

Doing Goethean Science

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Within Goethean Science is the metaphors in which lie all around us and represent all other facets of life. We should experience life based not only off the classic scientific approach and labeling samples, but what is seen that can reveal the world around you. Open yourself and converse with what jolts you and find wise well rounded answers in which reveal more than just what you study. In this I try to convey my tussle with understanding and practicing (always practicing) the Goethean science approach on the charming Orcas Pear tree.

Beginnings: Sensing boundaries

I had a very different 4th grade experience than most of my peers. I was a part of a small outcast group of my longtime neighborhood friends. We dressed darkly out of preference that were and were in constant tension with our peers because of it. In response to the name-calling, occasional fights and constant bickering with our class mates, we chose to and told them we didn't care about their approval or their opinion on how we chose to live. One day we got called down to the principal's office, not that this was abnormal; we got in trouble often in taking on our given roles as bad kids. We were piled into a small side office with only enough room for four 10 year olds and a grown man crouched to their level. He looked at us and, in an eerie calm voice adult's use on kids, stated as if simple;

“We are concerned with your dress style and words from your teachers and peers that you are potential future Columbine shooters.”

Our initial reaction is silence and four confused faces, our verbal reply?

“What's Columbine?”

A sigh, as if ten year olds were supposed to know about Columbine.

“Columbine is when people, who dress like you do with black trench coats, brought guns to school and shot many of their peers.”

We were stunned. The next day I came in lighter jeans and a dark blue sweatshirt and received thumbs up from my principal. The sight nearly made me vomit, I realized I didn't want his approval, I nearly wanted the opposite. At that point of being rejected by my peers, staff and principal, made me realize 2 things I still believe today. One, our general society tells idealistic lies to kids about being who you are and then tries to fit them into molds. Two, I will never fit into the society I was born into or be what they want me to be; and I may become an outcast for this. But In the end all I have is myself and if I'd rather be at the end knowing I lived as I saw fit rather than fit to anyone's mold.

Why aren't you in school? I see you every day wandering around."

"Oh, they don't miss me," she said. "I'm antisocial, they say. I don't mix. It's so strange. I'm very social indeed. It all depends on what you mean by social, doesn't it? Social to me means talking to you about things like this." She rattled some chestnuts that had fallen off the tree in the front yard. "Or talking about how strange the world is. Being with people is nice. But I don't think it's social to get a bunch of people together and then not let them talk, do you? An hour of TV class, an hour of basketball or baseball or running, another hour of transcription history or painting pictures, and more sports, but do you know, we never ask questions, or at least most don't; they just run the answers at you, bing, bing, bing, and us sitting there for four more hours of film-teacher. That's not social to me at all. It's a lot of funnels and lot of water poured down the spout and out the bottom, and them telling us its wine when it's not. They run us so ragged by the end of the day we can't do anything but go to bed or head for a Fun Park to bully people around... I guess I'm everything they say I am, all right. I haven't any friends. That's supposed to prove I'm abnormal."

I found a family in which I can live with using self-sustaining farming techniques through finding others that don't want to be part of the society that wished them to change or told them if they are not liked what they are doing is wrong. At the same time I've grown to be my own part

of society instead of separate from it. I also realize now that I need assets society offers in order to get where I want to go so I can still intake society's influence but with a grain of salt and now; taking only what brings me to other places or what jolts me.

Delicate Empiricism: Science as a conversation

In poetry, I constantly find a feeling or situation in which I can't fully express the entirety of. So I let the words that come from that feeling rise to the surface aware of its duality of creating an experience in trying to explain or convey a feeling. I applied this Goethean Science and talking to my teacher. When coming into contact with the thing that jolts you, your thoughts turn to what you want to know about it. Thoughts become clearer in how we use them to figure out and converse with the world around us.

