with practitioners experimenting with new frames of understanding as they engage with the complexities of their work. However, reflection does not always lead to immediate clarity; it is a process that can lead to new insights over time. As will be evident in the journal excerpts in the following chapter, the multi-year examination of my emerging identity as a lifelong and lifewide learner has not always had a clear path and has relied on intuition and an iterative approach. Canning (2008) pointed out that Schön's focus on reflection risks reducing complex, tacit knowledge to oversimplified frameworks. Reflection-in-action cannot fully capture the complexity of practice, as it relies on tacit knowledge that may never be entirely explicable.

While the contribution of Schön's theory is acknowledged, it has been critiqued for being overly individualistic. Reflection-in-action, as originally conceived, focuses on the practitioner's internal process of making decisions. Canning (2008) argued that this focus can sometimes make reflection a form of inward autobiographical reflection, rather than a dynamic engagement with the complexities of real-world practice. Schön claimed to have built upon the work of Dewey (1933), who emphasized that reflection should resolve indeterminate situations, but Schön's rational problem-solving model has been critiqued for lacking the flexibility to address the unpredictable nature of practice (Procee, 2006).

Although Schön's framework has been foundational, newer perspectives on reflective practice have sought to integrate a more sociocultural dimension. Scholars like Korthagen and Wubbels (1995) and Shah (2022) argued that reflection is not an isolated, individual process, but a collective one, shaped through social interaction and collaboration. This shift emphasizes the role of dialogue, mentorship, and peer collaboration in professional learning. Vygotsky's (1978) sociocultural theory, particularly his concept of the Zone of Proximal Development (ZPD), suggested that reflection can be enhanced through collaboration with more experienced practitioners. Through these social interactions, professionals externalize their tacit knowledge, transforming it into shared, explicit knowledge.

Drake and Miller (1991) extended Schön's reflection-in-action by integrating contemplative practices like meditation and visualization, which foster deeper awareness and personal transformation. This holistic approach encourages a service-oriented, compassionate practice, where reflection transcends individual concerns and focuses on broader educational missions. In this sense, reflective practice becomes a way of engaging not only with professional challenges but also with the deeper, ethical dimensions of practice.

The integration of Vygotskian principles into reflective practice highlights the importance of collective engagement. Reflection becomes not just an individual cognitive process, but a social practice, co-constructed with peers, mentors, and a wider community. In this research process, the role of critical friends has been instrumental in deepening my understanding. This sociocultural shift aligns with a more comprehensive view of teacher learning, where reflection is situated within communities of practice.

Private speech (self-talk) and collaborative dialogue play crucial roles in this process, leading to deeper professional competence and shared professional identity (Shah, 2022).

While Schön's work on reflection-in-action has reshaped professional practice, it also has its limitations. Schön's emphasis on tacit knowledge and real-time adaptation risks oversimplifying the complexity of professional learning. Critiques of Schön's framework highlighted the need for a more nuanced understanding of reflection, one that incorporates both individual and collective dimensions. Recent research, influenced by Vygotskian sociocultural theory, advocates for a more holistic, collaborative approach to reflection. In this view, reflection is not merely an individual process, but a dynamic, socially situated activity that evolves through dialogue, experimentation, and shared practice. This shift toward a sociocultural model of reflective practice offers a more comprehensive framework for professional development, one that recognizes the interplay of theory, practice, and social interaction.

### **Data Collection Tools for the Journey**

Data collection techniques included methods such as journaling, critical friends' feedback, and observation.

#### ***Journaling***

The journal I kept over the years of the research process was over 1,200 pages when I began compiling the dissertation. It includes my developing thoughts, feelings, and opinions about permaculture and my interest in permaculture over time, reflections on how I identified as a learner, and musings on if and how permaculture was shaping my identity, as well as an abundance of quotes from articles and books I read

throughout the research process. The research journal functioned as a tool for “observing, questioning, critiquing, synthesizing, and acting” (Annink, 2016, p. 4). Newbury (2001) described the research journal as “a melting pot for all the different ingredients of a research project – prior experience, observations, readings, ideas – and a means of capturing the resulting interplay of elements” (p. 3). Spalding and Wilson (2002) valued journaling as “a permanent record of thoughts and experiences, of establishing and maintaining relationships with others, of being a safe haven for expressing concerns and frustration, and of providing an aid to internal dialogue” (p. 1396). Browne (2013) contended it can also be a platform for justifying decision-making during times of uncertainty, as well as for articulating frustrations and challenges, while allowing researchers the opportunity to openly reflect on their personal transformation throughout the research process. Personal reflective journals are “a powerful way for individuals to give accounts of their experience,” wrote Clandinin and Connelly (1994, p. 421), and yet, the reflective data of the journal is “often omitted from the final written report because the researcher may seek to conceal and suppress certain relevant, and at times, personal aspects during research” (Annink, 2016, p. 1).

The process of condensing the lengthy digital journal into Chapter 4 required re-reading the journal several times with the intention of identifying salient reflections and ideas to uncover patterns and themes and create connections through the excerpts that articulated my learning journey through a content analysis approach. “Practical considerations of space and imagined audience eventually determine the quantity of data contained in the written narrative” (Connelly & Clandinin, 1990, p. 11).

### ***Critical Friends' Feedback***

Clandinin and Connelly (1994) emphasized the equality of participants, such as between the researcher-practitioner and their critical friends, which fosters flexibility in dialogue. The process of involving critical friends in my work included sharing my ongoing research, receiving feedback, engaging in discussions, and responding to alternative perspectives. This often led to further retelling, reflection, and revision (Clandinin & Connelly, 2000). Bochner and Ellis (2016) highlighted the importance of sharing work with critical friends (or “writing buddies”) who provide open, honest feedback.

Critical collaboration with colleagues ensures that research insights are relevant and meaningful to the collective. Schuck and Russell (2005) stressed the role of critical friends in self-study: “A critical friend is a significant part of a self-study. Both practitioner and critical friend should support and challenge each other to ensure that relevant perspectives are brought to bear on the self-study” (p. 11). The analysis of my journal was a reflective process, involving both reflection *in* and *on* the writing, as well as the sharing of work-in-progress with critical friends. These conversations influenced my thinking, helping it evolve, and shaping my observations and writing in an ongoing, cyclical process between data collection and analysis.

Personal observations are analyzed from multiple angles through discussions with critical friends and in the writing process. This includes examining key events, different contexts, important processes, and reflecting on my personal growth and changes. The process was iterative: writing, observation, and engagement with critical

friends shape the analyses. At times, it was necessary to step back, process my responses, and consider alternative perspectives before revising my work.

Samaras and Sell (2013) explored how critical friend work supports professional development through dialogue, collaboration, and critique. Drawing on Vygotsky's theory of socially mediated cognition, they found that written exchanges with peers facilitate feedback and alternative perspectives, encouraging self-reflection and fostering growth, suggesting that learning and understanding are shaped through collaborative dialogue. Critical friends challenge assumptions, provide constructive feedback, and encourage new perspectives. Samaras and Sell underscored the value of both individual and collective learning, demonstrating that peer feedback not only enhances self-reflection but also deepens understanding and can lead to transformative changes in practice. Findings highlighted the importance of mutual accountability, honesty, and a balance between structure and flexibility in fostering meaningful peer interactions. While the engagement of critical friends can be a valuable tool for reflection and critique, the process must be carefully structured to sustain and enhance collaborative learning.

### ***Observation***

The first time through re-reading the journal, I selected 120 pages of excerpts that initially became Chapters 4-6 of my first draft, which I shared with critical friends and my supervisory committee who engaged in thought-provoking conversations whereby they challenged the meandering path the excerpts took. I had not prepared them for the pattern of shifting voice from my own to other authors throughout the chapters. The first principle of permaculture, *observe and interact*, surfaced as I

witnessed my response to these conversations. Intellectually, I agreed with the feedback I received, yet emotionally I was challenged to process and move beyond my internal response to interact yet again with my excerpts and revise the drafts.

Subsequent drafts of these chapters resulted in reducing three chapters to one chapter of just over 50 pages.

Throughout the research process, learning to allow myself time to process and iteratively return to the research has been, as I have now realized, a critical part of my journey that required my patience and persistence. In the journal, you will find oscillating movement from my own voice in reflections to quotes from books and articles; ultimately, the excerpts selected for Chapter 4 reflect this iterative research process as I struggled to find my voice – moments of finding my voice were supplanted by deference to the voices of others, be they authors or critical friends, ultimately returning to finding my voice again.

### **A Recursive Approach to Data Analysis**

Narrative analysis methods are typically utilized to illustrate the shifts in self-identity over time resulting from my self-directed inquiry into permaculture. Organizing the data through a functional, in this case temporal, approach (Bruner, 1991) allows the journal to be interpreted through the lens of the stories I tell about my life, growth, and identity, and how I make sense of and share those stories. As a narrative analysis method, content analysis allowed for the revelation of persistent patterns in the journal.

The non-linear nature of this research process necessitated a recursive approach to data analysis. Significant time was spent refining and editing the journal to glean insights, in solitude reflecting on my journey with permaculture, in personal observation

where I continue to delve deeper and integrated permaculture into my life, and in active dialogue with critical friends. The analysis began long before data collection officially ended as the two were tightly intertwined, with preliminary analyses influencing the subsequent iterations of data collection. I gave myself an abundance of time to ponder and reflect, once again, enacting the first permaculture principle of *observe and interact*. Involving critical friends in the data analysis process offered opportunities for collaboration, reflection, and further insight, embracing that the purpose for including critical friends in self-study research is to “provoke new ideas and interpretations, question the researcher’s assumptions, and participate in open, honest and constructive feedback” (Samaras & Sell, 2013, p. 97).

## **Ethical Considerations**

### **Reflexivity and Ethical Considerations**

A critical component of ethical research is reflexivity: the process of examining one’s research activities through a critical, ethical lens (Israel & Hay, 2006). This involves ongoing reflection on how personal experiences, values, and biases shape the research process. Ethical decision-making is guided by established frameworks, professional standards, and legal regulations, which require researchers to disclose conflicts of interest or biases. Key ethical principles include respect for autonomy (e.g., informed consent, confidentiality), beneficence (doing good), non-maleficence (avoiding harm), and justice (fair distribution of research benefits and burdens).

While some ethical considerations can be addressed before research begins, many emerge during data collection. Wiles (2012) advocated for a situational relativist approach where ethical dilemmas are managed as they emerge, rather than relying on

rigid, pre-determined rules. The research journal served as both a tool for ethical reflection and a record for accountability, particularly when required for ethical review (Israel & Hay, 2006). This ongoing reflection ensured that ethical concerns were continually assessed and addressed as necessary.

Ethical decision-making in qualitative research is not a one-time occurrence but an ongoing process of continual reflection and monitoring (Bochner & Ellis, 2016; Frank, 2004; Swim et al., 2001). Reflexivity enables the researcher to address emerging ethical concerns, such as narrative ownership, while maintaining ethical power dynamics and fostering compassionate relationships (Pillow, 2003). Brandenburg and Gervasoni (2012) asserted that “ethical praxis demands more than conventional adherence to ethical standards for researchers” (p. 188). As Brandenburg (2008) noted, the ethical implications of self-study research are “not always known in advance” (p. 164).

### **Quality and Trustworthiness**

Quality and rigour in qualitative research are vital to ensure that insights are meaningful and relevant. Whitemore et al. (2001) argued that qualitative research must demonstrate integrity by ensuring interpretations are both valid and grounded in the data. Trustworthiness is often established through dialogical validation, a process in which the researcher shares writing-in-progress with others and incorporates their feedback (Schuck & Russell, 2005). Critical friends challenge assumptions, refine interpretations, and deepen insights, ensuring the research remains grounded and credible (Berry & Russell, 2014). As Clandinin and Connelly (1991) noted, narrative research invites readers to reflect on their own practices, generating further meaning through the sharing of stories.

In this inquiry, critical feedback from colleagues and peers played a crucial role in testing and refining interpretations, thus enhancing the overall integrity of the research. As Ambert et al. (1995) highlighted, qualitative research often relies on the informants' constructions of reality, which must be checked against the perspectives of others or the observations of informed researchers. Through recursive checks with critical friends, the researcher ensured the trustworthiness of the narrative.

Tracey (2010) advocated for qualitative research that emphasizes sincerity, including transparency about the researcher's biases, goals, and their influence on the research process. Transparency can be achieved through clear documentation of methods and challenges and self-reflection on personal biases and values. Creswell and Miller (2000) suggested maintaining an "audit trail" that tracks research decisions and activities to ensure transparency and accountability throughout the research inquiry, although Richardson and St. Pierre (2005) surmised that audit trails are irrelevant in post-modern qualitative inquiry.

### **Blended Methodological Approaches and Trustworthiness**

The blended approach used in this research, incorporating narrative, self-study, autobiographical, and reflective methods, strengthened the credibility and trustworthiness of the research design: a blending of approaches offset weaknesses in one method with the strengths of others, resulting in a more robust and comprehensive inquiry process. Connelly and Clandinin (1990) noted that "narrative writers frequently move back and forward several times in a single document as various threads are narrated" (p. 7). Similarly, Bochner and Ellis (2016) argued that writing is not simply recounting events but allowing the narrative to "rest" at a point where the writer has

made the necessary connections to make sense of events and insights in ways that engage the writer and the reader, always remaining open to further interpretation.

Whittemore et al. (2001) highlighted the tension between rigour and creativity in qualitative research, asserting that creativity emerges through novel methodological designs, flexible data analysis, and imaginative presentation.

### **Navigating the Vulnerabilities**

As I undertook this research, I shared Parr's (2011) concerns about the authenticity and validity of my work. I questioned whether I'm gathering the "right" data, making the "right" decisions, and maintaining objectivity in my interpretations. I came to accept that these doubts were part of the inherent vulnerabilities of qualitative research and can be mitigated through diligent attention to credibility and integrity. Although Bullough and Pinnegar (2001) suggested that no universally agreed-upon criteria exist for assessing the quality of self-study inquiry, credibility, authenticity, integrity, and criticality are often proposed as key measures of validity (Whittemore et al., 2001).

Critical feedback was essential in this research, with its novel, blended methodological approach. Connelly and Clandinin (1990) reminded researchers to take criticisms seriously, recognizing that every critique has validity. The process of self-articulation, explicitly stating the decisions made throughout the research process, helped establish the integrity of the work.

### **Relational Research**

Conducting research ethically requires a commitment to process or relational ethics, including "mindful self-reflection about the researcher's role, motives, and feelings during the research process" (Bochner & Ellis, 2016, p. 139). Riley and Rich

(2012) asserted that “what we need to do is provide the time and the space for all of us to be many different things, but at the core, human beings in relation, who are struggling towards wisdom” (p. 123). Telling stories has the potential to evoke strong emotions; “stories have the power to holistically engage. Allowing time to process stories is a way of respecting self and others. It is respectful and ethical” (Kovach, 2010, p. 47).

Research ethics review boards do not evaluate the validity of methods but ensure that human subjects are protected and that academic institutions are not exposed to legal risk (Bochner & Ellis, 2016). This research does not aim to generalize beyond my own individual experience. I do not speak for others but instead share the story of how I have come to see myself as a lifelong and lifewide learner through the pursuit of an interest in permaculture.

### **Balancing the Personal and the Social**

One challenge with this unique research approach is balancing the personal and interpersonal aspects of the inquiry. As Connelly and Clandinin (1990) acknowledged, narrative can be criticized for overemphasizing individual experience at the expense of social context. Like permaculture that works at both the theoretical and practical levels, “narrative is both inescapably practical and theoretical” (Clandinin & Connelly, 1991, p. 263). The blending of approaches used in this research required that I negotiate the tension between the individual and society in my inquiry, ensuring that the personal story remains connected to its broader social implications. Reconciling the paradoxical dilemma of personal, interpersonal, practical, and theoretical relevance was critical in establishing rigour in my research inquiry. As Connelly and Clandinin (1990) noted, the

researcher must carefully consider how the personal narrative serves both the researcher's own understanding and the broader social context in which it is situated.

### **Evolving Meaning and Ongoing Reflection**

As a qualitative researcher, I recognize that my inquiry is never fully finished, and the meanings I derive from personal experiences will continue to evolve over time (Bochner & Ellis, 2016). Connelly and Clandinin (1990) reminded me that the process of storying and restorying is essential in creating meaningful narratives. This cyclical process of revisiting, reinterpreting, and reshaping the story ensured that the research remains dynamic and responsive to both the researcher's evolving understanding and the external feedback received.

In narrative research, honesty and authenticity are paramount. As Bochner and Ellis (2016) argued, writing is not just about recounting events but also about making sense of them in ways that resonate with others. As I worked to craft my narrative, I remained attuned to guiding the reader through the experience, presenting it with character, dialogue, and reflection. This process fosters an ongoing dialogue between the researcher and the reader, inviting new interpretations and insights.

In this research, the commitment to transparency, reflexivity, and collaboration ensured that the inquiry is both rigorous and creative. The trustworthiness of the study is built through continuous engagement with critical friends, thorough documentation, and ongoing ethical reflection. By embracing the tension between the personal and social, and by remaining open to critical feedback and evolving interpretations, this research aims to contribute meaningfully to the ongoing conversations in qualitative inquiry.

### **Concluding Remarks**

Stories “help us to find our place in the world...” (Pagano, 1991, p. 197) and to “consolidate our connections to each other” (p. 199). Throughout this journey, the sharing of my story not only helped me to better understand myself and my personal interest in permaculture but has also “serve[d] to awaken a feeling of wonder and reverence toward life” (Atkinson, 1995, p. 11), thus serving a higher purpose than personal growth. My goal is that my stories serve the same reflective purpose for my readers.

## **Chapter 4: The Journal**

The following chapter contains excerpts from the research journal that were shared with critical friends and my supervisory committee, edited, and revisited multiple times. The chapter is organized temporally, mimicking the linear structure of the journal over a period of more than five years. It begins by documenting the creation of a space to be and become, meanders through a search for purpose in this research process, ultimately arriving at becoming a writer and activist. Throughout the journal, I tentatively weave together my voice and the voices of others, showing the ebbs and flows and iterative nature of the process over time. I have intentionally not used quotation marks or block quotes to depict these journal excerpts; what is found in this chapter can be considered direct condensed excerpts from the very lengthy journal. This process has been exceedingly murky, and this chapter reflects the struggles I both created and endured as I made the shift from being and becoming to being and becoming an activist. It is presented in present tense as it was originally written to keep the reader in the here and now of the inquiry as I experienced it.

