ENVELOPED BY OCEAN LIFE:
EXPERIENCES OF SCUBA DIVING

by

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A thesis submitted in conformity with the requirements
for the degree of Doctor of Philosophy
Department of Curriculum, Teaching and Learning
Collaborative Degree in Environmental Studies
Ontario Institute for Studies in Education and the Centre for Environment of the
University of Toronto

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Abstract

This arts-informed, phenomenological, and heuristic inquiry focuses on what it means to immerse deeply into experiences within the natural world. Through attention and reflection on emotional and somatic aspects of my own ocean SCUBA diving experiences, and those of beginner and practiced divers, a method and the significance of learning through personal experiences and others’ shared stories is illuminated.

Readers are invited to imagine or revisit what it is like to be enveloped by ocean life through an artful narrative account of the ocean diving experience. Crafted in meandering ways, through the aesthetics of photographic images, divers’ evocative descriptions and poetic text, and interspersed with remembrances and imaginations and contemplations of self and world, the narrative reflects the diversity, richness and resonance of divers’ shared stories, and the reverberating and nurturing beauty and mystery of the ocean world. Through five narrative sections that embody a sense of movement deeper into the experience – into relations with the natural world, (‘Immersing’ ‘Opening Pathways of Exploration’, ‘Widening Circles of Compassion’, ‘Nature Reveals Her Open Secret’ and ‘Surfacing’), I encourage readers to wander amongst ocean life to expand ways of experiencing the natural world.
It is important to look for new, creative ways that allow space for explorations of self and world, to uncover new ways to reconcile both the mind-body connection as well as the human-nature connection. This inquiry brings the notion of connectedness with nature to the forefront as humans’ alienation from the natural world is recognized as a significant contributor to the present ecological crisis. The exploration of ocean experiences was also a search for ways to encourage and sustain a lifelong inquiry into the relations with the non-human world as a way to continually build and reinforce a strong bond with the natural world for psychological, social and ecological wellbeing. The immersive nature of research methods and representation illuminated how ocean life and artful expressions of remembrances and imaginations build lasting impressions, further adding vitality to what is perceived in both aquatic and terrestrial worlds – enhancing a sense of connectedness with the natural world.
Dedication

To Mila,

Who continuously taught me about love and connectedness.

Thank you for all the meanderings.
Acknowledgements

Thank you to participants and other fellow SCUBA divers who enthusiastically shared their stories – for showing me more of the magical ocean world. Thank you to all the artists (listed on p. viii) for inspiring me with your images.

Thank you to my committee members: my thesis supervisor, Dr. J. Gary Knowles, whose patient and calm guidance and enduring support was exactly what I needed to remain committed to completing this exploration. I am also very grateful to Dr. Ardra Cole for introducing me to arts-informed, phenomenological, and heuristic research and for showing me early on in this thesis journey wonderful examples of dissertations that have broken the boundaries of a traditional form. Dr. Jack Miller’s emphasis on the importance of holistic learning and Gary and Ardra’s passion about the value and depth of arts-informed research has been inspirational and transformational for me. Thank you to all of you for further expanding this wonder-filled pathway of exploration – for creating a space for me to find a representational form that stayed true to my purpose.

I am very grateful to friends and family who supported and inspired me throughout the thesis journey. I cannot thank dancer and choreographer Sarah Chase enough for teaching me more about relational ways of knowing through her evocative performances – powerfully weaving storytelling with emotional-somatic movement – leaving lasting impressions. In my struggle to effectively relay to readers what I was discovering about the ocean dive experience your insights and advice were invaluable. Thank you to my partner, Steve McAdam, for creating the space for me to work and for always being so willing to patiently listen and sort through the challenges I came across during this process. Your intriguing stories about your research related to fish and the aquatic world inspired me to remain immersed in this ocean exploration. My mother, Chrystyna Chase, often shared ideas or information with me related to the significance of exploring experiences within the natural world. I have enjoyed and learned from our conversations and thank you for your enduring encouragement and interest. I appreciate very much how my family exposed me to the wonders of the natural world throughout my childhood. Finally, I want to express my gratefulness to seascapes and landscapes and the finned, shelled, winged, pawed, leaved, blooming beings, for filling my life with joy – especially my Irish Wolfhound-Shepherd friend Mila.
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Prologue

I became a certified ‘Open Water’ SCUBA\(^1\) diver in 1989; fifteen years later I delved deeply into the nature of ocean diving. This involved reflection on diving from the time I was certified, and stories of experiences collected from fellow divers through interviews, written descriptions, and other dive stories. I entered into ocean diving experiences through focused attention and reflection: moving with ocean currents; feeling ebbs-flows, pulls-pushes, expansions-contractions. My bodymind became attuned to myriads of rhythmic movements. I also delved into research and popular literature related to the ecological-holistic field of thought, specifically, the significance of exploring experiences in the natural world and the notion of developing a sense of connectedness.

In Part One, I present descriptions of the participants involved in this inquiry, including myself. I was fortunate to meet SCUBA divers who were enthusiastic about exploring and sharing their experiences in detail. They come from a variety of training backgrounds: commercial divers, dive instructors, dive masters, underwater photographers, and diving students taking a beginner course. Practiced and beginner divers, ranging in age from teenage to senior years, added to and enhanced my ways of perceiving the ocean world. They expanded my understanding of the range and the depth of my experiences. Some of my participants were youth between the ages of fifteen and eighteen and, I along with their dive instructors, were struck by their animated descriptions of diving and their enthusiastic participation in the project. Divers and the ocean world have left aquatic impressions that will forever stay with me – continuing to permeate my terrestrial life.

In Part Two, ‘Becoming Amphibious’, the experience of diving is recreated through an ocean dive narrative filled with writings, underwater photographs, found images, and my own graphic illustrations. As I immersed into ocean life I was enticed to create an artful narrative to uncover and more fully express what was becoming illuminated. The first five chapters (Immersing, Opening Pathways of Exploration, Widening Circles of Compassion, ‘Nature Reveals Her Open Secret’, and Surfacing), are a synthesis of my own experiences and those gathered from participants in this study and from diving literature. I invite you to enter into my

\(^1\) Self Contained Underwater Breathing Apparatus (SCUBA)
and fellow divers’ expressions of felt experience through memories, imaginations and discoveries. Amble through the ocean dive narrative as you would a vibrant garden – or the undersea world itself. Moving through the narrative, my hope is that you will immerse into ocean dive experiences in ways that will continue to linger with you.

Interwoven within this ocean dive narrative, are key ideas related to the ecological-holistic field of thought, and more information regarding the methods used to explore freely, and immerse deeply, into ocean diving (the methods used are phenomenological, heuristic and arts-informed research).

Then, in Part Three, ‘Expanding Self’, I elaborate on relevant literature, further examining important ideas related to this exploration. Chapter Six, ‘Fluid Qualities of Inquiry’, further describes my research processes and representation. Chapter Seven, ‘Lasting Impressions of Immersion’, explores the notion of developing an ‘ecological identity’ and significance of nurturing a strong sense of interconnectedness with the natural world – highlighting the need for encouraging sensory, relational ways of knowing.

In the Appendix you will find a short summary of: what led me to this inquiry; the inquiry focus; process and representation; and discoveries/ insights and future ideas.

The five ocean dive narrative chapters found in Part Two: ‘Becoming Amphibious’, are arranged in a way that reflects a sense of ebb and flow. These chapters are intended to be read in a book format as there is a relationship between the right and left pages that face each other. If you are able to view two pages at once, I recommend doing so (each chapter is formatted so that the even numbered page is intended to be viewed as the right hand side).
PART ONE

Sharing Ocean Diving Stories
I became a certified “Open Water” SCUBA diver in 1989 after training in the glacially-fed lakes of Jasper National Park, Alberta. Initially I did not feel comfortable underwater and I struggled to adjust to the cold water (especially without a dry suit). I initially thought that, maybe, diving was just not for me. That same year I enrolled into the Criminology program at the University of Alberta where my interest focused on ‘youth at risk’ and the importance of having a healthy self-identity. I worked as a student probation officer and I learned of the often traumatic past that youth on probation experienced, likely influencing their criminal involvement. I became interested in the effectiveness of ‘wilderness’ programs designed to help youth develop a more positive sense of self.

After I completed the Bachelor of Arts a backpacking trip abroad included a stop in Egypt where I encountered the magical world of the Red Sea. I was hooked. I decided I wanted to teach SCUBA diving and so I travelled to Australia to become a certified ‘Dive Master’, allowing me to be a dive instructor’s assistant. This experience quelled my desire to become an instructor. Dive trips with students felt rushed and I was often consumed with ensuring their safety. I realized how my love of diving necessitated feeling relaxed and having the ability to explore at my own pace. I left the diving industry, my diving frequency subsided, yet underwater experiences continue to permeate my thoughts.

In 1997 I commenced a Master’s degree in Environmental Studies program at York University, focusing on wildlife conservation issues. My research took me to Central America where I worked at wildlife rescue centres for wild animals, which were victims of the illegal wildlife trade. Time spent caring for these animals and watching the relentless destruction of forests through-out

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2 All diving certifications were acquired through the Professional Association of Dive Instructors (PADI). In total I have undertaken approximately 100 dives.
the world inspired me to look for ways to help protect wildlife. Later, still associated with a university, I decided to delve deeper into the nature of ocean diving to look for ways that may nurture a sense of interconnectedness with the natural world.

Through work in the dive industry I found that organized diving instruction and trips often do not encourage a reflexive inquiry into diving experiences. One of my hopes is that the process and representation of this inquiry will encourage dive operations to alter the manner in which they teach and undertake expeditions – to entice youth and adults (not only divers) to explore the underwater world and the terrestrial world, more deeply, to foster ecological and emotional health.

Participants’ Stories

My past and future ocean diving experiences become interwoven with the stories and experiences of fellow divers. Descriptions that resonated with my own experiences had an effect of heightening or reinforcing a particular aspect of the ocean dive experience. Through their descriptions I become more aware of the subtleties of ocean diving, and I discover new ways to view and feel the world.

In Part Three, I elaborate on the research design and describe phenomenological, heuristic and arts-informed methods of inquiry and how participants played a critical role in shaping this ocean dive narrative. Here I provide brief descriptions of participants.

I engaged in in-person interviews, focus group interviews and online correspondence with experienced and beginner divers over an eight-month period. Four participants, ranging in age from approximately twenty-five to sixty years took part in in-person interviews. Focus group interviews where held with a total of thirty-two beginner SCUBA diving students, aged fifteen to eighteen,
who were taking part in a two-week Open Water diving course. Three participants, ranging in age from fifteen to sixty, submitted their
dive experience descriptions through email³.

Jacob started diving when he was 18 years of age (1998) and “instantly loved this amazing three-dimensional world”. He
completed an Open Water course in Malawi where dive courses were inexpensive and well established. Continuing his interest in
photography he purchased a waterproof case for his camera. In 1999 he traveled to the island of Utila, Honduras where he achieved
dive instructor certification. At twenty-five years of age and instructor for two years, living on the West Coast of Canada, he expresses
enthusiasm for how teaching allows him to show this amazing ocean world to people, with the hope that they will develop a desire to
preserve it. He believes that an ethic of care for the ocean should stem from being a diver – “ok, now you are a diver and so take care
of the ocean”. He prefers taking students on boat dives so that they have an opportunity to see a diversity of aquatic species and
disapproves of dive operations that take students to places where not very much is seen – “this is not always the best way to get people
hooked on diving”. His passion for teaching comes from a desire to promote conservation. He stresses that the ocean’s richness “is
here now and so it must be preserved!”. Working with a conservation organization, Jacob’s attention is focused on ‘Eelgrass’ which is
a critical habitat for numerous underwater species (other critical ocean habitats include: mangroves and coral reefs in tropical zones,
and kelp beds and salt marshes in temperate zones (Orth et al., 2006, p. 988).

Gerry (56 years of age) describes how “life became complete” when he finally had a chance to spend plenty of time
underwater. He has been diving 38 years, and has been instructing since 1982. “For me diving was the glue that stuck all the parts of
my life together, or maybe kept it together.” He describes diving as “a flame that seemed to always be smoldering within me. With
every dive I made I was more and more at home in the water and I really lived my life like everything was surface interval waiting for
the next dive.” He now lives in Korea, after living all over the world, and cannot wait for his next dive:

³ Two of the online participants were also students of the two-week Open Water SCUBA diving course and therefore also participated in a group interview.
I am hooked up with a group to go diving for the first time in Korea next Sunday! I feel like a 10 year old kid that still believes in Santa the week before Christmas. I am as light as if someone told me I just won the lottery. This is what diving is for me, and what it means in my life…whenever there is a scheduled dive or even the possibility of one I am on a drug you can't get on any street corner or in any pharmacy…. I think therefore I am?…well, I dive therefore I am!.... It is so freeing and invigorating and life instilling that it cannot be described, it can only be experienced. I tell all students and more experienced divers alike, what I want most to share is the place where I am standing, not my vision from where I stand. You may see pink where I see blue but that isn’t important but getting your heart pumping and your mind reeling is…. Diving lets me be with people of like interest, even when I can’t speak their language or communicate properly. I feel at home and really do relax amongst these people. Sharing this common interest transcends national and political boundaries, so I’ll chalk this one up as my contribution to world peace.

Frank (in his fifties) received his diving certification in 1972, presently works as a Dive Master, and lives on the West Coast of Canada. He finds that the element of trust in diving creates strong bonds between divers – “diving brings me closer to people…I love the people part of it”. Working as a Dive Master sometimes “takes away from the Zen of it” as he must remain vigilant of all the divers under his supervision.

He sees diving as a “healthy escape”. Walking through a forest life’s problems often remain on his mind but when diving he is immersed in what he is experiencing, leaving no room to think of anything else. “On a bad day I can go back and dive the cloud sponges…these beings are really special…. [Diving] really stops time. It’s like a “cellular time”, where everything is dead still.” He wonders if diving allows a person to return to the sense of being in mother’s womb.

The Ottawa River is where he learned to swim as a kid:

I started swimming underwater before I started swimming on the surface. I pretended to be an otter. I identify most with the otter. I admire turtles…I don’t know why, maybe it is the somber and quiet turtle look. They have a
very human expression, like they are contemplating deep thoughts. Turtles are something special in ways I can’t describe. I ascribe wisdom to them.

Nicola (in her sixties) is passionate about exposing youth to the magic of the ocean world and so in 1998 she formed an outdoor environmental education organization.

Her dive training includes a commercial diving course in Monterey Bay, California. She describes how “overtraining was the primary theme of this nine month course – there was little time to appreciate the magic found in the ocean”. She described how an oceanography course transformed her experience of the ocean:

Every cell of my being was involved in the dive class. I learned about wave types, beach dynamics, wind effects…. I learned that the ocean was an unpredictable lady, she could spew up at any moment when she is in a snit. In my youth the ocean was a blob and then it became this animate creature. The relationship that I have developed with the ocean is of fear and utter admiration…. I have had more spiritual experiences underwater than I can count. I think it has to do with the aloneness I feel but also the connection…. Salt water is magical it refreshes me – I feel like I have been baptized. It’s like I’ve gone back to mom for a minute…. My attention was on my gear before and then all of the sudden I am on my own and experiencing this…. It’s like being in the desert. I hear my heart beat…. I am diving and all this richness of life is around me…all I have is my thoughts…not being able to speak underwater – I love that. There are few places where you can hear yourself…. Most of my being is water and most of our planet is water. Since it is my belief that we came from the ocean, I’m not surprised that we can feel so unified.

