

Ancient Future

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Abstract

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I explore human experience through the lens of the natural world while calling attention to preservation and its changing role. Encrusted with crystals my work explores fossilized fragments of our everyday world that speak to our current place in time and our connection to the natural world.

I have an endless fascination with the natural world. There is a complex yet simple relationship I am drawn to between the nature around us as well as the Nature within us. My work grows in a space forged between my understanding of nature and Nature; it is this intersection from which I create.

As I explore the blurred line between what is and isn't natural my attention is drawn to the many moments that surround us that often go unnoticed. Much like Nature, artists have a process for everything that is created. Understanding that process helps me to better understand my own purpose within making.

There is a natural method of inquiry that drives my work; a methodology to the way I investigate and organize the world around me. Utilizing a blend of both organic and synthetic materials and methodologies, I am able to create work that questions the viewers perception of what is and is not natural. The use of sound, kinesthetics, and viewer activation, guides my work

into a realm of tactile, immersive experience. The ability to reveal the unseen, natural phenomenon by integrating the tactile nature of the physical world aids the viewer in examining their place in the natural world.

Through my research I explore concepts of how the human psyche functions as a part of Nature. This conceptual material offers me a pool of symbolic language that allows me to interpret metaphorical imagery from nature to illuminate the abstract concepts of my own life experiences.

Observing these intricately related recurring patterns has allowed me to adopt methods used by Nature—a laboratory tested by time. My thesis work oscillates between realms where past and future converge as I work in a way that pays respect to materials and the passage of time.

“The goal of life is to make your heartbeat match the beat of the universe, to match your nature with Nature.”

-Joseph Campbell

Throughout my research I have been aiming to define what makes up “nature” and “the natural world.” The line between what is and is not natural is often more blurred than I would like to admit. The Merriam-Webster dictionary defines the natural world as “all of the animals, plants, and other things existing in nature and not made or caused by people.”¹ Wikipedia does not have a definition for the natural world, however, they do have a definition for nature which is an interchangeable word for my practice. Wikipedia’s definition is as follows, “Nature, in the broadest sense, is the natural, physical, or material world or universe. "Nature" can refer to the phenomena of the physical world, and also to life in general.”²

These definitions are still too broad for my work, through my research I have been developing my own meaning or definition of the natural world that can be shown in a visual language. I believe nature is more than an external force, Nature is something that lives in every living thing on Earth. Putting nature into something that can be defined in its broadest sense is all living or once living things that occur naturally. Ultimately, this means not human made.

This leads me to question if we humans are a part of nature and when the questioning of this separation began. An analogy I seemingly always go back to is; a bird is a part of nature, a bird nest is a part of nature; humans organically are a part of nature, but is a human house a part of nature? I do not believe these questions can be answered by a single person but through collective reflection I can come closer to understanding the core concepts of these primordial existential questions and finding my own little bits of truth along the way.

Merriam-Webster Dictionary (Springfield, MA: G & C Merriam Co., 1981).

² “Nature.” Wikipedia. Wikimedia Foundation, June 16, 2021. <https://en.wikipedia.org/wiki/Nature>.

Dating back to primitive time, man has interpreted the happenings of the natural world. This can be seen through their documentation and infrastructure that would align with the rising and setting of the sun, the moons phases or the seasons. I question why civilizations would build these massive elaborate timekeeping structures. Often times they would not be completed to experience within their makers' lifetime. I think this points to the importance in the collective whole over the individual human experience. As the age old proverb goes, "A society grows great when people plant trees knowing that they shall never sit in the shade of their foliage."

The research of Peter Wohlleben, a German forester and author, has given me great insight into the concept of the forest as a social network. I will often find metaphors in nature to help explain human existence, however his book flips that metaphor and has helped me to better understand the forest and the connection of trees through the human experience. Wohlleben makes the comparison that trees are like human families that live together with their children. Trees communicate with each other and support each other as they grow. They have the ability to share nutrients with those who are sick or struggling and even warn each other of impending dangers.³ Wohlleben's research is a great reminder to slow down and tune into the language of nature as there is a lot we can learn from the forest.

This idea of learning through nature is not something new. Aristotle wrote about concepts of nature being a teacher in his text *Poetics*:

³ Peter Wohlleben, *Hidden Life of Trees: What They Feel, How They Communicate - Discoveries from a Secret World* (HarperCollins Publishers, 2020).