### **Part 1 – A Space to Be and Become**

I am searching for my permaculture roots, feeling lost and isolated as I try to define the research journey. I am exploring the process of defining the research journey for myself and grounding myself in the research. As seasons pass, I begin to experience infrequent moments of connection and spend time exploring each of the twelve permaculture principles and the embodiment and expression of them in my life.

#### **July 2016 – A Time to Create Space**

I am learning over the past year and continuing to learn in this moment, how to

sit with uncertainty, how to create the space for just being and not becoming, to paraphrase Plato's Allegory of the Cave: "Knowledge as the movement of the soul from *becoming* into *being*."

### **Fall 2018 – A Season of Questions**

Why are people drawn towards certain topics of interest along their lifelong learning journey? Why am I interested in alternative topics like permaculture? What values and beliefs do I hold? Kovach (2010) writes, "What are my implicit beliefs about knowledge and power? What is the purpose of knowledge? For whose benefit (researcher or greater good) and who decides who benefits?" (p. 81). What assumptions do I bring to the research process? What has shaped me as an individual? Why this research topic and why should I pursue it? "What feeds my soul? What shapes my worldview?" (Tanaka, 2016, p.10).

When I think about the "so what" or implications of my research, I return to a question about the values and beliefs that I live my life by. I feel a sense of overwhelm even considering this question because it's never been asked of me before, and I've never articulated my assumptions or beliefs and where they've come from. I ache to know myself better, to understand why I am interested in the things I am interested in, so that I can share the story of how I came to understand myself in the hopes it will perhaps help others. I want to come to terms with the apparent contradiction within of the pragmatist and the intuitive, and to try and bring my whole self to research and to every situation in my life.

This research pursuit is about finding my voice and breaking my heart open. It is largely a journey of healing for me. At the core of this journey is an internal struggle to

acknowledge all of me, to shed light on and accept the gifts that I have been given, and to share those gifts with others. A lot of this process is identity work, I realize.

Part of the desire to pursue this research is to validate the informal learning that happens outside of institutions, to validate my own interests in subjects that are counter-mainstream or alternative, and to create my own network of supportive people. I'm learning that community and belonging are things I need to actively create for myself. I feel a deep sense of responsibility to create, through documenting my journey, in a way that honours my past, who I am in this moment, and who I will become. I hold myself gently, trusting that I am supported by many, and that things will unfold in the right way at the right time.

### **Winter 2019 – A Search for My Permaculture Roots**

I first came across the concept of permaculture when my son was an infant, when I was thinking a lot about my core values as I found myself in an identity struggle – who was I if not the graduate student, if not the full-time employee? Who was I as a new mother, and outside of that identity? How could I make the world a better place in my role as a mother? What kind of legacy would I leave for my child? I read books about living sustainably: farm to table food production, organic gardening and food security, medicinal herbs and living closely with the land, natural building and off-grid living – topics I had long had a latent interest in but had never allowed myself to pursue. Giving myself the time and space to explore these interests was a response to the question about the value and meaning of my life, a life which at that moment felt somewhat constrained by the intense day-to-day mothering of a new baby.

In whichever book it was that I first encountered permaculture – I do not remember which it was – I resonated deeply with the concept, and I recall going on to read the foundational books of Bill Mollison, David Holmgren, and other key permaculture "pioneers". For the next several years, I made a concerted effort to live more sustainably, to practice the principles of permaculture in various ways in order to live lightly on the land. I toured One United Resource (O.U.R.) Ecovillage in 2007, went on garden and farm tours, and tours of natural buildings made of straw bales and cob. By the time I began this research process, it was already years of interest in the topic, an interest that continued to simmer.

Years later, in 2018, I took the Permaculture Design Certificate (PDC) course at O.U.R. Ecovillage with Starhawk and Charles Williams. The days were long and full, and I was intrigued by the range of participants, some who had never heard of permaculture, and others like me who had read many books and articles. It was not only a PDC but also "Earth Activist" training. One day, Starhawk asked if we identified as activists, and I took my time considering the question. What does it mean to be an activist, I wondered?

The days of the course started and ended with a sacred circle, grounding ourselves, calling in the elements, and connecting with one another and the world around us through song and dance. Moments of ritual and ceremony and tradition, of establishing shared culture and building community. Meals from the outdoor kitchen were shared over conversation and stories, sitting at the long tables hewn from logs off the property. The classes were informal – no PowerPoint slides or handouts, no clearly articulated learning objectives or even distinct start and finish to the class. It was more

fluid and conversational, listening to Starhawk and Charles and other guest speakers talk, and at times I felt challenged to pull out the purpose or topic from their stories as I would be lost in my rich inner dialogue reflecting on the experience while the conversations around me continued. I found, having read so much about permaculture, that I knew the theoretical background presented in class, yet the active learning opportunities where we were out on the land building swales or plastering a cob building were experiences where I found a different rhythm. In the classroom, I was more comfortable on the periphery of the room, almost watching it happen from a slight distance, yet in the experiential classes outdoors, I was right in the midst of the flow and action, one member within a hive, where I was embodying the experience rather than getting caught up in my mind.

### **Spring 2019 – Out of Touch and Longing for Connection**

I am generally feeling out of touch with the research and am struggling to maintain a connection to it. Fumbling along in the dark, feeling very alone, hoping and trusting that the way forward will become clearer as I immerse myself in it.

I talked to my coach about the deeply personal nature of this journey, about finding my voice through this process and doubting that I have something worthy to contribute. The topic that I am writing about – generally, the connection between permaculture and lifelong learning – has not been well-documented in academic literature. It's a novel area of research and as such, contributes to the knowledge base. It is my journey and my exploration of the process that I feel drawn to document. I am not the person I was when I started, even since July 2017 when I was last with the cohort.

Thinking about my journey with permaculture, I consider that I have pursued interests throughout my life with quite an intensity. For example, I didn't just go for Reiki once or twice, I became a Reiki Master/Teacher. I didn't just go to a beginner's tai chi class; I became a volunteer teacher of advanced classes after taking further training. My interest in permaculture has a burning intensity to it; it comes with a desire to absorb as much as possible about the topic as quickly as possible, yet it is an interest that has persisted for over two decades. I remind myself that it's okay to pause and breathe, that the first principle of permaculture is to *observe and interact*. There is a tendency to rush into action in so many aspects of my life; I acknowledge that the act of observing is an active, not passive, state.

Connections to permaculture pop up in odd ways throughout my day. The community acupuncturist suggests that whatever thoughts or emotions surface during the process are exactly what needs to come up in that moment, and to just allow things to be. It's hard. I want a playbook for this journey, a clearly defined path of how to get from here to there, but this isn't a journey with a well-defined path. The only way through is in the present moment – here and now, I repeat to myself, here and now. I put such pressure on myself for this writing process to look a certain way, to be articulate and insightful from the very beginning. Truthfully, I spend a lot of time wishing various aspects of my life were not what they are. Acceptance can be a challenge.

I am finding it hard to hold this research journey close and connect often. I try to stay centered, grateful for this moment and all the blessings in my life, and yet I get mired in negative self-judgment. I guess part of it is the continual struggle to control where life is going instead of relaxing into it and letting it unfold. The illusion of control.

Control doesn't fit well into permaculture. Nature will do its own thing, and I had better learn to work with it instead of trying to force it to bend to my will. Quite like me in my life, I reflect; I need to learn to relax more and just go with it.

I try setting intentions in the morning, which usually ends up looking like a to-do list rather than a reflection on how I am going to show up in the world today. I was thinking about it last week: what do I need to do to be present in a different way in the world? How can I learn to be relational (which is core to permaculture, whether that's relational to the land around you or relational to others) in all aspects of my life, throughout my day? I think about the (high) expectations I have for myself, and it comes back to a yearning for control. Even as a small child, I had a deep sense of responsibility, like I have always had something to prove, and a need to bend the world to my will.

This pattern of busyness and calm, of feeling struggle or at peace, repeats itself like a wave, over and over in my life. My coach and I talk about this journey being an iterative spiral process, where I get lost and find myself again, but each time I come back to myself I am in a different place, and she suggests I might learn to respect the pattern, the flow – I just have to relax into it, I keep telling myself.

### **Summer 2019 – A Community Connection**

Tonight, there was a conversation in the neighbourhood social media group about the basketball hoop in the cul-de-sac. I think about the application of permaculture principles to this situation. *Observe and interact*. Someone observed that a wind gust caused the hoop to fall perilously close to their car today and noticed the state of disrepair of the hoop. They posted about it on the online group, which stirred up

a lot of conversation. Several people remarked that their families *did* use it and advocated for keeping it. I recalled the poster “How to Build Community” that was posted at the ecovillage during the PDC that stated: “Fix it even if you didn’t break it.” I live in a great community, yet I can do better than sit behind my screen and go on a rant about what is wrong with the neighbourhood. Permaculture principles pop into my mind: *Produce no waste. Apply self-regulation and respond to feedback.* I headed over and painted the wooden backboard with paint I already had at home and replaced the net – a small investment in a shared community space. It didn’t take much effort to leave it better than how I found it. Someone else showed up and filled the base with gravel and concrete. *Integrate rather than segregate.* In seeking to understand multiple perspectives and find common ground, I suggested that we could work together to create a welcoming, inclusive space for everyone, especially since the cul-de-sac is a low-traffic area which is more suited to kids playing than an intersection. *Use small and slow solutions. Use the edges.* We don’t have to build a basketball court (or rec center) in our neighbourhood, we just need a hoop and a relatively small, safe space for it to exist; we can continue to use the cul-de-sac on the edge of the neighbourhood.

Permaculture isn’t just about growing food; it is about consciously designing my life to be more sustainable, more in alignment with nature and with one another. The ethics of permaculture (earth first, people second, return of surplus or fair share third) play into this. Having a local play space like the basketball hoop in the community encourages people to be healthy and active and encourages people to connect with one another and build relationships. Relationships are like the soil of human connection; small, frequent interactions build relationships, much like small, frequent interactions

between soil microorganisms build the soil up. Permaculture is about finding opportunities and reframing my thinking (the notion of a weed being a plant that's perhaps contributing in a way I don't yet appreciate or understand rather than a "pest"). This simple example is permaculture-in-action.

### **Fall 2019 – A Question of Learning**

I think about this research project and how to validate that the informal learning that happens outside of institutions is equally valuable to the learning which occurs within those institutions. We see it within institutions that core courses – literacy, numeracy, the hard sciences – are valued more highly than the humanities and arts. We see it in the funding cuts to the arts with music and art programs that are often first on the chopping block. What is education for? Is it only to prepare young people to become economic contributors within certain sectors? What does it mean to be an educated citizen? Does that include an awareness of the impact of one's actions? Does it allow for creative expression and critical thinking? Are the only valuable things those which are quantifiable and measurable?

David Orr writes in the foreword to Sterling's (2002) *Sustainable Education: Re-visioning learning and change*, "Most education simply reinforces practices and pathologies that cannot and should not be sustained over the long term" (p. 8). Sterling advocates for "an education that sustains the 'whole person – spirit, heart, head and hands' and reclaims the authentic tradition of education to equip the young for lives of thought and purpose" (p. 8). I agree.

Sterling (2002) argues that "authentic education has always been rooted in place and tradition" (p. 8). I was thinking about how we measure time by the clock and

calendar and not by the connections to earth and the passing seasons. I noticed the smell of ripe blackberries in the wind in early August and wondered, why do we no longer measure time through connection to place and seasons? Are we too preoccupied and busy?

The prevailing educational paradigm is economic and managerial in nature, derived from a largely mechanistic and reductionist social and cultural paradigm. “There is a poor fit between this dominant paradigm and our experience of increasing complexity, interdependence, and systems breakdown in our lives and the world” (Sterling, 2002, p. 10). “Realization of a sustainable educational paradigm requires *vision, image, design*, and action – at all levels from all concerned with achieving healthy societies and ecologically sustainable lifestyles” (Sterling, 2002, p. 11). In permaculture, the principles can be applied locally or personally as well as systemically. Permaculture isn’t only applicable to agriculture and food production; its principles can be applied to transportation systems, shelter, health care, and education. This is what I aim to uncover in my research: a broader application of permaculture, where permaculture can be used as a metaphor to re-envision the education system as one that is more sustainable and supportive of a learner’s holistic development.

## **Part 2 – Finding Purpose in this Process**

As the seasons pass, I undergo a deep search for meaning as my interest ebbs and flows. In this extended period, I observe that I iteratively weave from my reflective voice to the voices of others. I continue reading and repeatedly return to reflect on the readings in the journal, exploring systems design thinking from a variety of angles – the processes, paradoxes, patterns, and principles of permaculture. The broad scope of

literature supports an examination of permaculture as metaphor, as themes of relationality and integration bubble up. Through this long season of learning, by reaching out to the world around me to reach deep within, I come to see that how I show up in each moment is how I live my life – my study of permaculture permeates who I am and all that I do.

### **Fall 2019 – A Quest for Purpose**

Connecting permaculture principles and lifelong learning is important to me on a personal level, bringing together my seemingly diverse interests. This inquiry is about validating who I am, about saying *I am enough, I am worthy*. It is the story of me coming into myself, growing a deeper self-awareness, of healing, of self-acceptance and learning to get comfortable with all parts of myself, and of bringing myself fully to all situations. It is my question, how am I supporting myself in continuing to learn throughout my life? Am I excited and engaged with developing and pursuing learning?

#### ***Why me? Why now?***

I don't know if I'm better positioned than anyone else to explore this topic, other than I am passionately driven by the inquiry. I care about permaculture and living sustainably because I see the larger impact of the choices we make. There is a part of me that is driven to define and articulate the values I want to live by and to align my behaviours and actions with those values. "No one is too small to make a difference," declares Thunberg (2019). This research inquiry is an alignment of my interests and, more than that, a deeper quest to genuinely understand myself.

### ***What do I want to get out of the research?***

I seek to gain a deeper understanding of who I am and of my purpose in life. It feels entirely selfish to write that, but it is what is driving me through this research. There are times I don't want to face myself – my shadow self – times I want to avoid growth and change. However, I want to focus my life on creating a consciously chosen, sustainable future, one that aligns my values and my actions, one in which I take responsibility for my actions, because I can see the connection between how I live my life now and how we create a collective future together.

### ***The Passing of the Seasons***

I return to contemplating how marking the seasons is no longer done in Western culture. We no longer create time for reflection and to acknowledge that the extremes of the solstices (both summer and winter) balance out at the equinoxes (spring and fall). The change of seasons is a shift in energy. Summer is a time of abundant growth and light. Light is very yang and outward and masculine; the darkness of winter is more yin-like, inward and feminine. Equinox is a time of balance between the masculine and feminine, between the light and dark, between the outer and the inner worlds. The paradox is that there is no duality, it's a continuum. The equinox serves as a reminder to take ownership of the direction we're headed, to step into leadership, to try new ways of doing things. How can I shift things so I can release what no longer serves me? How can I work together with others to move things forward harmoniously? Can I learn to respect my own needs as well as the needs of others?

I wonder, *what do I observe about my life right now, about my interest in lifelong learning and permaculture?* I have a pile on my desk of about two dozen books, most

currently unread, although I have read many permaculture books before accumulating this pile. This past week I've read *Speaking Our Truth: A Journey of Reconciliation* (Smith, 2017), *No one is too small to make a difference* (Thunberg, 2019), and *Lifelong Learning* (Longworth & Davies, 1996).

I question, *how would I define lifelong learning?* I think lifelong learning is about learning for intrinsic purposes. You might be motivated to upgrade your skills to pursue a new career path, but I would argue that lifelong learning is internally motivated; it is all-encompassing and lifewide. I am reminded of Dweck's work on growth mindsets. It's about valuing the invisible learning, the learning that I undertake on my own volition, the learning that isn't necessarily held in esteem by society. I think we need to let go of the idea that learning is something that happens between nine and three o'clock on weekdays during the school year by children five through 18 or 19. Learning happens all the time at all stages of life. There is so much evidence of learning outside of formalized institutions. We don't feel the need to force much of this learning to happen; rather, we let it unfold in its own time.

I continue to question, *what is lifelong and lifewide learning?* It is the learning that unfolds throughout my life. It includes formalized learning within the school system and the learning that happens to upgrade my career and so much more. It is learning that reconnects me to the Earth and connects us to one another. It is learning about who I am and my place in the world, about how I want to show up in the world. There is detailed learning of a skill, for example, learning when and how to apply that knowledge, and meta learning about how I learn.

In the space between stimulus and response is an opportunity for reflection and for intentional response. There is a moment where we can step back and observe what just happened, non-judgmentally. There is power in that space. The power of observation in my own learning is huge. In that moment, there is an opportunity for self-reflection and self-awareness. I can choose how I want to show up in the world – as a leader, as a person, as a learner. I can exercise self-compassion and extend that empathy to others.

I've been reflecting lately on my need for connection with others and how I approach that, how I show up in the world. The second permaculture principle, *catch and store energy*, could be thought of in terms of building social capital. My inner voice (critic) tells me that I'm not very good at navigating social situations and conversation; I think of different ways to try something different, incorporating the principle of *slow and small solutions* to building social capital.

### ***Awakening to Being in Connection***

I've been reading Richard Wagamese (1994) *Keeper'n Me*. I carry these quotes with me:

When you quit lookin' around at nature you quit learnin' the natural way. The world gets to be somethin' you gotta control so you're always fightin' it. Us we never fight the world. We look around lots, find its rhythm, its heartbeat, and learn to walk that way. (p. 53)

See, the important thing about our stories isn't so much the listening, it's the time you spend thinking about them. There's lots of traditional thinking buried deep

within each story and the longer you spend thinking about it the more you learn about yourself, your people and the Indian way. (p.145)

Reading *Keeper'n Me*, I am reminded of what it means to live a connected life, to live mindfully. There is room for growth and to bring my full self and awareness to each moment. How would being fully present change my perception of the world around me? How would it change how I am seen as showing up? In *Keeper'n Me*, Wagamese talks about the experience of being awake with the world at dawn, and I think of the morning birdsong, and how fish on coral reefs sing together at dawn. The natural world rejoices with the coming of a new day; we humans run around the house getting ready to go to about our day, disconnected from the natural world around us.