Simone (in her fifties) rarely dives for pleasure – diving is her work. She trained as a commercial diver in California. She is presently involved in Eelgrass restoration.
I see diving as a tool, an opportunity to give back – an opportunity that I would never give up. I’m trying to bring it [ocean life] back. They [aquatic beings] belong here and I don’t. I’m visiting – it is a privilege to be in their place. The diving is secondary – diving is just a means of being in the water.

Water is the quickest access to wilderness. I see it in a less contrived way…all the trappings of civilization – its comfortable but more removed. To go to a place that us less impacted – it hits a reset button in your psyche or biology. I think modern life is alienating.

SCUBA students between the ages of fifteen and eighteen years who were part of an Open Water course offered in the Southern Area of Vancouver Island relayed exuberant and often laughter-filled diving accounts. I, together with their dive instructors, was struck by their animated descriptions of diving and their enthusiastic participation. I realized that age and experience did not determine the detail or depth of descriptions and reflections. These young, beginner divers candidly expressed feelings related to their ocean diving experiences. They reminded me of all the thoughts and emotions that came with being exposed to the underwater world for first time. They often talked about the mysteriousness or unique nature of underwater experiences:

Sometimes I look up and think wow, this is *so* weird how am I still alive?

I was a little hesitant. It has to do with trust. I felt like Darth Vader.

In the water I can sense more – my senses become more alive and aware. I can’t hear anything…everything becomes more concentrated. I can think more clearly – I don’t have any distractions.

Knowing there is another world down there, that we can experience, makes me think about what we don’t know and if we look closely we will see.

Everything is more natural – it’s not as effected…you don’t have any manmade things obscuring what is natural.
A fish swam out of nowhere underneath me and startled me. There is always a possibility that something will jump out at you – usually all is stationary.

Since I was two (if not younger), I always loved being in the water. My mother would have sworn that I had gills or something. Though it sounds silly, I feel like I can find any answer in the water. Even if the answer is really somewhere else, things just seem to make more sense around water.

My time spent with the SCUBA students affirmed for me that creating the time and space for reflecting on and sharing experiences – a permission to voice their wonder – may spur a continued attentiveness to emotional and somatic aspects of experience. What is brought to a person’s attention through others’ stories or their own reflections opens up new ways of experiencing the natural world. I will elaborate further on the implications of this process of ‘ecological identity’ formation, that can create a greater sense of ‘connectedness’ in Part Three, Chapter Seven: ‘Lasting Impressions of Immersion’.

Within the ocean dive narrative (Part Two), participants’ ocean diving descriptions are distinguished by a Century Gothic font. In addition to having this font, beginner SCUBA students’ descriptions are identified in bold.
PART TWO

Becoming Amphibious
Amphibious: Having two lives, occupying two positions; connected with or combining two qualities.  
(OED, 2010)
Chapter One: Immersing
Those who dwell…among the beauties and mysteries of the earth are never alone or weary of life.
(Carson, 1956/1965, p. 88)
I get drawn into myself
I feel like I have just become part of the world down there.
Everything is quiet and peaceful.
And if I'm not looking at the other divers
I just feel like it’s me and this huge ocean all around me.
It’s really soothing.
It makes me feel more whole.⁴

⁴ Reminder: participants’ ocean diving descriptions are distinguished by a Century Gothic font. In addition to having this font, beginner SCUBA students’ descriptions are identified in bold.
When I was suspended in seawater, the difference between myself and the world around me was never as sharp as it was on the surface...hearing muffled, no smell, pressure of ocean on my skin limited the range of my tactile awareness. I felt the rapture of the deep – it was the rapture of belonging. This was, in some sense me, I was the ocean, and my body was nothing more than a particle within it.

(Harrigan, 1992, p. 91)
The awareness grows that something is terribly wrong with practices of European culture that have led both to human suffering and environmental disaster. Patterns of destruction which are neither random nor accidental have arisen from a consciousness that fragments existence. The problem is philosophical. Not the dry, seemingly irrelevant, obscure or academic subject known by the name of philosophy, but philosophy as a structure of the mind that shapes all our days, all our perceptions.

(Griffin, 1995, pp. 28-29)
Humans will be more inspired to take action to care for that with which we feel a strong emotional connection; what we learn to value intrinsically, feel compassion for and love (Berman, 1984; Kellert, 2005; Orr, 1993).

I love going where I have not been before – when those dives do happen I almost boil over with feelings. I feel like everything is in slow motion. I suppose because my mind is racing to take it all in. These are the moments I love the most, and sometimes it lasts the entire dive. I can still see the coral wall north of the Blue Hole of Dahab like it was yesterday. It is certainly engraved in my mind. I was the last in line. I wasn’t responsible for anyone but myself. I can see the octopus crawling along the wall oblivious to my presence, knowing that I wasn’t a threat to him, and that I belonged there as much as he did. I know that for some short period of time I am home where I belong, not a care in the world, ecstasy limited only by my gas supply.
The phenomenological method, like other qualitative research approaches, challenges the notion that there is ‘a truth’. Truth resides in the meaning that is made of experience. Therefore, there are multiple meanings or truths and multiple ways of knowing (Kvale, 1995, p. 21).
On the last dive, we were in a cave and the light was shimmering through a crack and hitting everything at weird angles. Everything was so beautiful! I just flipped over on my back and stared at the way the light was coming through. Also as we swam out of the cave the light was coming through the kelp. It was like stained glass…it was so cool!

silence

I also looked up and saw the clouds and the beams of light shining. It looked like heaven was shining down on us.

Yeah I was thinking that way to…like something that was watching us…you were watching me.

laughter

I was with them and so I had the same experience…I just flipped on my back and it made everything shimmer…we tried to take pictures of it but they weren’t very good.

laughter

Your whole mind becomes a void…. You are seeing all this life.

silence
For more than ninety-nine percent of human history, the world was enchanted and man saw himself as an integral part of it. The complete reversal of this perception in mere four hundred years or so has destroyed the continuity of the human experience and the integrity of the human psych. It has very nearly wrecked the planet as well. The only hope, or so it seems to me, is the re-enchantment of the world.

(Berman, 1984, p. 10)
My exploration of ocean diving involved a heuristic method of self-dialogue reminiscent of my experience of wave rhythm.

In addition to the significance of becoming one with what one is seeking to know, one may enter into dialogue with the phenomenon, allowing the phenomenon to speak directly to one’s own experience, to be questioned by it. In this way, one is able to encounter and examine it, to engage in a rhythmic flow with it – back and forth, again and again – until one has uncovered its multiple meanings.

(Moustakas, 1990, p. 16)
There is a need to ‘fluidify’ our very modern belief in the unshakable solidity of objective external reality…[requiring] a new style of speech and thought that honors the dependence of our mind and body on the more-than-human-world.

(Fisher, 2002, p. ix)
A few years ago I spent time exploring the coral reefs near Cozumel, Mexico and experienced the underwater world differently than at anytime before. I deeply focused on how I and other entities swayed in unison with ocean movement.

I was struck by how interconnected everything appeared and felt. The purple sea fan coral reminded me of lungs that appeared to be breathing as the waves shifted them vigorously back and forth. The bristling sea anemones reached out like grasping fingers while the grey, brain corals sat ominously still on the sea floor. The ocean waves gently rocked me in tandem with the sea fans and anemones. I slowed my breathing to match the motion that surrounded me and deeply sensed a soothing, cradling wave rhythm. My experience with the ocean water and the swaying purple sea fans was a bodily-felt motional and emotional experience filled with a sense of rhythm, unison, freedom and calm. I felt deeply drawn in, immersed in my surroundings.
I wondered what it would be like if the world were tilted on its side, with the ocean rising up beside me like a curtain that I could walk through, rather then plunging down into it. “How much more curious about [the sea’s] unfamiliar creatures many of us might be,” wrote the zoologist Alister C. Hardy, “if the sea were in fact separated from us by a vertical screen – over the garden wall as it were – instead of lying beneath us under a watery floor”.

(Harrigan, 1992, p. 179)
Chapter Two:

Opening Pathways of Exploration
Many caution that as humans spend more time shielded from earthly elements and forces by windowpanes, windshields, mall walls, television and computer screens, a sense of interconnectedness is lost and a rootedness and reciprocity with all that surrounds (Abram, 1996; Fisher, 2002; Louv, 2008; Searles, 1960; Sewall, 1995).
My grandparents’ yard
One of the great joys of diving is discovering how much more spacious the underwater world is than the terrestrial one. Walking on land, you always have that enormous unusable sky above you. You are confined, hounded by gravity. You walk into your house through a ground-level door, you stand on a chair to change a light bulb, you climb a ladder to brush away a spider web in the corner of the ceiling. But flood the house with water and your world expands. All that fallow space above your head is suddenly yours – you are able not only to reach it but to inhabit it. There is more room in the world…I was lucky to know this freedom.

(Harrigan, 1992, p. 185)
As I think about how I wander back into the past, revisiting places through memories. I reflect on a place very familiar to me as a child; my grandparents’ yard. I am able to vividly visualize being there, how I cycled throughout it: following along the perimeter lined with lilac bushes, I would reach the tallest trees found at the very back, bordering the ravine. I turn sharply left onto the narrow path along the row of Blue Spruce beside the fence. I continue upward slightly along the grass onto the red and grey patio bricks, onto the slanted, covered walkway next to the garage, leading to the front yard, trying hard to maintain my balance in this narrow space. I feel relieved as I exit and speed over the trampled grassy path, crossing the small sidewalk, turning right abruptly beside the pink, blossoming bush, my bicycle’s handle bars narrowly fitting through the metal gate, wobbling I hold my breath as I struggle to stay on the crooked, waffled sidewalk. I immerse back into this place.

Hearing the sound of the wheelbarrow making its way down the bumpy path, my grandfather’s shoes scraping against the brick walkway together with a squeaking clothesline. Wafting smoke from the burning leaves in the fire pit fills the air as I play in the sand…I remember this place by the ways I, my family, the sun, the wind – all the beings and forms – moved throughout it.
I absorb, immerse, or take in my surroundings. Brain’s cerebral fluid flows through neural pathways. Pathways hold my memories. New pathways are carved out by new my experiences.

Similar experiences may follow similar pathways

Well trodden paths become fixed
Remembering returns us to the world lost sight of in the language of representations and of neural traces. Indeed, remembering reminds us that we have never left the life-world in the first place, that we are always within it, and that memory is itself the main life-line to it. For memory takes us into things – into the Sachen selbst, which Husserl proclaimed to be the proper objects of phenomenological investigation. In remembering, we come back to the things that matter.

(Casey, 1987, p. xxi-xxii)
Water is creation, the mud we crawled on; the wash of the tide in the cells.
The Water Poet is the Creator.
His calligraphy is the tails and the tracks we living beings leave in each other; in the world, his poem.
(Snyder, 1969, p. 114)
The activity of thinking is essentially an expression of flowing movement.

With this ability to enter thoughtfully into everything and to picture all things in the form of ideas, the process of thinking partakes in the laws of the formative processes of the universe. These are the same laws at work in the fluid element, which renounces a form of its own and is prepared to enter into all things, to unite all things, to absorb all things.

(Schwenk, 1965/1978, p. 96)
Every contour of my body including my brain is formed through a delicate interplay of water and surface tensions; semi-permeable and permeable membranes. Solid bones form from fluids.
When we speak about the mind we refer to brain *waves* or *wave* lengths. Seas and lakes are *bodies* of water. I contemplate how I evolved from the sea and the odd similarity of brain coral’s wavelike patterns.
If there is magic on this planet it is contained in water.
(Eiseley, 1946/1957, p.15)
The fluid medium inside all living cells, called cytoplasm, is mostly water. But what a cocktail! – spiced with proteins and DNA, sugars, fatty acids, seething with hormones…scanning through the literature of modern molecular biology, you could be forgiven for concluding that the subject is all about proteins and genes, embodied in the nucleic acid DNA. But this is only a form of shorthand; for biology is really about the interactions of such molecules in and with water.

(Ball, 2000, p. 250)
I contemplate subtle movements. As I gaze toward the horizon, it’s as if I am moving forward, into the distance. As I enter my memories and imagination I can feel movements forward, backward, upward, downward, and yet my body remains motionless except for my inhalations and exhalations. I remember lying in bed awake as a child visualizing myself swinging back and forth on a trapeze bar. Staying attentive and still, I followed and felt every rise and fall. My acrobatics necessitated multiple movements back and forth to get my momentum going and then finally I would reach the peak to be able to somersault, and then particularly enjoyed my weightless glide downwards. At times getting my momentum going was challenging, but with persistence I was able to perform graceful rotations. I felt the weightless, inverted, rising and falling sensations of flight, all the while my body was lying still. I felt free.

Still movements permeate my lucid dreams. I lay perfectly still, while flying or plunging in my dreams.
Somersaulting and being carefree.
Being able to go in all directions.\textsuperscript{9}

\textsuperscript{9} Reminder: quote from beginner SCUBA student.
Ever since that magical moment when my eyes opened under the sea I have been unable to see, think or live as I had done before. That was twenty-six years ago. So many things happened at once that even now I cannot sort them all out. My body floated weightlessly through space, the water took possession of my skin, the clear outlines of marine creatures had something almost provocative, and the economy of movement acquired moral significance. Gravity – I saw it in a flash – was the original sin, committed by the first living beings who left the sea. Redemption would come only when we returned to the ocean as already the sea mammals have done.

Terrestrial sensations penetrate my experience of the aquatic realm.

I resist my terrestrially known sense of falling as I hover effortlessly over an endless blue below me. Ocean water holds me. I accept that I will not fall quickly downward and hard onto the sea floor.
I felt myself warming to the idea of what a fish might be…the school moved like a dense current…more like particles rather than individuals…constantly shifting in the quest for one ultimate and coherent shape…I felt eerily happy.

(Harrigan, 1992, p. 135)
Aquatic and terrestrial realms merge:

On a bright full moon night on the Australian Barrier Reef we descend to the sandy ocean bottom, turn off our torches, remove our fins and adjust our buoyancy to walk upright on the sea floor. I look up at the glowing moon as my feet sink into thick sand. Gazing at starfish in the sky. Stars on the sea floor. Sparkling.
This layer of water I am moving through gives me a sense of being an amoeba.

With diving gear I transform my body to be more like a fish, sea snake, or dolphin. I wonder if I get true glimpses into the sensory world of aquatic beings. Swimming headfirst horizontally, neck stretched forward, my chest and abdomen, legs, keeping up, meandering amongst coral beds, feeling eel-like, twisting, slithering, my body pushing invisibly behind me.
I feel disembodied and transparent, the seawater seeping through me as if I were some membranous organism like a jelly fish. Sometimes I even forget that I am underwater, and my body simply accepts its unbounded freedom of movement – its spirit – lightness, its ability to glide off at will into every dimension – as a condition that has been naturally bestowed and will not be revoked.