She (nature) can often enlist even the blind force of necessity as her ally, giving a new direction to its results. Wherever organic processes are in operation, order and proportion are in varying degrees apparent. The general movement of organic life is part of a progress to the 'better,' the several parts working together for the good of the whole. The artist in his mimic world carries forward this movement to a more perfect completion. The creations of his art are framed on those ideal lines that nature has drawn: her intimations, her guidance are what he follows. He too aims at something better than the actual thing of experience, not a copy of reality, but a higher reality— 'for the ideal type must surpass the actual'; the ideal is 'better' than the real.⁴

Art imitates the universal and in doing so imitates the ideal. In the text above Aristotle believes this to be nature. He says that nature taught art' and to follow her (nature) as the scholar does their teacher. "Nature is an artist indeed capable of mistakes, but by slow advances and through many failures realizes her own idea."⁵ I have found that much like nature, artists have processes for everything that is created. Understanding that process gives me further insight into my own purpose within making.

Joseph Campbell used the term "aesthetic arrest" to describe the state we enter when we encounter what we perceive to be profound beauty. This is a phrase he borrowed from James Joyce, who said that when confronted with beauty, "the mind is arrested and raised above desire and loathing."⁶ When we are confronted with profound beauty, we have the ability to step outside

⁴ Aristoteles and S. H. Butcher, *Aristotle's Theory of Poetry and Fine Art* (New York: Dover, 1951).

⁵ Ibid

⁶ James Joyce, Theodore Spencer, *Stephen Hero: a Part of the First Draft of a Portrait of the Artist as a Young Man*, 2013.

the self. The beholder becomes entranced and merged with the beheld. The ever racing mind quiets and we are left in a moment of stillness referred to as the “deep now.”⁷

When breaking down human experience into moments, some seem to stand still as we find ourselves transfixed, and ultimately transformed. It is as if we are watching a flower bloom or unearthing a crystal from the damp dirt. The Nature within us recognizes, and always remembers these moments as the ordinary gives way to the extraordinary. These experiential sensations can be described as ‘aesthetic arrest.’

Joseph Campbell speaks to the power of art to elicit aesthetic arrest:

Art is the rendition of the interface between your inner nature and the nature out there. . . And why is it that you are held in aesthetic arrest? It is because the nature you are looking at is your nature. There is an accord between you and the object and that is why you say, ‘Aha!’ In one of the Upanishads it says, when the glow of a sunset holds you and you say, ‘Aha,’ that is the recognition of divinity. And when you say ‘Aha’ to an art object, that is the recognition of divinity. And what divinity is it? It is your divinity, which is the only divinity there is. We are all phenomenal manifestations of the divine will to live, and that will and the consciousness of life is one in all of us, and that is what the artwork expresses.⁸

Traditionally, arts and philosophy were not excluded from the Physical Sciences.⁹ Non-physical means of perception such as intuition, feelings, and emotions can and were used to study the true nature of the physical world and life experiences. These senses follow methods, similarly human experience is a time tested laboratory. If something cannot be seen with the

⁷ Joseph Campbell and Diane K. Osbon, *A Joseph Campbell Companion: Reflections on the Art of Living* (New York, NY: HarperPerennial, 1998).

⁸ Joseph Campbell, *Mythic Dimension: Selected Essays 1959-1987* (New World Library , 2017).

⁹ Denis Diderot, *The encyclopedia selections* (New York, NY: Harper & Row, 1967).

eyes, heard with the ears, felt with the skin, or even smelled or tasted, does that mean it is not real or does not exist?

Based upon the natural phenomenon of growth, Alchemy is the process of multiplication, often aiming to increase and improve that which already exists. Contemporary glass artist Emily Nachison received a grant to travel to Yale University's Beinecke Rare Book & Manuscript Library to research their Mary Conover Mellon collection of alchemical books and manuscripts.¹⁰ As Figure 1 shows, Nachison's installation *Metonic Transfiguration* is made up of a series of cast glass crystals that morph into a tree branch. It then evolves slowly into a mushroom, and then to a murky pool collected on the bottom of the plate.



Fig. 1

¹⁰ —. “Yale University Beinecke Rare Book & Manuscript Library Alchemy Collection.” <http://www.emilynachison.com/new-blog/>.

