Connecting with Nature: A Journey to Find a Deeper Connection Within the Natural World

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Introduction

Background

Increasingly the world is becoming a more disconnected place, particularly in how we, as a society, connect with and within the natural world. This journey of disconnection is not new. Orr (2004) posited that the rise of what he termed *biophobia* ("...the culturally acquired urge to affiliate with technology, human artifacts, and solely with human interests regarding the natural world." p. 131) has its roots in Cartesian thought with its viewpoint that non-human beings are machines and not sentient beings with their own agency. He further argued that this initial viewpoint in seeing non-humans as inanimate has led, through a focus on hard facts and transforming the world into useful *forms*, led to our current perpetual growth, mass consumption society that has resulted in many people feeling this biophobia. He went on to argue that what is needed is a "biophilia revolution" to recover a greater sense of place in all that we see, touch, smell, and experience with nature. This case for developing a greater connection with nature was further argued by Bonnett (2007) who posited that the current environmental crisis gives us a chance to re-focus on our relationship with nature, asking the question:

Why should knowledge of nature that it enables - a knowledge ever increasingly articulated mathematically - be regarded as 'truer' or more authentic than, say, the knowledge achieved through the experience of helming a sailing boat in which one is acutely alert to, and in harmony with, the subtle nuances of wave and breeze. (p. 714) This focus on experience both with and within nature is key to a long-lasting and deep connection with the natural world.

As time moves on, environmentalist thinkers argue that the urgency for society to reconnect with nature in deeper and more meaningful ways increases if we are to mitigate our

worsening impact on our shared home; however we continue to loose the diverse ecosystems that contain the wisdom of nature. In Scanlan's (2022) editorial, she argues that the forests in Nova Scotia are no longer like they were, with the Wabana'ki (Acadian) Forest containing very few old-growth stands. She commented that, although growing up she did not connect with any forest ecosystems within her urban world, she did have a memorable connection during a camping trip when she remembers having "time to walk curiously through the forests". This connection with "the old" was further argued when Briggs (2022) reflected on the thousand-year-old oaks in Blenheim Park in the UK and wondered when sitting underneath one, what history it has witnessed. To return to Nova Scotian context, and further emphasizing the urgency, Plourde (2022) offers a cautionary tale of efforts of the provincial government in Nova Scotia to fasttrack development approvals, reducing public input and bypassing the municipal planning process on a number of proposed *greenfield* (a project on previously undeveloped land) housing developments, many of which are actively opposed by local citizen groups concerned about the loss of local natural spaces for them to connect with. These ancient natural places contain deep and inherent wisdom to both the human and other-than-human inhabitants that provide a foundation for our sense of connection with the natural world and this would be lost if they are developed.¹

This connection, however, is not a one-way sense; it is a two-way relationship based on reciprocity. The more-than-human world benefits as much from this connection as we do. As discussed by Abram (2017), not only are things such as our hands able to touch other things, but

¹ One such connection I had was during a reflection practice when I had the sense that the soil profile I was sitting with was a family, with young soil, parent rocks, grand-parent boulders, and their friends, the vegetation around the soil profile. If this area had been developed, rather than protected, I would have missed this opportunity to develop my connection with the soil family.

they are also touchable things to the other-than-human world. As he states so beautifully when discussing our relationship with this world:

Walking in a forest we peer into its green and shadowed depths, listening to the silence of the leaves, tasting the cool and fragrant air. Yet such is the transitivity of perception, the reversibility of the flesh, that we may suddenly feel that the trees are looking at us. (p. 68) Another similar view on the relationship of reciprocity is posited by Forbes (2022) in that, "That which the tree exhales, I inhale. That which I exhale, the tree inhales" (p. 128). However, not only are we in a reciprocal relationship with the other-than-human world, it is foundational in teaching with us about each other. This viewpoint of nature as *co-teacher*, or *co-learner* as I prefer in that I perceive it as a journey with nature in which we both learn together about not only each other but also ourselves, is one of the touchstones of the wild pedagogies as argued by Morse et al. (2018) which acknowledges that the learning about the other-than-human world occurs with, within, from and through the other-than-human world. Finally, in keeping with Indigenous education practice, the land itself is the pedagogy and any education about the otherthan-human world must come through the land (Simpson, 2014). We must therefore develop our own deep sense of connection with the natural world both for ourselves and the inhabitants of the other-than-human we share this planet with.

A deep sense of connection with the natural world is important from many perspectives. From the personal perspective, it is important to recognize that, as stated by Robin Wall Kimmerer, the "whole world is alive" (as cited in Hynes, 2020, para. 8). Further in the interview, Kimmerer recounts a story of her cutting flowers for her house, she first tells the flowers how beautiful they are and how grateful she is that they are growing there before asking them if she can cut them to add beauty to her house. If they say "yes", she does; if they say "no", she moves on. From the societal perspective, a deep connection to the natural world is an important way for members of society to develop a strong pro-environmental stance that leads to positive change actions in protecting the environment (Charles et al., 2018). Finally, there is a glimmer of hope in Nova Scotia for future generations with a pilot project for grade 12 students, utilizing two Mi'kmaw concepts of two-eyed seeing (*Etuaptmumk*) and the seeing of all living things as being connected (*Netukulimk*), where outdoor activities are woven into the course. With future generations hopefully enlightened, I will turn my attention to the current generation in an attempt to find ways to help deepen our sense of connection within the natural world.