(Harrigan, 1992, p. 86)
I am an upright, bipedal being. My body-mind is designed to know how I am positioned physically, balanced or unbalanced on land. I have the need to be able to decipher the vertical from the horizontal, far and near, so that I know how and where to go, how and where to take the next step, make my next moves. Light and gravity’s weights and pressures continuously guide me. In the terrestrial world I may physically collapse if I become disoriented. I become mis-placed: my situated-ness disappears. My sense of a stable, balanced self is compromised.
It's an amazing feeling. I am just floating there. I just float there and watch.
I’m a diving mammal right now.
Hovering over a coral formation, floating closer, lower, rolling off to my side, turning on my back watching lights flickering above, swooping down, somersaulting, watching shrimp dancing over a strobe lit sea floor, hanging upside down just for fun, feet gently finning over my head, my body carried, rocking, twisting, plunging, lying, resting on rocks, then scooting up the side of giant coral wall.
When I breathe in my body rises slightly.

It is an incredible feeling to be able to move upwards solely by my inhalations.
I notice how aquatic qualities, forms and sensations now permeate my terrestrial life. Remembering and imagining, I return to being underwater. Underwater when I inhale, I slightly ascend due to my increased buoyancy, and now on land, imagining, I am able to return to the sense of rising, levity and freedom. I can re-feel the silty ocean floor grasping hold of my feet as I remember and imagine walking on the sea floor with finless feet.
Aquatic forms seep into the terrestrial realm.

I noticed, when I looked at the gnarly, flattened tops of the island brush, that I automatically registered it as elkhorn coral. I was so used to looking at fish that it took my brain a second to process…. In a way, I thought, I had what I wanted: I was living underwater. My imagination was soaked in undersea thoughts and imagery, and here on the surface world it operated with a perceptible lag – refactoring, reconfiguring, purging itself of an endless store of aquatic references.

(Harrigan, 1992, p. 223)
I thought I saw a starfish on a leaf.
Watching a raven gliding over me
Phenomenology is inherently about allowing more space for discovery, opening up pathways to explore. (Spiegelberg. 1982, pp. 679-680)
Chapter 3:

Widening Circles of Compassion
A human being is a part of a whole, called by us “Universe”, a part limited in time and space. He experiences himself, his thoughts and feelings as something separated from the rest...a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty.

(Einstein, 1950/1972)
I walk out to the edge of the boat and steady myself as I scan the ocean’s surface.
Glancing up at the horizon, while holding my regulator and mask with right hand, depth and air gauge with the left, I take a giant step forward.

The oppression I had felt by the heavy burden of diving gear on land is released as I plunge into the ocean.
Buoyancy

Buoyancy adjustment is required throughout a dive: to maintain body position at a chosen depth; to alter body position to avoid collisions with divers, species and underwater terrain, and; to ascend and descend at a safe speed. Finding proper buoyancy requires becoming attuned to the interplay of gravity, air, my body and water that surrounds. Buoyancy is described as the force that causes bodies or objects to rise or float. Various factors influence buoyancy: salinity of the water, the proportion of fat and muscle in the body and diving equipment weight.

Attaining buoyancy takes practice. I gradually become attuned to feeling positive, neutral and negative buoyancy. When I am positively buoyant I feel light and my body rises. When I am negatively buoyant my body feels heavy and sinks. When neutrally buoyant I feel steady.

I ascend by adding air to my Buoyancy Control Device (BCD) and descend by releasing air with a purge valve. When I began diving I found it challenging to find the appropriate volume of air to add or release into the BCD and so my movement within the water column often resembled a rollercoaster ride because of excessive inflation or deflation. With practice I make infrequent, slight adjustments to maintain neutral buoyancy.
I concentrate on my breathing
It’s the only thing I can hear in the whole ocean.
I am more in touch with myself
Breathing can affect buoyancy: as air volume increases in my lungs upon inhalation I ascend slightly and as lung air volume decreases upon exhalation I descend slightly. I control my vertical movements in the water column by varying the depth of inhalations or exhalations; using my lungs like a BCD. I synchronize movement and breath: as my chest rises my body rises; as my chest lowers my body lowers. Inhaling deeply, I ascend. Exhaling deeply, I descend.
To move:

To promote the development or growth.
To excite, arouse, stir up.

(OED, 2010)
With flexed arms I reach forward into spaces ahead.

When feeling a sense of awe or joy, I feel it as an expansion or an opening up within me, a movement outwards. Like the space that opens when taking in a deep breath. When I experience a sense of fear, I feel it as a pull, contraction inward or toward me. Like the space that closes when forcing a deep breath out. When I am emotionally moved and I am also physically stirred. Emotions are tied to the movement of my muscles – emotions are motional. Gradually or suddenly I am emotionally moved, as I attend to sounds, patterns, and movements of forms and beings. I feel fearful and my eyes widen while it’s muscles contract.
When panicked, breathing becomes erratic. If the depth and frequency of inhalations increase and exhalations remain shallow, I am at risk of ascending involuntarily due to increased air in my lungs. It is important for me to remain calm and conscious of my breathing.

I enter the sunken shipwreck through a narrow window. The vast ocean expanse disappears. I feel trapped and notice that I am rising with every shallow breath. I kick vigorously to stop my ascent as I hear my rapid, strident inhalations. My shoulders are held as my dive buddy signals stop, staring intently into my eyes.

My breathing deepens and slows.
I communicate using my eyes and hand signals. I use the ‘okay’ frequently throughout the dive to ensure my buddy is not experiencing any problems. Learning to dive I found a consistent ‘checking in’ process comforting. Fears are alleviated knowing that there is someone to turn to for help. Buddies remain watchful and near so that if there is a problem they are within reach to assist. Erratic body movements or wide eyes signal distress.
I feel a startling, cool gush of water on my face and lose my ability to see clearly. My mask is knocked off accidentally and I feel exposed. I focus on not breathing through my nose. I try to adjust with my stinging eyes and blurred vision. As I replace my mask and expel the water within it by exhaling through my nose, I regain my sight.
My fear is the abyss

No sense of bottom because there is no light

What hits you is the void
Wilderness has come to mean that kind of place or region in which one readily loses one’s way, goes astray and becomes literally bewildered.

(Casey, 2007, p. 220)
Underwater I feel my mortality
I lose the ability to establish a sense of uprightness within my surroundings. I am left feeling dizzy, lightheaded, off-kilter, out-of-sorts, unbalanced. Within the ocean, finding myself surrounded by water, I crave to “attach”, at least visually if not physically, to a stationary form. I desire to know that something exists beyond the endless blue, the next rock outcrop, the next moment. In any place I desire physically and mentally to return to a “steady state”, by resting, sleeping, walking upright and balanced. In these ways I am physiologically-emotionally enmeshed within place. I am inextricably connected with all that surrounds me.
I enter the water from a boat and directly into a moving current that carries me close to a coral wall. I race alongside of it as if watching a film in fast forward. Drift diving there often is no need to swim as my body is propelled by the current. In strong currents I must accept the impossibility of swimming up against it. I sense how the force of a current slows closer to walls and also varies with depth. It is important to learn the dynamics of the flows so not to be swept away from walls and lost in the open sea.

The danger of being taken far into the open sea is always on my mind especially in unfamiliar dive sites. I feel the comfort of being safely close to rock formations.
Staying near the solid coral wall, eyes drawn into its jagged forms and intricate patterns, turning, gazing out from the wall, scanning the undulating shades of endless blue, venturing out of my protective spot, feeling the wall’s protective pull.

Moving further out into the endless blue, hovering effortlessly, looking down and across, feeling an absence of solid forms, only darkening blue, sunlight fading above, losing my sense of up and down, feeling lost, unbalanced, drawn in all directions.

Craving the fixed coral wall or to walk on solid ground, watching my air bubbles ascend, recapturing a sense of direction.

Swimming towards the wall, steadying myself.
To experience another physical being in the mode of direct and sensuous perception is to realize the primordial bond between oneself and that being, which disposes one to value it intrinsically.

(Bai, 2001, p. 89)
Hovering over a Hawksbill turtle’s marbled shell.

Together turning, lowering, stopping, gliding, rotating, zig-zagging, wavering, rising
Caught up in a mass of abstractions, our attention hypnotized by a host of human-made technologies that only reflect us back to ourselves, it is all too easy for us to forget our carnal inheritance in a more-than-human matrix of sensations and sensibilities. Our bodies have formed themselves in delicate reciprocity with the manifold textures, sounds, and shapes of an animate earth…. To shut ourselves off from these other voices, to continue by our life styles to condemn these other sensibilities to the oblivion of extinction, is to rob our senses of their integrity, and rob our minds of their coherence. We are human only in contact, and conviviality with what is not human.

(Abram, 1996, p. 22)
Flashes of shimmering silver ascend around me trapping me with their mass.

Swooping, darting, parting, left and right performing with my body’s every rise and fall.

Dizzied and spellbound in their midst.
Each phenomenon in nature, rightly observed, wakens in us a new organ of inner understanding.
When you look into the eye of an octopus, something clicks, you feel it staring at you, taking your measure, thinking about you. There is a disturbing, almost unspeakable recognition. You realize that the octopus’s eye, like yours, is the window to its soul…. I was not frightened of octopuses, but more than any other creature they haunted my imagination. And tonight, as I shone my light into the hole and stared at the octopus eye, with its eerie black rectangular pupil, I was startled by a feeling as intense as an electric shock. The octopus did not just have a brain it had a mind. And that mind, unthinkably alien, was trained on me. A thought was passing between us. The eye looking out at me was filled with fear and disdain, and its message was clear as if it had been spoken: Go away.

(Harrigan, 1992, pp. 73, 77)
They are contemplating me just as I am contemplating them.
One does not meet oneself until one catches the reflection from an eye other than human.
(Eiseley, 1978, p. 16)
There is no verbal connection.

It’s much more of a physical alignment.
There is eye contact I seldom have on land. We don’t often look at each other eye to eye and underwater you have to. It is about the only way you can register what is going on. Especially with people that you don’t know – if you did that on land people would look away. It is comforting, ‘you are present for me’. A different kind of relationship.
I felt the presence of a solid being.

I continued to feel the vibrant strangeness of the coral. I could never really understand what exactly it was. Coral animals to my mind were a perplexing creation: somehow not quite living but not yet dead, not quite one being but not exactly many. They taxed the limits of my conscious understanding, and at the same time they hinted at the unknowable but deeply felt notions, at the core sense we possess that our own lives are part of some common fabric.

(Harrigan, 1992, p. 45)
When I’m underwater not stressing about my equipment I have a clearer sense of spirituality..., my relationship with the spirit that I don’t have a name for.
Chapter 4:

‘Nature Reveals Her Open Secret’
I go down there and everything is happening. It just goes! \(^{11}\)

\(^{11}\) Reminder: quote from beginner SCUBA student.
Entranced by streaks of glittering bioluminescence
Everything is water, water is all.

(Thales, 624-545 BC, Ball, 2000, p. 118)
Plunging into the ocean realm, my terrestrial, ground dwelling life is interrupted. My familiar world disappears as I descend into a mysterious, extraordinary realm, and begin orienting within this new place. Mystified, startled, excited, and mesmerized by what I see I adjust with my body and SCUBA gear to this realm’s unique forces and qualities. I am surrounded by a world continually in flux, where I, along with aquatic beings, move within and with ocean water: shifting, rotating, fleeing, swaying, staring, twirling, undulating, searching, exploring…. 

A vast, infinite ocean is gradually revealed as I maneuver in all directions: with or against currents, up and over fan corals, folding, crouching, twisting, through, under and around rock formations – following turtle’s meandering trail. Watching from all angles: from the tops of cloud sponges, within coral caves, and under the belly of a seal. Experiencing levity – then weightfulness. Inhaling: my body rises, exhaling: I descend. My vision is challenged by limited light, sediment and masks with limited peripheral views. Through my lens everything appears larger than it is. With reduced visibility, surfaces and aquatic shapes surprise and elude me; suddenly appearing or partially morphing into view. Bright, clear waters extend my views into an endless expanse. Shrills, clicks, murmurs, moans seem to come from all directions. My sense of smell has disappeared. Continuing to move: scanning the ocean floor; exchanging glances with groupers; gazing at undulating manta ray wings; locking eyes with other divers and sea snakes; mesmerized by streaming trails of florescent bioluminescence and neon blinking squid lights. An octopus instantaneously takes on the shape, color, pattern and movement of its surroundings.
Although diving is often described as peaceful, it is far from quiet. Bubbling breathing is loud and continuous. I hear contrasting sounds of gasping or calm inhalations and rumbling exhalations. The sound is hard to ignore but occasionally escapes my awareness.
Hearing is the first sense to develop in the embryo, appearing in the third week of gestation. A baby’s hearing is functional between the fourth and fifth months of gestation (Tomatis, 1991).
Underwater, I have trouble discerning the source of a sound. Sound travels four times faster in the water than in air and my auditory system is not accustomed to hearing at this increased speed. I perceive as if sound stimuli strikes both eardrums simultaneously and with equal intensity. Sound seems to come from all directions (Brylske, 1988, p. 20).
Mark Fischer (2006) of AguaSonic Acoustics uses a technique for processing digital signals called wavelets to transform the calls of whales and dolphins into moving and still images. The image above represents part of a Humpback whale song.
To whom Nature begins to reveal her open secret
will feel an irresistible yearning
for her most worthy interpreter,
Art.
The ocean gives me space to explore beyond my familiar terrestrial experience. Here, I escape terrestrial movements and constraints and am exposed to moving; weightlessly, freely in all directions, rhythmically with the waves, in tandem with other aquatic beings. I feel ocean’s mystifying and breathtaking ways as I gaze out into a blue abyss and feel its vastness. Pressures and currents play on me as I view the undulating world that surrounds me, allowing for an overwhelming feeling of interconnectedness.
When you see what whales are doing with sound, or begin to see what they are capable of, it is clear that humans are not the only artists on the planet.

(Fischer, cited in Cuda, 2006)
Inundated by dolphin squeals and clicks twenty stories below me, suddenly launching upwards exchanging shrills and trills, staccatos and legatos of Cs Ds and Es at every floor before leaping silently up into the sky.
Dolphins appear from the depths below

They disappear as they leap into the air

Reappear when they plunge back in

Then vanish into the depths
A mingling of sounds echo around me: scraping, crunching parrot fish teeth on hard corals and the chattering, snapping fish jaws capturing minute organisms. My ears faintly popping while equalizing air pressure.

Floating with the sound of gently lapping water against my neck. Descending into whale choruses flooding every ounce of watery space. My breath and heartbeat slowly or rapidly cascading to haunting bass, tenor, alto, soprano Grey whale moans.
Pulsating reef squids

Light rocking dimly as it passes over shallow, wave carved sandy floors
Winged manta rays swooping down, then gliding upwards; performing synchronized somersaults to silent symphonies, filtering phytoplankton gathering in the trail of our underwater lights.
Night Dive, Hawaii, 2005
I love turning my flashlight off. We get in a circle and stay underwater with no light for about five minutes. The reef lights up like a city as my eyes get used to the darkness.
The first time I did a night dive there was bioluminescent plankton in the water. I had seen it before from the beach and from a boat but had never been in it. Every movement I made caused green and blue firework type lights all around me. I turned off my dive light and the ocean around me was alive with light. Everything that was swimming around caused a trail of light behind it. It was very surreal.
The phenomenological method is designed to explore experience – it inherently reveals a person’s conceptual process.

