Seven Steps Towards a Delicate Empiricism

These seven steps are an attempt to illustrate a process of "delicate empiricism" as a way to conduct creative

and scientific investigations. The process is based in the phenomenological experience of the senses paired with

imagination, research, and creation that results in discoveries that may be communicated to others through art

and science. These seven steps urge the observer to recognize the merits of using both the heart and the mind

when exploring the world, and are a way to bring together the inquisitive nature of science with the subjective

experience of art. These are the steps used by the student during a month long field study during which she

studied the ocean, and are a part of a larger paper that explores the power of art as a means of expressing

truths about the ocean. Delicate empiricism is a process that illuminates how love can be translated from a

phenomenon through the senses into art, which is a new phenomenon in itself. It starts: passion, observation,

imagination, conversation, context, and organs of perception. It begins anew in love.

1. PASSION

"For every appetite, there is a world. The dreamer then participates in the world by nourishing himself from one

of the substances of the world, a dense or rare, warm or gentle substance clear or full of penumbra according to

the temperament of his imagination." (Bachelard 1971)

Delicate empiricism must start with a passion. It starts with an open-ended interest, a desire to

be in orbit with an idea and to know its character from infinite perspectives. It starts with a

bodily response and a magnetic draw that directs one's attention, hands and eyes. This attraction must arise internally in order to be powerful enough to sustain a process of experimentation and dynamic discovery. It starts with a question, an object or an ineffable affinity towards a phenomenon. It starts with the sea. It begins with the pull of the ocean on my body, memory and imagination. In the conscious part of my memory, it begins with coastal life and the summer bay rhythms of tide, water, wind and daydreams. In the unconscious, it has always started with water. Our mammalian ancestors once crawled from the sea and all human bodies now are born from the ocean-amnion of our mother's wombs. Our first breaths before birth are an exchange of water in the amniotic fluids. The process of cell division is a fluid and circular dance. My body knows the character of salt water and how it forms eddies, vortices, spirals, and waves in a constant state of formation, reordering and diffusion. I am never more at home than when I am on a coast and recognize the salt-wet air on my own salt skin, or when I am on water and finally achieve a harmony with gravity and the motion of the hull, or when I am in water and feel the generous encompassing and upwards-lift of saltwater on my skin.

## 2. OBSERVATION

"All the senses, including vision, can be regarded as extensions of the sense of touch – as specializations of the skin. They define the interface between the skin and the environment – between the opaque interiority of the body and the exteriority of the world." (Pallasmaa 2005)

The body's senses are the tools for observation of the world. Every wave of cosmic information that our senses detect is relevant while practicing delicate empiricism. Openly

invite the clues of the world into your body and mind and write, photograph, sketch or memorize to document the experience of sensing. Do not censor your note-taking techniques at this stage: include anything and everything that you observe during this time of intentional observation, of focused sensory gathering. Include the classical five senses of sight, touch, smell, taste, and sound, but also note other input such as orientation, temperature, time.

Use these prompt for direction:

*Notes from the eyes*: color, motion, gesture, shape, quantity, light, value, depth, relationships with other elements.

(The ocean is sky-colored, blue, green, gold, grey, white, black, luminescent, deep, wide-colored.)

*Notes from the ears:* rumble, depth, horizon, enclosure, treble, bass, pitch, distance, echo, texture, materials, relationships with other elements.

(The ocean bellows, grumbles, laughs, laps, roars, crashes, whispers, splashes, sustains, diffuses, fills.)

*Notes from the skin*: texture, temperature, solidity, flexibility.

(The ocean cools, gives, envelops, swirls, warms, responds, presses, speeds, pulls, rouses, reminds, stings, soothes, floats.)

Notes from the mouth: temperature, texture, solidity, sweetness, salt, bitterness, memory.

(The ocean is salty, heavy, rich, wide, deep, vital, humid, ancient, familiar, liquid, wet, under, welcome, foreign.)

Notes from the nose: potency, consistency, attraction, repulsion, heat, variety, memory.