One cannot angrily observe anything fully for one cannot truly talk to something with that energy and get the truth from the object you seek it from. When you care about something you learn more about it because you want to know more about it, it tugs at something in you and it can help reveal more about life than just what is observed, even if all facets aren't satisfied. The best part of this learning process is that you don't know what you're going to learn but only start somewhere and experience it and to find what was answered after.

1) When something jolts me or peaks my interest, I come at it with humble curiosity, questions and mild observation with only a moment on each observation. I'm patient until I find a riddle or start topic of conversation. Something that stands out or rises to the top of my mind, something I

can tie to something else to continue on. It can be a smell, texture, feeling or passing thought usually tying to a memory, other object or situation.

2) A 'riddle' being a general focus during the evolving of the conversation. Find some common factor in what ties what I find together and pursue similar ties in that the conversation stays simple. Not something I isolate and dig for specific and precise answers to only. Take the trip, enjoy in between A and B.

3) I also must realize I must have no end in mind as I engage in this conversation. As with any discussion, it can lead anywhere and I cannot put input or know what will be said therefore can determine the end.

4) Whatever I engage with, in conversation deserves the basic respect of being treated as its own gathering of atoms. This needs certain sensitivity to the thought and observation process. I will still dissect a plant or animal but as in this process it is not a lesser gathering of atoms.

5) I engage in actual conversation; interruptions, tweaks in feeling, direction, movement and all with honest interest and commitment to what's going on.

6) No matter my intentions, I leave a mark on whatever I converse with and in actuality all I engage with period for a reason. As a conscience being I have to realize I am not separate from the entirety of existence.

7) Being a conscience creature also means I have a responsibility to realize this will have a direct effect on my and whatever I am engaging's existence. Whatever happens cannot be taken back and I am not separate, not an observer of the results; I live the results.

Engaging the Conversation

As I walked around the farm, I was still hazy from the weekends stress, oversleeping that morning and was trying to ignore the cold nipping at me through two coats. I wandered through a lot of the farm, as it was one of my first times able to. For a while I was focusing too hard on the fact it should last through winter so I refocused onto feeling as I walked through the rows. I was just looking for a jolt from one of the many plants scattered around this peace ridden farm. I had wanted to wander in the trees but looked around the entirety before the pull of the trees felt enough like a jolt, so I trudged over to the hose fenced trees. I looked at him then, a small tree with the larger branches twisting out in angles and the newer thinner branches growing straight up from them and a rainbow of colors on his leaves. I looked at the wooded sign hung upon a rope around its trunk reading

Orcas Pear Tree

I'm not the biggest fan of pears, but I and this tree clicked. On urge again after hesitantly hovering around him in some odd, probing for feeling, I felt I should stand with him. Observe amongst and with him, so I weaseled my way into a spot I could stand nose inches away from his beautifully speckled trunk and branches all around me. I just stood for a while, looking out at the

farm from where he was planted, at his branches inner workings, the black spots on his leaves, the cascade of colors found in such small inches of his being.

The bark had bits of mint green moss, red spots, brown hard parts, the thinner branches a more chestnut brown. As I stood with it, the haze I had felt went away. To replace it was a crisp feeling of existing in this moment, I felt like I could appreciate the act of merely standing in the morning air with this tree...*existing*.

As soon as I untangled myself from his branches, it was like the feeling of leaving a hug from a dear friend.

Exact Sensorial Imagination and Living Understanding

After each observation with my plant, I try to inwardly picture it to see what details I didn't observe. What when I close my eyes is still fuzzy or I'm not sure of and possibly why that is. What stuck out to me and what changed from the picture I had before that observation. I inwardly picture my walk to the tree from the gate, how the leaves reveal different colors as you approach. I try to remember the feeling given by the tree and what the bitterness the leaves taste like feels like on my tongue. How the bark smells like the outside of pears themselves and the details in the bark.