The word – from which we get ‘phenomenon’ – is derived from the verb ‘phainesthai’ meaning ‘to show itself’. Thus a phenomenon is ‘that which shows itself’, or ‘the manifest’. However, ‘phainesthai’ is itself a permutation of the word ‘phaino’ which means ‘to bring into daylight’. Therefore, in the word phenomenon is present not only the idea of the self-showing of beings but also an understanding of the very forum that facilitates such self-showing; this forum was understood by the Greeks metaphorically as light.

(Heidegger,1814/1962, p. 51)
Expanding shadows appearing and disappearing with the sun – muting sparkling coral.
Light dances appear and subside as clouds, manta rays and boats pass overhead.
It gets darker as you go down. Especially today I would notice these transitions, all of the sudden it is getting lighter, so I must be at the surface. I see patches out of the murky darkness. I thought the surface was closer than it was – I thought I’m up, but I’m not!
Light sets a tone for the dive. A totally different mood at sixty feet – it is gloomy!
This gloomy element has a drastic effect on my mood.
It feels like I am visiting a church. Incredible the way the lights cascade though the kelp forest. It feels extraordinarily wondrous.
Emotion: A moving, stirring, agitation, perturbation (in a physical sense).
(OED, 2010)

Emotions like muscles flux; ebb and flow in an inward and outward way and range from lower to higher intensities. I can feel a gradual or rapid buildup or development of emotion. Emotions surface and fade away. My muscles respond to my emotions by clenching or relaxing. Emotions are also influenced by my body’s movement: a forced smile increases my sense of happiness. Reaching upwards I feel a sense of expansion.
In addition to the significance of becoming one with what one is seeking to know, one may enter into dialogue with the phenomenon, allowing the phenomenon to speak directly to one’s own experience, to be questioned by it. In this way, one is able to encounter and examine it, to engage in a rhythmic flow with it – back and forth, again and again – until one has uncovered its multiple meanings.

(Moustakas, 1990, p. 16)
My dive buddy marvelled at the beauty of a tiny Christmas tree worm opening and closing with appearing and disappearing light and I now find myself attending to easily-missed movements of minute beings. His exuberant account stays with me. His sense of reverence is passed on to me.
Christmas tree worms spreading and collapsing.
I recall fleeting or lasting moments full of fear and joy or a mixture of emotions: surprise, awe, elation or fear as I swim uncomfortably close to a gargantuan, Napoleon Wrasse\textsuperscript{13} who remains motionless except for its articulating, watchful eye. I feel fear and excitement simultaneously as a glowing green eye, likely of a reef shark, passes me in the night. I feel confusion then surprise, as my flashlight reveals that the moving ocean floor is in fact a gigantic turtle’s shell.

\textsuperscript{13} One of the largest reef fishes in the world and is the largest member of the wrasse family. They can grow up to 230 cm and weigh 190 kg. They have fleshy lips and a hump over the head that is similar to a Napoleon hat (http://www.dive-the-world.com/creatures-napoleon-wrasse.php).
...I remembered the unearthly majesty of the rays as they swam toward me, the way they cut through the element of water as if it had no density at all and was as thin as air.

(Harrigan, 1992, p. 151)
I remember and imagine in movement: in sequence, as a series of moments filled with a progression of physical movement together with surfacing or disappearing feelings – like a moving film. I remember and imagine in stillness: instantaneously, all at once – like a snapshot. I wander and drift through various moments, visualizing and hearing various ocean dive stories and descriptions. I travel back and forth: turning back into the past – remembering, and continuing to move – imagining. I move fluidly between vague or vivid images (moments) as if in murky or clear water.
Feeling air’s expanse
Chapter Five:

Surfacing
There is a sacredness about some dives...there are few places where you can experience how the coast was before development. Diving takes you to a truly natural place. It speaks to us as a biological being...we need to be in places like that – diving is like an access to that.  

It's almost a forced meditation...being in tune with nature around me.

14 Reminder: quote from participant.
The third method [of meditation] is very ancient and found in all schools of Buddhism. It is to rest your attention, lightly and mindfully on the breath…. So, whatever thoughts and emotions arise, allow them to rise and settle, like waves in the ocean. Whatever you find yourself thinking, let that thought rise and settle without constraint. Don't grasp at it, feed it, or indulge it; don't cling to it and don't try to solidify it. Neither follow thoughts nor invite them; be like the ocean looking at its own waves, or the sky gazing down on the clouds that pass through it…. You will soon find that thoughts are like the wind; they come and they go. The secret is not to "think" about thoughts, but to allow them to flow through the mind, while keeping your mind free of afterthoughts.

Sea – is to be constantly exposed in the midst of something constantly changing.
(Casey, 2007, p. 109)
Everything is moving around me.
I am used to the way beings move on land. In the ocean everything has a different way of moving.
To move:
To go from one place, position, or state to another
To change one’s posture; to stir
To put in motion; to disturb or cause to stir
To move to mind; to come to mind. Also to move of (also out of) mind: to be forgotten
I began to experience the truth that everything is in movement: sound, light, emotion, the inner and outer workings of my body, even time manifesting itself in the living coral reefs around me.

The reef builds up layer by layer with each passing generation of these creatures, so that over time it becomes a mile deep honeycomb of past lives. The shapes and colors we see covering its surface are only a fleeting veneer, a mat of polyps that will soon die and take their place in the inanimate substructure. While, they are alive though, they are among the earth’s most beautiful and perplexing creatures.

(Harrigan, 1992, pp. 42-43)
Things come into question when my habitual sense of “what is” comes into question.  
(Casey, 2007, p. 62.)
Despite its airy indeterminateness, imagining arises constantly in the midst of concrete actions and events…. Imagining is the influenza of the mind – part of its pathology. But it is also an auspicious influence. Even when it is remote or most remiss, and in spite of its basic independence from other mental acts, imagining remains inseparable from the life of the mind as a whole, essential to its welfare, indeed to its identity and very existence.

(Casey, 1976, p. 4)
I am feeling ocean’s sudden or subtle prods and pulls, tightening and release, contraction and expansion as it rocks me with its rhythmic flows.

By focusing on phases or gradations in all of life’s processes and particularly the growth principles of contraction and expansion, my relationship with all that surrounds becomes infused with movement.
I feel the water accepting me.
I'm in my own little world.
Letting it all in.
Shimmering silver beings
Envelop me

Rising and falling,
Darting from side to side

I immerse
into rhythms:

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I am uplifted and spellbound in Ocean’s midst.
All I hear is myself inhaling and exhaling.

Inhaling
Exhaling
Inhaling
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Attentive observation of the world can awaken our inner capacity to illuminate it. Awareness of this capacity leads us to experience the interrelationships of the world.

(Bockemühl, 1985, p. 5)
The vast ocean space fills with past experiences as I imagine my and fellow divers observations, encounters and interactions.
Rising up through ocean’s final unyielding embrace.
I still hear our bubbles and feel the undulating motion of the ocean waves.
The sea, once it casts its spell, holds one in its net of wonder forever.
(Jacques-Yves Cousteau, as cited in Bortz, 2010, p. 9)
Chapter Summaries

Here I provide a brief summary of the five ocean dive narrative chapters and the final two chapters that follow in Part Three.

‘Immersing’ introduces readers to ideas related to a sense of connectedness and diverse ways of knowing. A personal fundamental ocean dive experience is relayed to express an ‘initial immersion’ into experience – an overwhelming sense of connectedness was felt through attending to ocean’s wave rhythm. The expansive essence of two of the research methods used (phenomenological and heuristic) is presented.

‘Opening Pathways of Exploration’ focuses on myriads of moving ways that are contemplated through attending to the fluid nature of water and the sense of weightless freedom ocean diving offers – movement through memories, imaginations, thoughts, between aquatic and terrestrial realms, and the somatic movement of human and aquatic beings.

‘Widening Circles of Compassion’ explores dynamics of emotion and a sense of connection. Diving, I am opening myself up to being vulnerable – to currents, the abyss, the unexpected. My sense of a world where I feel control disappears – I am exposed. I understand more about the need for attachment when I experience the abyss. Diving illuminates a further understanding of connection and heightens a sense of mortality.

‘Nature Reveals Her Open Secret’ relays why I turned to art to express and illuminate experiences within the ocean world. Exploring through art reveals subtle, repeating, intricate or diverse patterns inherent in the movement of beings, emotion, breath, light and sound.
‘Surfacing’ begins with a focus on the breath and this theme, together with other explorations of movement, is carried throughout. An enduring sense of ebb and flow permeates imaginations and remembrances of the aquatic realm.

The chapter that follows here, ‘Fluid Qualities of Inquiry’, describes research processes and representation. The phenomenological method was used to explore and understand others’ experiences of ocean diving and the heuristic method allowed for illumination and immersion into my own experiences together with participants’ shared stories. I elaborate on the process of moving through the six gradually more immersive phases of heuristic research as described by Moustakas (1990). The chapter concludes with a description of epistemology and the arts, and a summary of the ways in which this inquiry is imbued with the nine “qualities of goodness” in arts-informed research.

The final chapter, ‘Lasting Impressions of Immersion’, describes the notion of developing an ‘ecological identity’ and the significance of nurturing a strong sense of interconnectedness with the natural world – highlighting the need for encouraging sensory, relational ways of knowing. I elaborate on how ideas and methods related to ecological identity development, and holistic, experiential, place-based, bioregional and biospheric education, further a growing impetus to encourage embodied dimensions of knowing. Insights of this inquiry, revealed through the expansive and illuminative strength of art, phenomenology and heuristics, contribute to this movement by emphasizing the importance of further encouraging artful, attentive, personal, shared and enduring ways of exploring experiences with the natural world.
PART THREE

Expanding Self
Chapter Six:

Fluid Qualities of Inquiry
The psyche cannot be understood as a distinct dimension isolated from the sensuous world that materially enfolds us…genuine comprehension and amelioration of ills cannot proceed without a radical metamorphosis in our understanding of the psyche and a new recognition of the psyche’s entanglement with the more-than-human natural world…. There is a need to ‘fluidify’ our very modern belief in the unshakable solidity of objective external reality…[requiring] a new style of speech and thought that honors the dependence of our mind and body on the more-than-human-world. (Fisher, 2002, p. ix)

Increasingly it is being recognized that this separation or alienation from nature contributes to the present environmental crisis and has negative effects on our psychological and physical development and health (Fisher, 2002; Louv, 2007; Searles; 1960). Ecopsychologists point out that a strong connection with nature creates a sense of belonging that is important for human psychological wellbeing (Fisher, 2002). Advocates of an ecological-holistic perspective highlight the importance of reconciling the mind-body connection together with the human-nature connection to help overcome our present environmental crisis. This perspective emphasizes that humans will be more inspired to take action to care for that with which we feel a strong emotional connection; what we learn to value intrinsically, feel compassion for and love (Berman, 1984; Kellert, 2005; Orr, 1993). Finding ways to realize and strengthen these connections through education is a critical task to help facilitate a shift away from a modern, objectivist, destructive worldview to a relational one – beneficial to all Earth’s entities.

**Research Design**

This ocean dive narrative represents a process of coming to know diving experiences deeply and the ways that my continually forming and evolving aquatic impressions linger with me, infusing my terrestrial life. I explore diving experiences, using phenomenological and heuristic research methods as described by van Manen (1990) and Moustakas (1990), respectively. I chose research processes that gave plenty of space for searching, discovery, and creativity continually allowing further inquiry into the often more ineffable aspects
of being human – our emotional and somatic dimensions of experience, including the kinesthetic aspects of experience – how we feel when moving. The two methodologies are related in their purpose to further uncover hidden or taken-for-granted dimensions of experience.

In the initial stages of my inquiry I reviewed my personal dive logs from the time I started diving in 1989 and wrote about what I remembered about my experiences and focused on somatic and emotional aspects. During the eight-month period when I collected dive descriptions from participants in this study, I also shared my own diving experiences, read other dive stories, and went diving off the south coast of Vancouver Island. After completing interviews with my participants my inquiry continued with an artful, phenomenological and heuristic exploration of somatic and emotional dimensions of the dive experience.

**Participants**

A phenomenological study emphasizes the meaning of lived experience of a particular phenomenon. It includes participants who have experienced the phenomenon under investigation (Polkinghorne, 1989).

Fellow divers, with a range of experience and who were passionate about diving, were suitable participants for this study. Initial diving experiences involve adjusting to the unfamiliar underwater world both physically and mentally. A novice diver experiences this world in a unique way as compared to an experienced diver who is more accustomed to making transitions from land to sea. As an experienced diver I feel how different it is to be in this realm; now it has less intensity compared to when I was a novice diver. Once I became habituated to ocean diving my fears subsided. Being more relaxed allows me to attend to details of the experience that I overlooked earlier.
To find experienced divers who were interested in participating in interviews I contacted local dive shops located in the southern area of Vancouver Island. I posted a call for participants on the Professional Association of Diving Instructors website to find divers interested in contributing descriptions through email and other means.

I engaged in in-person and focus group conversations, and online correspondence with experienced and beginner divers over an eight-month period. Four participants, ranging in age from forty to sixty years, took part in monthly in-person interviews of approximately one and a half hours over four to five months.¹⁵ Three participants, ranging in age from early teens to sixty, submitted their dive experience descriptions through monthly or bi-monthly emails over a five-to-eight-month period. Interviews took place in the southern area of Vancouver Island (Metchosin, Brentwood Bay and Victoria). I conducted two, one and a half hour focus group interviews with a total of thirty-two beginner SCUBA diving students, aged fifteen to seventeen, who were taking part in a two-week beginner diving course.

During conversations with participants I did not encounter any ethical or safety concerns. The participants were certified divers trained in safety procedures or were students learning under the supervision of dive instructors.

I gathered a variety of ocean diving descriptions that helped illuminate the kinds of experiences that happen underwater. I had a workable number of participants because my intention was not to make broad generalizations to a population (about what it is like to dive) but, rather, to further illuminate somatic and emotional dimensions of ocean diving which may lead to theoretical generalizations.

¹⁵ One in-person participant was only able to complete two interviews.
Gathering Ocean Diving Descriptions

As I described earlier, the dive narrative is a synthesis of my own dive experiences and those gathered from fellow divers through interviews, online written descriptions, and other dive stories. This exploration involved a process of attending to their dive experiences, together with my own.

I describe the interview process as a loosely structured conversation. I had various questions prepared to help encourage participants to describe and reflect on their experiences and to focus on emotional and somatic aspects of their experiences. I asked divers to pay close attention to all aspects of their ocean experiences and to describe experiences in detail. At times, I prompted them to focus on the dive steps (entering, descending, exploring, ascending, surfacing and exiting), as well as other diving aspects: the buddy relationship, encounters or interactions with aquatic beings, weightlessness, breathing underwater, clear or reduced visibility, night versus day diving, shore versus boat diving, warm versus cold diving, strong versus gentle currents, and turbulent versus calm surfaces.