There is a dualistic nature to her work: Art and Science, Liquid and Solid, Chaos and Form, Randomness and Precision. Nachison's work also draws from the dualities of: Science and Art, Myth and Nature, Material and Message.¹¹ When describing her work Nachison says, "I'm interested in transformation and how culture shapes our relationship with nature. Glass goes through an amazing chemical transformation when it is created and also has a physical preciousness and a culturally derived value. I'm interested in playing with these aspects of the material."¹²

Has reality become reduced to what can be physically measured and does this leave a blindspot in our cultural view of what nature is and how it is experienced? Are we living in the natural world or are we living in a realm where our reality is biased and created through another person's perception? I question how man has institutionalized my perception of the natural world. What fragments will be resurrected to reconstruct this current place and time that we are living in?

Carl Gustav Jung is widely considered one of the most important figures in the history of psychology. He was an early 20th century Swiss psychologist who dedicated his life's work to studying archetypes. Jung explored these concepts and conducted his research through his patients, himself, and the world around him. Jung was the first to develop the concept and language of archetypes. However, acknowledging that he had nothing to do with the origin of archetypes. He first called archetypes 'Primordial Images' implying they came before and

¹¹ —. "Emily Nachison." Accessed June 10, 2021. <http://www.bullseyeprojects.com/artists/427-emily-nachison/overview/>.

¹² Margolis, Sarah. "Art Ltd Magazine May/June Issue "New Directions in Glass"." <http://www.emilynachison.com/new-blog/2016/7/18/art-ltd-magazine-mayjune-issue-new-directions-in-glass-1>.

beyond the beginning. Jung's research was driven by questioning where these sources originated from, when they began, and what their purposes are?

Jung believed that the events of nature were not simply put into fairytales and myths as a way of explaining them physically. Rather, the outer world was used to make sense of the inner. He also draws on some strong parallels that describe the Nature within humans and the nature around humans as one in the same.

Our psyche is part of nature, and its enigma is as limitless. Thus we cannot define either psyche or nature. We can merely state what we believe them to be and describe, as best we can, how they function ¹³

Jung also points out historical eras oscillating between an orientation towards matter or spirit. "We are living in a period when the material aspect of Nature is emphasized."¹⁴ This can currently be seen through societies materialist consumer culture. In my own observations I see many people acting in a certain way, as if Nature or the Earth at large is a commodity. Often thinking about the individual when it is the collective whole that is necessary for survival.

It is easy to forget that we are simply a thread in the continuing existence of history. The contemporary world is not the cumulation, nor the peak. "Things came before us. Things will come after us. But when we act as if nothing's coming after us, we create problems with people down the road. We're a society that has created the most material culture ever, and with that comes garbage and residue, and that's a legacy that we're leaving."¹⁵ says contemporary

¹³ C. G. Jung et al., *Man and His Symbols* (Bowdon, Cheshire, England: Stellar Classics, 2013).

¹⁴ Ibid

¹⁵ Mallonee, Laura C. "Mark Dion's Penchant for the Past." *Hyperallergic*. July 15, 2014. <http://hyperallergic.com/137700/mark-dions-penchant-for-the-past/>.

sculpture artist, Mark Dion. Through his display and organization of objects, Dion's work transforms past and present found objects into visual artifacts of this generation.

There is a complex yet simple relationship we have with nature, to understand nature's process will help us to better understand ourselves. In Figure 2 you can see Dion's installation, *Neukom Vivarium*, he takes a fallen old growth Hemlock tree out of its natural setting bringing a "forgotten element of the environment" back to the city of Seattle.¹⁶ Dion creates a controlled environment inviting the viewer to spend time with the giant tree while simultaneously watching the natural phenomenon of growth and decay; the dead tree gives life to an entire ecosystem.



Fig. 2

¹⁶ Teréz Iacovino. "Groundless: A Supporting Paper." University of Minnesota. https://Assets.Cla.Umn.Edu/Wbaq/Art/Img/Degrees-Courses/Grad/Gallery/Iacovino_Terez/Iacovino_Thesis.Pdf. 2017.