I ponder, *why was I drawn to studying lifelong learning and permaculture?* I have been interested in permaculture for close to 20 years now. I am interested in having a positive impact on the world, in leaving it in a better condition than when I found it, and in how I show up in the world and the (emotional) wake I leave behind. I am interested in minimizing the environmental impact I have. I yearn to always be learning, to remain curious about the world around me (as opposed to certain and set in my beliefs, which I know I can be), to maintain a growth mindset, to constantly question my perspectives – where did they come from? Are they well-founded? Although I don't particularly self-identify as such, I suppose I am a curious and inquisitive person by nature.

I question, *who am I and how does that influence how I see myself as a learner?* I enjoy having a sense of purpose in my life. As an introvert, I need time alone to reflect and recharge. I do well with a decent amount of order and structure and routine in my life. I am fiercely independent and do things my own way, even if that makes it harder

for myself and I come across as somewhat obtuse. I seek outlets for the insights I have (hence this research) and for my creativity as well. I notice the beauty in the world around me.

My sense of empathy provides me with the ability to relate well to others, and although I am emotionally intelligent and can read the room, there are times I struggle to understand myself. I am sensitive and emotional, while also quite analytical and logical; this seemingly paradoxical nature can make it feel hard to fit in, yet on the other hand, I could reframe it as being well-balanced. As a big-picture thinker, I struggle to remember details. I intuitively just *know* things to be true, but I can't quite pinpoint or articulate how I know these things.

### ***Having and Being Enough***

What's been on my mind lately is this concept of *enough*. What does it mean to have enough and to feel able to share with others? When we feel a sense of lack, we tend to hold things close with a (false) sense of attachment. What does it mean to be successful enough? How do I define success and how does a sense of gratitude play into this ethic of having and being enough, and willingness to share? It reminds me of the third ethic of permaculture, fair share or return of surplus.

My daily reflections often start with a list of tasks accomplished, as if my worth or self-love is dependent upon my productivity. It's not, but it is deeply ingrained in me that one must be active and productive to be worthy of love. Trying to just *be* and not feel like I constantly must prove my worth is a challenge. It is why meditation and things like acupuncture and tai chi – activities where I can still my mind, are both a challenge but also a blissful moment where I can shed the auspices of having to constantly be doing

something, proving myself (to whom, I wonder). To understand that by resting I am recharging and will be more productive in the long run is an important lesson I am still learning.

I am reading *Paradoxes of Learning* (Jarvis, 2012) about the education system and the paradox of *having* versus *being*. The education system purports to have “*being*” at the core, but it’s “*having*” knowledge that is valued. The system aims to create educated citizens of its pupils: people who will grow up to contribute positively to society because they *have* skills and gifts to share, not that they are inherently valued as a person for just existing, for *being*. There is an emphasis in the system on *becoming* rather than *being*. *Becoming* insinuates that you can improve, grow and develop, that you never end up *being*. I feel like I can continue to grow, develop and learn, that I am continually becoming, but can I learn to see my worth in *being* as opposed to either *becoming* or *having*?

### ***A Permaculture Focus***

I started reading Hemenway’s (2015) *The Permaculture City* today and was drawn in from the beginning. Building off Holmgren’s (2002) permaculture flower (see Figure 1, page 2), Hemenway writes on the application of permaculture principles to a broader lens of human systems beyond food production. I find resonance in so much of what he says around social permaculture and the relationships and interconnections inherent in permaculture. I decided to park a few passages and themes to return to. In the opening pages, Hemenway states,

Permaculture has something to offer everyone. All humans, because we plan, dream, and manipulate the environment with our hands and brains, are

designers of some sort. Permaculture is a universal design tool; thus, each of us can benefit from using it. Nature has tricks to teach everyone... But nature can do more than improve how we make things. It can also teach us how to cooperate, make decisions, and arrive at good solutions... We search for the principles that generate life's resilience, immense productivity, diversity, interconnectedness, and elegance. (Hemenway, 2015, p. x)

Later, Hemenway states that permaculture "leans heavily on methods that focus on creating relationships among the parts of a design" (p. 31). This could be relationships in physical space, over time, among the parts, between the parts and the users, and between the parts and the environment of the design.

### ***Holmgren's Permaculture Flower***

Hemenway's writing is themed loosely around "Holmgren's permaculture flower, in which each petal of the flower represents a basic human need that must be met in a sustainable – or, better yet, regenerative – way if we are to build an equitable, ecologically sound culture" (ref 2, p. xi). I realize that my beliefs are aligned with the three central ideas of the flower:

...that permaculture's ethics, principles, and methods can be applied not just to gardens but to all essential needs; that in order to create a sustainable culture, we need to address all of these needs; and, that we must meet these needs not just at the personal level but at the local and regional levels as well. (Hemenway, 2015, p. xi)

We are bound by both visible structures that "tell us *what* to do," and invisible structures that "tell us *how* to do it," and invisible structures, like ethical living, equitable

economics, working in community, developing sustainable policies and decision-making practices, helping people feel secure, building social capital, and focusing on health, spirituality, and justice (Hemenway, 2015, p. xiv).

### ***The Permaculture Design Process***

I call on Hemenway's (2015) four-part permaculture design process as a guide to support my journey: I begin with good design to keep my "eye on a large, holistic mission while delivering a set of interconnected, self-reinforcing, and doable steps to achieve it" (p. 27). My goal is to complete this research in a sustainable way, where I strive for balance in all areas of my life whilst undertaking this research. I have come to understand that

Learning a technique is the easy part. Much harder tasks are figuring out which technique is appropriate for the conditions and designing a strategy for using the techniques in the proper place and order. Those – strategy, planning, and decision-making – are permaculture's strong suits. (Hemenway, 2015, p. xv)

I think that learning which tool or technique is appropriate when can be gained through active experience.

Most people, consciously or not, apply *highest use* to their work habits. At the beginning of my workday, my brain is at its best, so I do the most intellectually challenging tasks, such as studying new material that I need to master. When that part of my mind feels stuffed full, I move to writing and other creative work. Once my creative juices are spent, I answer emails and make phone calls. It takes even less brainpower to sort, file, and organize tasks and materials, so I do that next. When my brain has deteriorated to an inert mass, I find physical work

to do. Somehow that work pattern manages to preserve some social energy, which often fills my evening. (Hemenway, 2015, p. 33)

As for Hemenway, permaculture design brings a consciously thought-out, intentional organization to my day, which permeates other areas of my life. Designing my day with intention has ripple effects on the wider systems I function within throughout my day.

### ***Systems Thinking with an Indigenous Lens***

I attended a workshop at OUR Ecovillage yesterday afternoon: *Systems Thinking with an Indigenous Lens* with Gary Hutton and Anastasia Gaisenok. I am invigorated and inspired to continue this path, to find a way to describe who I am and place myself in the research. During the workshop when we were defining systems thinking, words like interconnected, interdependent, and emergent came up. I was thinking of Hemenway's (2015) reference to holarchies and holons – about the way the components of a system fit together and integrate and make something bigger than themselves when joined (p. 20).

There is a paradox within systems of simultaneous creation and destruction. A system will tend towards equilibrium and homeostasis but will be in continual flux, never finding complete stability – a concept known as dynamic equilibrium. There are elements (nodes), interconnections (relations) and functions, purpose, and boundaries in systems. The boundaries are like a flashlight illuminating what I can see/know. Understanding that boundaries are often arbitrary, when life events force a shift in the direction of the flashlight, my view will change (sometimes dramatically).

### ***Hemenway Again***

I return to reading Hemenway (2015), about the concept of zones in permaculture design based on frequency of use (p. 108), a series of concentric circles. Applying the concept of zones towards food access and production, the first zone might look like sourcing food as close to home as possible through growing my own food in my yard. The next zone might be trading home-grown food with neighbours, local foraging, or having a plot in the local community garden. The third zone might involve the use of currency in accessing local food: supporting farm stands, farmer's markets, and community-supported agriculture (CSA) programs. Beyond that, zone 4 might include independent grocers with a focus on supporting local farmers. In the farthest zone, food access might be chain supermarkets or big box grocers where you can access foods from around the globe year-round. Hemenway (2015) cites some of the benefits of thinking in zones and encourages building up those first few zones because they foster connection to community, reduce travel, support a local economy, give us greater control over how our food is grown, encourage seasonal eating, and build local food security and resilience (p. 108). In the journal, I spend time iteratively considering the implementation of zones in my physical environment and the notion of a local foodshed.

Reflecting on Holmgren's permaculture flower (see Figure 1, page 2), the concept of zones could also be applied to how we move about and transport ourselves through our communities and beyond. We might consider places we frequently visit as Zone 1, and perhaps we could consider walking, cycling, or other active transportation modes for these Zone 1 areas. Areas in Zone 2 that are farther afield but frequently

visited might require transit or car-share for access, and perhaps single occupancy vehicles for trips in Zone 3 where transit is less accessible and access is less frequent, and maybe trains for the infrequent, longer trips for Zone 4.

### **Winter 2019 – A Season of Searching**

Applying the concept of zones from permaculture to education, we could consider that the zones of education closest to the learner are the most accessible: with the learner at the center, introspective reflective thought as a source of learning would be zone 0 or 1 (closest) and always available to the learner. Learning enabled through active life experience might be considered zone 2, where it is fostered through the learner's interaction with the world around them in their daily living. Learning which is facilitated by others who are already in our lives might be considered zone 3 and learning which requires seeking out (or being placed in) environments or teachers in more formalized institutional settings, like schools, as zone 4.

In colonial Western culture, the prevailing assumption of the education system is that children are empty vessels who need to be filled with literacy, numeracy, social and other skills to become contributing members of society as adults. As a culture, we don't value a child's place in the world or their inherent contribution and gift resulting from who they are (including the context of when and where they were born) and the lessons they share. In my family of origin (and arguably in Western culture), success is externally defined: higher education, home ownership, professional employment. The pursuit of personal interests – even if they are lifelong and lifewide – doesn't contribute to the concept of being successful unless the interest is deemed to somehow add to

society in a positive, tangible way. Learning for its own sake is not inherently valued. Pushing back, I wish for Tanaka's (2016) thoughts about education where

Learning is the 'membering' of the emotional, physical, and spiritual with the intellectual. Learning is circular, cross-disciplinary, and cross-cultural. Learning is complex and requires a kind of trust in the learner that is unfamiliar in Eurocentric educational thought. To take care of our souls, we do well to embrace what Freire calls the 'death of the professor' (in Vella, 2002, p. 20) and let the learner find his or her own way. Learning requires us to be vulnerable, to engage our emotions, to follow our intuitive knowing. (p. 23)

### **Spring 2020 – A Time to Pause**

The COVID-19 global pandemic's self-isolation of recent weeks is bringing me face-to-face with my vulnerabilities and shadow self (much to my chagrin). I only have the present moment, *this* moment, to come to terms with my mortality. More and more, I am coming to understand that I am in control of none of it, but in relation to all of it. This present moment of the past few weeks – this self-isolation and collective breathing space offered by COVID-19, is much needed. Collectively, we have time to pause now that we aren't rushing the kids to school in the morning and off to work ourselves, to after-school activities and a hurried dinner with bedtime routines and errands and trying to fit in a workout and a moment to ourselves. At our essence, we have time and nothing but time, yet we have no time either as we are faced with our mortality. I hear the birds chirping at dawn and at sunset. I hear bats in the darkness of the evening. Tonight, standing on the dock, the lake was so calm, like a sheet of glass. I noticed the air bubbles from an otter swimming underwater and tracked where it was; it popped its

head up, looked at me and dove back under. We have time to pause, and it is much needed. Our pets are probably wondering why we're home so much, like an extended weekend. Our homes are our sanctuaries from the world, and probably in some (many?) cases, our prisons. No escaping the reality of our lives, for better or for worse.

This is a time to pause. Do what you can each day but don't feel guilty about what you don't get done, about the good intentions that get away from you, the design you so carefully planned (or maybe your whole life is filled with obligations and responsibilities you fell into, and did not carefully design, in which case it's an opportunity to rethink how you want to live your life). The world is collectively coming to terms with grief and loss and memories of how things used to be just a mere month ago. Freedom lost and freedom gained. This time, this collective pause, reminds me of the days of homeschooling when the kids were young, except this time I am also working full-time, completing a PhD, supporting my teenager with her own remote schoolwork, while also keeping the house clean, making meals, and running errands. Don't try so hard, I tell myself. Trust the universe has your back. Take time every day to notice the little things, to notice life passing by. First principle of permaculture: *observe and interact*. Know that in observing you are impacting the world around you.

I do wonder if we'll go back to normal when normal was causing so many problems globally – problems that covid is shining a flashlight on; things like the inequities in society – vulnerable people, food insecurity, homelessness, lack of universal health care, lack of equal access to resources, racism. Certain subpopulations of people are being hit very hard by this, through no fault of their own. How can I make a difference? How can I serve?

## **Summer 2020 – A Moment for Self**

I would like to sit in silence this week and return to self. I have an inner critic that voices that this research process is selfish and indulgent. I counter by acknowledging that it is an incredible privilege to be given this opportunity to explore myself, my inner world, who I am and to be able to share my experience of how I show up in the world. Picard (2020) asked herself, "Am I alone? Am I the only one who sees it this way?" I have the same question. Why am I drawn to permaculture and yet I hold myself back from living fully – from the full expression of myself through permaculture? There's a hesitancy or a restraint that has been imposed on my expression of who I am throughout my life, and I recognize that I am the one doing the imposing, holding myself back.

### ***Questioning***

I circled back to asking, what is the research trying to get at? Why was I drawn towards completing a PhD? I wanted to get to know myself better. I wanted to be able to contribute something, to be of service. I wanted validation for my experiences, to know that I was not alone, to foster connection with others. What could permaculture teach me about who I am as a learner? What would I learn about myself through the pursuit of my interest in permaculture? Why was I drawn to permaculture and other alternative interests and yet why did I struggle to fully embrace these interests? Was it social and cultural conditioning that held me back? How could I release the shackles of cultural conditioning that I had picked up in childhood?

This avenue of research has been inspired by a desire to be seen and to have my experiences validated, an acknowledgement of lifelong learning as a valid and

worthy pursuit. It has really been about marching to the beat of my own drum, honouring myself and my interests, even when I felt judged, even (especially) when I judge myself for it.

### ***Paradoxes and Identities***

I was reading permaculturist Looby Macnamara's (2016) book of poems last night, *Strands of Infinity*. In one poem, she was talking about the paradoxes that exist within each of us.

#### **Who am I?**

I am woman  
 I am child  
 I am me  
 I am feminine  
 I am masculine  
 I am nowhere  
 I am everywhere  
 I am no one and everyone  
 I am ancestor and great grandchild  
 I am past, present and future  
 I am air, water, fire and earth  
 I am Mother Earth  
 I am one of humanity  
 I don't know who I am  
 I am body, mind and spirit  
 I am movement, muscles and breath  
 I am bone, blood and brain  
 I am heart and love  
 I am thoughts, emotions, feelings and I am none of these  
 I am singer, dancer, writer, healer, mover, shaker  
 I am a window through which I see the world  
 I am a womb where ideas can grow  
 I am a boat to travel the cosmos  
 I am a spiral of connections  
 I am energy in one place  
 I am stars exploding  
 I am dreams flying  
 I am sensor of currents folding in upon themselves  
 I am the pattern and the detail  
 I am the question and the answer

I am the vastness and the miniscule  
 I am the oneness, the everything and the nothingness  
 I am the universe and the atom  
 I am a strand of infinity  
 I am eternity  
 And I am now.

I am both perplexed by and in awe of the paradoxes of life. How can something be both expanding and contracting at the same time, and yet I have experienced that in tai chi as my spine both lengthens and contracts simultaneously. The world outside of us is paradoxically the same as the world on a molecular, atomic level. Each cell is a universe unto itself, going back to the concept of holons. I spend time sitting with this.

### ***Empowered Learners***

Pithouse (2007) defines eight pedagogic precepts (p. 6), including "making it possible for learners to see themselves as agents of their own learning processes." As mentioned previously, during the PDC at O.U.R. Ecovillage in 2018, Starhawk asked us if we considered ourselves to be activists. I do not yet consider myself an activist or even a practicing permaculturist with something to offer the world; I am still learning. Another of Pithouse's precepts is "attempting to do the tasks that I require learners to undertake." The best leaders lead by their actions and example, not their spoken directives. One precept I think Starhawk and Charles really embraced was "allowing the real interests and preoccupations of learners to inform the actual curriculum" (p. 6). I reflect on what the education system might look like if driven by the interests of learners rather than curricula standards.

### ***Observing the Edges***

I wonder, where do things pile up in my physical space? On the edges, in the periphery. There is clutter in the corners of my physical (and mental) space. I notice the

spaciousness that is created when I tidy up. Part of what draws me towards minimalism or simplicity is that everything in your (sacred) space has a purpose and function (if not more than one function, as in permaculture). Things also pile up where I don't use them every day; those that do get used daily get more attention. That may seem obvious, but how do you move something from the edge/periphery where it's not getting used to becoming the focus of attention and a regular habit? I think about the first permaculture principle *observe and interact*; through observation we can see where things are piling up and creating clutter. Through mindful awareness and connection, I can pay more attention to them if I want to create more space and time for them in my life. In the same way, how can I look at my physical, mental and emotional space, and make sure that what I allow in is serving my growth and development?

### ***Exploring Self***

I have chosen to pursue this research to legitimize and validate the pursuit of personal interests in a society that does not value this pursuit unless it reaps economic benefit. "Given social and cultural contexts of the United States, there are instances where my credibility or expertise appears to require validation by someone other than me, and validation is often withheld or not freely given by recognized authorities" (Grant & Butler, 2018). Through this research, I am coming to know and understand myself better, growing and laying claim to my space in the world, taking my place and positioning myself as leader, expert, contributor, and not as a learner, student, subordinate – showing up fully, uninhibited.

Do I see this research as an act of social justice? I think that comes back to Starhawk's question of us during the PDC: do you see yourself as an activist? I didn't

then (two years ago), and I don't quite yet either, although this question spirals and iterates, and every time I come back to it my thinking shifts. Maybe I don't yet perceive myself as an activist because I tend to "hide behind the books" as I was told in one of my coaching sessions. I chose this research to engage in and resolve an internal struggle with belonging and expectations that are influenced by others' perceptions of me (Skerrett, 2006). I am seeking to validate my own journey as worthy of pursuit and to gain self-confidence. "I self-identify as a reflective practitioner, and self-study affords a systematic approach to investigate my practice" (Grant & Butler, 2018, p. 326). I have come to see this research process as an activist's tool for situating my work within a framework of empirical, evidence-based practice. I chose this path as a tool of empowerment that enables me to be more resilient when challenged.