During in-person conversations I encouraged participants to increasingly focus on somatic and emotional dimensions of their dive experiences by sharing my own experiences and highlighting my emotions and body sensations. I asked participants to keep a record of their dive descriptions prior to each interview as a way to remind them of significant moments and to help them attend to details. At times I asked questions to encourage additional conversation. What stood out most on the dive? What got your attention? Was there something you had never or rarely seen before? Was there something that was similar or the same as what you had seen before? How did you feel on the dive generally, and did feelings change and why? When have you experienced that feeling before? Were you close to any fish species or coral (describe your interaction)? Have you experienced that physical feeling before? Can you describe memorable sounds, motions and movements? How do you feel moving in the water? How do you describe feeling weightlessness? What impact or influences do the following ocean qualities or forces have: fluidity, current, waves, depth and...
vastness? What stands out about various diving steps (gear preparation, safety check and briefing, entering into the underwater world, descending, establishing buoyancy, exploring the underwater world, ascending, exiting, gear removal and debriefing)? What is significant about the realities of diving (decreased visibility, dependency on one’s dive buddy, reliance on dive equipment, awareness of breathing, silence, inability to talk, immersion in water, weightlessness and increasing pressure)?

I also asked participants to further reflect on their dive descriptions from previous conversations or online submissions. This allowed for further revelations of their diving experiences. I looked for responses to questions like: Have your diving experiences changed the way you see, understand, relate, identify or connect with the world and other species? What kind of effect have diving experiences had on you? Have diving experiences changed the way you see yourself (how and why)? I also asked directly for participants to give an example of an emotional, physical, and spiritual aspect of the dive experience (in whichever way that they define “spiritual”)?

I digitally recorded conversations with participants and produced a word for word transcription of the descriptions which seemed most relevant in illuminating their dive experiences. I also asked for any drawings or photographs that added to or further conveyed the meaning of their descriptions.

van Manen (1990) describes how the interview in phenomenological research serves very specific purposes:

[The interview] may be used as a means for exploring and gathering experiential narrative material that may serve as a resource for developing a richer and deeper understanding of a human phenomenon, and (2) the interview may be used as a vehicle to develop a conversational relation with a partner (interviewee) about the meaning of an experience (p. 66).
Relating to the first point, van Manen stresses the importance of staying close to the experience as lived. When interviewing, as the phenomenologist, I remained focused on the concrete experience. When a participant begins to generalize about an experience, the researcher can bring them back to the level of concrete experience by asking, “Can you give me an example?” or “What was it like?” (p. 68). The second purpose van Manen identifies is the recognition of the participant as a co-investigator. Here he stresses the importance of creating a dialogical relationship that “is talking together like friends” (p. 98). He sees how this kind of relationship can lead both the interviewer and the interviewee into deeper meanings or themes of the experiences.

I had two kinds of conversational interviews as described by van Manen (1990). Most conversations focused on gathering descriptions of experiences (the stories, anecdotes and memories of experience). The purpose of this process is to discover the range and quality of experiences of the underwater world. During the conversational interviews, I also looked for what may be described as a ‘transformative moment’ versus a series of experiences that led to a particular perception or understanding.

As mentioned, in-person interviews also involved reflecting on the experiences described in previous interviews. According to van Manen (1990) these conversations are “hermeneutic interviews” because the focus is on interpreting experiences. As van Manen suggests, I concentrated on separating the descriptions from the reflections of lived experience to aid in getting at the essence or meaning of an experience versus a description of it.

With two novice diver focus groups I employed a ‘fish bowl’ dialogue method (Steinglass, 1988) which allowed twelve students to listen to the stories of four divers seated in the centre of a circle. After one or two rounds of questions and responses, when the novice dive participants in the outside circle felt comfortable or interested, they exchanged positions with the people in the centre ‘story telling’ circle. I utilized this method because of the high number of student divers and so that they would not feel pressured to participate. It also created a more intimate setting as smaller groups of people described and reflected on various aspects of the dive.
experience. From the other in-person interviews I realized how sharing stories might help listeners understand or consider more aspects of their own experiences or facilitate recall of similar personal experiences. I encouraged those in the outer circle to ask questions or to ask participants to elaborate on or clarify experiences. If individuals wanted to add to what those in the centre circle initially said I encouraged them to do so. When there were no questions I prompted further stories or descriptions by focusing on various dive steps (e.g. what it is like to enter the water, descend, and so on) or asked about various aspects of the experience (e.g. what is it like to feel weightless, to breathe underwater or to experience poor visibility?).

In-person conversations were with four participants. The initial interview group had three members while the rest of the interviews were one-on-one or in groups of two. I found the group interviews allowed for an atmosphere akin to a conversation between friends compared to individual interviews. The small or large group interviews, allowed the participants to view me as simply another diver sharing stories, rather than a researcher ‘searching’ for information. This group conversational atmosphere may have added to a greater feeling of relaxation which allowed some people to open up or feel more comfortable sharing emotional experiences. Although many divers are not accustomed to attending to somatic and emotional dimensions of the dive experience in detail, the dialogue also felt natural as divers often share underwater adventures.

I did not share my own diving stories with the three online participants and they did not have a group dialogue experience. Two participants from the focus groups continued with the study and submitted their descriptions twice online over two months. I asked all online participants to focus on describing dives in detail and occasionally I asked for divers to elaborate on particular experiences or various aspects of their experience.
Exploring Through Phenomenology and Heuristics

Phenomenology, recognized as a descriptive, reflective and engaging mode of inquiry, allows me to delve into the essence of the ocean diving experience (van Manen, 1990). I looked for richly detailed descriptions of emotional-somatic dimensions of the ocean diving experience. Through the phenomenological method I delve deeper into underwater experiences and into embodied knowing.

Combined with the six self-reflective phases of heuristic practice, allowing for an extensive process of self-search, self-dialogue and self-discovery (Moustakas, 1990), delving deeper into ocean diving experiences arises together with self exploration.

Behavior is governed and experience is determined by the unique perceptions, feelings, intuitions, beliefs, and judgments housed in the internal frame of reference of a person. Meanings are inherent in a particular world view, an individual life, and the connections between self, other, and world (Moustakas, 1990, p. 32).

Phenomenological and heuristic research methods and other qualitative research methods challenge the notion that there is ‘a truth’. Truth resides in the meaning that is made of experience. Therefore, there are multiple meanings or truths and multiple ways of knowing (Kvale, 1995, p. 21). In this postmodernist notion of truth, “Knowledge is conceptualized as a linguistic and social construction of reality…. There is a focus on interpretation and negotiation of the meaning of the lived world” (p. 24). This approach to research attracts many researchers because they identify with this notion of truth and knowledge. They do not agree with the modernist notion of knowledge that true knowledge reflects an objective reality (Kvale, 1995). The qualitative method of inquiry allows for overcoming the dualist notion of a subjective and an objective reality and attempts to recover what has been lost with this positivist notion of knowledge. Bogden and Taylor (1975, p. 5) state, “Qualitative research methods enable us to explore concepts whose essence is lost in other research approaches”.

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How researchers see knowledge form (ontological viewpoint), and their assumptions about how humans come to know (epistemological viewpoint), have already contributed to the desire to pursue qualitative research (Heshusius & Ballard, 1996). The ways of knowing the researcher values (beliefs and interest) and wants to encourage (purpose) also influences the choice of qualitative research method. Each qualitative method (life history research, ethnography, case study, narrative and phenomenology) focuses on illuminating different ways of knowing. Phenomenology focuses on revealing somatic and emotive dimensions of knowing rather than cognitive dimensions of knowing (Moustakas, 1990). Researchers who choose the phenomenological method encourage awareness and understanding of lived experiences with their audience through their work. They want to revive physical and emotive dimensions of knowing because they recognize the value of this kind of knowing. The heuristic method complements the phenomenological method’s emphasis on illuminating self, experience and place. Its gradually more immersive phases allow for a self knowing or exploration that is developed through careful and deep personal reflection (Moustakas, 1990).

I, together with other researchers, theorists and practitioners within the ecological-holistic-experiential field of education, want to emphasize an awareness of felt experience because our present ways of life neglects emotional-somatic dimensions of experience (Fisher, 2002; Merleau-Ponty, 1962; Naess, 1987). An emphasis on felt experience and the human connection with the natural world views human separation from nature as a significant contributor to the present ecological crisis. Ecopsychologist Andy Fisher (2002) sees that there is a lack of recognition that the ecological crisis is also psychological. He refers to the ecological crisis as a “pathological break from reality” (p. xiii) and says that to overcome it, we “need to revive meaningful engagement with the natural world” (p. xix). Modern lifestyles, dominated by built environments and technological innovations, contribute to preventing humans from knowing (deeply) and appreciating nature’s ecological processes and dynamics. These lifestyles hamper the development of a psychological-somatic bond or connection with the natural world. Humans distance themselves from noticing how their neglectful and consumptive behaviours may have deleterious effects on nature. This separation also increases psychological stress by hindering nature’s calming and restorative effects on humans and by weakening a sense of belonging within the world (Louv, 2008). Many
caution that as humans spend more time shielded from earthly elements and forces by windowpanes, windshields, mall walls, television and computer screens, we lose a sense of interconnectedness a rootedness and reciprocity with all that surrounds (Abram, 1996; Fisher, 2002; Searles, 1960; Sewall, 1993).

Fisher (2002, p. 11) sees that “phenomenology’s experiential focus and ‘demand for awareness’ make it a kind of therapy for healing the splits of modern thought”. A primary writer in phenomenology, Maurice Merleau-Ponty, said phenomenologists wish to re-achieve a “direct and primitive contact with the world”, and to feel the “flesh of the world” (1964, p. 123). Morse and Richards (2002, p. 45) explain that through a phenomenological perspective, “people are considered to be tied to their worlds – embodied…”.

Seamon (2000, p. 160) saw that in Heidegger’s phenomenological writing, Being in Time (1814/1962), the term Dasein, or being-in-the-world is used to express how people “do not exist apart from the world but, rather are intimately caught up and immersed”.

In addition to allowing for a more enmeshed sense-of-self in the world, Spiegelberg (1982, pp. 679-680) describes the phenomenological method as "enlarging and deepening the range of our immediate experience" and that it "expresses a revolt against an approach to philosophy that takes its point of departure from crystallized beliefs and theories". Phenomenology is inherently about allowing more space for discovery, opening up pathways to explore. Husserl (1911/2002), considered one of the founders of the phenomenological approach, points out how scientific inquiry does not elucidate the complexity of our lived experience.

My inquiry continued with a heuristic exploration of somatic and emotional dimensions of the dive experience. A heuristic method of self-dialogue reminded me of my experience of wave rhythm:

In addition to the significance of becoming one with what one is seeking to know, one may enter into dialogue with the phenomenon, allowing the phenomenon to speak directly to one’s own experience, to be questioned by it. In this way, one is able to encounter and examine it, to engage in a rhythmic flow with it – back and forth, again and again – until one has uncovered its multiple meanings (Moustakas, 1990, p. 16).
I am drawn to heuristic research because of an appreciation for the transformative nature of reflexive inquiry. This method involves self-examinations through processes of self-dialogue, tacit knowing, intuition and indwelling and allows me to generate further insights into human behaviour, learning, motivation and satisfaction, areas in which I have a passionate interest. I used heuristic methods outlined by Moustakas (1990) to explore my underwater experiences. He explains that, “[T]hrough the guides of heuristic design I am able to see and understand in a different way” (p. 11) and this may result in a “personal transformation that exists as a possibility in every heuristic inquiry” (p. 14).

It is important to include myself as a participant in this inquiry into somatic and affective ways of knowing and the ocean dive experience because I agree with Moustakas in that any pursuit to understand something is a process of also knowing yourself as well as others’ perspectives. He states, “[O]ur most significant awarenesses are developed from our own internal searches and from our attunement and empathetic understanding of others” (1990, p. 26). Similarly, phenomenologist van Manen (1990, p. 62) observes, “We gather other people’s experiences because they allow us to become more experienced ourselves”.

The heuristic research method created the space to explore what the ocean world teaches or reveals to divers. Taking the time to contemplate experiences in detail allows for an uncovering or unfolding of deeper meaning. One of the assumptions that underlies the heuristic perspective is that deep-seated understandings or knowledge are developed through careful and well thought through reflection (Moustakas, 1990). The heuristic method requires having significant time and attention to contemplate the insights that emerge.

The heuristic method involves a progression through six attentive and reflective phases designed for prolonged focus and contemplation. Moving through the contemplative and creative phases requires a slow, gradual pace which allowed me to thoroughly
delve into the multiplicity of meanings and feelings associated with ocean diving – to take the time to deeply reflect on what I learned from fellow divers and my own experiences. Through a dialectical approach – a movement between self-exploration and an exploration of others’ experiences – I deeply came to know the experience of ocean diving. My ocean experiences became infused with participants’ descriptions. Moving “back and forth, again and again” (Moustakas, 1990, p. 16) between my own experiences and theirs, I uncovered multiple meanings of ocean diving.

The heuristic phases include the initial engagement, immersion into the topic and question, incubation, illumination, explication and culmination of the research in a creative synthesis. Here I further describe this exploration of ocean diving together with the immersive phases of the heuristic research process:

The initial phase of my inquiry or ‘initial engagement’ into ocean diving began during my time exploring the coral reefs off of Cozumel, Mexico in 2003.16 Just prior to this trip was reading about the philosophy of Deep Ecology and its emphasis on interconnectedness and I remember focusing on how water envelopes everything submersed within it. I recognize how these prior thought processes primed me to see the underwater world in such moving, interconnected, and incredible way.

The task of the initial engagement is to discover an intense interest, a passionate concern that calls out to the researcher, one that holds important social meanings and personal, compelling implications. The initial engagement invites self-dialogue, an inner search to discover the topic and question (Moustakas, 1990, p. 27).

During this trip and research phase I had the opportunity to talk with a dive instructor about his diving experiences and I became excited by how even a short discussion with him allowed me to discover new ways of contemplating ocean diving, including my own underwater experiences. The inability to speak underwater was something he cherished about diving. He relished how some

16 See Chapter One: “I experienced the underwater world differently than at anytime before.” p. 23.
aquatic beings would choose to approach him to get a closer look while others were tentative. He marveled at “Christmas tree worms” – tiny beings that look like miniature spruce trees with vibrant colorful lights. I had never noticed them and how swiftly they flee from predators by folding down into tiny holes. Unexpectedly, on my next dive I noticed the luminescent worms scattered throughout the sea floor, attached to nearly every Brain coral. In addition to bringing my attention to new aquatic beings, dive participants and other dive stories allowed me to attend to previously neglected aspects of ocean diving – opening up novel ways of contemplating this experience.

Immersion into the topic and question…. Everything in his or her life becomes crystallized around the question. The immersion process enables the researcher to come to be on intimate terms with the question – to live it and grow in knowledge and understanding of it (Moustakas, 1990, p. 28).

I immersed deeper into the experience of ocean diving through the interviews with participants and the sea stories, poems, photographs of other divers, as well as others’ artful representation of ocean life and qualities.

The phase of incubation suggests the importance of ‘sitting with’ an experience for awhile to be able to see it more clearly, creatively and holistically.

Incubation is the process in which the researcher retreats from the intense, concentrated focus on the question. Like Archimedes who discovered a principle of buoyancy and displacement of fluids while taking a bath, the heuristic researcher through the incubation process gives birth to a new understanding or perspective that reveals additional qualities of the phenomenon, or a vision of its unity. Incubation is a process in which a seed has been planted: the seed undergoes silent nourishment, support, and care that produces a creative awareness of some dimension of a phenomenon or a creative integration of its parts or qualities (Moustakas, 1990, pp. 28-29).
After a period of immersion into my own and my participants’ aquatic memories, I noticed how ocean rhythms and qualities began to penetrate my terrestrial life. Diving is an experience saturated with the oscillating movement of water and ocean beings, together with human emotional and somatic movements, and exploring this ocean experience in detail initiated a heightened focus and an ongoing attentiveness to movement and growth in my terrestrial life. A further appreciation/knowing/understanding of my emotional and somatic self is revealed, leading to myriads of ways to contemplate how I am immersed in nature/place/existence.

