Public Art for Ecological Remediation

A Thesis Presented to The Art Practice Program Faculty of the School of Visual Arts NYC

> In Partial Fulfillment of the Requirements for the Degree of Master of Fine Arts

> > by Allison O'Connor March 2, 2020

I declare that this is my own work. To the best of my knowledge it contains no materials previously published or written by another person, unless otherwise acknowledged. I also declare that the intellectual content of this thesis is the product of my own work.

Allison O'Connor

March 02, 2020

Dear reader,

I spent some time working on this document while sitting at the dining room table of my family's farmhouse, looking South onto white vacant fields and getting distracted by watching the cat swat after sleepy flies. As I stop to think, I run my fingers along the edges of the table and notice the erosion of varnish that this pensive tick of mine has created over nearly three decades. I have worked in this same spot, sat on this same chair, at this same table my entire life; this is where I learned to read, applied to colleges, sorted through my mother's affairs, and now toil over this document. It is at this moment that my thesis comes together, at once the culmination of a lifetime of knowledge and the beginning of a focused career.

A warm and heartfelt thank you to Ernesto Pujol and Thyrza Nichols Goodeve as well as the entire thesis committee for the much needed guidance on this journey. Thank you to the SVA AP faculty and staff for building me up to this point. Thank you to my mentor, Melissa McGill for the tough love and to my coworkers at the City of Ottawa for supporting my academic pursuits. I could not have made it through this process without my friends and family, who lovingly encourage all my endeavours, as outrageous as they may be. Finally, a special appreciation to Dawn, my editor and provider of positive affirmations. I was raised by an apple orchard

Next to our farmhouse is an apple orchard. The trees have been rooted in this place for over a hundred years, and my family has tended to them for the past four generations. Originally comprised of 24 apple trees, now only five of the original trees remain. These trees are giant; unlike new dwarfed breed, their canopy is high and wide, creating a canopy green, resulting in large apple yields every year. We have planted four new saplings, an investment in our future. These floppy youngsters only produce one or two small apples a year, which are adoringly coveted and ceremoniously savored come the Fall. Similarly to the trees, O'Connors have come and gone. Only my father, my sister, and I remain in this place where we tend to the past and planting seeds for the future. These trees are prominent features in the space and major figures in the memories of my childhood. These trees have been instrumental in the shaping of my values — labor and care.

Late Winter pruning is done every two years for optimal health by whoever is able and willing, either my father, my uncle, or myself. The only instructions passed down is to "cut anything that is new and growing upward". These directions are interpreted differently; my father is laissez-faire, my uncle is heavy-handed, and I channel my inner Giuseppe Penone¹ as I shape the tree back to its pure form—at least that's what I am imagining while I wield my power saw.

¹ Giuseppe Penone Tree of 12 Metres, 1982

The Spring's bloom is a highly anticipated sight, effervescent and lush, each pollinated flower transitions into a small post-bloom fruit. This is the start of the apple-picking cycle. Fruit is dropped to the ground on a daily basis, as the tree selects which fruit to invest towards full growth. The select small fruit grow into mid-sized apples, which then ripen to full-sized apples. This is my period of humble meditation as I pick apples from the ground throughout Spring and Summer.

"I have found that allowing ideas to pass is the surest way to original inspiration. It is a matter of trust, in the same way that breathing out trusts the next in-breath to come. But the thought that comes in is not my own; it is from Nature."²

Finally, in the Fall, we shift our eyes to the canopy above, moving from ground to sky, meditation to exaltation of the apples, ripe in abundance. Picking an apple from a tree has a distinct feeling; the rounded fruit fits perfectly in your palm, it has a stratifying weight and smooth texture, the teasing tension and release from the branch is exhilarating. Once picked, the apples are stuffed into dozens of canvas bags and delivered to family, friends, and coworkers. Sharing the apples is a vehicle for a connection with others. I drop them off, leaving the canvas bag behind purposely so that we have an excuse to see each other again. Thousands of apples are stuffed into lunch boxes, made into sauces, or baked in pies every year.