### ***Permaculture and Types of Capital***

I am called back to reading more. I read *The Permaculture Promise* by Neiger (2016) and *Permaculture and Climate Change Adaptation: Inspiring ecological, social, economic and cultural responses for resilience and transformation* by Henfrey and Penha-Lopes (2016). Neiger (2016) discussed the different types of capital in our lives: financial, social, material, living, intellectual, experiential, spiritual, and cultural. Most often people talk about their financial capital, or perhaps social capital or maybe nowadays cultural capital. We don't often discuss intellectual or experiential capital. Permaculture is largely shared through these methods – intellectually through books, for example, or experientially through the PDC and other active learning opportunities like workshops.

### ***Random Thoughts***

It occurred to me that you can't change a system by withdrawing from it, but you can change it from inside, from being a part of it or through interacting with the system. In permaculture we talk about the fertility of the edge, that between two ecosystems there is an opportunity for growth and change. Maybe it's from walking between these two "worldviews" that I can affect the greatest change. How do we nurture the growth of a lifelong and lifewide learning mindset in students? How do we facilitate a learner's self-understanding without being prescriptive or standardized? How do we help students develop deep critical thinking skills? How do we get a greater focus in the curriculum on self-reflection, personal growth, and self-awareness?

When the leaves change colour in the fall and drop to the ground, the tree doesn't hold on. When it's time to let something go, it just releases. What is it about being human that makes letting go more challenging for us? I must let go of things – even things I love – to make space for new things to come into being in my life. Maybe that's part of the shadow work I need to do – letting go and being adaptable and flexible. This is part of my learning around coming to see myself as a lifelong and lifewide learner; can I learn to embrace simultaneously being a learner and leader, expert, and contributor?

### **Fall 2020 – A Recursive Question**

I enter a season of reflection, where the readings I have done linger in my thoughts, where patterns begin to emerge, and I continue to deepen a connection to the world and those around me and to the research questions through this process.

### ***Berger's (2014) A More Beautiful Question***

I've been reading Berger's (2014) *A More Beautiful Question: The power of inquiry to spark breakthrough ideas* and thinking about the driving force behind this research inquiry. I am drawn to understand my interests in things that are (in society's view) alternative. Berger recommends letting your questions roll around on your tongue. What have I learned about myself as a learner through the pursuit of these interests? How does one go deep into oneself? Perhaps I need to go deep by allowing the surface to exist. Perhaps I need the contrast, the paradox. Maybe deep thinking arises from stillness. I need to create space to just sit with my idea, with my question. Part of this process for me, this learning journey into permaculture, is to allow things to be as they are, to trust in nature and in the natural processes.

In *A More Beautiful Question*, Berger draws similarities between the world we now find ourselves in with the experiences of early childhood.

MIT's Joi Ito says that as we try to come to terms with a new reality that requires us to be lifelong learners (instead of just early-life learners), we must try to maintain or rekindle the curiosity, sense of wonder, inclination to try new things, and ability to adapt and absorb that served us so well in childhood. (p. 24)

Author Seth Godin (in Berger, 2014) touches on a similar idea: "Our new civic and professional life is all about doubt. About questioning the status quo... questioning what's next" (p. 25). Berger notes a shift afoot, where

people of all ages are beginning to direct their own learning, exercising their questioning muscles – and doing so outside the established institutions of learning... The maker movement... is driven by project-based, peer-to-peer

learning, which tends to happen as novice 'makers' in the group question the experienced ones. (Berger, 2014, p. 69)

Permaculture is a maker movement of sorts, existing largely outside of formal institutionalized learning and transmitted by peer-to-peer learning and through active learning experiences.

I continue to think about the research question and how to allow it to emerge as I read Berger. "When you find your beautiful question, stay with it. If it's a question worth pursuing, it will likely also be confounding, frustrating, exhausting" (Berger, 2014, p. 215). Certainly, this has been my experience. There is no step-by-step guide here, no path to follow. "The best you can hope to have is a good compass to guide you. The ones who understand that – and can embrace that – are going to have the greatest adventures" (Berger, 2014, p. 180). I signed up for the adventure and yet struggled to embrace it.

### ***Patterns in Nature***

As time moves forward, I find myself thinking about the different types of structural patterns found in nature: wave, spiral, branching, lobe/honeycomb, and net (Macnamara, 2012, p. 15). Each type has different applications, characteristics, and benefits. In designing a system, each type of pattern will yield different perspectives. For example, a wave pattern (as in sounds, sleep, brain activity, heartbeats, water flows, earthquakes) yields an attitude that embraces constant change, time for action and time for rest, ebbs and flows/ups and downs in design. A spiral pattern (found in whirlpools, tornados, the inner ear, plant tendrils and snail shells) yields an approach of iterativeness, slow and small changes as you gradually improve or erode, building upon

successes and transcendentalist tendencies. I see both patterns in this research process as I move away from and come back to the research over and over, and also the spiral pattern that each time I come back around, I am in a new place with it, richer for having gone through a cycle.

There are also behavioural patterns found in nature: flocking/schooling/herding, cooperatives, hierarchical structures, families or pairs, and solitary units (p. 16). Again, each pattern is found in different places/situations/contexts in nature and has different human applications. Each of these behavioural patterns has unique characteristics and benefits as well as yielding a certain attitude as a designer. These patterns have different wake/sleep cycles: diurnal, nocturnal, or frequent naps. "Each behaviour has evolved in relation to the whole environment including other animals. Structural patterns inform behavioural patterns" (p. 16).

Macnamara (2012) continues,

Using metaphors from the natural world helps us to see ourselves as part of nature. Our understanding of patterns such as spirals and waves is deeply intuitive because they are present within our bodies. When we connect with our own patterns and those around us, we have a sense of belonging to something immensely ordered, vast and amazing. When we create using these patterns our creations are beautiful. (p. 18)

Reflecting on the structural and behavioural types of patterns found in nature, I begin to identify where I see these patterns in my own life. For example, a wave pattern; I have set patterns, like walking my dog every morning and evening, like going to work during daylight hours on weekdays and a pattern of activity and rest on weekends throughout

the day - repetitive, wave-like routines. I reflect on where there are spiral patterns in my life: *where in my life do things gradually improve or erode?* This recalls the habit of regular exercise; every time I exercise, I gradually improve my health. For a lobe or honeycomb pattern of interlocking edges of uniform pieces, I think of the various aspects of my life (parenting, self-care, dissertation, house and yard work, errands) and how each contributes to an overall resilience and strength and balance in my life. And in the net pattern, I look for that in my life which is permeable, distributing tension, incorporating lots of edges, and strong yet light. I ponder, in what ways is the concept of a net pattern visible in my life? There are many routes to the same outcomes. There are also social networks in our lives. The use of permaculture as metaphor for this research process and experience does help me connect, as Macnamara notes, with natural and intuitive patterns, with something bigger than myself – to the vast sense of order in the universe.

### ***Systems Principles***

Macnamara (2012) writes in *People and Permaculture* about the functions and properties of systems.

A system is an association of elements that together perform a function...

Systems often exceed the expectations of the designer as unique properties emerge. We can monitor what is needed for growth and productivity and what might be limiting them. The system needs to be allowed to respond to feedback; intervening too early can inhibit the system's inherent ability to self-organize. (p.

28)

Macnamara shares that system elements can be part of more than one system simultaneously, and systems can interact with one another in respect to the bigger whole (p. 29).

Systems are emergent, where the system is greater than the sum of its component parts. "The whole is not predictable from looking at the parts, because we do not know what the relationship and flow of energy is between them or how that will influence each part" (p. 26). Systems are also self-stabilizing; they tend towards equilibrium through (negative) feedback loops. Through frequent/constant adjustments/fluctuations, the system is held in 'dynamic equilibrium.' Systems are also dynamic and ever-changing, evolving in complexity. Here I think of the Cynefin Framework (Snowden, 2002), where systems evolve from simple to complicated to complex to chaotic. "The most marvelous characteristic of some complex systems is their ability to learn, diversify, complexify, evolve. The capacity of a system to make its own structure more complex is called 'self-organization'" (Meadows, 2008, in Macnamara, 2012, p. 27). And lastly, systems are nestled within each other like stories within stories, flowing, unfolding and expanding; "systems are holons and exist as a whole in themselves and as part of a bigger whole" (p. 29).

### ***Incorporating Permaculture at Work***

At work recently, I've been incorporating permaculture principles into a background paper on systems design and high-performing education systems. The paper touches on the key premises of system design theory: emergent properties, ambiguity, the value of interconnections, the idea of iterative/recursive design, how systems need to be adaptable/flexible and have multiple pathways/networks, leverage

points in making changes and the challenge of momentum, as well as the value of diversity and multiple lenses in system design. We've also discussed the evolution of systems towards increasing complexity, incorporating my learnings from the Systems Thinking from an Indigenous Lens workshop I've taken twice now, at the ecovillage and at work. What is missing from the paper is a discussion of dynamic equilibrium, of the tendency of systems towards equilibrium or homeostasis, that the negative/positive feedback loops will keep a system in check. We also didn't discuss the inherent paradoxes in systems design: you must keep an eye on the micro and the macro simultaneously.

Another thing that comes to mind is how dispersed power in a system leads to increased diversity and collaboration. A decrease of centralized power empowers the component parts to each contribute meaningfully. Grassroots power is one way to allow slow and small changes to be made in a system, to allow momentum to build and fine-tune the direction the "ship" is sailing. There are several permaculture principles embedded in this example: *observe and interact, slow and small solutions, integrate rather than segregate, (apply self-regulation and) accept feedback, use and value diversity, and design from patterns to details.*

### **All About Love**

I pivot myself from thinking about systems design theory and principles to reading bell hooks' *All About Love*. hooks (2000) writes,

Some individuals find their sacred connection to life communing with the natural world and engaging in practices that honour life-sustaining ecosystems... When

we make a commitment to staying in touch with divine forces that inform our inner and outer world, we are choosing to lead a life in the spirit. (p. 81)

This "commitment to a love ethic transforms our lives by offering us a different set of values to live by" (p. 88). I am drawn back to when I first came across the term permaculture, when my son was young and I was sorting through the values I wanted to live my life by, that list of values included simplicity.

Living simply is the primary way everyone can resist greed every day. All over the world people are becoming more aware of the importance of living simply and sharing resources. While communism has suffered political defeat globally, the politics of communalism continue to matter... Living simply makes loving simple. The choice to live simply necessarily enhances our capacity to love. It is the way we learn to practice compassion, daily affirming our connection to a world community. (p. 125)

hooks quotes Parker Palmer,

Community cannot take root in a divided life. Long before community assumes external shape and form, it must be present as a seed in the undivided self: only as we are in communion with ourselves can we find community with others. (p. 217)

You can have depth in relationships insofar as you have come to know yourself deeply. For years (coinciding with the length of this research journey), I have regularly gone to community acupuncture, where there is a communal treatment room. One of the tenets of community acupuncture is that "we don't heal in isolation, but in community" (Harrell, 2012). hooks concurs: "Rarely, if ever, are any of us healed in

isolation. Healing is an act of communion. Most of us find that space of healing communion with like-minded souls" (p. 215). This comes back to the value of coming to know myself deeply and then sharing my story through this research process; it is an act of healing and of building community and connection.

### ***Exploring the Ethics of Permaculture***

Growing up, I watched David Suzuki's *The Nature of Things* on CBC. On the one hand it was a nature documentary show bringing scientific concepts to the audience, and yet it also embodied permaculture ethics and principles as it discussed relationships and ecosystems and an interconnectedness to everything, aligned with hooks discussing love. I turn to reading Suzuki's (2010) vision for a sustainable future, where he writes,

For most of our existence, people knew that we were deeply embedded in nature and that our very survival depended on nature's generosity. We understood that everything in the world was connected, that what we did had repercussions, and that therefore every act was laden with responsibility. Nature was our touchstone and our reference point and dictated the way we interacted with it... We have lost our sense of place in the world and our reverence for nature. (p. 55)

The biosphere is our home. All other species in Creation are not resources, opportunities, or commodities; they are our relatives, and in an act of generosity, they provide our most fundamental needs while also giving us companionship and enriching our lives with beauty, mystery, and awe. We have to see the world through new eyes, because how we view the world affects the way we treat it. (p. 91).

I am reminded of reading *Rebuilding Earth: Designing Ecoconscious Habitats for Humans*, in which Coady (2020) observes that

It is our spiritual connection to this earth that drives civilization, not the other way around. I believe that if we truly forget how to live in harmony with the land we are on, and if we continue to lose our connection to its energies, our civilization will not advance. (p. 82)

Both Suzuki and Coady share their observations of how disconnected we are, and how this deviates from our history. While we cannot turn back time, we can spiral back to reconnect with the world around us. We can return to loving the world around us, starting with learning to know and love ourselves.

### ***Introspective Reflections***

At this point in the research process, I have learned that my identity is intrinsically tied to who I am as a lifelong and lifewide learner. I cannot describe myself without the 'meta' knowledge that how I am describing myself is what I have learned through experience and reflection and engagement with the research topic. I am enjoying learning – and continuing to learn – about permaculture ethics, and how to implement the 12 principles into my life. By prioritizing this informal learning in my own life, I am role-modeling and creating space for others to do so in their lives. I respect that this pursuit of informal learning, this concept of living as learning, is *as valuable if not more* than formal, in-class learning.

I am learning through this process to articulate my identity, including my strengths. I am driven, tenacious, and passionate as a learner. I strive to live a life in alignment with consciously chosen values and am idealistic in that respect. As a lifelong

and lifewide learner, I embrace a growth mindset. Through permaculture, I am regaining a connection to the natural world around me and paying more attention to my intuition. I am also learning to yield to uncertainty, to release the desire for control and a clear path forward, and to trust that I will learn. I follow the natural rhythms of interest, trusting that it permeates my life in all respects, even without direct attention; permaculture has become part of my holistic identity.

I've learned to look at myself as a learner more holistically, understanding that the things that I learn about myself in one domain are transferable to other domains. I've been trying to better understand myself as a learner, to understand what it means to be a lifelong learner, and how I can foster and nurture that within myself. I am coming to realize that there is no "mastery" of lifelong and lifewide learning; if anything, the more I learn, the more I discover there is so much more to learn.

### **Spring 2021 – A Symbiotic Relationship**

The arrival of spring following the introspective depth of winter yields emergent reflections on the symbiotic nature of permaculture in my life as I live both independently and interdependently with the world around me, reminding me of the layers of an onion.

In systems theory, there is a concept of holons, of systems nested within systems. In my own body, I have different physical systems that are integrated for my body to function: respiratory system, musculo-skeletal system, circulatory system, immune system, digestive system, and limbic system, among others. These systems are organized and complex. From a systems design perspective, they function independently but are deeply integrated with one another: symbiotic relationships. A

change in one can have impacts on others. When you look at the body as a whole system, you can see it's not just a physical entity. There are multiple, less visible, layers: cognitive/mental, emotional, spiritual. All of these are interrelated; emotions impact on our physical health and well-being and so on. I am not an entity unto myself in the world. I am integrated into the world around me, in my immediate physical environment, but also in spheres of influence with other beings/entities I encounter. In systems thinking, and particularly in permaculture, there is an awareness of the interconnectedness and interrelationships between people, between us and the world around us. Hence the ethics of permaculture: care for the earth, care for people, return of surplus.

We are deeply connected to nature. We may deny it, but all it takes is one natural disaster to remind us. I think about Emoto's (2011) research on how the structure of water changes when infused with loving thoughts versus non-loving thoughts. I've read research on how plants respond similarly, and that plants even respond to the colours we wear. I am so deeply connected to the world around me, yet I go about my days largely unaware of the influence and impact I have.

I think about the choices I make in my daily life and how they impact and create the world I live in. This is a process of learning to love myself and by extension the world I live in, of reconnecting to nature and developing a relationality to the world around me and to others. I think about the PDC and Starhawk asking us if we considered ourselves activists. At the time, I did not. I am coming to see that we are all actively supporting one paradigm or another. We are all activists with every choice we make throughout our day. Being an activist is not a static end state; in the same way

Kendi (2019) says being anti-racist isn't a product, it's an ongoing engagement with action. I'm coming to see myself as an activist.

### **Part 3 – On Becoming a Writer, On Becoming Accountable to Self**

A story begins somewhere in space and time, when you step onto the path beside the writer... We get to know some characters who are recognizable as family, friends, ourselves... Events transpire... and people are changed. The universe is usually telling us the same story, that our lives are rich and fluid and infinitely mysterious; that we only thought we were stuck, that nothing stays the same for long. (Lamott, 2018, p. 95)

I realize that I am only beginning to identify as a writer. That is part of the journey of this research, coming to see myself not only as a lifelong and lifewide learner, but as a writer, storyteller, and activist. "Through stories, we are able to make meaning from our raw life experiences. We need to have a story to give shape to our inarticulate feelings and responses to the things we sense and experience" (Campbell et al., 2010, p. 5). I must continue to dig deep, to remain willing to be transformed by this research process, to listen to what my experiences and my process have been telling me, to listen to my inner self:

We have to cultivate the habits of curiosity and paying attention, which are essential to living rich lives and writing. Life is made up of these mosaic moments, seemingly meaningless details that tug on your sleeve to get your attention... Stories are usually about a modest salvation. Events took us on a journey that was inconvenient or scary, and changed us, in ways that helped us

feel more connected to life, made it more spacious and welcoming. (Lamott, 2018, pp. 96- 97)

In my coursework, I read Chambers (2004); today I hear her advice: "You must explore and write the suffering and grief that comes from living in an imperfect world. Make peace with the past and the present and live into the future" (p. 11). Trying to live a life in alignment with consciously chosen values, in alignment with the ethics of permaculture, has created suffering within myself and conflict with others to live in alignment with these values. I realize that I have spent a great deal of time internalizing this suffering and reaching for support in countless books, workshops, professional and personal learning opportunities. This research process has been a lesson in learning to attune to my heart's path, to dwell in the depths of my suffering and grief, and to come through the other side, changed for the better. "In these moments of turning, *Kehre* in German, we rise above our everyday world and come to see, hear and understand life and being differently (Schrag, 1986)" (Chambers, 2004, p. 10).

### **Summer 2021 – A Time to Become, A Time to Change**

As spring turns to summer, I begin to acquiesce to the uncertainty and constant change of life as I think about how becoming and being are one and the same, that my identity as a lifelong and lifewide learner is both emergent and fluid, influenced and impacted by the connection to a constantly changing world around me.