The process of illumination is one that occurs naturally when the researcher is open and receptive to tacit knowledge and intuition. The illumination as such is a breakthrough into conscious awareness of qualities and a clustering of qualities into themes inherent in the question (Moustakas, 1990, p. 29).

The process of illumination involved a revealing of the overarching theme of ebb and flow through noticing oscillations of movements-stillness, light-darkness and weight-levity, together with the ‘back and forth’ movement involved in remembering, imagining, and attending to present encounters and interactions. What also became further apparent to me was how developing deeper into ocean diving involved a continuous movement between my own and other divers’ memories – I continuously revisited and reflected on fellow divers’ written or imaged descriptions and noticed when others’ accounts resonated with my own.

The purpose of the explication phase is to fully examine what has awakened in consciousness in order to understand its various layers of meaning. In the explication process, the heuristic researcher utilizes focusing, indwelling, self-searching, and self-disclosure, and recognizes that’s meanings are unique and distinctive to an experience and depend upon internal frames of reference. The entire process of explication requires that researchers attend to their own awarenesses, feelings, thoughts, beliefs, and judgements as a prelude to the understanding that is derived from conversations and dialogues with others (Moustakas, 1990, p. 31).
Here I explored deeply the meanings and details of the experience as a whole and the core themes of the experience. The ‘explication’ phase involved shaping and reshaping my ocean dive narrative. I continued to add to or alter the content of my narrative to more closely reflect how I was thinking about the experience: my own and participants’ descriptions, the various themes (ebb and flow: movement-stillness, light-darkness, weight-levity, remembering, imagining). As van Manen writes of the phenomenological method: the research occurs in writing and re-writing the experience (1990, p. 131).

The explication phase led to developing a “creative synthesis”, the final phase of the heuristic research process:

The creative synthesis can only be achieved through tacit and intuitive powers. Once the researcher has mastered knowledge of the material that illuminates and explicates the question, the researcher is challenged to put the components and core themes into a creative synthesis. This usually takes the form of a narrative depiction utilizing verbatim material and examples, but it maybe expressed as a poem, story, drawing, painting, or by some other creative form (Moustakas, 1990, pp. 31-32).

I arranged what was illuminated in a way that reflected the oscillating movement of ebb and flow: movement between my main themes (stillness-movement, light-darkness, weight-levity, remembering, imagining), including other divers’ memories, imaginations, and reflections on emotional and somatic experience.
The Arts in Qualitative Social Science Research

Since the mid 1990s art’s place in qualitative social science research has received increased attention. A recent publication, The Handbook of the Arts in Qualitative Inquiry: Perspectives, Methodologies, Examples, and Issues (Knowles & Cole, 2008), provides a comprehensive overview of how arts-related research has evolved over the years and embraced various genres. It defines and explores the role of the arts in social science research and recognizes the challenges inherent in alternative methodologies. The handbook is described as “a foundation for considering art in its many forms, as a way of knowing, and knowing, in its many forms as an art.” (p. 1). Eisner (2008, pp. 3-4), in the opening chapter, discusses epistemology and the arts:

Are the arts merely ornamental aspects of human production and experience or do they have a more significant role to play in enlarging human understanding…? Part of the reason for the separation of arts from matters epistemological, pertains to the belief, a true one I would argue, that the arts are largely forms that generate emotions. We seek out the arts in order to take a ride on the wings that art forms provide. Arts are ways to get a natural high. This high is secured largely through our sensory response to the way sound is arranged, as in music; to the ways colors are composed, as in visual art; to the ways in which the human body excites us as we experience its motion in time and space, as in dance.

Also commenting on arts-based research and what it means to know, McNiff (2008, p. 35) draws on phenomenologist Merleau-Ponty’s (1962) remarks: “that the words of science and all other attempts at description are ways of ‘concealing phenomena rather than elucidating them’”. McNiff conceptualizes knowing as an ‘interplay’ between science and art, explaining that “science tends to reduce experience to core principles while art amplifies and expands, and I see the two as complementary within the total complex of knowing” (p. 34).

Knowing or understanding is not always reducible to language. Thus not only does it come in different forms, the forms of its creation differ. The idea of ineffable knowledge is not and oxymoron. The liberation of the term knowledge from dominance by the propositional is a critical philosophical move (Eisner, 2008, p. 5).
I find that art, like the ocean, allows for a sense of spaciousness. With art, I am directed away from a preoccupation with the cognitive and instead am drawn to embrace emotion and creative expression, opening up new modes of experience and ways to contemplate experience.

**Qualities of Goodness**

In developing the ocean dive narrative I gave careful attention to the qualities that define a well crafted arts-informed inquiry. Knowles and Cole (2008) define the “goodness” of an arts-informed work as having the following qualities: intentionality, holistic quality, researcher presence, communicability, contributions, knowledge advancement, methodological commitment and aesthetic quality. When engaging with the narrative and reflecting on its contents the reader will find that this work is imbued with all of these qualities. Here I summarize how all these qualities are embodied in this work.

**Intentionality, Holistic Quality and Researcher Presence: Creating an Expansive Space to Explore Experience**

With my own and fellow divers’ descriptions of ocean diving experiences a narrative was developed that honors, illuminates and evokes the wonder-filled, moving quality of being enveloped by ocean life. The ocean dive narrative was crafted in artful ways, with photographs, other images and my own illustrations and text, to reflect the diversity, richness and resonance of fellow divers’ shared stories related to emotional and somatic aspects of experience, and the reverberating and nurturing beauty and mystery of the ocean world.

Interspersed with fellow divers’ and my own remembrances and imaginations and contemplations of self and world, the narrative is also intended to invite and entice readers to feel/imagine what it is like to ocean dive and to discover and immerse into new and creative ways to contemplate their own experiences within the natural world and to bring the notion of connectedness with
nature to the forefront. The ocean and my artful journey deeper into the ocean dive experience has significantly strengthened a sense of connectedness I feel with the natural world and in crafting this narrative my intention is to relay, cultivate and inspire an enduring awareness and growth of this nurturing powerful sense (for ecological and humans’ psychological/physical wellbeing).

To relay the multidimensional aspects of exploring experience, the narrative’s final artful form reflects the notion of a meandering pathway within a vast ocean space. Within this space a whole range of sensibilities become illuminated and united – with the intention of expanding ways to envision and contemplate ocean diving – self-identity, place and experience. My hope is that this inquiry spurs and expands (creative) ways to explore somatic and emotional aspects of experience and connectedness with the natural world.

**Communicability, Contributions and Knowledge Advancement: Searching for Engaging Ways**

When creating the narrative I looked for ways to engage readers who are both divers and non-divers. Occasionally explanations of technical aspects of SCUBA diving were included for readers unfamiliar with the experience. I created line drawings throughout the narrative to relay the movement found in a particular description of experience, this element will likely resonate with divers, as line work was inspired by dive maps used by divers to depict “dive plans” – a drawing of the route to follow on a particular dive. The artistically crafted narrative, in landscape format with plenty negative space, is imbued with a sense of spaciousness to relay the vastness of the ocean and the sense of weightless freedom felt when diving, leaving readers ample room for further (silent) reflection.

Through my work in the dive industry I found that organized diving instruction and trips often do not encourage a reflexive inquiry into diving experiences. To emphasize the value of exploring somatic and emotional experiences in detail the narrative represents what is lost in a traditional dive log which often only focuses on logistical information and lists aquatic species seen. One of
my hopes is that this inquiry will influence dive schools and operations to appreciate the value of exploring experiences and sharing them through detailed attention to emotional and somatic aspects of experience and to alter the manner in which they teach and undertake expeditions – to entice youth and adults (not only divers) to explore the underwater world and the terrestrial world, more deeply, to foster ecological and emotional health.

**Methodological Commitment and Aesthetic Quality: Immersed in Ebb and Flow**

My initial immersion\(^\text{17}\) into this exploration of ocean diving was dominated by a sense of wave rhythm – a continual movement of ebb and flow, and with this feeling grew a strong sense of connectedness. This lasting sense of ebb and flow was carried throughout my inquiry and I realized that it is inherent in my three research methods – this rhythmic sense exemplifies how I thought about my participants’ descriptions together with or influencing my own experiences. The arrangement of text and images exemplifies how reflections or imaginations build on and influence one another. I noticed a continual movement back and forth among my own and participants’ descriptions and between our experiences of the past and the present. This sense of ebb and flow also guided the development of other themes: oscillations of movement-stillness, weight-levity, and light-darkness, which further illuminated how somatic and emotional movements also contain a sense of ebb and flow – in how they build and subside, surface and fade away.

A sense of ebb and flow also guided the search, selection or creation of images that serve to illuminate my and fellow divers’ somatic and emotional aspects of ocean diving experience. The narrative was arranged by having text often accompanied by an image (on the same or facing page) to further relay a particular description of experience. Through this ‘imaging process’ I was personalizing or creating a deeper relation with a particular aspect of the ocean dive experience. I noticed how moments become livelier, vivid – more solidly embedded perceptions, or **impressions**:

\(^{17}\) The first phase of heuristic research as described by Moustakas, 1990. (‘Initial immersion’ is described in Chapter One p. 23).
Those perceptions, which enter with most force and violence, we may name *impressions* (OED, 2001, from the philosophy of Hume, 1739).… By the term *impression*, I mean all our more lively perceptions, when we hear, or see, or feel, or love, or hate, or desire, or will…. Impressions are distinguished from ideas, which are the less lively perceptions, of which we are conscious, when we reflect on any of those sensations or movements above mentioned (OED, 2001, from the philosophy of Hume, 1742).

In addition to further illuminating emotional and somatic movement, images also brought to light diverse or repeating patterns of movement. Visible movement began to permeate the content of my narrative, opening up new ways to contemplate experience and self. During the explication phase of the inquiry the artful form of my narrative was altered to provide room for myriads of movement to effectively reflect a growing sense of expansiveness.
Chapter Seven:

Lasting Impressions of Immersion
My Connection with the Natural World

My connection with the natural world has grown through being a diver. Water, for me, plays a special role in developing a feeling of connection to this natural environment and amongst species found there. Dominant feelings in the ocean are the effect of weightlessness, pressure, and currents. The sway of wave motions and the pulls and pushes of currents manipulates my movements and of species around me which produces, for me, an overwhelming feeling of interconnectedness. Being within the water also presents opportunities for close interactions with aquatic beings.

I feel that through my diving experiences and other time spent in nature I have learned to feel a strong connection to and appreciation for the world and all of its beings. I have had many opportunities to spend time in nature and reflect on my experiences and have realized how greater attention and contemplation enriches or deepens my experiences by reviving or enhancing my memories and illuminating and strengthening my relations with the world. I find that as my contemplative, bodymindful practice continues to evolve I am enticed to discover and wonder more about my self within this world. I am learning to appreciate more and continually expand a relational way of being. This practice is a precious gift to me that I cherish and therefore want to encourage.

Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts.  
(Carson, 1956/1965, p. 88)
Ecological Identity Development

There is a growth in the field of inquiry that focuses on the human relationship with nature – especially in terms of how this connection influences notions of identity. Self-concept, involving beliefs of who we are and who we want to be, until recently, was thought of only in anthropocentric terms, focusing on multiple levels of social relationships. Psychological research on identity gave little consideration to the influence of the nonhuman environment (Clayton & Opotow, 2003).

Thomashow’s (1995) definition of ‘ecological identity’ expresses important ideas related to teaching and learning that are valued in my ecological-holistic educational field:

Ecological identity refers to all the different ways people construe themselves in relationship to the earth as manifested in personality, values, actions and sense of self. Nature becomes an object of identification. For the individual this has extraordinary conceptual ramifications. The interpretation of life experience transcends social and cultural interactions. It also includes a person’s connection to the earth, perception of the ecosystem, and direct experience from nature…each person’s path to ecological identity reflects his or her cognitive, intuitive, and affective perceptions of ecological relationships (p. 3).

The “curriculum of ecological identity” (p. xiv) emphasizes that each person’s path is unique and therefore teaching and learning must honour this. Thomashow stresses that ecological identity is not something that can be taught as a lesson or in a step-by-step fashion. The educator’s role is to guide the learner, encourage learners to bring perceptions of nature to the forefront of awareness and stimulate learners’ imagination, awe and wonder about the natural environment. An ecological identity grows as people have and reflect on new or past experiences within nature.

Thomashow explains how his curriculum, dedicated to developing an ecological identity, evolves from shared, nature-based stories, critical reflection, and deep introspection. He also describes a two-step process: first, circles of identification are widened and
perceptual boundaries are broken. I am enticed to reconsider or expand the ways that I think about my relationships with other living and non-living entities. How do I perceive myself in relation to the earth and its species? Secondly, the process involves delving into memories of nature to further comprehend the many experiences that have influenced me. I contemplate why certain memories are very vivid and important. What memories associated with nature stand out? What are my transformative moments had in nature? As I increasingly focus on observations, encounters, interactions within the natural world I come to know the myriads of ways that I am connected with the environment. Gradually an ecological perspective develops and is used to reflect on and interpret other experiences.

I agree with Thomashow (1995) and others (Fisher, 2002; Abram, 1996) advocating for an ecological-holistic perspective in education; that it is important to explore new, engaging, creative, and holistic methods that allow for a lifelong inquiry into an ecological identity to help strengthen a human-nature connection. In the contemporary Western world, many humans, especially city dwellers, are distanced from the natural world, spending much time in relatively sterile, barren, or built environments relatively devoid of nature’s natural processes. What implications does this have for the development of our selves: learnings, emotions, body, our mental and physical health, our identity? What are the implications for the health of Earth’s ecosystems?

**Ecological-Holistic Education**

European cultures have led both to human suffering and environmental disaster. Patterns of destruction which are neither random nor accidental have arisen from a consciousness that fragments existence. The problem is philosophical. Not the dry, seemingly irrelevant, obscure or academic subject known by the name of philosophy, but philosophy as a structure of the mind that shapes all our days, all our perceptions (Griffin, 1995, pp. 28-29).
My focus on ecological identity and strengthening the sense of interconnectedness between humans and the natural world aligns with the beliefs and values inherent in ecological-holistic schools of thought. These perspectives resist the mechanistic mindset that dominates Western culture and point to the significance of the human-nature connection and having an ecocentric orientation as opposed to an anthropocentric perspective. I see inquiry within the ecological-holistic field as exploring new ways of strengthening humans’ abilities to feel an interconnectedness with the natural world. My exploration, this project, contributes to expanding the ways that humans can explore ecological identity by exploring outside of familiar terrestrial worlds in order to realise the myriads of ways that humans are entwined with the world.