(The ocean smells of decay, wind, birds, fish, mammals, machinery, diesel, freshness, youth, health, summer, substance.)

*Notes from the heart*: emotions, memory, atmosphere, energy, aura.

(The ocean evokes tranquility, daydreams, destruction, danger, light, sunsets, fluidity,

adaptability, generosity, gestation, defiance, blue, depth, exhaustion, diffusion.)

Notes from the body: balance, gravity, orientation.

(The ocean disorients, disrupts, tips, tilts, throws, flattens, broadens, diffuses, gathers, defines, confines, reminds.)

## 3. IMAGINATION

"Close your bodily eye, so that you may see your picture first with the spiritual eye. Then bring to the light of day that which you have seen in the darkness so that it may react upon others from the outside inwards. A picture must not be invented but felt. Observe the form exactly, both the smallest and the large and do not separate the small from the large, but rather the trivial from the important." - Caspar David Friedrich

At this stage, invite imagination, memory and emotion to participate as tools in the investigative process. Use imagination to come to a new way of knowing the phenomena, and notice how these truths feel different in the body from the above tools for observation. Distill the most potent aspects of the phenomenon in your imagination to discover their power. Imagine the phenomenon over time and its stages of transformation in the process of becoming, manifesting in the present, and how it will change into the future. Use imagination to transcend the limits of time, space and the physical experience of perceiving through a body. The ocean is here, on this long and shallow shore. Each wave is a roiling line of white horses, continuous, always in a process of becoming and receding. The ocean has been a source for sustenance, transportation, inspiration, and myth for generations. In my imagination, I understand the ocean in a state of simultaneity, motion, transformation.

Although I cannot see the pulsating form of the sea in its entirety through my physical eye, my

imagination offers me a deeper understanding of the way the moon's orbit pulls at the great water layer of the ocean to peel it back from the shore at low tide and release it again in the flood towards high tide. Through imagination, the perceiver gains an understanding of the transformation of the phenomenon over time and space, and comes to a new level of knowing that is deeper, wider and more fluid.

## 4. CONVERSATION

"The taste of the apple...lies in the contact of the fruit with the palate, not in the fruit itself; in a similar way...poetry lies in the meeting of poem and reader, not in the lines of symbols printed on the pages of a book.

What is essential is the aesthetic act, the thrill, the almost physical emotion that comes with each reading"

--Jorge Luis Borges (Pallasmaa 2005)

Interaction between the observer and the phenomenon is the dance of beachbreak on a shore. There will be moments of clarity, fullness and understanding, but there will also be moments of silence and questioning. The second stage of observation should act as an opening or as an introduction between the observer and the phenomenon and blends with this fourth stage of dialogue. Delicate empiricism is a dynamic conversation, a process in which both the observer and the phenomenon are constantly in stages of flux. The phenomena, the ocean, is fluid and mutable, sensitive to the slightest curvature of seafloor or the faintest lick of wind. So must the process of investigation unfold. The lover of seas must look intently and pointedly but must also open her gaze to include the thin spread of horizon and the lapping waves at her feet in the same glance. The lover of seas must be fluid like the waters in her investigation, to prompt questions but also to receive questions, about herself, her history, her particular lens of

perception. The conversation and familiarity must originate from direct interaction with the phenomenon itself through the observer's body and memory. This will provide a solid basis of direct perception before the observer turns to other sources for context in the next step. There must be moments in the conversation that allow the phenomenon to express and introduce itself without being confined by the observer's expectations.

## 5. CONTEXT

Our domicile is the refuge of our body, memory and identity. We are in constant dialogue and interaction with the environment, to the degree that it is impossible to detach the image of the Self from its spatial and situational existence." (Pallasmaa 2005)

Context is everything. No phenomenon exists in a cultural, historical or environmental vacuum, just as no human perceives objectively. Others have studied the sea before me: painters, photographers, artists, sculptors, writers, poets, singers, children, beachcombers, sailors, fishermen, boatbuilders, oceanographers, biologists and any seashore-resident. What have they discovered about the character of the sea? What nuances of the ocean attracted them and what of their discoveries did they communicate through art, story or science? Explore what others before have explored about the phenomenon and gather the cultural context as it pertains to your own passions. What do poets and painters see in the sea? What do scientists dream of in the ocean? Note your own context, as well. Take into account your physical, emotional, and cultural history with the phenomenon. As the daughter of fishermen, the sea is home, food, family and spirit. As an artist and a poet, the sea holds a metaphor to the fluid process of creativity and reverie.