The orchard has fed my family, friends, wildlife, and livestock for generations. This place hosts layers of beings and organisms that connect in boundless ways through symbiosis,

² Glenn Aparicio Parry, *Original Thinking: A Radical Revisioning of Time, Humanity, and Nature*. (Berkeley, CA: North Atlantic Books, 2015), 68.

on multiple timescales, making it inherently incomprehensible and, therefore, cautiously fragile.

In the following text, I will translate the lessons I have learned through my lifelong responsibility as caretaker and steward of an apple orchard and combine it with my role as a steward of public art and public spaces, in order to propose foundational practices for artists and arts organizations who are creating and placing art in outdoor spaces. Donna Haraway stated in her conversation with Thyrza Nichols Goodeve: "I have always read biology in a double way— as the way the world works biologically, but also about the way the world works metaphorically."³ I have struggled with the definition of nature as "a being" and nature as "a way of being", perceiving one as independent from another. This rupture trickled into my practice, creating a canyon between what I do and how I think. In this exploration, I have come to reconcile my own distinctive view of nature⁴ into a holistic approach that puts these two definitions in collaboration⁵.

My understanding of the historical and rapidly progressing arch of human's relation to nature goes as follows:

Kinship⁶ -> Fear of ⁷-> Othering⁸-> Commodification⁹ -> Lament OR Denial¹⁰

In this time, when our planet is in crisis, nature is no longer a unifying topic or refuge from conflict; speaking about the weather is no longer categorized as a small talk but a weighted and possibly polarizing issue. I fear that, like many, I have become paralyzed by the magnitude of the

³ Donna Jeanne Haraway and Thyrza Nichols Goodeve, *How like a Leaf : An Interview with Thyrza Nichols Goodeve / Donna J. Haraway.*, 2000, 24

⁴ *Nature* is an umbrella term for many beings and ways of being things. My understanding of Nature is articulated later in this document when I describe my bio-geographical roots.

⁵ Collaboration is a theme that permeates throughout this document.

⁶ Traditional knowledge and practices such as those of the Algonquin First Nations recognize a all encompassing relationship and respect of Nature.

⁷ Jean Bodin in *Universae naturae theatrum* argued that environmental factors exerted a major influence in human destiny and therefore Nature determines the economic, political and social faith of a people.

⁸ Haraway and Morton explore the rupture in the categorization human as being apart from Nature. This "othering" establishment of a hierarchy between species which leads to a variety of issues, mainstay when it comes to empathy and understanding.

⁹ The commodification of Nature as intellectual property is an infringement on the commons. Vandana Shiva environmental activist is fighting against the patenting of seeds, among many other things.

¹⁰ The reaction to climate change, like any change, has two predominant and polarizing responses- Ecological lament whereas in like Hegel *beautiful soul*, humans yearn to solve the issue they are perpetuating in order to save Nature. The other half of the population is in denial of the issue at hand.

issue. As ecological philosopher Timothy Morton states, "once our consciousness is awoken to the environmental crisis, every action we take is an environmental one."¹¹ This paralysis extends to the process of making. The process of making something tangible which exists in space is the physical moving and reassembling of matter and energy. "The quantum realm is the source of energy the immutable source of vibrating that governs everything there is, and energy, physics tells us, cannot be created or destroyed"¹². The action of making forcibly rips matter from one space and introduces it in another, moving and using energy in the process. We are responsible for these processes and therefore have in our sphere of control the ability to alter our practices and inspire best practices¹³. Knowing that carbon neutrality is rarely feasible in art making, we must each reconcile this. How I have reconciled my effect on the environment in my art practice is to propose a mission statement for myself, with the goal of tangible and conceptual ecological benefits. I have generated for myself a philosophy and methodology that guides my motivations for making and creating public art so that, in turn, it can have some benefits to the environment — ecologically remediating¹⁴ public art¹⁵.