For me, becoming isn't about arriving somewhere or achieving a certain aim. I see it instead as forward motion, a means of evolving, a way to reach continuously toward a better self. The journey doesn't end... It's all a process, steps along a path. Becoming requires equal parts patience and rigor. Becoming

is never giving up on the idea that there's more growing to be done. (Obama, 2018, p. 419)

It's not about being perfect. It's not about where you get yourself in the end.

There's power in allowing yourself to be known and heard, in owning your unique story, in using your authentic voice. And there's grace in being willing to know and hear others. This, for me, is how we become. (Obama, 2018, p. 421)

### ***A Time for Change***

This past week, there were record-breaking temperatures here as we experienced a “heat dome”, then Lytton, B.C. burned to the ground as a forest fire ripped through the town after setting the Canadian all-time high temperature record at 49.6C the day before. The old growth forests in the province are being decimated by unsustainable logging practices. Increasingly frequent and severe events like forest fires and floods are likely exacerbated by human activity. There's a feeling of a lack of agency, influence, and impact, and frustration at what appears to be apathy on the part of policy and decision-makers.

What I have observed is that the world is always going through change. Change, paradoxically, is a constant. We may not yet be at critical mass for the changes we need to make for our species to make it through climate change, but I continue to believe that we have a responsibility to leave the world better than we found it.

The consumption that North Americans live with is not sustainable for everyone on the planet. We need to change our ways. When I think about the changes that have already been enacted in my lifetime, I feel hopeful, and I know that positive change *is* possible.

In permaculture, we talk about *slow and small changes*. You never know if some small change is going to be the lever that tips things over to a critical mass. Seemingly innocuous things can have huge impacts.

You have to keep going forward even if that forwardness is kind of sideways – sometimes backwards. Things stop working when you stay still. You've got to keep moving, listening to that inner voice that dares you to be more than you are. The conversation you have with yourself is a lifelong one, so you may as well make it a positive and encouraging one. If you keep repeating negative, hurtful things inside your head, you will believe them eventually. (Arden, 2020, p. 117)

That feels like this research process; there are times when I am unsure if I am moving forward, or sideways, or backwards.

### **Fall 2021 – A Messy Middle**

I have been stuck in the messy middle of this research for a long while, and I need to take action to move towards the end. I need to be still and go deeper – that's the action (paradoxically) that will move me forward, which is ironic because I'm currently reading Odell's (2019) *How to Do Nothing* right now about resisting the "attention economy." Doing nothing – sitting still, going deeper – is incredibly hard work, and it's no wonder I've resisted it. Society does not encourage one to "do nothing".

As an adult, allowing myself to explore my interests, regardless of others' perspectives, has been about honouring all that I am, allowing myself to fully be who I am. My interest in permaculture ebbs and flows, and every time I come back to it, I'm different than the last time. I am in a process of continual change and growth. Part of

what I've learned from my interest in permaculture is the integrated nature of our experiences; everything is connected.

### ***The Art of Being Useful***

Grappling with my sense of self-worth and belonging, I come across Odell (2019), who writes, "The tree balks at the distinction between usefulness and worth, made by a man who only sees trees as potential timber" (p. xvi). Like Kimmerer (2013), I wonder, "How, in our modern world, can we find our way to understand the earth as a gift again, to make our relations with the world sacred again?" (p. 31).

An ecological understanding... reminds us that – while it's useful to have a word for that thing called a cloud – when we really get down to it, all we can really point to is a series of flows and relationships that sometimes intersect and hold together long enough to be a 'cloud'... Resisting definition like headwaters resist pinpointing, we emerge from moment to moment, just as our relationships do, our communities do, our politics do. Reality is blobby. It refuses to be systematized... We should refuse such dams first and foremost within ourselves. (Odell, 2019, p. 151)

Bioregionalism teaches us emergence, interdependence, and the impossibility of absolute boundaries. As physical beings, we are literally open to the world, suffused every second with air from somewhere else; as social beings, we are equally determined by our contexts. If we can embrace that, then we can begin to appreciate our and others' identities as the emergent and fluid wonders that they are. (Odell, 2019, p. 154)

Writing on the concept of manifest dismantling, and Masanobu Fukuoka's 'do-nothing' farming, Odell (2019) says,

Our idea of progress is so bound up with the idea of putting something new in the world that it can feel counterintuitive to equate progress with destruction, removal, and remediation. But this seeming contradiction actually points to a deeper contraction: of destruction (e.g., of ecosystems) framed as construction (e.g., of dams)... Seen through the lens of manifest dismantling, tearing down the dam is indeed a creative act, one that does put something new in the world, even if it's putting it back... (manifest dismantling) also requires a kind of Copernican shift of humans away from the center of things. (p. 192)

### ***Calling On My Spirit***

As part of my personal and professional commitment to reconciliation, and of my learning of relationality through understanding permaculture, I seek out Indigenous voices through books and podcasts. Alec's (2020) *Calling my Spirit Back* was a deeply impactful read.

The most important work we can do for our children is the kind we don't always want to do, the work that is vulnerable, the work that requires us to look at things we may have tried to hide because we didn't want to make a big deal about it or we didn't want people to judge us. (Alec, 2020, p. 169)

"It's a journey of understanding and embracing your story and sharing it with others. We can't expect others to share their stories, their hearts, their thoughts, and their truths if we are not willing to do the same" (Alec, 2020, p. 169). I find that part of this journey for me is about feeling safe to share my story; Alec notes that the four necessary conditions

required for cultivating safe space are understanding of self, working from a love-based place, patience, and discipline (p. 172). I'll keep working on it.

In many cultures and beliefs, discipline is obtained through mentoring and lifelong learning. It is taught through stories, ceremony, and spending time with others... Paying attention is a discipline all on its own. It meant that you listen without interference from your own thoughts. (Alec, 2020, p. 174)

I wonder, in applying the permaculture principles to my own life, can I learn to observe impartially? Can I silence the critical voice within, or at least lower its volume?

### ***Habits, Changes, Results***

I read Clear's (2018) *Atomic Habits*, where he discusses the difference between "being in motion" and "taking action." Action is behaviour that delivers an outcome whereas being in motion is about "keeping busy" with related tasks, but not the actual tasks that will deliver the outcome. "Being in motion allows us to feel like we're making progress without running the risk of failure" (Clear, 2018, p. 142). Clear says "the tighter we cling to an identity, the harder it becomes to grow beyond it" (p. 247). I wonder, am I holding myself in the research process, keeping busy but not taking action, because I am clinging to an identity that I have outgrown?

### ***Tending My Soul's Garden***

I read Rushing's (2012) *Tending the Soul's Garden: Permaculture as a way forward in difficult times*. I was reminded of holons when Rushing writes, "Cultivating a greater understanding of the whole system is possible by looking to understand any one element" (p. 52). Continuing on the next page,

To see everything as connected is both an underlying belief and a way to observe and notice the world around us. Nature moves in concert – pull one thread in the web of life and others respond to take advantage, adapt or perish.

The act of noticing, in itself, nourishes our creative spirit. (Rushing, 2012, p. 53)

Rushing (2012) describes "*information (as) the critical potential resource...* Many permaculture designers are information enthusiasts and seek multiple sources of information, both traditional and non-traditional" (p. 94). The first principle of permaculture, *observe and interact*, is an information-seeking activity.

Seeking information is a valuable principle for the permaculture garden. Similarly, seeking self-information and wisdom is valuable when applying permaculture to inner life or invisible structures. Awareness emerges by observing nature and from within ourselves; from our own inner knowing. We cultivate inner awareness through a variety of spiritual practices, through regular meditation or simply by allowing ourselves to just *be*. (Rushing, 2012, p. 130)

Like a garden soil that is lacking in specific nutrients, it is important to me that I reclaim and restore all available wisdom. I must seek balance to cultivate a new abundance in my life. To engage in the Great Work of restoring and renewing our world, I must start with the soil of my own spirit. Sources of wisdom are vital for the collective human spirit. Rushing notes four types of wisdom, and I think about how they show up on my learning journey:

Feminine wisdom (intuition, inner knowing), indigenous wisdom (archetypes, stories, symbols, dreams, transformation), the wisdom of science (how things work together, the magic of living systems, chaos theory, quantum physics,

fractals, genetic science and holographic theory), and classic religious and spiritual traditional wisdom (the sacred, compassion, gratitude, passion, death, resurrection). (Rushing, 2012, pp. 130-1)

### ***Embodied Permaculture***

It has been several seasons since reading both Woodruff's (2014) and Gartrell's (2017) articles on permaculture, and I return to them now as I contemplate ways to holistically incorporate the learning from this research. I enjoyed the inclusiveness of Woodruff's approach: recording the holistic soundscape of playing ancient instruments (gamelan) in a community garden with its background noises of people and traffic and a nearby factory, then having children listen to the recordings and improvise piano accompaniments and recording those accompaniments, then bringing plants from the garden into the gallery where people can play the combined soundscapes and accompaniments amidst the plants, and after the exhibit ended the plants are returned to the garden having absorbed the energy of the experience of being in the gallery, with the funds raised in the gallery going to support the community garden. It's all-encompassing and holistic and balances the ancient (gamelan) and new (current lived experience), the human and human-built with the natural environments, the material of steel in the gamelan and the nearby steel factory noises in the soundscape, the economic striation of the gallery and the community garden, and the sharing of experiences between the personal and the public.

Gartrell (2017) documented a flightless journey from England to Australia in a permaculture travel memoir. I enjoyed considering the notion of travel and home, of finding or creating a sense of place, as Gartrell considered regional, migrant, and global

affinities to place. Planting the seeds collected during her travels upon returning home, of seeing them through from planting to harvesting – a whole cycle, this "implanting of the seeds into the soil of her 'native' home offers a neat metaphor for the integration of those other places, people and experiences into her sense of self and identity," resulting in "a joyful realization that she is not, and never was, apart or separate from nature, but deeply enmeshed in a rich and diverse web of ecological interconnections" (p. 268).

In my own research, I wonder, could I hold space for the reader to share what they learn about themselves from reading the dissertation? How do we come to express the value of informal learning? Informal learning is distinguished by a lack of a clearly defined aim. It is rarely assessed or accredited. It is learner-led and learner-centered, often with unintended, sometimes ambiguous, outcomes. It is voluntary, evolving, organic, lifewide. I ask myself, does there need to be a tangible artifact of learning, or is that a notion that my conditioned learner self is seeking to impose on this process? I think about this research experience that has been immersive/experiential, social, and reflective. I think of how my intention in living is aligned with the ethics of permaculture: to help the earth, help people, and give back. I reflect on how this research process has encompassed the physical (helping earth, as I practice permaculture on a physical level in how I live my life), social (helping people through the sharing of this research), mental and emotional (giving back, supporting our collective understanding of how we can foster the identity development of lifelong learners). I question, does informal learning need to fit into a colonial, traditional frame of reference (and thus be required to be tangibly demonstrated and assessed) for the learning to be of value to the learner's growth and identity?

### ***Reflecting on Daily Use of the Permaculture Principles***

I return to reflecting on the permaculture principles in my daily life. The journal ebbs and flows between reflective thought and reading. What have I *observed* today, I wonder? That I'm productive, yet finding it hard to prioritize writing, even though in this moment I see myself as a burgeoning writer. I know that all writers struggle, that it's part of the creative process, and so I try to embrace the struggle. For the second principle, *catch and store energy*, I've invested in my life today: I went to work, did housework, did some reading and writing, moved my body and nourished it with healthy food. All these things are investing in me and the life I want to be living, and they are also simultaneously *providing a yield*, too. Embracing *self-regulation*, I applied a good amount of self-discipline to get as much done as I did. I made time to reflect, in silence, to tune into the spiritual self, to nature, to hear the feedback my body, mind, and the world around me is trying to provide. I trust that I am in exactly the right part of the process, and that things will resolve themselves successfully. *Use renewable resources*. My energy is renewable. Some days I have a lot, others not so much. Time is non-renewable, so how I spend my time is important; am I spending it doing things that bring me joy and move me further towards my goal? Generally, yes. *Produce no waste*. Sometimes I just need some unstructured time, but that is not wasted time at all – it is an investment in relationships, with self and loved ones. *Design from patterns to details*. I have a morning routine and an evening routine, and generally my days are full and productive. By stacking functions and using routines in my life, I aim to maximize efficiency. These routines free up cognitive energy to ruminate on higher priority thoughts like this research. *Integrate rather than segregate*. There is a connectedness

to everything in my life: from the Earth Activist Training (EAT) course on *Collaborative Groups during Chaotic Times* with Starhawk that I'm participating in right now, to my research, to investing time in my relationships – it's all integrated. *Use small and slow solutions.* For example, exercising regularly is something I come back to time and again. I know that small and slow solutions are how you accomplish big goals. I have succeeded in the past in making slow and small changes that have significant life impacts. *Use and value diversity.* I am so grateful to my friend from the PDC for recommending the EAT course to me. There are people from all over the world tuning in, people I otherwise would not have crossed paths with. There is a real diversity of backgrounds and experience, and I appreciate that. *Use the edges and value the marginal.* I recognize edges in my life in the liminal periods throughout the day, waking up in the morning, and setting a good intention for the day ahead in those precious waking moments. I recognize I could be more mindful as I shift between activities throughout my day. In these liminal moments of my life the opportunity exists for cross-pollination between domains. *Creatively use and respond to change.* This speaks to approaching things with a sense of inquisitiveness and wonder. How did I implement this principle today? In one sense, reading *Indigenomics* (Hilton, 2021) is changing how I think about my place in the economy and the place of Indigenous people as well.

I reflect (again) on what I'm learning about myself during this process. I realize I am comfortable learning – I like reading books and taking workshops. I've been thinking about how with formal learning, the 'what' and 'how' you learn is decided externally to the learner, whereas with non-formal learning, the what is self-directed but how you learn it is decided externally, whereas with informal self-directed learning the what and

the how is internally decided. You have control over both what you learn and how you will learn it. The part I struggle with is that I'm more comfortable in the learner role than I am doing something with that learning. I like learning but don't know if I demonstrate that I have learned in a way that allows for external, traditional/colonial assessment methods. I think this learning process, for me, isn't necessarily about having something tangible as a result – I enjoy learning for learning's sake. Does that make learning less valuable, I again ask myself?

### **Spring 2022 – A Life Design**

As I engage in this lifelong journey, I am drawn to Heather Jo Flores's short courses by donation called Emotional Permaculture: Design Your Inner Landscape and Design Your Daily Practice. Through permaculture, she encourages design of life space through zones that are determined by your level of interaction: the most labour-intensive activities are closest to the core for maximum efficiency. I'd like to say that this process has been efficient, but I've come to terms with the fact that not all learning is efficient and this journey of being and becoming has been incredibly labour intensive. As I've learned about zones and boundaries in permaculture, I have also learned that "the boundaries you set, either intentionally or unintentionally, define the space and trajectory of your relationships with the people and elements who cross or come into contact with those boundaries" (Flores, 2022).

As I reach the end of this phase of the journey, I am thinking about what it means to design a life through the permaculture principles. Liminal spaces are the edges, the thresholds, and the uncertainty; they are the essential source of creativity, where you have the potential to act but have not yet done so. Edges maximize diversity and

provoke creativity. I spend time thinking about how I spend my days; I ponder, where is there "wasted" time (although I don't think it's wasted, honestly – often, it's necessary recharging time), and what actions would I like to incorporate into my daily rhythm? As part of the Emotional Permaculture course, I just watched a video of Flores speaking about the importance of daily practice in reaching our goals. I ponder, what things – rituals, even – do I already do successfully every day? The simple routines I have in my life create space for creativity because my mind does not have to consciously think through all the little steps of my day.

### **Fall 2022 – A Time to Restore**

I attended an online book launch event hosted by permaculturists Delvin Solkinson, Rosemary Morrow, and David Holmgren this week, for Morrow's new book, *Earth Restorer's Guide to Permaculture* (2022). I've been reading quite a bit of Solkinson's work about the process he took to complete his permaculture doctoral studies. It's making me wonder about my own path with permaculture. How can I use my permaculture learnings to give back and serve others? For me, permaculture isn't so much about the sheet mulching and food forests but rather the broader application of the systems-design principles to *all* areas of our lives, especially on a societal level. I'm curious what that might look like to advance my interest from that perspective.

I read Burnett's (2021) *Towards an Ecology of the Self*, Bloom's (2018) *Creating Sanctuary*, and I started on Howland's (2019) *Emotional Permaculture: The Noble Truth of Love*. I reach into memory, hearing Hemenway (2015):

What allows patterns in this sense to guide us toward creating 'places that live' is the seeming disorder within their orderliness... A pattern in natural systems

design offers just enough order to create a functional framework but plenty of room for variation, spontaneity, and adaptation to the context. In a sense, this is design without design. (p. 15)

I went to the Compost Centre today for a two-hour free workshop on Zero Waste Living. I lean into the connections to Vannini and Taggart's (2014) book *Off the Grid: Re-assembling domestic life*, the book that I'm reading right now, and their idea of rebuffing the capitalist economy and of relational living through regenerative life skills, like zero waste living.

### **Concluding Remarks: December 2024**

As I attempt to draw this journey to a close, I come across Griffin's (2023) *Out of Silence, Sound. Out of Nothing, Something*, a book on writing similar to Lamott's (2018) *Almost Everything: Notes on Hope*. Both books are deeply moving and filled with tangible and motivating strategies to assist emerging writers like me.

No wonder indeed that metaphors are so effective in providing structure to literature. They structure our minds too. We think through associations. We like whatever we encounter to rhyme as well as reason. This is why some contemporary thinkers believe our picture of a world in which one thing is connected to another is illusory. But others believe that our minds mirror nature, and that it really is all connected. (Griffin, 2023, p. 143)

Perhaps I needed the principles of permaculture to guide my journey inward and outward in the world. Perhaps I needed to come to understand how “reflexivity is the process of reflecting critically on the self as researcher, the ‘human as instrument’ (Guba & Lincoln, 1981)” (Guba & Lincoln, 2005, p. 210). Perhaps I needed the

“conscious experiencing of the self as both inquirer and respondent, as teacher and learner, as the one coming to know the self within the processes of research itself” (Guba & Lincoln, 2005, p. 210). Perhaps I needed to discover that reflection is so much more than just a mirror image: “It adds a third element to the pair, the seer and the seen, and that is thought. With reflection you are not only seeing something and naming it, you are also thinking about it” (Griffin, 2023, p. 162). By seeing and naming this learning journey, I thought deeply about it and how intensely personal it can be.