Research Questions, Objectives and Purpose

There have been many ideas explored over the years about our connection with nature and its importance and with this study I hope to coalesce some of these into an approach to further this work. In this study I will explore a deeper personal connection with nature and then use these experiences to develop methods, in cooperation with the Ecology Action Centre (an environmental NGO in Nova Scotia who are known for "...taking leadership on critical issues from biodiversity to climate change to environmental justice" (Ecology Action Centre, 2020)), to educate adults in Nova Scotia towards a deeper personal relationship with nature. To guide and frame my research, I will be exploring two research questions:

RQ1 – What are my own experiences in finding a deeper connection with nature?*RQ2* – How might we facilitate this kind of connection for others?

As such, the purpose of this qualitative study is to use an arts-influenced phenomenological approach to explore a deeper connection with nature and then use these experiences to develop methods to educate others to deepen their own sense of connection with and within nature.

Literature Review

The literature surrounding the question of connecting with nature is deep, rich, and varied. Following a review of available works, focusing primarily on peer-reviewed articles from the past ten years, four general themes emerged: the personal benefits of connecting with nature, the benefits to society when people connect deeper with nature, the barriers that prevent or reduce people's ability to connect with nature, and methods people have used to develop a deeper connection with nature. It should be noted that many of the articles touched on two or more of the themes found, but generally focused more on one theme than the others.

Personal Benefits of Connecting with Nature

The literature is clear that the benefits to one's physical health are often expressed as a reason people want to *get outside*. In their study of users at two botanical gardens / urban parks in Malaysia, Razak et al. (2016) noted that the most common reason people gave for using the parks was for *recreation and exercise*, with *stress relief and relaxation* and *because they are beautiful* following as other reasons. In their study of community woodlot users in Scotland, Logan et al. (2021) noted that *physical well-being* was the common reason for visiting their community woodlot, enhanced by the lockdowns during the COVID-19 pandemic that prevented travelling far. They went on to comment that other, lesser reasons expressed were to enhance their mental well-being and to *connect with nature*. In their studies, both Razak et al. and Logan et al. show that people regularly visit natural settings, both urban and rural, to help maintain their physical well-being as a significant reason for being outside in nature but were unclear as to how this can deepen any connection. In addition to the literature on the feelings expressed of physical benefits of connecting with nature, Edwards (2018) argued, in a limited study of one patient with

respiratory illnesses, that their condition improved when they followed a programme of a combination of slow and brisk walks in a forest.

Beyond the surface of physical benefits, articles have also shown that people seek a connection with the natural world to help aid their mental health and well-being. In their review of the benefits of connecting with nature, Capaldi et al. (2015) discussed the benefits to mental health within two aspects, *hedonic well-being* (associated with pleasure and enjoyment), and *eudaimonic well-being* (associated with meaning and purpose). Within hedonic well-being, they argued that even brief contact with nature boosts one's mood and that people are happier in a natural environment than in an urban one. They go on to argue that long-term contact can increase emotional functioning and reduce mental distress. Within eudaimonic well-being, they argue that a connection with nature increases both a feeling that life has meaning and a sense of autonomy. Finally, they provide examples of programmes for adults to increase their connection with nature, from The David Suzuki Foundation's *30 X 30 Nature Challenge* (spend 30 minutes per day in nature during May) to the Canadian Mental Health Association's *Mood Walks* to increase physical activity, mental health, and social connection.

In White's (2012) review of his methods to enhance a connection with nature, he noted that the participants reported the immersive experience led to a sense of peace, calmness, and love and that the effect can unlock joyful times from the past. In their review of *human-nature connectedness*, Ives et al. (2018) noted that this connection is multifaceted, consisting of material, experiential, cognitive, emotional, and philosophical connections. In looking at the practice of Forest Therapy, Rosa et al. (2020) in their meta-analysis found that the practice is linked to a decrease in depressive symptoms among participants, however, the effects are only short-term. Similarly, Rajoo et al. (2020) in their study of female middle-aged participants in

Malaysia reported that they felt rejuvenated at work following a session of Forest Therapy and that they experienced lower blood pressure for three days afterwards. These studies all argue that connecting with nature increase both happiness and general well-being as well as both mental and physical health and has been used as a treatment for anxiety and depression as a *dose of nature* prescription. While people often first identify the physical benefits of connecting with nature, and these are important, the mental health and general happiness benefits can often run deeper and may be unseen by people experiencing them.