In an interview with Art:21 Dion says:

I think that one of the important things about this work is that it's really not an intensely positive, back-to-nature kind of experience. In some ways, this project is an abomination. We're taking a tree that is an ecosystem—a dead tree, but a living system—and we are re-contextualizing it and taking it to another site... We're putting it in a sort of Sleeping Beauty coffin, a greenhouse we're building around it. And we're pumping it up with a life support system—an incredibly complex system of air, humidity, water, and soil enhancement—to keep it going. All those things are substituting what nature does, emphasizing how, once that's gone, it's incredibly difficult, expensive, and technological to approximate that system—to take this tree and to build the next generation of forests on it. So, this piece is in some way perverse. It shows that, despite all of our technology and money, when we destroy a natural system, it's virtually impossible to get it back. In a sense, we're building a failure."¹⁷

In a time when nature and culture are disappearing before our eyes, Dion provides us with an honest picture. He exhibits the melancholy of loss while providing us hope for the future. A passionate preservationist sharing so much that is of value to current and future generations. Through his installations viewers gain a greater understanding of our history and how this has altered our perception of the natural world.

Plants make up more than 99% of biomass on the planet.¹⁸ The entire animal kingdom, including humans, make up less than one percent. Plants give us the oxygen we breathe—plant conservation is necessary for human conservation. Perhaps in a very small way my work can contribute to a shift in consciousness that leads to greater love for and preservation of nature.

¹⁷ "Neukom Vivarium." *Art21*. November 10, 2007. <http://www.art21.org/texts/mark-dion/interview-mark-dion-neukom-vivarium>.

¹⁸ Jason Daley, "Humans Make Up Just 1/10,000 of Earth's Biomass," *Smithsonian.com* (Smithsonian Institution, May 25, 2018), <https://www.smithsonianmag.com/smart-news/humans-make-110000th-earths-biomass-180969141/>.

Humans have been studying plants for hundreds of years. Charles Darwin was an early 19th century plant researcher and naturalist. He experimented with the intelligence of plants and discovered that they can sense light, humidity, gravity and atmospheric pressure. Plants use these environmental factors to determine the optimal path for their roots to grow. Darwin recognized that plants are sentient beings and speculated that their roots were the equivalent of the human brain. In his book, *The Power of Movement in Plants*, Darwin wrote:

It is hardly an exaggeration to say that the tip of the radicle thus endowed, and having the power of directing the movements of the adjoining parts, acts like the brain of one of the lower animals; the brain being seated within the anterior end of the body; receiving impressions from the sense-organs, and directing the several movements.¹⁹

‘Primary perception’ is the theory that plants can perceive their surrounding environment, and subsequently respond to it. This is what we might call emotion or behavior in animals. This is sentience. In the 1960’s, primary perception was first hypothesized by a polygraph expert named Cleve Backster. In a moment of feeling impulsively experimental, he attached polygraph electrodes to a plant in his office to see what polygraph results would come from watering the plant. Polygraph electrodes are used to measure electrical conductance of what they are attached to.

Cleve Backster hooked up his electrodes and eventually noticed that the polygraph machine indicated the electrical resistance/conductance of his office plant deviated in response to his mere intention of harming the plant.²⁰ This means, that the plant was aware of Backster’s intentions to do something to the plant that would affect its well-being. At the time, there was no

¹⁹ Charles Darwin, *Power of Movement In Plants* (S.I.: Charles River Editors , 2018).

²⁰ Cleve Backster, *Primary Perception: Biocommunication with Plants, Living Foods, and Human Cells* (Anza: White rose millennium Press, 2003).

known scientific basis for such a phenomenon as plant awareness to any extent, much less to the extent of being super-humanly aware of a person's thoughts as Backster observed. Today, quantum physics may offer a scientific explanation for what is happening and then again, it may not.

What we do know is that plants produce electric impulses. The leaf for example can gather electric charges on its surface and pass them through the inner plant tissue.²¹ The plant tissue then transmits this electricity to other parts of the plant.

Science shows us that being near trees and plants significantly improves our physical, mental and emotional wellbeing.²² The healing power of plants has long been understood by indigenous cultures who communed with nature and harnessed the power of plants. Now, as we are in the age of the Anthropocene, it is time to rethink and reshape our relationship with nature. Consider this shift as an invitation to reexamine human relationships with nature and how we treat the earth.

²¹ Tompkins Peter & Bird C. *Secret Life Of Plants: The Physical, Emotional & Spiritual R* (HarperCollins (USA), 1989).