I am grateful for this journey, for this coming to self through the process of coming to know permaculture. I’m not entirely sure I’ve become an activist in the world, but I know for sure that I have gained strength and conviction in the landscape of my emotional permaculture. Realizing that this was anything but a straightforward process, I accept that the closer I get to the end, the more I feel at the beginning.

## **Chapter 5: Circling Back to Permaculture**

By reviewing my journal, engaging in content analysis, and through discussion with critical friends and my supervisory team, themes began to emerge. As I revisit and explore themes more deeply in this chapter, I see a pattern of moving from books to reflective thought and back again throughout the journal. There is a calling expressed to go beyond the books into active learning that is also found in an ongoing self-imposed struggle to trust and relax into the learning journey. A recurrent pondering of the permaculture zones emerges with an affinity for identifying and ruminating on paradoxes. Here, I take note of the lifelong and lifewide learnings that surface in the journal, and consider the broader applications for systems, such as the education system.

### **Moving Iteratively Within or Through Books and Reflective Thought**

I first came upon the concept of permaculture through books, and it was to books that I often returned along this journey. As noted in the journal in Summer 2019, at one point in this process, I had a coach suggest that I learn to “step out from behind the books,” implying that I was using the books and the voices of other authors to hide behind and avoid doing the hard work of allowing my own voice to emerge. I could see that my pattern was to iteratively return to the voices of others both in my writing and along my learning journey. It felt safer to learn from the wisdom of others rather than following an uncharted path of my own creation. I see that during this process, for example, as I read Alec (2020) in Fall 2021, I had not yet done the work of creating for myself a safe space within which my research could unfold, as I searched and struggled

and yearned for a clearly defined path, rather than patiently cultivating the discipline to understand myself and to respect the process.

In Fall 2023, I questioned, *What purpose did reading and returning to books serve along my learning journey?* I saw that reading was a mechanism by which I developed greater self-reflection skills and self-awareness.

Seeking information is a valuable principle for the permaculture garden. Similarly, seeking self-information and wisdom is valuable when applying permaculture to inner life or invisible structures. Awareness emerges by observing nature and from within ourselves; from our own inner knowing. We cultivate inner awareness through a variety of spiritual practices, through regular meditation or simply by allowing ourselves to just *be*. (Rushing, 2012, p. 130)

Books were a tool in the pursuit of my knowledge, both about permaculture and about self. Returning to books was a safe space, a practice, and an act of discipline. The various books I read reflected my growth and development, my understanding and application of permaculture principles in action in my life. I mulled over the learning I gained from reading through the lens of the permaculture principles. Reflecting on the purpose that books and the voices of others served along my learning journey, in Fall 2023 I noted that through books I had learned to *observe* my responses *and interact* with the ideas presented. Reading was a way to *catch and store* (intellectual) *energy*, and to *obtain a yield* (knowledge). Books challenged my thoughts, biases, and beliefs, calling me to *self-regulate* and remain open to changing behaviours that no longer served me (such as playing it small, and caging myself into an identity as a “small I” learner as opposed to a lifewide and lifelong learner). My engagement with a range of

topics in the books I read reflected the value I place on the abundance and diversity of knowledge that exists. There was *no waste* in returning iteratively to the books throughout the process; each author I read contributed to my thinking and helped deepen my understanding of the research questions. The books, covering a range of topics both directly and indirectly related to permaculture, reflected the *diversity* of my interests (leading to increased strength and resilience) and were *integrated* within me as a reader and as a learner. Reading, and returning to books throughout the process, was a practical application of permaculture principles along my learning journey.

The books that I read helped me hold the research questions close as I journeyed through this process. In Fall 2020, as I read *A More Beautiful Question: The power of inquiry to spark breakthrough ideas*, I was inspired by Berger (2014) who recommends letting your questions linger and roll around on your tongue and offers advice on choosing questions:

As to which question to choose, to some degree the question chooses you. It's the one that resonates with you for some reason only you understand. What will make it a beautiful question for you, and one worth staying with, is the passion you feel for it. (p. 212)

I note in a Spring 2023 entry that I could not let Berger go and kept returning to this idea that the experience of sticking with a question is frustrating and exhausting. Certainly, this has been my experience as I have struggled to embrace the messiness of the research process and to trust in my own ability to be transformed, to embrace a shifting identity as learner and expert/contributor.

In a rapidly changing world, there really isn't a step-by-step map for them anyways. The best you can hope to have is a good compass to guide you. The ones who understand that – and can embrace that – are going to have the greatest adventures. (Berger, 2014, p. 180)

This recursive pattern of moving back and forth from my own reflective voice to the voices of others throughout the journal meant that I rarely allowed myself to settle into my own intuitive wisdom and instead kept reaching out to the voices of others rather than going inwards. As I proceeded through my journey, in Summer 2023 I wondered, *Did this habit of returning to the books, to others' words, keep me in this research process for longer than I needed to be? Or did the readings facilitate the lessons I needed to learn at the right time along the journey?* I think about how often in the journal I acknowledge the struggle of the process, of this feeling that I was making it harder than it had to be, and that only I could let go of the attachment to the struggle and release it to move this analysis and writing forward.

Today, I remind myself that I am not alone in realizing the struggle is self-induced; pueblo (2022) concurs: "If you are open to experiencing a profound transformation, you need to come to terms with the fact that much of your struggle is self-imposed" (p. 63). I think of the sixth permaculture principle, *produce no waste*, and reflect that none of the process has been wasted, something I will discuss more as I reflect on learning to trust and relax into the learning journey later in the chapter.

This struggle expressed itself in the wave-like pattern of moving between reflective thought and returning to quoting others' words. I think about Wagamese (1994), in *Keeper'n Me*, discussing the importance of the time we spend reflecting on

our stories, that going within requires a slowing down and a presence to the learning journey that (in my opinion) the formal education system does not provide adequate opportunity for with its predetermined timeframes and curricula objectives. Applying a permaculture approach to the research, I have aimed to emulate the processes and timing of nature, to slow things down and allow learning to unfold in its own time, which has necessitated taking a less conventional timeframe and approach to the research process. Each time I move in and out from my own voice to other voices, I build resilience and a stronger foundation upon which to stand.

I used Hemenway's (2015) four-part permaculture design process as a guide to support my journey: I began with good design, keeping an "eye on a large, holistic mission [lifelong/lifewide learning] while delivering a set of interconnected, self-reinforcing, and doable steps to achieve it" (p. 27). Engaging with the research questions and with permaculture, the books I read helped me come to see that reading was not a passive pursuit, just as observation as the first permaculture principle is not passive. My identity shifted the more I read and reflected upon what I had read. Reading was a way for me to take responsibility for my learning journey. Pithouse (2007) defines eight pedagogic precepts (p. 6), including "making it possible for learners to see themselves as agents of their own learning processes." The essence of permaculture is about taking self-responsibility. Macnamara (2012) asserts,

Self-responsibility asks us to recognise our interconnectedness and apply our own free will to find ethical options. Being reflective encourages us to see the consequences of our actions. Responsibility is *response – ability*. We have the ability to choose how we respond to our circumstances and other people, how we

look after ourselves, how we communicate and how we connect with our fellow citizens. It can be an empowering, transformative shift when we take responsibility for our thoughts, feelings, what we say and what we don't say, how we learn and whether we change or not. (p. 7)

Through this research, I have examined my developing identity as a lifelong and lifewide learner through the pursuit of an interest in permaculture. I aimed to take responsibility for and control of my own learning journey and sought to understand how I could acknowledge and value the informal learning that I pursued outside of formal academic institutions for my own personal reasons, and I am not the only one, as noted where Berger (2014) is quoted on the project-based, peer-to-peer learning driving the maker movement.

As the seasons passed, I questioned why I viewed quotes as a weakness in my writing, for this repetitive pattern informed my thinking with each iteration of the spiral; each time I returned to the reflective thinking, I was richer for having parked others' words for further reflection. Writing this dissertation has been one step towards coming out from behind the books, a way to claim my power and voice.

### **The Call to go Beyond the Books into Active Learning**

Learning to value the hands-on experiences as much as I valued the more traditional, formal learning experiences I was accustomed to has been a part of this journey. Even some of the more active, experiential learning situations I sought out relied on the expertise of others rather than finding my own confidence in applying and integrating permaculture into my own life; for example, natural house tours, garden tours, lectures, and workshops I attended. I noted in the journal how I found the more

informal and hands-on structure of the PDC challenging, as I was more familiar and comfortable in formal academic learning situations with clearly articulated learning objectives for each lesson. Yet it was through the hands-on activities that I sought out along this research journey (building a cob oven, a cob cabin, plastering a straw bale building, work parties planting food forests, building swales and hügelkultur beds, to name a few) where the permaculture principles became embodied, my mind was able to become still, and my hands were able to demonstrate that learning had been integrated. As Parr (2005) notes, "learning and teaching by doing... requires that we embark on the journey of lifelong learning that necessarily involves intellectual, emotional, and spiritual dimensions (Palmer, 1998)" (p. 1). Only through active, hands-on experiences would I come to fully know what it is to learn through permaculture's ethics and principles in a holistic way. After all, as Kimmerer (2013) notes, "Transformation is not accomplished by tentative wading at the edge" (p. 89). The path to fully embracing the research process was found in participatory opportunities that allowed for the dynamism of active learning. Much like Tanaka (2016), I can be both learner and teacher simultaneously; in a fluid manner, I can know, be, and do all at once. "It is not possible to *be* without *knowing* and *doing*; rather we hold the immediate plasticity of *being-knowing-doing*" (Tanaka, 2016, p. 9).

And so, staying in this space, I considered, *What did it look like to go beyond the books into active learning?* For many years, I made a concerted effort to live sustainably, to practice the principles of permaculture in various ways in my life – composting, preserving food, line drying clothes, using cloth diapers when my children were very young, minimizing waste, among other strategies. I toured One United

Resource (OUR) Ecovillage back in 2007, went on garden and farm tours, co-operative and intentional community housing tours, and tours of local natural buildings made of straw bales and cob. Years later, in 2018, I returned to OUR Ecovillage to take the PDC course and Earth Activist training with Starhawk and Charles Williams, where Starhawk asked if we identified as activists, and I pondered for some time afterwards, what does it mean to be an activist?

I have come to see that we are all actively creating a particular worldview with every choice we make. Just as being an activist is not a *fait accompli* but rather a process and ongoing engagement with action, it was my experience in this research process that full embodiment in active hands-on experiential opportunities incorporating physical, intellectual, emotional, and spiritual engagement, fostered greater creative thinking and deeper awareness and understanding for myself as a lifelong and lifewide learner. Creativity involves letting go into the unknown – you don't know what's going to be created when you start – and you must trust the journey will lead you where you need to go. I've always struggled with the free form nature of creativity. I want someone to guide me and tell me what to do, what steps to take. I am more comfortable following the cross-stitch pattern, reading the piano's sheet music – anything where the path is clearly laid out in front of me. This research is a perfect example of where I have struggled to be the one guiding myself through the unknown. Taking responsibility for one's learning journey is contradictory to how the learning process is shared in most formal, academic learning settings. I want to focus my life on creating a consciously chosen, regenerative and sustainable future, one that aligns my values and my actions,

one in which I take responsibility for my actions, because I can see the connection between how I live my life now and how we create a collective future together.

The integrative and relational aspects of permaculture have influenced my unfolding identity as a lifelong and lifewide learner. Vannini and Taggart (2014), in exploring off-grid living through a regenerative permaculture lens, write that “regenerative design is... founded around the principle of ongoing renewal and rebirth... integrat(ing) natural and social processes... Advocates view ecology as a process: a ‘dynamic living assemblage’” (p. 133). They go on to say that “regenerative life skills were relational since they depended on establishing relationships among people, places, times, and materials” (p. 136-7), and that “off-gridders’ partial self-sufficiency was a relational responsibility: an onus to duly play one’s part in socio-natural processes ‘wherein people and their environments are continually bringing each other into being’” (p. 168). This research journey has been a process of renewal and rebirth, a continual re-envisioning of self and identity as a lifelong and lifewide learner in relation to others and the world around me.

I have come to appreciate this path of self-directed and informal learning, of coming to see oneself as a lifewide and lifelong learner, as the path of an activist. I have felt a deep responsibility to remain true to myself, to foster and nurture the relationships within the collective, where creating space to focus on my own burgeoning identity as a lifelong and lifewide learner enables others to also come into their own as lifelong and lifewide learners, and to live with authenticity and integrity. I chose a path of self-directed and informal learning as a tool of empowerment that fosters resilience. This research journey of self-directed and informal learning validates my experience

pursuing a personal interest for its own sake and not for economic, social, or political gain. It has allowed me to deeply connect to permaculture and develop a deeper awareness of what has drawn me here and what I might learn about myself as a lifelong and lifewide learner. I hope to empower others, including educators, to discover within themselves a better understanding of who they are as lifelong and lifewide learners and how they can bring this awareness into their work with the learners they support.

### **Trusting and Relaxing into the Learning Process**

Learning to trust and relax into the learning process has been a recursive challenge as I struggled to let go of preconceptions of how this process should look. I had to repeatedly remind myself to practice self-compassion when I found myself being self-critical. I recalled that when my children were young and learning at home, I trusted that they would learn in their own way and time, yet I've struggled to trust my own learning along this research journey. My research journal is riddled with this reticence to trust my learning – continually reaching for books and the voice of experts demonstrates reliance on the outside world instead of trusting what I knew in my heart: that I needed the slow, meandering, timeless journey of finding my own way. I remember when my son, upon entering the classroom as a teenager after having been educated at home for many years, commented a few months into the school year that the school system is not set up to allow learners adequate time for processing and reflection. Through this journey, I have come to appreciate that I, too, need unstructured time to process what I am learning, to assist in building connections and relationships and recognizing patterns, especially as a neurodiverse learner. I have had to unlearn embedded ideas of

what the learning process could be – that it was okay for learning to take longer than expected and that taking time to process was not a waste of time.

Reflecting on the twelfth principle of permaculture, *creatively use and respond to change*, allowed me to consider when to forge ahead and instigate change, and when to create space for things to unfold with less manipulation on my part. More than once, I have remarked that this whole process would be much easier if someone would just clearly lay out the path I was to take. I can follow directions well, but creating the path ahead has not been something that I perceive to be one of my strengths as a learner, and this journey has challenged that notion. By exploring permaculture, I was able to slowly develop trust in the natural unfolding of the path, in the ebbs and flows of the natural rhythms of life. I recognized that forcing things to happen or approaching this journey in a disjointed manner (for example, focusing solely on intellectual learning as opposed to the holistic approach of integrating the intellectual, physical, emotional, and spiritual) caused tension within. I observed how in autumn the maple leaves changed colour and let go gracefully, and I pondered how that might look in my own learning journey to let go of that which has outgrown its usefulness or is no longer meant for me. Part of this journey has been to learn to be fully present, to relinquish control and accept what is, and to accept myself as a holistic learner.

I have learned through observation and interaction with the natural world that the speed through which I live my life, with which our modern systems function, is not always aligned with the speed of natural processes. I have been challenged to slow down, be still, and go deep during this journey to tune into my intuition and inner voice that resonate with natural patterns and rhythms. I have tried to find different strategies,

tools, and techniques to quiet my mind, to observe and develop the sustained effort that engaged, active observation requires. I pondered the paradox that becoming still and going within would move this process forward, that resisting the attention economy would provide for embracing the economy of nature. I felt challenged by the parameters and constraints of an education system, even this graduate program, requiring demonstration of visible learning through traditional assessment methods, when this research topic was about learning for its own sake, for the benefit of the learner's own experience. It has been illuminating just how difficult it is to do nothing, to sit still, and to go within. As Odell (2019) asserted,

To resist in place is to make oneself into a shape that cannot so easily be appropriated by a capitalist value system. To do this means refusing the frame of reference: in this case, a frame of reference in which value is determined by productivity, the strength of one's career and individual entrepreneurship. (p. xvi)

By exploring permaculture, I have experienced the rise of an inner resistance in response to the demands of external systems of which I recognize I am inherently embedded. This exploration of permaculture has been an attempt to ascribe value to the informal learning I pursue in my life, to actively resist the framing that my worth is tied to my economic contributions through my productivity and career. Instead, through this research journey with permaculture, I have tried to embrace and inhabit the more amorphous and hazy notions of

...the importance of nonverbal communication, and of the mere experience of life as the highest goal. It means recognizing and celebrating a form of the self that

changes over time, exceeds algorithmic description, and whose identity doesn't always stop at the boundary of the individual. (Odell, 2019, p. xvi)

Embedded as I am within systems, I cannot fully extract myself. Even if that were possible, standing outside the system would still be *in relation to* the system. Through this decades-long interest in permaculture, I have come to consider that we cannot change a system by withdrawing from it; we can only change it through slow and small changes from within, from actively participating in the system. Coming to see myself as a lifelong and lifewide learner and as an activist has necessitated that I change from within. I have had to do internal work to change how I show up in the world around me, to have some influence and impact on changing the larger systems of which I am a part. Learning is, as Tanaka (2016) wrote, a whole-body experience, encapsulating the intellectual, physical, emotional, and spiritual. This journey required me to learn to be still, vulnerable, to engage in all aspects (intellectual, physical, emotional, and spiritual) of myself, and to foster intuitive knowing.

Through permaculture, I am regaining a connection to the natural world around me and paying more attention to the wisdom of my intuition. I am learning to yield to uncertainty, to release the desire for control and a clear path forward, and to trust that I will learn and can create the path for learning. I follow the natural rhythms of interest, trusting that it permeates my life in all respects, even without direct attention; permaculture has become integrated into my identity. I've learned to look at myself as a learner more holistically, understanding how the things that I learn about myself in one domain are transferable to other domains. I've been trying to better understand myself

as a learner, to understand what it means to be a lifelong learner, and how I can foster and nurture that within myself.