The final leg is the triad of personal benefits of connecting with nature is that of enhancing one's spiritual self through a deeper connection with nature. In his "four domains model" of spiritual well-being, Fisher (2011) argues from a secular humanist perspective that humans are spiritual beings that have four domains of spiritual well-being: personal (relates to self), communal (relates to inter-personal), environmental (relates to connecting with nature), and transcendental (beyond the human level). Within the environmental domain, he posits that people report a sense of awe and wonder with the natural world and express the value of nature and creation. In his review of deep ecology from the Hindu-based belief that "one's self is part of the world's environmental wholeness", Haigh (2006) argues that there are three steps to ecological self-realization, a concept he refers to as self-renationalization: self scape (within your personal boundary), social scape (includes your social interactions), and earth scape (within a global system). He goes on to argue that this process of finding self-realization within deep ecology is based on Vaisnava within the Hindu faith whereby followers "strive to reconnect their self with the supreme Self and thus return to Godhead" (p. 47). By extrapolating from her Christian faith, Loorz's (2021) autoethnographic work explores her experience of establishing the Church of the Wild or Wild Church, a work in which she takes an animistic perspective to

consider how the natural world is an "alluring invitation into the sacred". She argues that the church she helped to found was the Church *of* the Wild rather than *in* the wild. In telling her story, she recounts a time when, sitting, leaning against an oak tree, she heard a voice saying, *draw me*. First thinking it was God, she then realized it was the tree inviting her to connect with it. Regardless of one's religious convictions, or lack thereof, the literature offers varying viewpoints on how connecting with nature can help us to develop a personal connection with a higher entity or something larger through nature as a co-teacher of the spiritual.

These three facets of the personal benefits of connecting with nature form a continuum of a deep connection with the natural world. Within the literature studied, there is little indication that, while being exposed to nature increases one's physical health, the exposure fostered a deeper connection with the natural world. However, being in the natural world is a draw for people to engage in physical activities that provides them with increased physical health. The personal benefits of connecting with nature on our mental health begin to show a deeper connection with the natural world with people reporting a sense of peace and calm and a decrease in depression when being in the natural world (White, 2012 and Rosa et al., 2020). The personal benefits of connecting with nature in one's spiritual sense affords an increased and deeper connection within the natural world, when, as argued by Fisher (2011) people report feeling a sense of awe and wonder with the natural world. The feeling of seeing, at least in one's mind's eye, or sensing the presence of spirits or higher beings when within the other than human world leads to a connection beyond physical or mental inward needs, towards a deeper connection with and within the natural world that forms the basis of the relationship I am seeking with the rest of the natural world.

Societal Benefits of Connecting with Nature

When a person connects with nature, it not only benefits them but has benefits for the wider society in how they use the effects of this connection within their interactions with each other. In their study of ecological embeddedness and its implications for public health, Lewis and Townsend (2015) argue that a deep eco-connection can, especially when started in childhood, be often associated with pro-environmental attitudes later in life that leads to a move from an ego*centric self* to an *eco-centric self* that fights for nature. Similarly, a study of university students by Zelenski et al. (2015) where they were shown images of either nature or urban scenes and then engaged in a game to assess cooperation found that those who viewed positive images of nature demonstrated more cooperative behaviours. Even though these are only instances of a virtual exposure, they speak to the potential positive societal effect of connecting with nature. Along the same line, the study by Williams and Chawla (2016) of former participants of a nature-based programme in Colorado found that they formed an eco-identity from a direct connection with nature that led to an increase in their sense of the importance of the natural world and that they identified with the world of environmental action. Finally, the study by Merenlender et al. (2016) of past participants of naturalist programmes in Virginia and California indicated that, while many had pre-existing pro-environmental attitudes, the programmes deepened this attitude and they felt that such citizen science programmes served as a link between formal science and environmental action. As it has been shown, connecting with nature benefits society by either developing or deepening pro-environmental attitudes that may lead to an increase in cooperative behaviour and environmental action. This driver of a deepening proenvironmental viewpoint is a key outcome, for me, of a programme that helps people to foster

their own deep connection with nature; so more people will be moved through an empathetic and reciprocal relationship with nature to work to protect it from us.

Barriers to Connecting with Nature

While many people have access to natural areas, others face barriers that limit or prevent them from connecting with nature. In their study of users and providers/managers of urban natural areas around Manchester, UK, de Bell et al. (2018) noted that users remarked that natural areas should be accessible and not be *fenced off*. They also expressed the view that they wanted areas that felt safe and not too wild and were managed with amenities. They looked for urban parks that have paths so that people using wheelchairs, walkers and strollers can access the park, playgrounds for the children, and amenities such as toilets. For the demographic of this study, they looked for natural areas that, while they had a form of nature, were largely cultured with amenities and other, more wild, areas of nature without amenities and easy access were seen as a barrier to connecting with the natural world. Other factors like aging affected people's access to gardens, Freeman et al. (2019) noted that people with access to green spaces, such as gardens, were healthier with fewer health problems. However, while older adults have more free time to be able to connect with nature through their garden, as they age, declines in their, or their partner's, health reduce their ability to be able to connect. Thus, the effects of aging becomes a barrier to being able to connect with nature, even in their own home garden. Finally, the study by Merenlender et al. (2016) discussed earlier also posited that barriers such as programme costs and time competition with other commitments, such as family and career, made participation difficult and likely prevented some people from attending. While connecting with the natural world in any form is beneficial, not everyone can connect as much as they would like, if at all. Barriers can be overcome such as paths for physical barriers, park facilities or home programmes

for age barriers, or examining cost and time commitments of programmes for life barriers, and these changes can help more people connect with nature. In developing my proposed programme, I must always be mindful of potential barriers and strive to minimize or eliminate them as much as possible.