Interconnectedness is the primary theme advocated by the philosophy of Deep Ecology (Naess, 1987), which emphasizes an ecocentric orientation rather than an anthropocentric orientation. “[A]n ecocentric orientation attempts, within obvious kinds of practical limits, to allow all entities (including humans) the freedom to unfold in their own ways unhindered by the various forms of human domination” (Fox, 1990, p. 2). This perspective stresses that people have become disconnected from nature because of a mechanistic worldview that can be traced back to the scientific revolution and is presently promoted by industrial capitalism. Deep ecologists point to how mechanistic thinking and industrial capitalism lie at the root of many environmental problems. They focus on the consequences of becoming disconnected from nature and highlight the ways that science, technology and capitalism perpetuate our dislocation from the natural world, including other humans. They espouse the need for a holistic worldview that can help restore the health of ecosystems and the species within them, including humans. A new ecological paradigm is necessary to replace the dominant mechanistic paradigm of the past three hundred years (Zimmerman, 1990).

Recently, the relationship between psychology and environmental destruction has received more attention. The need to re-establish and nurture a strong, caring human relationship with the natural world has gained significance, as alienation from nature is recognized as one of the causes of the present environmental crisis. Ecopsychologists stress that severing ties with nature compromises human psychological and social wellbeing, which in turn contributes to environmental degradation (Fisher, 2002).
Ecopsychology focuses on how there is a reciprocal relationship between mental-physical health and environmental health. How we perceive the natural world and how we feel a connection with it, affects environmental health. The environment in which we find ourselves affects our mental health as it can induce feelings of calmness or stress.

Wellness and mental health improvements that result from reconnecting with nature have also received increased interest (Louv, 2005; Irvine & Warber, 2002; Greenway, 1995). In Last Child in the Woods: Saving our Children from Nature-Deficit Disorder, Richard Louv highlights how children growing up exposed to an environment relatively devoid of nature are missing significant learning and developmental opportunities. He compiled various studies that point to the many positive emotional and physical developmental effects derived from using ones senses fully and regularly in nature, and blames increasing rates of psychological and physical illness on the lack of prolonged exposure to the natural world.

Spending more time in nature while paying close attention to sensory experiences is seen as a way to further realize and strengthen interconnections between people and the natural world. Strong personal emotional connections are recognized as leading people to care for the environment and also creating a sense of belonging, important for our mental health.

The existence and nurturance of a strong connection with the natural world is a primary part of Daoist and Buddhist beliefs and practices and is viewed as an important approach to mental wellbeing (Bai, 2003, p. 3). Aboriginal people all over the world have long honoured this relationship as part of their spiritual beliefs. In contrast, the western mental health tradition is criticized as being very anthropocentric. In 1960 psychologist Harold Searles cautioned against this limited perspective:

The nonhuman environment is…considered entirely irrelevant to human personality development, and to the development of psychiatric illness, as though human life were lived out in a vacuum – as though the human race were alone in the universe, pursuing individual and collective destinies in a homogeneous matrix of nothingness, a background devoid of form, colour and substance (p. 3).
Ecopsychologist Andy Fisher (2002) considers his field not as a discipline but rather as a project and historical undertaking. He defines the ‘project of ecopsychology’ as encompassing four historical tasks: psychological, philosophical, practical, and critical.

The psychological task involves building a psychology that expands the field of important relationships to include other-than-human-beings (p. 7)…. The philosophical task points to healing our dualism by returning soul to nature and nature to soul (p. 10)…. The practical task requires the development of therapeutic and recollective practices toward an ecological, life-celebrating society (p. 13)…. The critical task focuses on challenging the beliefs attitudes and values and social arrangements that have sanctioned ecological destruction (p. 17).

Neil Evernden (1992) argues that the absolute separation of humans from nature has allowed humans to claim the unique qualities which justify domination of the earth. Abram’s (1995) book, The Spell of the Sensuous: Perception and Language in a More-Than-Human World, is a reminder of how human perception of the natural world has changed because of technologies, and that humans have lost a way to perceive a distance between technologies and selves. This has transformed many human relationships with the natural world:

Caught up in a mass of abstractions, our attention hypnotized by a host of human-made technologies that only reflect us back to ourselves, it is all too easy for us to forget our carnal inheritance in a more-than-human matrix of sensations and sensibilities. Our bodies have formed themselves in delicate reciprocity with the manifold textures, sounds, and shapes of an animate earth…. To shut ourselves off from these other voices, to continue by our life styles to condemn these other sensibilities to the oblivion of extinction, is to rob our senses of their integrity, and rob our minds of their coherence. We are human only in contact, and conviviality with what is not human (p. 22).

Ecological-holistic schools of thought stress that humans’ inextricable link to nature is essential, especially now as many humans are relentlessly destroying the health of aquatic and terrestrial environments worldwide. Some of the blame for this continued
devastation is placed on an inability or a lack of desire to reflect on or foresee how our actions impact environments (Fisher, 2002). This pervasive neglect is linked to an insatiable desire and greed to industrialize and modernize at all costs leading to the creation of unsustainable technologies and shifting the ways people experience nature. Many caution that as humans spend more time shielded from earthly elements and forces by windowpanes, windshields, mall walls, television and computer screens, a sense of interconnectedness is lost and a rootedness and reciprocity with all that surrounds (Abram, 1996; Fisher, 2002; Sewall, 1993).

Learning to Connect With the Natural World

Mainstream educational curriculum lacks consideration of humans’ relationship with the natural world, that it, like any healthy relationship, requires nurturance, time, attention, and care, for growth. Although many have espoused the need to feel a significant connection with nature to be inspired to protect it, other educators stress that more attention must been given to how strong connections can be nurtured. Ecopsychologists and environmental educators point out the often false assumption that having more experiences in nature inevitably develops a strong connection with nature, leading to care and action (Fisher, 2002; Russell, 1999).

Drawing on her experience as an environmental educator Constance Russell (1999) problematizes the idea that experiences in nature will ultimately lead to a significant connection. She describes this relationship as “a linear understanding of experience” (p. 123), where “nature experience is often seen to automatically contribute to environmental awareness, commitment, and action” (p. 124). In her experience, she sees how past experiences and interpretations of them influence perceptions of new experiences. A person comes with various layers of experience and “stories” which influence how new nature experiences are integrated.

Ecopsychologist Andy Fisher (2002) points out that in the Western world it seems that people have to learn how to connect with nature. He explains that many are alienated from the other-than-human-world because of an anthropocentric, objectivist and
atomistic worldview that dominates lives, including education experiences, that they cannot find their way back to earth. One of the
tasks in changing this worldview, one component of what Fisher refers to as the project of ecopsychology, is the need to develop
healing and recollective practices that help strengthen bonds between humans and nature.

A Return to Place: Place-based, Bioregional and Biospheric Education

In 1949 Leopold, in the *Sand County Almanac*, spoke of “landlessness” referring to the loss of humans’ collective awareness
of and admiration for the land. According to Midgley (1989) and a growing number of ecological, holistic researchers and educators,
it is the sheer inattention or lack of mindfulness toward the world, region or place around us that underlies many environmental
problems. The underlying assumption is that awareness leads to knowledge and understanding. As understanding increases, ecological
relations appreciation and respect deepen and actions follow (Butler, 1993).

The value of knowing one’s place or region in detail is recognized by a growing number of ‘place-based,’ ‘bioregional’ and
‘biospheric’ educators as an important way to connect with nature. Developing a thorough understanding of existing ecological
systems helps foster an interest in preserving natural spaces.

What bioregionalism means is that in order to survive on this planet, we need to realize how important it is that we’re
part of the immediate place in which we live: “We need to know this place in detail; we need to love it in the detail”

Bioregional education, developed over the last two decades, embraces the principles of deep ecology that stress the need for a
reconnection with nature and its processes and to move from anthropocentrism to ecocentrism. In the late eighties, a number of
bioregional educational values were established and two in particular express a holistic conceptualization of experiential learning:
Bioregional education validates and nurtures bonding between the individual and the planet through sensory, emotional, spiritual and intellectual channels…. Bioregional education recognizes no separation of learning from life. We are all teachers and students. The process of bioregional education is one of active participation and sharing within the human community and the natural environment (Proceedings NABC I, 1984, p. 12 and Proceedings NABC III, 1989, p. 61. In Traina 1995, p. 7).

Baker (2005) stresses the need to promote ‘landfull’ experiences that actively engage people with the environment. People learn about their immediate surroundings or region by focusing on lived experiences. For Baker, the essence of ‘landfullness’ is for people to discover a personal approach to relating to the land. Like Thomashow’s (1995) focus on developing an ecological identity, Baker stresses the promise and power of developing personal connections to the natural world.

Drawing on the connectivity and unity principles of holistic ways of learning and bioregional education, biospheric education focuses on the various interconnections and layers in the universe from the smallest quark to the largest celestial bodies. Proponents of this approach blame a lack of capacity or interest in seeing vital life-sustaining interconnections as a significant cause of environmental destruction. By learning to see the earth and its species and the universe as an entangled web of relations, humans may notice the many ways that they influence and depend on each other. The hope is, that as the ability to recognize relationships increases, a greater interest in paying attention to these links develops, resulting in a stronger connection to the natural world, people and other species. Consequently, people may be motivated to act in ways that reduce their ecological footprint and nurture the health of the world’s ecosystems and its species. We should not view a person’s actions as being isolated, but, rather, as being part of and affecting an integrated, layered and relational whole.

This approach stresses how looking at interconnections between people, other species, and their surroundings is intriguing, as various relations and phenomena are likely not fully understood. There is an opportunity to explore the mysterious and unexplained...
behaviour or qualities of water, perception, emotion, senses, gravity, space, brain functioning, light, microscopic particles and waves, color, our universe and interpersonal and interspecies communication. Movements from heights to depths, between micro and macro scales, and the realization of reoccurring movements, energies, patterns and shapes within our biosphere and bodies can astonish and bewilder. Extraordinary insights occur when we are given the opportunity to perceive in an expansive or holistic way; when we see from different vantage points and perceive relationships across and between boundaries and between worlds (Abram, 1996).

**A Need for Transformation in Education**

Valuing educational practices and theories that support an interconnected worldview aligns with a curriculum orientation described by holistic educator, John Miller (1993), as ‘transformation.’ He distinguishes between three orientations to curriculum based on how they perceive the universe: transmission, transaction and transformation.

Miller (1993) describes most of Western mainstream education as tending to follow the transmission orientation: “[T]he underlying worldview of the transmission position is atomism, as the universe is conceived of small reducible units” (p. 54). Learning is far from reflective or experiential. “Students sit in rows and study from the textbook or worksheet” (p. 56). With this kind of educational practice, the cognitive dimensions of life are of main concern, while the spiritual, physical and emotional dimensions are not stimulated or engaged.

The transaction position is associated with the thinking of John Dewey and conceives of a universe which is viewed as rational and intelligible and the fundamental component of human understanding is experience (Miller, 1993). The learner must interact with the environment in order to grasp the patterns and relationships among entities and concepts. The substance of curriculum is derived
Experiential learning activities dominate this orientation.

Dewey and others associated with the educational philosophies of pragmatism and progressivism, consider that the way education occurs is as important as its content. Learning from experience is recognized as an important learning method because humans learn by engaging in action. Dewey saw that “the organic connection between education and personal experience” was significant because experience in itself is not educative; rather it is what the learner brings to the experience (Criticos, 1993, p. 162). Meaning is derived from the interaction between learner and experience. In addition, a key notion in Dewey’s philosophy is that the learner must be engaged or fully present with the experience to gain meaning from it. By emphasizing the importance of real-world experiences and problem-solving, experiential education programs support this action-oriented perspective.

In *Experience and Nature*, Dewey (1925) pointed to the importance of having direct experiences in nature:

> Experience is not a veil that shuts man off from nature; it is a means of penetrating continually further into the heart of nature. There is in the character of human experience no index-hand pointing to agnostic conclusions, but rather a growing progressive self-disclosure of nature itself. The failures of philosophy have come from the lack of confidence in the directive powers that inhere in experience, if men have but the wit and courage to follow them (p. iii).

Experiential learning is also described as a non-fragmented method of learning about the world and humans’ relationship to the world. Dewey stressed the importance of what he termed ‘the experimental continuum’. Britzman (2000) summarized his assertion:

> Continuity, as a criterion for experience, refers to the connectedness we feel toward our social practice and activities, and whether we see ourselves as authors of, rather than authored by experience…. The difference between mere circumstance and lived experience is our capacity to bestow experience with meanings, be reflective and take action….
Fragmented experience cannot be extended or transformed… What becomes fragmented is our conceptions and relationships” (pp. 34-35).

David Orr (1993) points out how in mainstream education students receive a disconnected sense of the world through a fragmented curriculum with its disciplines and sub-disciplines. To see the interconnections between the world and its beings and happenings, an ecological-holistic perspective stresses that teachers must prevent the compartmentalization of knowledge. As the world faces complex issues of environmental degradation, social inequality and interpersonal and international violence, the need to examine all these issues interdependently is gaining significance and has received increased attention, spurring more interdisciplinary learning and research. These integrative and inclusive approaches are valued because they increase students’ capacity to make connections in their learning across the curriculum and between disciplines (Orr, 1993).

Creating Space for Sensory, Relational, Ways of Knowing

The transformation orientation is congruent with beliefs inherent in holistic education. This orientation conceptualizes the universe as having interconnected parts and systems (Miller, 1993). We can only fully understand phenomena in relation to each other and in relation to the larger system or whole. It adopts a focus from existentialist philosophy:

Existentialists believe that the most important kind of knowledge is about the human condition and the choices that each person has to make, and that education is a process of developing consciousness about the freedom to choose and the meaning of and responsibility of one’s choices…. The curriculum would stress self-expressive activities, experimentation, and methods and media that illustrate emotions, feeling and insights (Ornstien & Hunkins, 1993, p. 40).
This position values self-reflection and contemplation. Hutchison and Bosacki (2000) explain what they see as an integral
difference between the transaction and transformation positions: “With the transaction orientation, human experiences are subject to a
process of reflection. However [in the transformation position], such a reflective process takes on a uniquely non-analytic character,
incorporating nonlinear forms of expression such as narrative, metaphor, and fantasy” (p. 179). This position acknowledges that there
are other dimensions to human experience beyond the cognitive. In this orientation, there is space for the expression of the emotional,
somatic and spiritual dimensions of human experience (Hutchison & Bosacki, 2000). There is room to explore these relational
dimensions of experience.

Experiential learning theory is evolving as ecological-holistic schools of thought emphasize the importance of taking
experiential learning a step further into an awareness of our sensory being. Advocates of holistic education focus on enhancing the
conceptual foundations of the philosophy of experiential education, by incorporating the notions of wholeness, interconnectedness and
mindfulness in the experiential learning method (Hutchison & Bosacki, 2000). They recognise the significance of enhancing
experiential learning by focusing on emotional, somatic and spiritual dimensions of human experience. Having a holistic view of
experience is considered as a necessary step to overcoming human disconnection from nature (Abram, 1996; Bai, 2001; Fisher, 2002;
Hocking, Haskell, & Linds, 2001). A holistic view sensitizes us “back to earth”.

For more than ninety-nine percent of human history, the world was enchanted and man saw himself as an integral part
of it. The complete reversal of this perception in mere four hundred years or so has destroyed the continuity of the
human experience and the integrity of the human psych. It has very nearly wrecked the planet as well. The only hope,
or so it seems to me, is the re-enchantment of the world (Berman, 1984, p. 10).