Developing trust, both in myself as a learner and in the learning process to unfold as it needed to, has taken a significant amount of time and effort and it's not yet complete. I continue to struggle with self-acceptance, to shake off the judgment of self and others, to feel safe in the world and at ease with myself. The holistic, integrative nature of permaculture is helping to foster this development of trust as I continue to learn to yield to uncertainty, to release the desire for control and a clear path forward. I am learning to understand more fully the transferability of knowledge gained in one domain to others, to not just intellectually understand but to fully embody and embrace that after more than two decades of sitting with this interest. My persistent interest in permaculture permeates all aspects of my life and has infused my holistic identity as a learner; it has truly become both lifelong and lifewide. By prioritizing this informal learning interest in my own life, I have been role-modeling and creating space for others around me – for my children, my critical friends, my colleagues – to learn to trust their own learning journeys and to develop their own sense of self as lifelong and lifewide learners. Along with the value of trust, I see that humility is also evident throughout my work; I am coming to realize that there is no mastery of lifelong and lifewide learning: the more I learn, the more I realize there is to learn.

This research process has been a lesson in learning to attune to my heart's path, to dwell in the depths of my suffering and grief, and to come through the other side, changed for the better. As an adult, allowing myself to explore interests, regardless of

others' perspectives, has been about honouring all that I am, allowing myself to fully be who I am.

### **Zones and the Struggle for Control**

There are several places in the journal where I reflect on the concept of zones in permaculture, or this notion of concentric circles based on frequency of use (Hemenway, 2015, p. 108), such as where I discussed zones in relation to food access and production and also transportation, in relation to the education system, and to life design. However applied, we can use zones and sectors to assess where the natural boundaries are, how we may be able to shift them, and how to place elements in healthy relationships with one another. With zones and sectors, the idea is that the spaces that require the most labour-intensive activities are closest to the core for maximum efficiency in the design of the system. The shape of the zones may not be perfectly circular as there may be considerations such as land formations or other contextual variables affecting their shape.

Because a lot of the permaculture literature that I came across early on in my interest focused on the application of the principles and ethics to food production and systems, applying the concept of zones to transportation or education arose for me as I considered the other petals of Holmgren's (2002) permaculture flower (see Figure 1, page 2). As seasons passed and I explored permaculture further, I came across information on social permaculture and later emotional permaculture. Applying zones to the design of our social lives and connections is based on the second permaculture ethic of people care (Macnamara, 2012). In this respect, Zone 0 (or 00 as it is sometimes referred to) is about self-care and our inner lives, our self-awareness and

internal processes. Zone 1 encompasses the relationships that are closest to us and those with whom we most frequently interact, generally our family and closest friends. These relationships have the potential to help us learn to heal conflict if we are open to learning more about ourselves. Zone 2, the next concentric circle away from us, is typified by group dynamics and community-level design and relationships. From the inner life of zone 0 to the group dynamics of Zone 1 to the organizational design in Zones 2 and 3, we can see the farther away from the self we go, the more system-level we get. The more formal structures at the community level and beyond generate opportunities to participate in negotiating social agreements, conflict resolution, and consensus-building. Additionally, there are ceremonies, rituals, coming together over shared experiences, and storytelling at these levels. Zones 4 and 5 in social permaculture are about social movements, coalition building, and advocacy for policy changes. We can apply the concept of zones in permaculture to our lives to build a rich relational landscape that reflects the regenerative essence of a holistic system.

I spent time considering the application of zones to my inner environment after taking two online courses (Emotional Permaculture: Design your inner landscape and Design Your Daily Practice) with Heather Jo Flores, the author of *Food, Not Lawns* (2006) in Spring 2022. Then in Fall 2022, I read Howland's (2019) *Emotional Permaculture* and came back to mulling over zones in the inner realm. With the concept of emotional permaculture, the zones and sectors can be used to assess natural boundaries and place system elements advantageously to one another. One's inner landscape becomes Zone 00. "The boundaries you set, either intentionally or unintentionally, define the space and trajectory of your relationships with the people and

elements who cross or come into contact with those boundaries" (Flores, 2022). Flores asks us to consider our inner landscape with respect to how we spend our time, the emotional labour we do, and how our physical boundaries and the material world around us impact our emotions and thoughts.

Regarding the concept of zones and its application to different systems in my life, I came to consider that zones must be considered for the relationships *between* them and not in and of themselves; Vannini and Vannini (2023), in discussing the concept of "wilderness" and "wild," shared that in their ethnographic research with land-based or Indigenous cultures, they observed that there is no differentiation between wild and non-wild, as it is all integrated. Permaculture is a holistic, regenerative approach to system design, with a principle focused on *integration, not segregation*. I reflected on how the traditional, formal, institutionalized education system has conditioned me as a learner to segregate my intellectual learning from my physical, emotional, and spiritual learning, and how this research has allowed me to contemplate the fusion of living and learning. Permaculture invites us to focus on relationality and on connectedness rather than artificial boundaries we are conditioned to apply to the world around us and to our own learning journeys. It has been my experience that the unnatural boundaries inherent in formal educational settings block creativity and inhibit motivation and engagement with learning.

Odell (2019), in writing about resisting the attention economy, acknowledged the messiness inherent in applying artificial boundaries like zones to our lives. Odell concedes that "reality is blobby," and that we resist definition, and should resist "first and foremost within ourselves" (p. 151). This prompted me to reflect on if, and how, I

experienced resistance during this process. There were several times where I acknowledged the struggle of finding my way through this learning journey, as though walking an unfamiliar path in darkness and heavy fog with only a dim flashlight to illuminate the few feet immediately in front of me. My inner critic is unambiguous in the journal as I judged myself harshly. This process has been a search to know and understand myself as a learner, and I've approached it with the artificial boundary between self and other (other people, the world around me), as Odell notes,

When we recognize the ecological nature not only of biotic communities but of culture, selfhood, and even thought – that indeed, consciousness itself arises from the intersection between what's 'inside' and 'outside' (troubling the distinction thereof) – it's not just the boundary between self and other that falls away. We're in a position to see past another supposedly insurmountable barrier: the one between the human and the nonhuman. (p. 142)

This false dichotomy of self and other leads to unpacking the paradoxes which come up at several different junctures in the journal.

### **Paradoxes**

As I travelled on this research journey to know myself better as a learner and to apply the concepts of permaculture to lifelong and lifewide learning, I came across several paradoxes. In permaculture and systems design, a system will tend towards equilibrium and homeostasis while in continual flux, never finding consistent stability; it is forever correcting its course. This concept of dynamic equilibrium in systems (Macnamara, 2012) challenged my thinking, reminding me of how in tai chi the body can simultaneously expand and contract, just as we are in a constant state of creation (cell

reproduction, for example) while also moving towards destruction (e.g., aging). My journal shows this quest for equilibrium as I went through a process of deconstructing my identity and sense of self to allow for the creative act of emergence in putting this research out into the world. This paradox within systems design of simultaneous creation and destruction came up in Odell (2019), commenting on the concept of manifest dismantling through Masanobu Fukuoka's do-nothing farming. This contradiction of destruction framed as construction can feel counterintuitive in equating progress with destruction. Reflecting on this in the journal in Fall 2022, I wondered how I could deconstruct or dismantle structures, routines or patterns to create space for new things to emerge, like my identity as a lifelong and lifewide learner.

Throughout this journey, I uncovered many unconscious beliefs I held because of my experiences in the formal educational system. Trying to disentangle my own voice from the indoctrination of the education system was virtually impossible, much as a researcher is inherently a part of the research process, no matter how unbiased I might consider myself to be. I had to disabuse myself of the notion that as a learner I was an impartial observer of my learning process. I had to liberate myself from the dissociation of intellectual development from physical, emotional, and spiritual development. The idea of segregation between self and other – the very notion that self and other exist independently of one another – had to be released to allow for an understanding of relationality and interconnectedness to simultaneously emerge.

I grappled with the concept of holons, how a component or element of a system can be a whole system unto itself while still being a part of a larger system (Fall 2019, Fall 2020, Spring 2021, Summer 2022). As Macnamara (2016) wrote in the poem, *Who*

*am I?* "I am the pattern and the detail," "...the universe and the atom." I am inescapably intertwined with the world around me (the "other") while still being a whole individual ("self") at the same time. I contemplated the interconnectedness of the organized, complex systems that are both part of us and that we are a part of.

Along this journey, I struggled with the relationship between the individual and the systemic; much like Lorenz's (1963) butterfly effect, the notion that a butterfly flapping its wings in one part of the world can significantly impact weather patterns (create a tornado) elsewhere, essentially that small changes can have large (system-impacting) consequences. In regenerative systems design like permaculture, dispersed power amongst the component parts leads to increased diversity and collaboration. Grassroots power is one way to allow slow and small changes to arise in a system; to allow momentum to build and fine-tune or course correct the direction the "ship" is sailing, or where the system is headed. The ninth principle of permaculture is about enacting *slow and small solutions* and within that is the concept of critical thresholds or tipping points (Gladwell, 2006).

Opportunities for change at a systemic level can be leveraged through instigating slow and small changes where feedback loops of a manageable, localized scale yield more immediate information as to the effect of a change, providing greater opportunity for making tweaks and adjustments to the implemented approach. I struggled with this concept of a decentralized locus of control in this research process in that I wanted someone else – anyone, really, who I perceived to have more authority, experience, and/or power – to clearly lay out the path through the research rather than having to build a path for myself, and to learn to create feedback loops for myself about whether I

was on the right path or not. This came back to learning to trust and relax in the learning process and to develop self-compassion.

In *Tending the soul's garden: Permaculture as a way forward in difficult times*, I was reminded of holons when Rushing (2012) writes, "cultivating a greater understanding of the whole system is possible by looking to understand any one element" (p. 52). Yet, as Suzuki (2010) notes,

In focusing on the parts, we lose all sense of the whole, and today we know that the whole is greater than the sum of its parts. That's because when combined, the pieces interact, and properties emerge from their interaction that cannot be anticipated from the characteristics of the individual parts. (p. 58)

While Rushing states that we can understand the whole by focusing on any one element, Suzuki counters this by saying that we lose all sense of the whole in taking that approach. Gooley (2017) notes that "a focused interest is a two-edged sword: It allows us to notice many things that pass others by, but it narrows the spotlight of our vision" (p. 62). I am reminded about the need to consider both the detail and the pattern simultaneously, to see both the forest *and* the trees in systems thinking and in this research process.

I return to considering the paradoxical nature of focusing on a single element of a system to learn about the system as a whole. I think of how a pattern emerges from the repetition of detail. I think about how things that appear binary can exist on a continuum, which brings me to considering the concept of balance. I reflect on the changes of the seasons throughout this research process, and the passing of time marked by the solstices and equinoxes. Time for reflection and to acknowledge that the extremes of

solstice (both summer and winter) balance out at the equinoxes (spring and fall). At the time of the equinox, I contemplated the idea that there is no duality, rather a continuum, between light and dark, between masculine and feminine, between outer and inner worlds. This realization allowed me to come to terms with the idea that I could have multiple identities at once. I could be a researcher, an activist, a lifelong and lifewide learner, and a writer all at once; I didn't have to compartmentalize myself, and I didn't have to have it all figured out before embracing those aspects of my identity. I could both *become* and *be* these identities simultaneously, even if they appeared to be in contradiction to one another. I could transcend the structure of self-imposed constraints through creative free-form exploration, much like interpretive dance or free jazz.

I have considered how this research process uses permaculture as a metaphor for understanding how my identity as a lifelong and lifewide learner has developed. I quoted Macnamara (2012) on the use of metaphor to support a deepened understanding of and connection to nature and its patterns. The use of permaculture as metaphor for this research process and experience helps me connect with the natural world, with my intuition, and with something bigger than myself – the vast sense of order in the universe.

As things change within me, I see things changing in society. More people are becoming aware of how the systems we belong to can improve. To create equity, we need to dismantle and actively work to provide equity of opportunities, and that has not existed to date within these systems. There is so much that is happening – both good and bad – in the world right now. What I have observed is that the world is always going through change. Change, paradoxically, is a constant. While there have always been

people who have been "the old guard" and resistant to change, there have also always been revolutionaries, people "ahead of their time." I am not naïve; I can see how much change is needed, yet I know that positive change *is* possible.

As an adult, allowing myself to develop and explore my interests, regardless of others' perspectives and judgment, has been about honouring all that I am, allowing myself to fully be who I am, and embracing my neurodiversity. My interest in permaculture ebbs and flows, and every time I come back to it, I'm different than the last time. I am in a process of continual change and growth. Part of what I've learned from my interest in permaculture is the integrated nature of my experiences; everything is connected. By re-establishing my connection to nature, through consciously redesigning and rewilding my community, I can benefit from ancient wisdom and advance society.

### **Lifelong and Lifewide Learnings**

Along this research journey, I sought to explore how the pursuit of my interest in permaculture would impact the growth and development of my self-identity as a lifelong and lifewide learner. I wondered what permaculture would teach me about who I am and who I am becoming. Through my writings in a multi-year journal and in the experiential activities I pursued during this journey, my identity has shifted. In this section, I explore the shifts experienced and how this awareness of, and reflection on, the process of becoming a lifelong and lifewide learner has affected how I show up in the world.

**What have I learned about myself as a lifelong and lifewide learner through my interest in permaculture? My sense of self: strengths and challenges**

My interest in permaculture has given me procedural knowledge – the skills and strategies and knowledge of how to “do” permaculture in a conventional sense (for example, how to build a swale or a cob oven), as well as conditional knowledge about when to apply such procedural knowledge (e.g., when and why you might build a swale). The third type of metacognitive knowledge I have gained from my interest in permaculture is declarative knowledge about my sense of self as a lifelong and lifewide learner.

Coming into this research, I was hard-pressed to articulate my strengths as a learner. Although I consider myself emotionally intelligent, there are times when I struggle to understand myself and relate to others, and in discussion with critical friends, I know I am not alone in that. One of the outcomes of exploring this interest in permaculture has been learning to observe my inner dialogue and the world around me more deeply, and to be able to articulate the changes happening within.

As I reflected on what I have learned about myself during this process, I learned that I am a theoretical thinker, more comfortable with ideas, systems, concepts, and patterns. As a neurodiverse big-picture thinker, I can struggle to remember details. I intuitively just *know* things, but I can't quite pinpoint *how* I know these things. I am also a right-brain, holistic thinker; I've observed that I can feel lost if I don't understand the relationships between the system elements, so the use of maps and visual organizers helps me to understand the connections. I have also come to understand how reflective I am in my thinking. I need quiet time to process what I am learning. This can appear as withdrawing from situations where I need to go and be alone with my thoughts, often talking through them aloud.

As a learner, I am driven, tenacious, and idealistic. I strive to live a life in alignment with consciously chosen values. My learning happens in fits and starts; I will immerse myself in a subject as I'm learning, then walk away for a while, and return to it with intensity. As a lifelong and lifewide learner, I practice embracing a growth mindset, as described in Carol Dweck's (2008) writings.

Lifelong and lifewide learning is inclusive of the invisible learning that I undertake on my volition, learning that isn't necessarily valued by society. I realize I like "being in the books" and taking workshops. I am comfortable in the learner role. The academic structure of this research process dictates that I must demonstrate my learning in a manner that allows for external, traditional/colonial methods of assessment. However, this learning process, for me, isn't necessarily about having something tangible as a result – I enjoy learning for learning's sake, and that does not make it any less valuable.

Some of my areas for growth as a learner are in recalling detailed information and learning in situations that are overwhelming to the senses (loud, bright, etc.). I find it challenging if not given space and time to process and when I am put on the spot to recall or share information. I have come to see these areas of growth as opportunities to reframe my sense of self as a lifelong and lifewide learner, to understand that my strengths (and challenges) can be double-edged swords. For example, routines can help create the conditions for mindfulness and connection and can help quiet the mind and create conditions optimal for what Csikszentmihalyi (1990) termed "flow". Yet routines can also hold me rigidly to aspects of my identity that I outgrow or that do not serve me well, limiting and restricting me from being more flexible and adaptable along my learning journey towards becoming a lifelong and lifewide learner. I am learning to

understand and appreciate my neurodiversity as part of my identity as a lifelong and lifewide learner.

Through permaculture, I am regaining a connection to the natural world around me and paying more attention to my intuition. I am also learning to yield to uncertainty, to release the desire for control and a clear path forward, and to trust that I will learn. I follow the natural rhythms of interest, trusting that it permeates my life in all respects, even without direct attention; permaculture has become part of my holistic identity.

**How has exploring your interest in permaculture influenced how you see yourself as a lifelong and lifewide learner?**

This avenue of research has been inspired by a desire to be seen and to have my experiences validated, and to establish lifelong and lifewide learning as a valid and worthwhile pursuit. It is a story of self-acceptance, of developing deeper self-awareness, and of healing. I have learned that my identity is intrinsically tied to who I am as a lifelong and lifewide learner. I cannot describe myself without the metacognition that how I am describing myself is shaped by what I have learned through experience, reflection, and engagement with the topic. I have discovered the paradoxes both in systems thinking and within myself: the more I learn about myself, the more I discover there is to learn; there is no “mastery” of lifelong and lifewide learning.

I have chosen to pursue this research to legitimize and validate the pursuit of personal interests in a society that does not value this exploration unless it reaps economic benefit. As Grant and Butler (2018) noted, validation of my credibility or expertise can appear to be externally required and yet withheld. More formal, institutionalized learning is heavily controlled through curricula standards and testing.

The informal and self-directed learning that I pursue for my own reasons is largely invisible and undervalued by society. This research has been about, in part, articulating the value of my lifelong and lifewide learning journey, of learning that happens outside of formalized institutions and settings. Through this research, I am laying claim to my space in the world, taking my place and positioning myself as a leader, expert, activist, and contributor to the academic world.

By prioritizing this informal lifelong and lifewide learning in my own life, I am role-modeling and creating space for others to do so in their lives. I respect that this pursuit of informal learning is *as valuable as, if not more so*, than formal, in-class learning.

### **What was the process of coming to see myself as a lifelong and lifewide learner?**

During this research journey, I have spent an extensive amount of time contemplating the permaculture ethics and principles and considering how the application of them in my life has shaped my identity as a lifelong and lifewide learner. Through this process, I have come to understand the ethics of permaculture in practice: whether for the earth or for others, the ethic of care begins within. We learn to heal the world around us and to strengthen our relationships with others by healing ourselves, and this is where activism begins. This research journey has been a process of learning to understand and care for myself and, by extension, the world around me. Exploring my interest in permaculture, regardless of others' opinions, has been about honouring all that I am and who I am becoming.