Methods for Achieving a Deeper Connection with Nature

While getting people out in nature is a good first step in connecting with it, to fully connect would require an ability to find a deep connection beyond a superficial experience and there are a number of practices and approaches for connecting with nature. One such approach can be found in the phenomenological approach of the philosopher, author and naturalist Johann Wolfgang von Goethe who inspired a number of naturalists in their own work. Harding (2009) reviews and discusses James Lovelock's Gaia theory and offers his experiences while studying the muntjac deer. While collecting data on the habitat of the deer, he rested in the woods and felt they were *deliciously wild*. Leaning against a tree he looked up and felt like he became a part of the being of the woods. Harding's approach was based on those of Goethe in that focuses on studying the close details of the deer and imagining what the deer's life is like. Dean Robbins (2006) discussed the phenomenological approach to studying nature used by Goethe and described it as an *activity of disclosure*. As such, the practice is "participatory, morally responsive, and holistic" with a hope that "earth yields to us 'new organs of perception' to behold earth's latent sensibility" (p.10). Furthermore, Skaftnesmo (2009) argued that Goethe created a *hypothesis-free method* by merging two cornerstones of the scientific process, the theoretical level of scientific theory to explain a phenomenon with the empirical level of the use of the phenomenon itself as well as facts to verify the theory. Finally, Simms (2005) posited that Goethe mistrusted the mathematization of the natural world and that the observer must be free

from the *sedimented cultural paradigm* in practice at the time. Goethe moved beyond the clinical descriptions and sketches common in science, although he did produce to highly detailed examples, to using one's imagination to see beyond the observed and into the life imagined. He used his approach to create a close and deep connection with the plants he was studying and could envision them from seed to flower and back to seed. Goethe's approach has been adopted and used by many students of the natural world from Stephen Harding to Henry David Thoreau. In her review of Thoreau's journal as well as his *Walden*, Root (2005) discussed how he used Goethe-like methods to experience nature and liked to walk at night so that the small objects, highly visible during the day, would become blurred and thus the other aspects of the landscape (the fog, mist, light, wind and so on) would become primary:

Every little pine needle expanded and swelled with sympathy and befriended me. I was so distinctly made aware of the presence of something kindred to me, even in scenes which we are accustomed to call wild and dreary, and also that the nearest of blood to me and humanist was not a person nor a villager, that I thought no place could ever be strange to me again. (Thoreau, 2022, p. 131)

In this way, the Goethean method adjusts one's normal point of view on the natural world to an alternate one that can provide a unique perspective. This Goethean approach to studying the details of the natural phenomena and then, using one's mind's eye, perceive the life, past, present and future of it, as a way of developing a deeper sense of connection with it.

However, Goethe is not the only approach to studying nature to develop a deep connection with it. White (2012) developed a process to create an eco-consciousness he referred to as *Mindful Affective Perception in Nature* (MAPIN) in which the participants followed a process involving place familiarization, meditation, sound mapping, connecting with the senses of hearing, sight and touch, and then reflection to deepen the connection. Before using this process on others, White (2011) tried his proposed process on himself and found that it created a *heightened eco-consciousness* (HEC) and this enhanced the human-nature connectedness. Within his approach and use of all one's senses, I am reminded of Muir's (2006) account of being in a windstorm in the mountains and his description of the sound of the wind and trees moving and creaking, the feeling of the wind on him, sense of motion as climbed one to the trees to get a sense of the storm and the sight of the trees around him moving in different directions.

In addition to the approaches of both Goethe and White, the practice of Forest Therapy, also called Forest Bathing or *Shinrin-Yoku*, is a public health practice that began in Japan to help reduce various aliments, including cancer, by following a programme of activities in a forest to enhance a connection and improve both physical and mental health. There are a variety of forms of practice, but typically include the triad of mind, body and soul (Felber, 2019). Within *mind*, she focuses on mindfulness and sensory experiences and sees "the forest as a power source" due to the interaction with the "aromatic, terpene-rich atmosphere between the trees" (p. 393). For this triad, she posits activities such as a *path of the senses* (a slow deliberate walk, paying attention to both your steps and various senses you experience the forest with). Within *body*, she focuses on breathing and meditation with both *active meditation* (a combination of breathing and gentle physical exercise) and *passive meditation* (sitting or lying focusing on purposeful breathing). Lastly, within *soul*, she focuses on conducting forest rituals, such as building a mandala or making an offering of thanksgiving.

Finally, not all methods to connect with nature need a structured self-exploratory journey. As discussed by Pitt (2018) gardening, and in her case community garden plots, can, in some cases, help to enhance a connection with nature. Although the results were mixed, she did find that some felt a connection with nature that influenced their gardening practices, such as not using slug bait for fear of increasing toxins in the environment and not using peat moss in their gardens to help protect the ecologically sensitive peat fields.