²² Ibid

“If you wish to understand the universe think in terms of energy, frequency and vibration”

-Nikola Tesla

The main focus of my thesis work is the *Plant Drawing Machine* and can be seen below in Figures 3-6. This is the most recent piece I created and is the culmination of my graduate research. Through my two years in graduate school many of the sculptures and research I have collected feed into one another and will be mentioned in the following chapter. Often times I will circle back from older pieces and their research and how it relates to the *Plant Drawing Machine*.



Fig. 3

I created the *Plant Drawing Machine* as a way to further explore plants and human connections. The machine measures changes in electrical conductivity of a plant when touched by a human. Utilizing capacitive sensors the data is fed into an Arduino microcontroller which converts the data into motor rotation and movement. The machine measures the changes in the electrical conductivity of plants, activating a single motor that moves three sets of “drawing arms” continuously. A second motor is activated when a plant is touched by a human. The human

touch creates a circuit that controls motor speed and direction, using medical capacitive sensors the data is translated via microcomputers. The result is a change in the drawing pattern on an endless roll of paper.

The paper is fed through the rollers of a typewriter that is hooked up to a belt and motor. The speed of the paper is 7.83 rotations per minute. 7.83 correlates to the Schumann Resonance, which is also known as Earth's heartbeat. The use of a stepper motor gave me the ability to program exact and precise motor rotations. As the data was collected and rolled through the typewriter I pulled the paper across the length of the gallery and it organically folded on itself. A detailed photograph of the layers of paper is depicted in Figure 4. As the layers accumulated they began to resemble layers of the Earth and its metamorphic activity.

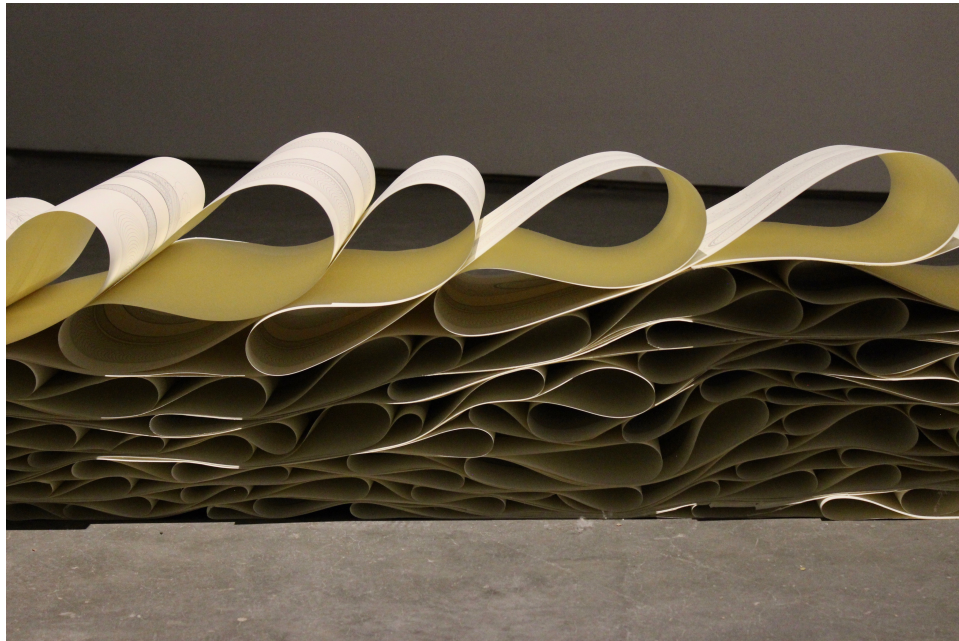


Fig. 4

I have approximately one hundred and thirty houseplants that are my friends and collaborators. When it came time for me to decide what type of plants I wanted to bring into the

gallery space, it only seemed appropriate to bring in some of my houseplants. They are adaptable and had no problem living in the gallery space. I have always had an intense interest in nurturing native plants. I knew bringing them out of their natural habitat into the gallery could ultimately cause a decline in their health.

With the *Plant Drawing Machine* I gave agency to these plants. Every living thing is connected by the electrical impulses that run through them. With this machine I accessed a shared visual language with plants to harness their electricity into something tangible and observable. Drawing becomes their language for communicating what is beneath the soil, what is invisible to us, as well as their observations about us. A detail of their drawing language can be seen in Figure 5.