## 6. ORGANS OF PERCEPTION

"Any object well contemplated, will open up a new organ of perception within us." - Goethe

"You don't make a photograph just with a camera. You bring to the act of photography all the pictures you have seen, all the books you have read, all the music you have heard, the people you have loved." – Ansel Adams

Delicate empiricism is a phenomenological process that creates an exchange of energies and thoughts between an observer and a phenomenon. Like the hydrologic processes of the ocean, water and ideas pass through membranes, are altered based on their context and continue in a cyclical process of change. Delicate empiricism introduces new lenses and layers through which to observe and participate in the world. When reading one poet's work, for instance, it's easy to look at the world through their particular rhythm, use of imagery, vocabulary and line length; nuances of the world reveal themselves to observers in different ways based on one's particular state of perception at any given moment and particular life circumstances. Every place traveled through or lived in or dreamed of, every word written or spoken or heard or read, every photograph or painting or drawing seen, every object touched or created or broken and every person loved or remembered is brought with a body to the experience of observation. We bring our lenses with us when we experience life, but the world constantly hands us new perspectives with each experience and investigation. Delicate empiricism conjures up new organs of perception that allows the lover of seas to perceive and understand more deeply the way light, water and wind interact with land through motion, nuance and color.

## 7. LOVE

"..one learns that ... at certain times, internal lights render opaque bodies translucent..." (Bachelard 1971)

"When experiencing a work of art, a curious exchange takes place; the work projects its aura, and we project our own emotions and percepts on the work." (Pallasmaa 2005)

"Poetic language – and by that I mean the language of image, sound, rhythm, color, sensation – is probably the closest we bring language to experience – poetic language takes you to the edge of sense and deep into sensation... Even if some of the sentences seem to lose their meaning. I want the rhythm, the image, the cry to remain with your body." (Yuknavitch 2010)

Delicate empiricism is a process towards love. As with any love, it begins with a passion, progresses through a dynamic dance of curiosity and discovery, and changes the way the observer perceives and lives the world. With delicate empiricism as a creative and scientific process, this love can translate into an object, be it a painting, a poem, a scientific article or a story through well-articulated language or image. Then, in turn, the object creates an experience for the viewer, reader or listener who interacts with this physical remnant of a prolonged courtship of discovery and investigation between the observer and the phenomenon. The series of translations start with the phenomenon itself: with the ocean-roar, consistent through the ages and hours and perceived by others long before myself. The phenomenon then undergoes an act of translation as it enters my body and awareness through my senses. My body is a sieve that is only open to a small range of light-waves, sound waves, heat waves, and electro-magnetic waves that contribute to my understanding of the

ocean waves. From these physical clues, the artist or the scientist must struggle to articulate the essence of that experience and passion into a communicable medium. That object then becomes a phenomenon itself. When a new perceiver encounters this object of art and science, created through the profoundly subjective experience of the scientist and artist, the reverberations of the original phenomenon echo through in a new translational experience of the senses and memory.

# Bibliography

Adams, A. (2013, March 03). Retrieved from

http://www.goodreads.com/author/show/12115.Ansel\_Adams

Bachelard, G. (1971). The poetics of reverie. Boston, MA: Beacon Pr.

Friedrich, C. D. (2013, March 05). Retrieved from

http://en.wikiquote.org/wiki/Caspar\_David\_Friedrich

Pallasmaa, J. (2005). The eyes of the skin, architecture and the senses. West Sussex, England: Academy Press.

Yuknavitch, L. (2010). *The chronology of water: A memoir*. Portland, Or: Hawthorne Books & Literary Arts.