Summary

People seek a connection with nature for a number of personal benefits; from a desire to increase their physical health through activities in nature, to maintaining better mental health by spending time in nature, to finding a spiritual connection with and within the natural world. Beyond these personal benefits, society also benefits by deepening eco-centric attitudes and a greater desire for cooperation. However, despite the benefits of connecting with nature, both personal and societal, for some, barriers, from physical, to financial, to social, impact their ability to be able to connect with nature and thus must be examined in any programme design. A number of methods to achieving a deep connection with nature have been developed, all with merit. From Goethe's phenomenological approach through the close and detailed examination of plants that influenced writers such as Thoreau, to White's emphasis of using all the senses to explore the natural world, to the immersive practice of forest therapy to take in the essence of the natural world. To develop a deep connection, one based on a relationship of reciprocity, will rely on a combination of all three. One that focuses on the small details of the natural world, examines the interaction with this world through all senses in a full and deliberate immersive way. This multifaceted approach forms the foundation of my intended study in looking to foster a deeper connection with the rest of the natural world.

Methodology

This project will use an art-influenced, self-reflexive phenomenological approach to developing nature connection. It encourages the study of phenomena through both self-reflective

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journaling of the personal experience with the phenomenon and visual recording, through photography, the object of the connection. As posited by Merleau-Ponty and Bannan (1956) in their seminal work on phenomenology, the researcher is both the source and sense-maker of their own experiential data—"I am the absolute source" (p. 60). My selection of a phenomenological approach speaks to my choice to conduct an exploration of my own experiences. Further, the choice of phenomenology to explore what, for some would be an ordinary everyday experience in nature can be summed up by Gorichanaz (2017) who said that phenomenology can show that ordinary experiences bring a sense of wonder. For many people who walk or run in a park or along a nature trail, the other-than-human world around them becomes a part of their ordinary experience, but how many stop to notice to small details of this world? By first examining what I am experiencing when I am connecting with nature and taking note of how I am enhancing this connection, I hope to able to use these experiences to guide other adults to foster their own deep connection with nature, something beyond the passing ordinary experience of their routine activities.

My proposed research approach and procedures will be modelled on Goethian phenomenology, White's MAPIN model and elements from the practice of forest therapy. From using Goethe's approach, with its slow and deliberate deep study of a phenomenon with the imagination of its life, to White's MAPIN approach with its broad focus using many senses, to the use of meditation, breathing and rituals from forest therapy, the important outcome should be a deep and rich connection within the natural world for both personal and societal benefits. My intent is to use elements of these approaches to form a foundation to explore different methods that may be used to foster a deeper connection within me to the natural world. Through trial and error, I will practice different techniques from these approaches as well as developing some of my own approaches. The end goal will be to, building these past works, develop a programme with activities for adults to use to develop their own deeper connection with the natural world.

As discussed in the literature review, there are a number of ways of conducting a deep explorative connection with nature, in particular the methods of Goethe as well as White's (2012) MAPIN approach as well as elements from the practice of forest therapy. As I noted in the introduction, this path to exploring the natural world first began when, during one of my courses, I had an experience with a soil profile during a field study that led me to see them as a "soil family" with children, parents, grandparents, and friends all sitting around me. As argued by Dean Robbins (2006), Goethe's phenomenological approach to observing nature involved a slow and deep exploration. Much like Thoreau used with his "first-hand study of nature", as discussed by Root (2005, p. 236), I intend for my field study to connect with the natural world so that nature can tell its own story. Goethe's approach to studying the phenomena of nature, in his case flowering plants, focused mainly on the sense of sight to observe followed by the use of one's *mind's eye* to imagine the life of the plant, a deep connection with the natural world should involve, as much as possible, all the senses to get the full connection rather than just an observer.

Not wishing to limit my exploration to one approach and in looking for methods that explore the use of many senses, I would also use elements from the MAPIN approach of White (2012) to allow other senses, such as hearing, touch and smell, to be used in my study. Additionally, I will examine some of the practices from forest therapy, such as meditation and breathing exercises, slow and deliberate sensory walks and rituals, such as building mandalas, to inform my study. As such, I intend for my approach to connecting with the natural world that I will try during the data gathering will be a combination of the three approaches into a new approach of my own emergent design.

My study will involve the more traditional use of self-reflective journals and field notes of my experiences; what am I connecting with, what are my experiences across many senses and how am I achieving a deeper connection; as well as the use of photographs taken by me of what I am connecting with. As posited by Knowles and Cole (2012), in their work on Arts-Influenced Research, the use of photographs taken with an artistic and aesthetic eye would involve an infusion of artistic process and form into the production of knowledge. In particular, I would focus on the use of the *form as medium* to present the idea of connecting with nature and the form as communication to later help with the presentation of the ideas to others. By noting and photographing what and how I am connecting with phenomena in the natural world that might otherwise be missed and passed off as ordinary, I hope to show that, on close examination, they become extraordinary. Much like a photographer uses different lenses, I see Goethe's approach of focusing on close details not unlike using a macro lens to capture images such as a flower on the forest floor or a slug on a mushroom, while White's (2012) MAPIN approach, being more expansive, would be like using a wide-angle lens to show the expanse of the natural world, while the techniques from forest therapy use a blend of both macro and wide-angle perspectives.