Like hearing a song in your head I try to stand with my tree as I do on the farm. In the process of our meetings my images get more detailed as I picture his branches, though now bare. He started as my rainbow tree, so many colors, bright and dark all over leaves but now different colors are prevalent. His winter stance even makes him look cold, branches almost looking

hunched, somehow no longer reaching full length for the sun. Through these images I've come to see part of the cycle in his life with different depth. Not only this but see the significance of the world around my tree to the tree and me to it, how we all connect and what can be revealed in the spaces in between, what's revealed in why we connect.

Orcas Pear Tree: A Portrayal

Those who have visited the 5 acre farm on Evergreen campus can more than likely remember its peaceful air and calm disposition. Colors are everywhere and as to the northwest, more often than not it's very damp. On one end of the farm, up a small slope, in the fence of a hose hanging around the outer tree's branches, is a small community of trees. In the front most outer trees, closer to the rows than the farm house is the Orcas pear tree. He grows up and out, taking advantage of the home he was brought to all the way from Orcas Island, in partly to meet me. I like where he stands because sometimes I can almost feel the trees whisper to each other and even a ghost of giggling, they all have some character.

San Juan Children

He's imperfect but functional for his setting

meant for tree covered islands, like me

Do the northwest islands call to you as they do to me?

In your core, does homesickness lie for home's charm?

You, we, thrive anyway

Responsibility was thrust upon you; us...

I can tell by that hose sitting on your branch

You help others.

And someone didn't like how you were growing either.

A rope tied to keep you in the right place.

Don't tell the farmers but I want to cut it.

You taught me blood stained fingertips can be beautiful.

Did you to, run your fingers in dangerous waters to wear the color that stains you?

Let's regret none of it at all, you and me.

*Grow whatever direction you please, hell; sprout polka dotted pears for how many shits I give
just don't be afraid.*

*And I see you whispering to that pretty thing over there with long branches climbing toward the
sun, is it funny to you two how we try to observe? Comical to ask questions so obvious to you,
there jokes?*

Forget it for now, all in good time I suppose,

let's sway with this wind

When I stand in his branches I find his colors the most wonderful spectrum. Purple blackened leaves scatter around his base, other colors glimpsed through the dark fallen leaves; Yellows, reds, browns. A light brown trunk leads up to meandering, twisting branches flecked with light green specks and moss, orange wrinkles like those in-between your fingers. He even has elbow creases in which a deep purple is shown. The stems of the leaves are as nearly as long as the leaves themselves and splay out in curves from the branches. I bite a leaf and to my surprise it tastes like the skin of fruit.

I drink water from a leaf and am left with an earthy taste and smell in my senses. The knots in the tree remind me of eyes, they have a coy stare and I find my hips swaying with him in the wind. The urge returns to get closer and I tangle in to find the sun peeking through his colorful leaves. All sorts of Greens flowing into purples, reds, yellows with dark speckles like ink blots, no branch without a rainbow. Brianah's tree keeps whispering to mine at this point and Brianah comes over at this moment to say she's trying to figure out what's up with mine and her tree, she thinks hers doesn't like me so close. They apparently cross pollinate best with each other, so each spring they must cover each other in one another's pollen like kisses. This leads me to learn more about his mechanics. I try to picture the inner workings as I stand with him. I crouch down to feel the roots, knowing the root hairs, stems of the leaves and trunks all do something awesome; bring water upwards.

The Whole in the Part

I've only got to spend fall to winter with the Orcas Pear tree and its transformation in this time period was very extreme. I met my tree with rainbow leaves with black blots all over them, only a few leaves around its trunk. We met in sunshine often and it showed how his new branches reached up for the sun. Its leaves were changing colors so each time we met the colors were different, darker as the weather did. In my research among books I found about the inner workings of how trees work, and each function of its parts. The roots do an amazing process in that they have hairs on the roots are constantly growing and expanding in the soil and defy gravity and tug water and nutrients up into the trunk and stems of the leaves. The leaves themselves combine the carbon dioxide in the air with the soil's nutrients and water to help

create the flower. The plant's female and male parts are in the flower and with my tree, cross pollination is needed to produce fruit, meaning things like insects and the elements (wind etc.) are needed to cross pollinate. This reminded me of a slow process of evaporation. Water is moved up combined for a process and released and or used in that they come from the roots and go all the way to the leaves. With this process the tree produces fruit, filled with water to be consumed, in a process in which water is reused. Along with water this fruit has sugar in which burns into energy when consumed, Orcas pears are supposed to be close to the hardness of apples. If not picked, these pears fall to decay into nutrients for the trees consumption, to become one with the soil once again to rejoin the process.