The process has been messy and time-consuming and an internal struggle. Allowing this learning journey to unfold in its own way and time has been part of the process of embracing my identity as a lifelong and lifewide learner. The only way

through is to stay connected to the present moment, to get out of my head and into my body and connect to the world around me as I learn to sit with uncertainty. This has been an iterative process that waxes and wanes. It has been a process of coming to recognize my own predilections towards learning – that I am a person who learns in fits and starts, with intensity – and allowing that to be what it is, not trying to force it to be something it is not. This process has fostered trust in the natural rhythms and patterns, the ebbs and flows of life. I am learning to allow things to unfold with greater ease, because I recognize that when I try to force things to happen or control how things are going to go, it causes tension, instead of learning to hold them close but loose.

This process of coming to see myself as a lifelong and lifewide learner has incorporated Collier and Williams' (2005) four types of reflection. The process of coming to know myself has taken time through continuous reflection. This process has allowed for challenging reflection and pushing myself to think in new ways. The nature of connected reflection has assisted in seeing the integrated nature of my learning journey through the lens of permaculture. And finally, the journey has incorporated contextualized reflection as I have reframed and re-storied my experiences.

**How has the process of becoming a lifelong and lifewide learner through exploring permaculture influenced how you show up in the world?**

A thread that runs through the journal is a struggle to accept myself as I am and to shake off the judgment of others. I think about the many times I have been told that I make life difficult for myself or that I am 'too much' for others. I feel deeply. I feel the angst of wrestling with who I am as a learner and what permaculture has taught me about that, and I recognize my attachment to that angst. Finishing the dissertation

means letting go. This research process, I knew from the beginning, was about healing so that I could move forward in the world in a new way. Am I willing to find closure to this chapter of my life?

I explore the permaculture principles in relation to how I show up in the world now as a lifelong and lifewide learner. I have *observed* that my relationship with permaculture iterates and is richer for having gone through past seasons with it. I have observed that between stimulus and response lies the possibility for self-reflection, self-awareness, and intentional action. The power of observation in my own learning is significant. In that moment, we can choose how we want to show up in the world – as learners, as leaders, as people. We can exercise self-compassion and extend empathy to others. To *catch and store the energy* of my developing identity as a lifelong and lifewide learner is to process the memories and experiences engaging with the topic. When we think of *obtaining a yield*, the yield of this research process has been the metacognition of how I have changed and grown in the development of identity as a lifelong and lifewide learner through the pursuit of this interest in permaculture. *Applying self-regulation and responding to feedback* includes the self-reflection of how I've grown through my interest in permaculture – I'm not the same person I was almost twenty-five years ago when I first came across the concept. Responding to feedback is about the adjustments I've made to my identity as a learner as I've explored permaculture in response to self-reflection and feedback externally from my surroundings and others. To *use renewable resources* is to recognize that I have the capacity to learn throughout my life, a sense of trust in my ability to learn and to continue to learn. To understand the concept of *producing no waste* is to understand that all learning is valuable, even the

"lessons" we may judge inconsequential through the lens of society's more traditional, ingrained, formal learning perspective. To *design from patterns to details* with respect to identity development as a lifelong and lifewide learner is to think holistically about my identity development – to realize that I am the thread through my experiences, no matter how disparate they may seem. In Gooley's (2017) *How to read nature: Awaken your senses to the outdoors you've never noticed*, he states that "we don't start by finding nature itself interesting – it is almost meaningless in its vagueness – but we will all at some point discover the part of nature that corresponds with our own inner passions, whatever they might be" (p. 47).

We can start to make sense of the vast canvas around us by moving from the big relationships, the broad brushstrokes of habitat-knowledge, to the finer connections, the species within those habitats. This narrowing from broad to fine focus is what allows us to make sense of our natural surroundings in the moment. (p. 122)

My identity as a lifelong and lifewide learner has developed through this research process from a broad notion to become clearer the longer that I sit with the topic of permaculture and reflect on my identity development. Thinking about *integrating rather than segregating*, I am reminded of my interconnectedness to the world around me. As a learner, I'm looking to integrate my experiences, to make sense of them in relation to past experiences. *Using small and slow solutions* in this context is about implementing small changes, slowly and consistently – changes that have the potential for large impacts. I hold my interest in permaculture and in my developing identity as a lifelong and lifewide learner close and examine it frequently. *Using and valuing diversity* and the

next principle, *using the edges and valuing the marginal*, both speak to going beyond my comfort zone in my experiences and with my learning. I have challenged myself to diversify my interests and experiences. And on the final permaculture principle, *creatively using and responding to change*, I think there is a notion of how I continue to iterate and "continuously improve" my self-identity as a lifelong and lifewide learner throughout my life in response to feedback and change. The learning cycle is thus both a creative pursuit and an expression of creativity, and to have an outlet for creative expression in my life is to have creativity bubble over into other areas of my life – it's not neatly contained within the box of self-identity, for example. Allowing myself to come to this pursuit as a whole person has been one of the lessons of this search for meaning. Permaculture has helped me learn about myself as a learner while also helping me understand how I fit into the broader context of the world around me.

This process has taught me to sit with uncertainty and the unknown. It has taught me to continue to move forward even when the path is unclear. It has been about working through the internal struggles around the sense of worth and validation of this pursuit. The longer I sit in the "messiness" of this research, the more willing I am to allow things to be as they are, to accept this process as messy, and to acknowledge there is no mastery of lifelong and lifewide learning, and so there is no clean resolution to be found.

### **Circling Back to Permaculture and Systems Design Theory**

As I wrote this final chapter, I came to realize how the process of analyzing my journal excerpts parallels the permaculture principles. I needed to *do* permaculture, not just read about it. First, *observe and interact*. I sat with the unedited journal of over

1,200 pages, reading and re-reading the entire journal several times, observing the thoughts that arose while reviewing the writing. The second principle, *catch and store energy*, is about harvesting while things are abundant. I wrote down those thoughts that arose while reviewing the writing and reflected on them as well, sharing them with critical friends. In this way, I also attended to the third principle, *obtain a yield*. The fourth principle, *self-regulate and accept feedback*, was enacted in the process of both synthesizing the journal down from more than 1,200 pages to 120, and again down to 50, and incorporation of feedback from critical friends, my supervisor, and my committee. The next principle, *use and value renewables*, acknowledges the abundance of creative thought available during this process. In the initial writing, in the distilling, in the analyses, and in the editing, the concept of renewable energy is evidenced in consistent, applied thinking and mental effort. The sixth principle, *produce no waste*, is seen in that there is no wasted effort in this entire process, including in the raw journal. All that reflection and writing was paramount to getting to a place of being able to distill it down, and the observation process of sitting with it and observing thoughts that arose while re-reading was all part of the process. The seventh principle, *design from pattern to detail*, can be seen in that there are patterns and themes that arose in the analysis of the excerpts, which provided an opportunity to then incorporate reflections and recommendations in this final chapter, which also embodies the eighth principle, *integrate; don't segregate*. The recommendations that close the chapter endeavor to reflect the remaining four principles, *use slow and small solutions*, *use and value diversity*, *use the edges and value the marginal*, and *creatively use and respond to change*.

## Final Reflections

Permaculture ethics and principles are directly applicable to lifelong and lifewide learning and educational sustainability; for example, obtaining a yield might mean: How do you assess your growth and development on your learning journey? The principle of integration is strongly related to the interconnectedness of holistic learning theory; in lifelong and lifewide learning, this could mean asking, *how do we integrate what we learn about the subject of inquiry, about ourselves as learners in the process, and how we can apply this learning to other facets of our lives?* Valuing diversity leads to greater resilience in the system, and multifaceted approaches to learning are stronger than singularity. In lifelong and lifewide learning, we *use the edges and value the marginal*, knowing that creativity flourishes at the intersections. We are more apt to learn when we are on the edge of our comfort zone, but not so far out that we have no idea of how to proceed; somewhere in the delicate balance is the opportunity for innovation and creativity to expound. Supporting that pursuit of balance are the critical friends and more knowledgeable others in my life who showed up fortuitously at the right moment to facilitate my learning.

Using permaculture as a metaphor for my lifelong and lifewide learning journey helped to ground me in the world around me, to integrate all aspects of my being and to not ruminate at an intellectual level, but to incorporate the physical, emotional, and spiritual as well. Permaculture as a metaphor allowed me to see deeper within, as with holons, that we are systems unto ourselves but also in relation to one another, parts of an emergent whole, of something bigger than ourselves. Part of this developing awareness, too, is where humility arises; as one small part of a much larger whole, I do

not have to feel a burden of responsibility to be everything to everyone. I alone do not have to single-handedly solve the world's problems. Permaculture as a metaphor has allowed me to place myself and ground myself within the larger frame of reference, and to learn to rely on and work collaboratively to resolve larger systemic issues.

The decentralized locus of control in implementing *slow and small solutions* and the dispersion of power in a system to leverage opportunities for innovative and creative solutions to arise lead to increased diversity and collaboration among the component parts. Along this journey, I have struggled with this decentralized power as it contrasted with the way the education system presently operates. Several times, I lamented that I was having to find my own path rather than be provided with a clear roadmap through the research by someone more knowledgeable. Providing opportunities to develop and maintain empowerment of the learner is paramount to fostering generative and transformative learning experiences (London & Smither, 1999; London, 2011).

### **Limitations and Complexities**

This research is inherently bound by my own understanding at the time it was conducted, as well as to the social context in which it took place. Given that the methods were fluid, emergent, and organic, responding to the needs of the moment, the generalizability of the research is limited. In crafting this narrative, I have engaged in reflection and incorporated feedback from critical friends and committee members, reframing my perspective and ensuring that the insights are grounded in data, refined through dialogical validation, and ethically sound. In establishing rigour in this process, I have been attuned to guiding the reader through my experience, to ongoing ethical reflection, and to balancing the personal and interpersonal aspects of the inquiry.

## **Recommendations and Next Steps**

Several avenues for further research emerged during the process, including the need for self-directed learning, extended time, support, opportunities, appropriate assessment, and holistic education.

**Investigate the application of unstructured, exploratory time in formal educational settings to foster growth and development as a lifelong and lifewide learner, and its permeating impact on more structured lessons.** This would require offering opportunities for learners to explore self-directed interests and pursuits, and to allow learners sufficient time to create their own learning journey. By allowing time for self-directed exploration outside of curricula requirements, students build problem-solving skills and reflect on their strengths and passions. When students have adequate time to create and pursue their own learning journey, it fosters a sense of ownership and increases intrinsic motivation, empowering them to engage deeply with the material, develop critical thinking skills, and retain knowledge. This approach nurtures a sense of autonomy and encourages the development of a resilient, flexible identity as a lifelong and lifewide learner, preparing students to adopt a growth mindset and adapt to diverse contexts throughout their lives.

**Observe changes in educators' pedagogical approaches within learning environments that foster the development of lifelong and lifewide learning identities in students in formal educational settings.** Included here are three smaller recommendations for educators: to support learners in developing self-trust and confidence in their journey towards becoming lifelong and lifewide learners, to allow learners the opportunity to develop the boundaries of their own path of exploration, and

to consider using alternative, decolonized assessment methods, including self-assessment. A learner-centered pedagogical approach nurtures critical thinking and collaboration skills as learners are encouraged to explore, question, and apply knowledge in real-world contexts. Creating space for learners to focus on their needs and interests supports students in taking an active role in shaping their learning experiences, building confidence and trust in their ability to be self-directed, lifelong learners. Alternative assessment methods promote more inclusive and holistic approaches to evaluating student progress, emphasizing student agency and allowing learners to demonstrate knowledge and skill in ways that consider individual strengths, cultural contexts, and personalized learning journeys. Moving away from traditional assessment models challenges dominant, Western-centric norms in the education system, fostering a more equitable and inclusive learning environment where diverse perspectives are prioritized.

**Explore how students who have completed their PDC experience shifts in their identities as a result of the learning and how they apply permaculture ethics and principles in their own lives.** Zimmer (2016) surveyed post-secondary participants and instructors in a university-credit PDC, noting that “all the students talked about how they had applied their permaculture education in their own lives” (p. 96). This area of research is also linked to a recommendation for integrating the intellectual, physical, emotional, and spiritual in learning. Zimmer (2016) observed that “several [students] seemed to perceive shifts in their own lives in terms of a combination of changes in the inner realm – thought processes, attitudes, self-perceptions, or beliefs – with changes in day-to-day lifestyle choices and outward engagement,” something

one of the instructors viewed as a spiritual change (p. 103). When students transfer knowledge to contexts beyond where it was originally learned, it fosters a sense of agency and adaptability, allowing them to view themselves as capable, resourceful learners who can make meaningful connections. This process boosts their self-efficacy and confidence. Knowledge transfer across diverse contexts also supports the development of a more integrated and flexible learner identity, centered on growth and an ongoing sense of curiosity about the world. Nurturing an awareness of the interconnectedness of their learning helps students see how their education aligns with their values, beliefs, and life goals, fostering a sense of deep meaning and purpose. In turn, they realize that education contributes not only to personal growth but also to social contribution and holistic well-being.

Exploring the use of permaculture as a metaphor would contribute to the dearth of literature in this area (Woodruff, 2014; Gartrell, 2017). The application of permaculture principles and ethics to the other petals of the permaculture flower (outside of food production where most of the focus has been) would contribute to the maturity of permaculture as a regenerative systems design framework. Just as the permaculture flower's petals can represent a journey towards balance, sustainability and holistic development, they are interconnected and work together to form a whole. For example, the petals that explore health and well-being symbolize physical, emotional, and spiritual health, and as metaphor represent deepening self-awareness, nurturing inner growth, and cultivating practices that promote well-being. There were several books I read that used permaculture as a metaphor for exploring the inner landscape (Rushing, 2012; Howland, 2019; Burnett, 2021). Exploring each petal of the

permaculture flower as metaphor facilitates a layer of self-discovery, growth, and contribution to the broader world we live in, emphasizing balance and holistic integration of personal, social, and environmental well-being through the application of permaculture ethics.

**Explore social connections through permaculture, how practicing permaculture builds collaborative communities and relationships that impact a learner's identity.** Here, I would look at Portland, Oregon's *City Repair Project*, Macnamara's (2021) *Cultural Emergence* book and land-based courses, and alternative online permaculture social media communities (like Flores' *EcoDesignHive* and Earth Activists' *social media platform*). Zimmer (2016) notes that students developed an enduring sense of hope through the collaboration and community building experienced during the PDC. In permaculture, the collaborative approach to problem solving and resource management encourages learners to work together, exchange ideas, and support one another in the process of learning and applying permaculture ethics and principles. Community-based learning environments foster a strong sense of belonging, reinforcing the idea that learning is not a solitary endeavour but a shared experience. Through social interaction, permaculture practitioners are exposed to diverse perspectives, and find encouragement to stay curious, open-minded, and committed to the development of the community through a deepening sense of responsibility for the collective. Learning to balance individual well-being with the common good requires self-awareness and reflection, mutual respect, clear communication, and flexible roles and responsibilities to achieve a sustainable long-term vision.

**Lastly, research that applies a social justice lens to permaculture, decolonizes its principles, incorporates eco-feminist perspectives, and seeks to make permaculture more accessible to traditionally underserved populations would be highly valuable in the field.** These approaches aim to dismantle the systems of oppression that intersect with social, environmental, and economic issues. By addressing the impacts of colonialism, patriarchy, and classism – forces that contribute to the degradation of both the earth and vulnerable communities – permaculture can ensure its benefits are available to all, not just those with privilege. Indigenous knowledge systems offer vital insights into community-based, place-specific, and holistic approaches to environmental stewardship. Incorporating these perspectives actively supports Indigenous sovereignty and land reparations. Additionally, integrating eco-feminist views allows permaculture to recognize and elevate the roles of women and other gender minorities in decision-making and sustainable practices, especially in rural and developing areas where women often play crucial roles in food production and resource management. Addressing the intersections of oppression through permaculture’s ethics and principles can lead to holistic solutions that foster equity. By advocating for decentralized, non-hierarchical, and cooperative models, permaculture can shift away from exploitative practices and help build more resilient, just, and equitable communities.

In pursuing this research project, I intended to consider how the understandings I gained might be transferable from the individual level as a researcher to the systemic level for the education sector. I wondered what it would look like for the K-12 education system to set aside regular time in the curriculum throughout a student's thirteen years

to foster and nurture the development of a self-directed pursuit of learning.

Undoubtedly, that would look unique for every student, both the process and any artifacts. Incorporating the above future areas of research and recommendations for the education system is the notion of passion projects.

Through pursuing self-directed passion projects that span years, students might learn to trust their own learning journey as well as to self-regulate and monitor their own learning for progress. The time to meander and to process and integrate information was critical to developing my own sense of trust in the learning process. This time to meander looked amorphous and messy but it was necessary for me to embrace creating my own path. It fostered a sense of humanity and humility in the approach to learning that the education system may not traditionally have time for. Time to pursue a self-directed passion project would require observation of self and others, and the creation of feedback loops would support students in seeing that tangential pursuits along the way were not a waste of time, not a failure, and perhaps help them see how learning is integrated and interdependent. A multi-year passion project would demonstrate how slow and small changes can provide more immediate feedback and can have large impacts on the overall project direction, supporting students to envision possibilities and respond to change in innovative and effective ways. As Gartrell (2019) noted, a self-directed passion project "also serves an ideological purpose. It is an attempt to portray research as organic, ecological, and evolutionary" (p.12), and such a process is intrinsically slow. The outcomes of such a passion project are not necessarily measured in tangible, traditional artifacts of learning, but in the more nuanced life lessons that emerge, much as the emergent whole is greater than the sum of the

component parts. An immersive, experiential, self-directed passion project need not require colonial, traditional assessment methods, but the knowledge gained would be evident in more reflective and social valuations.

### **Concluding Remarks**

When I reflect on my journey through permaculture, I am surprised that this interest has persisted for nearly a quarter of a century. The journey through this research has taken much longer than I had anticipated at the beginning of the process. Reflecting back, I understand and appreciate that I would not have gained as much from the research process had I rigidly adhered to the four-year timeframe I had initially planned. The experiences I gained through this research, allowing myself to meander and to process and integrate information, have helped me to learn to trust myself as a learner and to relax into the learning process. The research process has reinforced the values of interconnectedness and relationality, of trust, reciprocity, and humility. This process looked amorphous and messy but was necessary for me to learn to create my own path. I am not the same person I was at the onset of this research. I now realize that my identity as a lifelong and lifewide learner will continue to evolve and expand as I embrace the opportunities to engage with the world around me. I hope that readers will be inspired to continue their own lifelong and lifewide learning journey and will consider the shifting nature of their identity as a lifelong and lifewide learner through the exploration of their pursuits.

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