Data Gathering

The data will be gathered by two connected and concurrent methods. Firstly, as used by Mikaels and Asfeldt (2017) when they had their students record their experiences in a reflective journal during a rafting trip, I will be keeping a reflective journal. This journal will be used to capture my experiences connecting with nature and will focus on what I am connecting with, my feelings and emotions while connecting, the method(s) I am using with each connection, and whether it was effective at providing a deep connection or, as White (2011) calls it, a heightened eco-consciousness. Ultimately, what I am looking for is what activities fostered a relationship,

and thus a connection, with the other-than-human world around me. It is, however, recognized that it may not be easy or clear to define how this connection will manifest itself other than to explain it as similar to how one feels when one enters into any other deep and personal relationship.

Secondly, I will take photographs of beings I am connecting with and record information about what was photographed. As posited by Weber (2012), I would be the researcher taking new photographs that represent the idea of connecting with nature. Additionally, as discussed by Emmison et al. (2014), this would be similar to the *participant-centred approach*, except that I would be both the participant and the researcher. This arts-influenced method was used by SeppÄNen and VÄLiverronen (2003) who argued they used photographs as a "sign or symbol of what the idea represents", which, in my case, entails connecting with nature. They further posited that taking photographs was similar to taking a specimen from nature. Finally, Thomsen (2015) argued that the taking of photographs can provoke a reflexive self-inquiry that can develop an emotional connection with the subject of the study. Both of these methods, the written and the visual are linked in that they each can be used to both describe the object of connection and show your emotional connection you feel in your relationship with it. While one might argue that each method of observation can, in one sense, encourage a distancing, clinical approach, I believe that it can foster a closeness by an emphasis on a close study of the phenomena you are building a deep connection with. Through a combination of observing the surroundings, using a variety of senses, and then reflecting on their significance to both me and our relationship, I am hopeful that this will provide insight into the relationship I am exploring.

The field data was gathered during 15 weekly or semi-weekly field studies along trails in areas around my home in Fall River, Nova Scotia between October and December 2022. On each

trip, I visited a different location along the trails in Oakfield Provincial Park (Oakfield, NS), MacDonald Park (Waverley, NS), Shubbie / Portobello Connector Trail (Waverley, NS), Lake William Trail (Waverley, NS) and Sandy Lake Park (Bedford, NS). As such, the specific sites were not the same throughout and I travelled along the trail until a site "spoke to me" and invited me to sit down with it. Each data-gathering session lasted approximately one hour. This approach is based on the work of Haskell (2013), except that he visited the same m² area during his yearlong study of a forest area. In his work, he offered two pieces of advice that guide me leave behind your expectations and hope for an "enthusiastic openness of the senses" (p. 245), and to return your mind's attention to the present when connecting.

Data Analysis

My overall approach to the analysis of the data is heavily grounded in inductive thematic analysis. As with the data gathering, the journal/field notes and photographs will be analyzed separately to discern any emergent themes with them. These will then be merged to discover any common themes that ran through both the journal/field notes and photographs. For the selfreflective journal/field notes, the handwritten words in my field journal will be analyzed using inductive coding to find common emergent themes of how I developed a connection with the natural world.

The photographs will then be reviewed to identify ones that best reflect the powerful and deep connection with the natural world I experienced and captures my relationship with the object in the photograph. The chosen photographs will then be analyzed to determine what they are trying to tell us about connecting with nature, and what is the emotion or feeling it invokes about the connection with nature. Lastly, as with the coded text, the photographs will be grouped into emergent themes to reveal what, as a collection, they tell us about the feeling of connecting

with nature. I will look to see if the photographs can be classified along two axes similar to the methodology discussed by Emmison et al. (2014) with the axes being discerned during the analysis of the emergent themes.

From these emergent themes of what and how I was fostering a deeper connection with the natural world will form the foundation of the programme for adults on how they can also achieve their own deeper connection. Additionally, some of the photographs taken will be used in the programme materials to spark their interest in their own journey to foster a deep connection with the natural world.

Trustworthiness, Credibility and Dependability

Since the results are of my experiences and are written by me, they are, in keeping with a self-reflexive phenomenological study, true reflections of those experiences, as long as they truly and accurately reflect them. However, do they compare with the experiences of others? To answer this question, my experiences will be compared with the current literature to confirm if they are similar. It must be stated that, because of the subjective nature of this kind of inquiry, the results will not be the same but may be similar in the type of experiences had when connecting with nature. In comparing my experiences I can foresee two possible outcomes, either the experiences will be similar to those reported in some of the literature or will be different. In this case, it may not be indicative of flawed results but may, rather, be a newly discovered avenue of experience that has yet to be reported. In that case, further exploration would be required to confirm their transferability.

As I am both the researcher and the researched, it is possible that pre-conceived ideas of connecting with nature may influence how I report and analyze my experiences. During the entire MRP, I will have to remain conscious of this potential bias and must try to approach the

data with an innocent and open mind. In an attempt to minimize the potential bias as much as I can, I will collect the data first without reviewing it and then analyze it in a separate phase so as to, hopefully, minimize the potential effects of an early review on the integrity of collecting. In keeping with the argument by Gorichanaz et al., (2018), when referencing the work of Husserl, my research would be using the lifeworld to reconstruct the connections rather than the scienceworld approach of first conceptualizing and theorizing the phenomena before investigating it.