Merleau-Ponty (1962), asserts that relearning how to look at the world requires a reconnection between our minds and our
bodies. Now there exists a wealth of criticism that challenges the notion of a separate mind and body (Cataldi, 1993; Damasio 1994;
Education (2001) is a recent collection of ‘bodymind thinking,’ stressing a somatic, emotional orientation to education as well as an ecological worldview. There is an explicit emphasis on the body as a primary source of knowing. Conceiving the bodymind as whole undoes the dualistic, atomistic, Cartesian worldview. The growing field of phenomenological curriculum theory and research stresses the interconnectedness of the bodymind and considers the lived experience of the body-mind and bodily and affective awareness as critical qualities of learning (Aoki, 1993; Greene, 1995; Hocking, Haskell, & Linds, 2001; Jardine, 1998; Pinar, 1994).

Hocking, Haskell, & Linds, (2001) point to the fact that Dewey (1925) resisted dualist thought as he used the term “body-mind” (p. 232). He also paid attention to the role of the non-cognitive dimensions of experience. Eisner (1992) explains that, in Dewey’s thinking, “[e]motion could not be disregarded in dealing with intellectual matters since how children felt about what they studied influenced how they thought about what they studied” (p. 312). Dewey (1925) distinguished between the world of primary and secondary experience, describing the former as “non-cognitive”, while the latter, “explains the primary objects, they enable us to grasp them with understanding instead of just having sense contact with them” (cited in Hunt, 1995, p. 7). In present educational discourse, ecological-holistic theorists call for a greater emphasis on primary experience – our emotional and somatic experience.

Bai (2001) points out that what is usually missing in empiricist philosophy, a philosophy that grants primary understanding of the world to the senses, is the “affective dimension of the bodily-sensorial understanding or knowing” (p. 89):

This dimension is home of the “carnal, sensorial empathy” (Abram, 1996, p. 69) that connects the being of the human self with the being of other material entities, or taken in totality, the earth or biosphere. To experience another physical being in the mode of direct and sensuous perception is to realize the primordial bond between oneself and that being, which disposes one to value it intrinsically (p. 89).
Although there is growth in the discourse emphasizing the somatic and emotive dimensions of knowing, Heshusius (1996) points out that it has been difficult to stress the significance of this way of knowing in an academic context which values and rewards cognitive ways of knowing. Her concern is that even though there have been attempts by holistic thought to overcome Cartesian dualisms and to prevent the privileging of cognitive ways of knowing, they are never quite complete:

The general importance of the mind-body connection might be mentioned, but explicit emphasis on the body as a primary source of learning is noted by only a few [academics]…. Holistic educational inquiry could end up leaving the real-life bodies and emotions of students by the wayside once more in its attempts at recovering “wholeness” that is only conceptual and rational (p. 11).

Hutchison and Bosacki (2000) believe that articulating a place for non-analytical forms of cognition and consciousness would enrich the conceptual foundations of experiential education. They assess present definitions of experiential learning and find that a dichotomy exists between perception and meaning. Often, emotions and spirit are relegated to perception and meaning is judged to have a solely cognitive makeup. They point to how holistic educators recognize other meaning-making processes:

Where in this [experiential learning] definition would one place acts of intuitive insight, moments of wonder and revelation, and peak experiences, for example?…What about intuitive thought processes that entail direct and immediate contact with knowledge? Intuition is a cognitive process unmediated by rational analysis, which arises most often during moments of intense creative activity or when the body is at rest, but the mind alert. Or what about metaphorical thought processes that entail cognitive leaps in thought which bridge by analogy two seemingly unrelated phenomena, and thus uncover new relationships and patterns? And finally, what about narrative modes of thought in which the temporal basis of life is given voice and sequences of events are reconstructed to capture meaning? (p. 179).
Discovering an Amphibious Way of Being

Amphibious: Having two lives, occupying two positions; connected with or combining two qualities. (Amphibious, 2010)

Movement-filled aquatic experiences now permeate my terrestrial experiences, adding vitality to what I perceive – enriching my experiences. I have learned to delve deeper into experience through feeling, knowing, wave rhythm.

I tune into the continual interplay of ocean qualities together with my and other divers’ somatic-emotional movements. I begin to see my artful narrative pathway as a discovery, exploration, and expansion of an amphibious way of viewing – knowing – being in the world: through a movement between my own experiences together and my participants’ stories, through oscillating ebb-flow: movement-stillness, weight-levity, darkness-light, remembrances-imaginations, inhalations-exhalations, terrestrial-aquatic. Through artful and ocean’s ways I am taught to experience the world through deep-rooted relationships and as animated and sacred.

Perceiving in an animated way, Bai (2003) explains, “is a matter of life and death” (p. 2).

The urgency of the problem is particular to our time as our civilization has entrenched itself almost completely in instrumentalism, making the intrinsic, animated perception of the world appear as an outdated…. The whole world becomes violable and disposable when we can no longer see it as alive and sacred. Herein lies our challenge to education. Can we educate ourselves and our young to perceive the world as animated and sacred? (p. 2).

By artfully immersing deeply into ocean diving experiences I notice that I build lasting impressions and enduring relations – a stronger sense of connectedness with the natural world grows and expands. I become more aware of how I am shaped by attentive observation of the natural world – subtle undulations of light, the smooth sideways movement of an Angelfish’s caudal fin, the
swooping dive of a raven overhead. I notice how my breath changes with dimming sunlight, I am soothed by the oscillations of a fish’s fan-shaped fins, my body relaxes as it dives downward with the raven. I now habitually look for subtle shifting movements, even subtle pressures, transitions and thresholds of the natural world. I am drawn to hearing or reading others’ experiences of the natural world as I have learned of the enduring, enriching influence of shared stories. My hope is that this inquiry also entices others to focus on artful, immersive and shared ways to explore experiences in the natural world – in both aquatic and terrestrial realms.
Appendix

Inquiry Summary

Here I describe my interests and experiences which led to this inquiry. This will lead into a summary of the inquiry focus. Then I will briefly describe my process and representation. Finally, I will elaborate on discoveries/insights and will conclude with future ideas.

Firstly, I will explain what led me to explore the diving experience deeply or my research question: what is the ocean scuba diving experience like?

I became a Open Water’ SCUBA diver in 1989 after training in the glacial lakes of Alberta. I did not take to diving right away because I was consumed with being uncomfortably cold without a dry suit. Soon afterwards I enrolled into a Bachelor of Arts in Criminology program at the University of Alberta where I focused on ‘youth at risk’ and the importance of having a healthy self-identity. I became interested in the effectiveness of wilderness programs designed to help youth develop a more positive sense of self. Upon completion of the degree I embarked on a backpacking trip to Europe and Africa where I had the opportunity to dive into the ocean for the first time. I encountered the magical world of the Rea Sea. I was instantly hooked on ocean diving and decided I wanted to teach diving, and so two years later I travelled to Australia to become a certified ‘Dive Master’ – allowing me to assist an instructor. After working as a Dive Master for a short time I left the diving industry because my experience with instruction was very rushed and it did not allow for the kind of relaxed diving experience I loved and valued.

In 1997 I commenced a Masters in Environmental Studies degree at York University, focusing on wildlife conservation issues and specifically the illegal wildlife trade. I had the opportunity to spend time with and care for animals at wildlife rescue centres in
Guatemala and Costa Rica. My strong desire to protect animals was further fueled by the strong connections that I had developed with these wild animals. I learned of the immense love and reward that animals (both wild and domesticated) and being in the natural world brought to my own life. I was surrounded by the healing, calming nurturing aspects of observing them, being with and interacting with them.

**Inquiry Focus**

Through my experiences I was learning more about how the development of a sense of interconnectedness with the natural world and its beings, leads to emotional and physical benefits, and inspires care of the natural world. During the initial stages of my inquiry I was also learning, through reading eco-philosophical and eco-psychological perspectives, that separation or alienation from nature contributes to the present ecological crisis and has negative effects humans’ psychological and physical development and health.

And so what led me to this exploration, also became the purpose of this inquiry: I was developing a strong sense of interconnectedness with the natural world, and I learned of the value of this connection, and so I wanted to further explore ways of connecting with this world, and to entice others to explore their connections to foster ecological, emotional and physical health.

I decided to delve deeper into the nature of ocean diving – the emotional-somatic aspects of this experience. I chose to explore this particular experience because I had always felt that the ocean world had a profound effect on me. I was always carrying with me this sense of knowing that an incredible, fluid world, full of life, was existing out of my visual sight.
I will elaborate on the process and representation shortly but I want to highlight here: I gathered and immersed into my own and participants’ descriptions and other dive stories and I focused on the best way to relay our experiences – in a way that was in line with my purpose. With the guidance of my committee I realized that I needed to embrace, an artful representational form – to create a space for the reader to enter into the somatic and emotional aspects of ocean diving and, at the same time, to create a space that would allow readers to explore the notion of interconnectedness with the natural world.

As the ocean dive narrative evolved in a movement-filled artful way – a movement back and forth between my own and others’ experiences, and between imaged and written accounts – I continued to further illuminate the ocean diving experience and notions of interconnectedness. In a personal, artful way I created moments that stayed with me – I created lasting impressions of ocean diving. Through this artful process and representational form I found ways to relay what I was discovering – with the hope that the insights would also linger with readers.

**Process and Representation**

The inquiry process and representation led to various illuminations and therefore, in describing my inquiry process and representation I will also be describing discoveries or insights.

I was drawn to the phenomenological method because I want to encourage awareness and understanding of lived experiences with my audience through my work. I want to revive physical and emotive dimensions of knowing because I recognize the value of this kind of knowing. I feel that often our present ways of education and life neglects emotional-somatic dimensions of experience.
I engaged in in-person and focus group conversations and online correspondence with divers over an 8 month period. They come from a variety of training backgrounds: commercial divers, dive instructors, dive masters, underwater photographers, and diving students taking a beginner course. They ranged in age from 15 to 60’s. It was important to also include myself as a participant in this inquiry into somatic and affective ways of knowing as I agree with heuristic research theorist Clark Moustakas, that any pursuit to understand something is a process of also knowing yourself as well as others’ perspectives. My past and future ocean diving experiences became interwoven with the stories and experiences of fellow divers. Descriptions that resonated with my own experiences had an effect of heightening or reinforcing a particular aspect of the experience. Through their descriptions I become more aware of the subtleties of diving, and I discover new ways to view and feel the world.

**Phases of Heuristic Research**

The heuristic method involves a progression through six attentive and reflective phases: initial engagement, immersion, incubation, illumination, explication and creative synthesis. As I describe my movement through the phases I will elaborate on: the influence and importance of participant voices and how the artful, creative process and representation facilitated my exploration.

Moving through the contemplative and creative phases requires a slow, gradual pace which allowed me to thoroughly delve into the multiplicity of meanings and feelings associated with ocean diving – to take the time to deeply reflect on what I learned from fellow divers and my own experiences. Through a dialectical approach – a movement between exploration of self and exploration of others’ experiences – I uncovered multiple meanings of ocean diving.

I see that the first phase of my inquiry, or the ‘initial engagement’ into ocean diving, began during my time exploring the coral reefs off of Cozumel, Mexico in 2003. My ‘initial engagement’ was dominated by a sense of wave rhythm – a continual movement of ebb and flow, and with this feeling grew a strong sense of connectedness. This lasting sense of ebb and flow was carried throughout
my inquiry. This rhythmic sense exemplifies how I thought about my participants’ descriptions together with or influencing my own. The arrangement of text and images exemplifies how reflections or imaginations build on and influence one another. I noticed a continual movement back and forth among my own and participants’ descriptions and between our experiences of the past and the present. This sense of ebb and flow also guided the development of other themes: oscillations of movement-stillness, weigh-levity, and light-darkness, which further illuminated how somatic and emotional movements also contain a sense of ebb and flow – in how they build and subside, surface and fade away.

During the ‘immersion phase’ I delved deeper into the experience through conversations with participants and the sea stories, poems, photographs of other divers.

The ‘incubation phase’ suggests the importance of ‘sitting with’ an experience for awhile to be able to see it more clearly, creatively and holistically. After a period of immersion into my own and my participants’ aquatic memories, I noticed how ocean rhythms and qualities began to permeate my terrestrial life. Exploring this experience in detail initiated a heightened focus and an ongoing attentiveness to movement and growth in my terrestrial life.

The process of ‘illumination’ involved a revealing of the overarching themes of ebb and flow through noticing oscillations of movements-stillness, light-darkness and weight-levity, together with the ‘back and forth’ movement involved in remembering, imagining, and attending to present encounters and interactions.

The ‘explication phase’ involved shaping and reshaping my ocean dive narrative. I continued to add to, or alter the content of my narrative to more closely reflect how I was thinking about the experience. The narrative was arranged by having text often accompanied by an image (on the same or facing page) to further relay a particular description of experience. Through this ‘imaging
process’ I was personalizing or creating a deeper relation with a particular aspect of the ocean dive experience. I noticed how moments become livelier, vivid – more solidly embedded perceptions, or impressions. During this phase of the inquiry the artful form of my narrative was transformed to provide room for myriads movement and to effectively reflect a growing sense of expansiveness. Focusing on the use of images also brought to light diverse or repeating patterns of movement. Visible movement began to permeate the content of my narrative, opening up new ways to contemplate experience and self.

I see the creative synthesis phase as an extension of the explication phase – I completed the ocean dive narrative in a form that reflected the oscillating movement of ebb and flow and stayed true to my purpose.

Discoveries/ Insights and Future Ideas

I have already discussed some of the discoveries or insights of the inquiry in describing the process and representation and here I will review and elaborate on discoveries as I review the meaning and development of the five ocean dive narrative chapters:

‘Immersing’ introduces readers to ideas related to a sense of connectedness and diverse ways of knowing. A personal fundamental ocean dive experience is relayed to express an ‘initial immersion’ into experience – an overwhelming sense of connectedness was felt through attending to ocean’s wave rhythm. The expansive essence of two of the research methods used (phenomenological and heuristic) is presented.

‘Opening Pathways of Exploration’ focuses on myriads of moving ways that are contemplated through attending to the fluid nature of water and the sense of weightless freedom ocean diving offers – movement through memories, imaginations, thoughts, between aquatic and terrestrial realms, and the somatic movement of human and aquatic beings.
‘Widening Circles of Compassion’ explores dynamics of emotion and a sense of connection. Diving I am opening up myself to being vulnerable – to currents, the abyss, the unexpected. My sense of a world where I feel control disappears – I am exposed. I understand more about the need for attachment when I experience the abyss. Diving illuminates a further understanding of connection and heightens a sense of mortality.

‘Nature Reveals Her Open Secret’ relays why I turned to art to express and illuminate experiences in the ocean world. Exploring through art reveals subtle, repeating, intricate or diverse patterns inherent in the movement of beings, emotion, breath, light and sound.

‘Surfacing’ begins with a focus on the breath and this theme, together with other explorations movement, is carried throughout. An enduring sense of ebb and flow permeates imaginations and remembrances of the aquatic realm.

My future plans involve continuing to explore and encourage ways for people to connect with the natural world. I feel that this inquiry can guide or give others ideas on ways to explore experiences in the natural world. This representation acts as a metaphor – suggesting immersive ways of exploring experiences in both terrestrial and aquatic worlds. I would now like to focus my efforts on creating a book which becomes more accessible to people outside of the academic world. Also, through my work in the dive industry I found that organized diving instruction and trips often do not encourage a reflexive inquiry into diving experiences. One of my hopes is that this inquiry will influence dive schools and operations to appreciate the value of exploring and sharing ocean experiences.
Bibliography