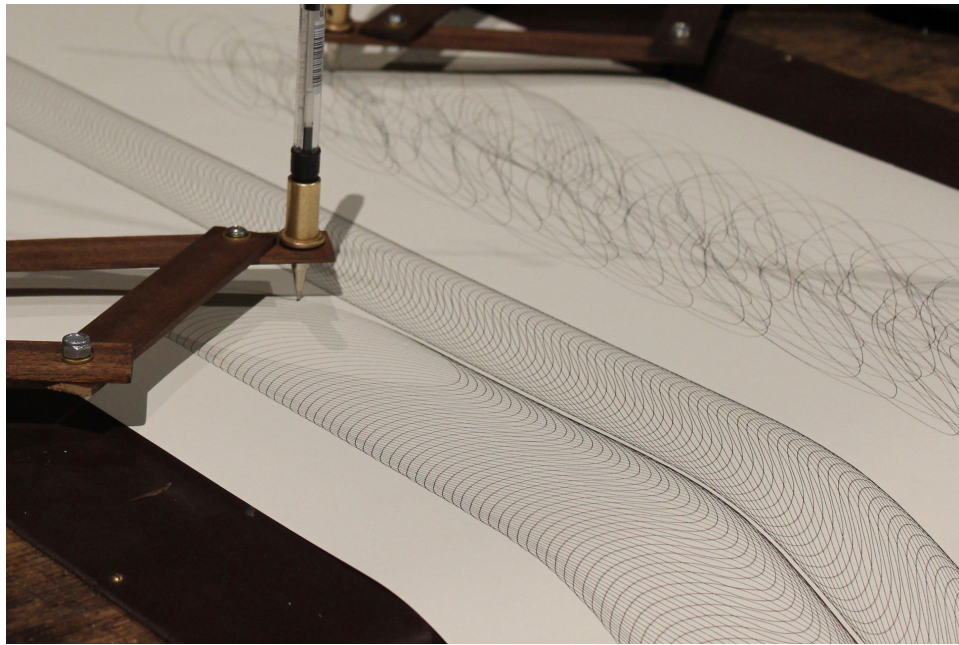


Fig. 5

The machine is housed and built into an old solid wood flat file that was acquired from University of Washington's surplus. When taking the cabinet apart and inspecting the material

carpentry and joinery I believe it was made in the early 1900's. I altered the cabinet by building each side out with other found architectural salvage. Each piece was added to accommodate the elements of the drawing machine and the plants. Each element I added onto the cabinet had purpose for the machine, not only to add to the aesthetic of that period.



Fig. 6

The cabinet is made of old fir and oak wood— built of large thick slabs with tight grain. The age and aesthetic of the material speaks to the past while the modern mechatronic technology of creating drawings with plants brings us to a future place. The intersection of past and future is the place from which I create. Reusing old objects, particularly wooden objects, is a way of respecting, honoring and acknowledging the past. Utilizing modern technology is a way to push the piece into an unknown space of future exploration.

In my work, I choose to build with materials that already have a soul as you can not recreate the patina of time. Throughout my practice I have found that the best materials are those

that have already lived a couple of lives. The best homes are the ones that have been a sanctuary for generations of people over decades of time. Forests are a bit different, as they are actively alive, growing and communicating. As for forests, I have found that the best ones are those with the oldest and wisest trees.

I see old forgotten furniture as time capsules, with much to teach me about their makers lives. I believe furniture to be far more than an utilitarian implement whose only purpose is to perform a mundane task. I draw inspiration from the history of materials as well as the history of the place I find myself when creating.

As for Seattle and the surrounding areas, the founding story is no different than countless others in this country. When the settlers first stepped foot here they began to destroy just as quickly as they began to build a new civilization. In the act of growth they eroded the wilderness and culture in their quest for more land and resources. The old growth forests were dense, dark, scary and seemingly endless. The settlers disrupted then destroyed the civilizations that preceded theirs. Their effort to salvage was sadly an afterthought. There was no nostalgia, no desire to preserve. I believe this resulted in my generation losing not only identity in place, but time.

The summer of 2020 I spent a period of time in the Olympic Peninsula. That was a summer of a new kind of investigation, an adaptation to my art practice had to be made as we were in the midst of the COVID-19 global pandemic and I lost access to my studio. The call of nature was strong to leave the the city.