Ethics

This project is broken down into two main parts, the first of which involves the collection and analysis of my experiences fostering a deeper connection with nature. As this part of the project involves only myself collecting data of my own experiences, I cannot, at his time, foresee any potential ethical issues from this part.

The second part of the project involves the design, testing and release of a self-directed programme, intended for adults, to provide them with guidance on fostering their own deeper connection with nature. As with the first part, I do not see potential ethical issues with the design or release of the output, however, the testing of the proposed self-guided programme would involve the solicitation and analysis of feedback from a trial audience. To protect the participants, all of whom will be either staff or volunteers of the Ecology Action Centre, I will be drafting a Request for an Ethical Review with the following proposed ethical safeguards:

- All participants will be over the age of 18,
- All participants will be volunteers,

- All participants will be presented with a statement discussing the purpose of the research project, their role in participating in the research, and the purpose and use of the final self-directed programme,
- The feedback sheets will be returned directly to me and will not shared with any other party, and
- Their input will be anonymous and no personally identifying information will be included in either the final research project report or the self-directed programme.

Limitations and Delimitations

As discussed above, this study is from a single point of view, mine, and, therefore, may be seen as limiting the validity. However, I believe that the key point of this study is to explore my experiences, grounded in theory and other studies, and then to use these experiences to develop a guide to help others foster their own deep connection with nature based on a relationship of reciprocity.

The primary delimitation in this project is that of time, principally the time available to collect the data being practically limited to a three-month period. It would be interesting to see this data collection conducted over a longer period of time, as was done by Haskell (2013) during his yearlong study. The choice to change the site with each visit based on finding one that "speaks to me" allows the research to cover data over space and harkens back to my geographical roots of studying phenomena over space, but also empowers the natural world to have agency in this research by helping me find spots that have a story to tell me.

Output

The planned core output of this product will be a self-directed programme to help adults in Nova Scotia and elsewhere develop a deep connection within the natural world. While both a self-directed programme and group guided programme would work in covering the proposed techniques, my preference is towards to the self-directed programme as it affords participants the ability for deep self-reflection about their connection. This is confirmed by the study by Kim & Shin (2021), who when studying a number of forest therapy programmes found that while participants in guided forest therapy programmes reported "positive emotional changes" (p. 12) and that the programmes promoted social bonds, self-guided forestry programmes provided an opportunity for self-reflection and for participants to focus on their inner self. It is planned that this programme will likely be a mixture of a Goethean approach, elements from both MAPIN and forest therapy, and techniques that I discovered during my visits within the natural world in the data collection phase. The planned programme will be designed to be self-administered however, it could also be later adapted to serve as an outline for a group event. Once developed in draft, the product will be trialled with up to five members of the Ecology Action Centre (EAC) in Halifax for their feedback and suggestions for improvement before being released. The intent of the proposed programme will not provide a cookie-cutter programme for participants to follow in sequence, but to provide a guide with different techniques for them to choose from that will encourage them to walk with, and just in, nature and to allow, as argued by both Morse et al. (2018) and Simpson (2014), nature to be their *co-teacher* or *co-learner* as I prefer in a relationship based on reciprocity.

The programme will be detailed in two separate but related formats. Firstly, it will be provided in the form of a written illustrated guide with the various methods one can use to foster their own deep connection with nature. The other will be in the form of a video to both explain and demonstrate the different techniques I found to be useful for me in achieving a deeper connection with the natural world during my information gathering in the field. The plan is to release the programme to the EAC for their use and for them to share with other groups and environmental NGOs. Additionally, the products will be placed on a website being developed by me (www.connectwithnature.ca) that is currently being built. Based on this programme, following graduation, I also intend to refine and offer it to environmental and community groups to use with their own or community members. Lastly, in the fullness of time, I intend to expand this work into a book that, hopefully, will get published, to help adults develop a deeper connection within the natural world.

Conclusion

I see our own connection with and within the natural world as being in keeping with that of the forest ecosystem with its complex and interconnected network. Wohlleben (2015) posits that forests are a social network, sharing their nutrients, especially with struggling organisms, and effectively communicating amongst each other. In her work, Simard (2021) argues that forests are cooperative creatures connected through an underground network that have agency over their own future. Finally, Sheldrake (2020) comments on the life of fungi in that the mushrooms you see are "just the fruit" and that they are a part of a network support system sustaining other living systems. With a fresh perspective on the interconnectedness of our forest ecosystems, it is, therefore, important to enter within their world with respect and reverence if one is to develop the deep connection with nature we are trying to achieve.