The Unity of the Organism

During my encounters with the Orcas pear tree, the observation that the tree was planted here stood out to me a lot. At first I disregarded it as my thoughts rationalized it because it was a farm, of course they planted it. When you buy small fruit trees, it isn't the seeds to the trees but the trees in a young state, so they didn't even plant a seed here. Yet each time I came to sit with my plant, it kept catching my eye how the ground around the trunk looked disturbed. I got down close to probe this out, face a couple inches from the ground and the trunk. I lightly touched the outside ring, thoughts musing on how we both love the San Juans and felt a jolt in the pit of my stomach, I felt like I was onto something. My realization began there, the endless option of how it got here, its connections to the San Juans as well as Sweden (as posted on his sign) and then the pregnant point hit me in the form of a simple realization. Some pollen, from some other tree, got onto the flower of this tree's predecessor, created a pear and in that created the seed in which

made this tree.

“To find the pregnant point with a plant or with anything in Nature, the moment of first contact must be anchored deeply into your experience. The focus must be the initial imitation or mood of phenomenon or plant, the complex of primary and secondary feelings that you experienced when you first opened up to feeling. Through the days or weeks to come, you must continually re-experience that moment of first contact, letting the phenomenon come into your awareness as if for the first time.”

I realized the endless metaphors I could take from that, how relatable that it to human genealogy among many other processes. The entire world can be metaphorically seen within a pear tree, and in that the entire world's answers lie in the petals of flowers down to the microscopic bacteria that lie on everything. Not only that but in my personal encounters with the pear tree I can see how all is circumstantial as well. I found I can never look at a pear tree the same; it's no longer just a pear tree but a phenomenon with its own history, personality and place in the world.

Doing Goethean Science

Science today is the product of human nature's innate sense of 'why?' We are constantly looking for correct information and science has brought us to points of understanding that were once thought impossible. Where Goethe comes in to all of this is those who find the hard practices of science don't fully encompass the world we live in. With Goethean science, a whole new sensitivity is brought into interactions with what's around you and how in that it relates to each

other.

“Out of this awareness arises the striving to develop a gentle sensibility that does not violate the phenomena in the process of getting to know them. It’s an active conversation, but in which I hope the other – as something in its own right – can reveal itself.”

This opens up all kinds of new realms in the scientific world I for one think especially in environmental scientists and those who are open to this way of learning that has been deemed unscientific by society are those who are able to incorporate these aspects of learning into how they have previously learned to bring about a more faceted and in my personal opinion well rounded mode of cognition.

Practicing Goethean Science

When jolted by an object, the riddle is what comes of the observation with said phenomenon in which you engage with. It is revealed through patient and humble curiosity through starting your conversation with the phenomenon, like a beginning topic or point of interest. With no end in mind explore the object through observation, your own outlets of information (books, websites etc.)

You must realize you have a responsibility in that whatever happens, you cannot change or predict and will have to deal with any consequences of your inquiry and as such proceed with respect toward whatever object is in your fascination and realize you are in it’s as well. You are trying to see your phenomenon for all that encompasses it, what that means, what that ties to you and all other things. Using the Goethean technique of Exact Sensorial Imaging, after physical

observation, inwardly re-experience you're observation as to build its complete image in your mind. This is also helpful in that any changes are more prevalent the next observation. Through these steps, your phenomenon begins to reveal itself into your pregnant point in which it reveals itself through your own connections and perceptions of said object. In this process begins a new one, a new riddle and an opening into the whole in its parts.

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