I was experimenting with the process of cyanotype printing on cotton fabric. Utilizing this process for my work allowed me the ability to explore Washington's landscapes while continuing to produce a constant 'studio' routine. The specimens used in the prints were found

around some of the largest and oldest trees in the world. Rather than focusing on these majestic trees, this work is about the life that surrounds them that often goes unnoticed in the shadows of the giants.



Fig. 7

One tree in particular I found to have a melancholy yet poetic history to it. The tree known as the Duncan Cedar is the largest western red cedar in the world. Cyanotype prints of the Duncan Cedar can be seen in Figure 7. The Duncan Cedar was spared as loggers took notice of its massive size, they clear cut all around it and left just the Duncan Cedar to stand alone. This was its ultimate demise and now all that is left is a bleached skeleton with a few live branches. “Imagine trying to preserve this king of the forest, when all his kingdom lies in ruin. Soon his bones, too, will lie at the Nolan Creek”²³, wrote historian and arborist Thomas Pakenham. The elements out on the peninsula are harsh and this one tree was never going to thrive on its own. The singular is a meager symbol; we need to be taking care of the whole.

The Duncan Cedar, like many others, has a message for us. Knowing that rooted deep, it has survived the death of the forest around it, as well as harnessed space for rebirth. When looking closer around its understory I found sweet nostalgia in the ecosystem thriving in it’s

²³ Thomas Pakenham, *Meetings with Remarkable Trees ; Remarkable Trees of the World* (London: Weidenfeld & Nicolson, 2003).

shadows. This was the core of my investigation and I realized that if I worked in cyanotype I could create an alternate understory that matched the ‘king’ of the forest in saturation. Like the cyanotypes, backlit in blue, the Duncan Cedar now stands tall, bare and stark white in contrast to the life surrounding it. Almost as if spot lighted the Duncan Cedar appears bleached from its lack of life force.



Fig. 8



Fig. 9

Figures 8 and 9 show cyanotypes ability to create X-rays of where something once was and the essence of a plants form is revealed. That summer I produced at least one cyanotype print a day as a way to document the growth and decay of Washington's forests in contrast with the city of Seattle. Through this exploration I further explored the understanding that there is something different about walking through a family of trees in the forest compared to seeing a tree on a street corner. The city tree is a guardian marker. It is equally majestic to the trees in the forest but when you enter a forest, there is a palpable connection between the trees. The forest is a network, the trees support each other, their density and scale feel incomparable.

There are many cycles that can be observed in the forest, whether on a macro environmental scale or a more micro personal scale. The cycles of the forest help us understand the cycles of ourselves. When the cyanotype prints I created are grouped together and displayed on a wall, seen in Figure 8 and 9, the difference in the city and the forest is not so apparent. That is because it is an experiential feeling of nature. It is the Nature within us that absorbs the nature around us.

When I see old homes from the turn of the century being torn down and replaced with modern components I question what the trees used in building them were cut down for? A 1,500 year old tree sacrificed for a home that would only stand 100 years is something that is hard for me to wrap my head around. *90 Day Notice* is shown in Figure 10. It is site specific sculpture that is a response to this destruction and demolition. Broken plaster chair legs with crystals grown on them resemble broken bones. Stacked like logs they lay in the fire place, the hearth of the home. 90 day notices that my landlord posted on my door lay crumbled under the andiron and act as kindling.

This specific fireplace is the central gathering point and is located at the direct center of the house. With bulky carved moulding surrounding the mantel and a decorative cast iron vent planked in the center, the fireplace is the focal point. It has provided warmth and comfort for myself and the unknown faces that have occupied this space before me over the past one hundred years.



Fig. 10

In Seattle the tearing down of antique homes is happening quicker than I am able to digest. If left up to the property developers they would simply clear cut all the homes and build new. In just a few years time the skyline has become a wall of upright rectangular buildings reaching for the sky, as if it's a cyborgs version of a densely packed forest.

The 1920s house I am currently living in will be demolished when I move out in August 2021. As will the established trees and rhododendrons in the yard that are nearing a century old. So eager they are to demolish the history. The old growth vertical grain peeking through the chipped paint around the windows and door frames reminds me of the sacrifice taken from the forest to build this home. Now, for what?