Henry Thoreau (2022) summarized best how I perceive our relationship with the whole of nature as:

The earth is not a mere fragment of dead history, stratum upon stratum like leaves of a book, to be studied by geologists and antiquaries chiefly, but living poetry like the leaves of a tree, which precede flowers and fruit - not a fossil earth, but a living earth; compared

with whose great central life all animal and vegetable life is merely parasitic. (p. 307-308)

We are, however, beginning to recognize the importance of developing a deeper connection with nature, not just for the natural world but also for our own well-being. CBC News (2022) reported how doctors in BC are now writing prescriptions for Parks Canada Discovery Passes and recommending at least two hours per week connecting with nature for 20 minutes or more per session. Recently, this has also expanded into the Maritimes (Smith, 2022). For the CBC radio show "White Coat – Black Art", Zafar (2021) interviewed a member of a conservation group in Halifax who commented that being outside was therapeutic and that she often used it to offset feelings of eco-anxiety. In interviewing a counsellor from Dartmouth, she commented that "Getting out in nature – to hear, smell and feel everything it offers – also commands our five senses in a way built environments don't".

A deep connection with nature is vital, I believe, if we are to undergo the systemic change necessary to protect the natural world from ourselves. With this arts-influenced selfreflexive phenomenological study, I hope to explore and examine my own experiences connecting within the natural world in two planes. Firstly, the self-reflexive study will help me to better understand the significance of these experiences and how I can develop a deeper connection within the natural world so that I can live more harmoniously within it. Secondly, it will assist me to create a programme that will help others to develop their own deep connection within the natural world that will, hopefully, lead to them to develop strong (or stronger) proenvironmental attitudes that will drive the systemic change we need to help defend Gaia.

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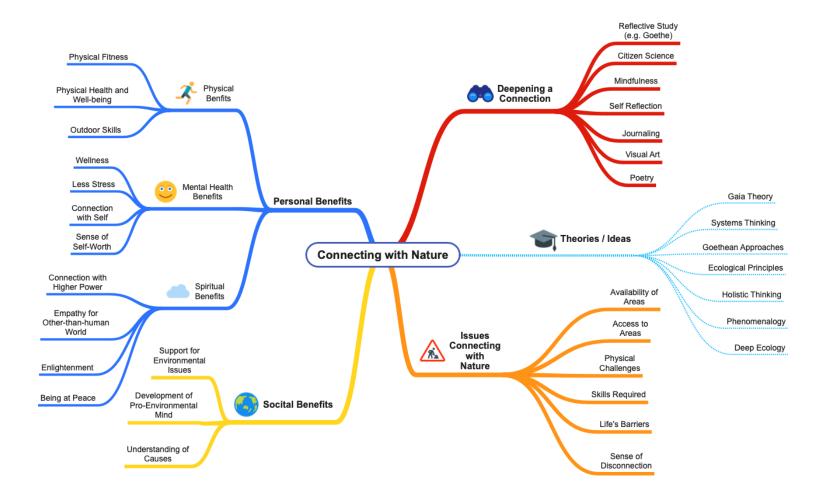
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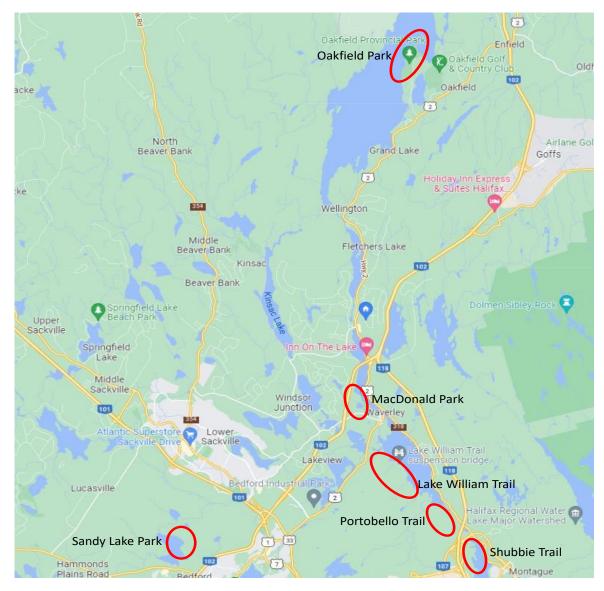
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Appendix 2 - Planned Areas of Data Collection



Month	Activity
April 2022	Draft Research Proposal
May 2022	Research Application
October to December 2022	Conduct Field Data Gathering
November 2022 to January 2023	Revise the Research Proposal
December 2022 to January 2023	Revise the Literature Review
30 January 2023	Submit MRP Proposal
January to February 2023	Draft the Ethics Review Proposal
27 February 2023	Submit Ethics Proposal
January to March 2023	Analyze the Field Data
March to May 2023	Develop the Draft Self-Directed Programme
March 2023	Draft Letter of Agreement with Ecology Action Centre
	(EAC)
4 April 2023	Submit Letter of Agreement to EAC
29 May 2023	Provide Draft Self-Directed Programme to EAC
	Members for Review
June 2023	EAC Members Test Self-Directed Programme and
	Provide Feedback
June to July 2023	Review Feedback and Revise the Self-Directed
	Programme as Required
April to August 2023	Draft MRP Report
14 August 2023	Submit MRP Report and Self-Directed Programme
July to August 2023	Revise Website
August to September 2023	Revise MRP as Required
September to October 2023	Develop Presentation for EAC / Wilderness Issues
	Committee (WIC)
19 October 2023	Deliver Presentation to EAC / WIC

Appendix 3 - Proposed Macro Timeline