The piece *Universal Solvent* is seen in Figures 11 and 12. This piece was made by encrusting wingback arm chairs in grown crystals. I see crystallization as a metaphor of perfection and universal natural purity. In some ways the crystal is the next stage of us, rendered pure by chemical growth and the shell results in crystalline perfection. This piece was not born, but grown by the rules of unchangeable universal pattern. Coated with crystals, this work explores fossilized fragments of our everyday world that speak to our current place in time, along with our connection to the natural world.

Universal Solvent explores inner Nature through the use of archetypal objects and natural processes. In *The book of Symbols*, compiled by Jung's students a chair is described as being full of potential and speaks to the natural world:

The original throne is the lap of the Great Mother, the imaginal and infinite womb of nature in which all is conceived, and the cosmos, within and without, in which, upon emerging, each thing gets 'seated'. Physically her lap is echoed in hill, mountain, tree branch, rock clefts and the smooth surfaces of huge boulders.²⁴

A chair's form implies a specific type of action that happens when in use. The wingback chair is different from a computer chair or wooden dining room chair for example. It is meant for rest, pause, thought, or contemplation. Comfortable and sturdy, the wingback is appropriate to spend long periods of sitting as we travel inward to access our own Nature.

²⁴ Ami Ronnberg and Kathleen Martin, "*The Book of Symbols*" in *The Book of Symbols* (Taschen, 2010).



Fig. 11

The iconic wings of the chair that its namesake implies were an answer to climate control before homes had adequate insulation. The design is ideal for enjoying the warmth of the fire while your sides and back are shielded from drafty historic architecture. That is why wingback chairs are sometimes called fireside chairs.

The three wingback chairs in *Universal Solvent* are covered in synthetically grown crystals. The process of growing crystals synthetically is much like how they form in the earth only the timeline is sped up. Still this process of growing crystals speaks to patience.

Crystals stand in contrast to their earthly surroundings. It is not something that can be found when among comforts and pleasantries. Crystals are precious stones that develop slowly, deep in the earth, amid pressure and darkness. To discover a crystal requires a descent beneath the surface, where there is no definitive map. There is a metaphorical crystal within each of us.

For many of us the longing to touch this true crystal is so strong that we can not help but seek out its radiance.



Fig. 12

It is within the core of the mountain that the gems, minerals, and jewels reside. Slowly and steadily crystals of enormous magnitude grow within the dark confines of caves. I think of the cave as an archetypal space and once able to find and enter the cave we are forever changed. It can be a physical or metaphorical place of potent power, acting both as a portal to another realm and a space for sacred ritual and initiation. The cave is a place to return for meaningful retreat, where we can see the true self in the darkness. In esoteric teachings the cave is known to reside in the center of the heart.²⁵ Yet because of its mystery and power, many fear the cave and

²⁵ C. G. Jung et al., *Man and His Symbols* (Bowdon, Cheshire, England: Stellar Classics, 2013).

never try to find it. In creating *Universal Solvent* I was reminded how important it is to return to our cave and tend the fire.

There is a soft hum emanating out of the chairs in *Universal Solvent*. A low hertz frequency that is heard differently depending on where you stand in relation to the chairs. The sound is a binaural beat emanating at 7.83Hz. The ideal motor rotations per minute on the *Plant Drawing Machine* was also in sync with 7.83. This emulates Earth's heartbeat also known as the Schumann Resonance. This frequency is an electromagnetic resonance that circulates in the cavity bound by Earth's surface and the ionosphere.²⁶

Humans are inherently tuned to the resonant vibration of earth. Theoretical physicist Albert Einstein said "everything in life is vibration" and at the core of our atoms is vibrating matter. When broken down to its simplest form humans are nothing more than vibrating energy. The frequency humans emit ranges from 5-10hz.²⁷ This means that we are vibrating in the same range as the Earth. Could this be a reason why nature has healing effects on humans?

Throughout my research I have been aiming to define what makes up "nature" and "the natural world". The line between what is and isn't natural is often more blurred than I could have ever imagined. As some of us move away and some of us drift closer to understanding these age old existential and primordial questions we are all finding our own bits of truth along the way. I am left with more questions than answers.

²⁶ Alexander Nickolaenko, *Schumann Resonance for Tyros* (Springer Verlag, Japan, 2016).

²⁷ Penney Peirce, *Frequency: The Power of Personal Vibration* (Beyond Words/Atria Books Imprint, 2011).

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