¹¹ Alex Blasdel, "A Reckoning for Our Species': The Philosopher Prophet of the Anthropocene," *The Guardian*, June 15, 2017, sec. World news,

https://www.theguardian.com/world/2017/jun/15/timothy-morton-anthropocene-philosopher.

¹² Parry, Original Thinking: A Radical Revisioning of Time, Humanity, and Nature., 128.

¹³ The term *Best Practices* means a widely accepted way of operating in the most effective manner. For me, best practices would result in the creation or review of a policy.

¹⁴ Term borrowed from *Environmental Remediation* which deals with restoring a polluted environment. *Ecological Remediation* is the restoration of a disconnected environment.

¹⁵ *Public Art* is a term that can be attributed to any type of art form presented in the public realm.. My understanding of *public art* is articulated later in this document.

As a social practitioner, sculptor, and installation designer, with a career as a commissioner of public art, I apply this methodology and reconsiderations, not only to my motivations for making but, more specifically, the audience for whom I make.

My art practice centers around ecology, where micro and macro cellular organisms as well as abiotic components¹⁶ are in a relationship based on reciprocity and togetherness. My artwork is a series of linked environmental elements working together to accomplish one action. Much like the bees in a beehive, elements of my artwork are in obligatory symbiosis¹⁷; that is to say that each individual has a necessary dependency on another. My ecosphy¹⁸ is inherited from generations of land stewardship combined and my experience in that role. This philosophy is complemented by vigorous research and consultation with generous and sensitive subject matter experts¹⁹. Together we translate biological sciences and carefully interpret the needs of a segments of our biosphere²⁰.

My career centers around public art, I commission artworks for municipal public spaces. Public art can take many forms, but I am specifically interested in three-dimensional visual art,

¹⁶ An *abiotic component* is a necessary nonliving element in an ecosystem, such as rain, sunlight, and oxygen. These factors are usually cehimcal, therefore one could assume that chemical feelings such as love could be an abiotic component.

¹⁷*Obligatory symbiosis* is the relationship between organisme, where each cannot live without the other. Examples of this are flowers and pollinators.

¹⁸ Félix Guattari introduced *Ecosophy*, a term meaning ecological philosophy. Guittari established tree ecologies, later adding a fourth, which all come together to build our environment.

¹⁹ My desire to work with biologists and environmental engineers is to prove the validity of my choices. To be backed by facts is to quench the insecurities I was raised with on a patriarchal intergenerational farm operating in practices passed down through generations and built on gender roles.

²⁰ *Biosphere* is the sum of all planetary ecosystems; the combination of micro and macro organisms that create our world.

permanent or temporary, that is placed in outdoor public spaces²¹ with some engagement with a

human community. This brings together my practice of creating sculptures and installations with

my practice in environmental stewardship.

Public art can be defined in many ways—physically and\or conceptually. The City of Ottawa

physically defines and subcategories public art as follows:

A visual artwork in any media created by an artist(s) that has been planned and executed with the specific intention of being sited or staged in public space, and is acquired in compliance with the City of Ottawa's Public Art Policy:

 \cdot Integrated public art forms a physical part of a building, structure or landscape. If the site were to be redeveloped, the art would be as well.

 \cdot Stand-alone (non-integrated) public art is not a physical part of a building, structure or landscape

 \cdot Temporary public art is an original work by an artist(s) that is created for a specific occasion, time frame or event and which is situated at a particular site on a temporary basis. The art may cover a range of forms including, but not limited to, visual art, digital art, sound art, and performance-based work.

 \cdot Site-specific art, whether long-term or temporary, functional or aesthetic, stand-alone or integrated and in any media, is an original work that is created in response to the immediate context.²²

Organizations such as Creative Time continuously push the conceptual definition of

public art. Each project's core values demonstrates that "art matters, artists' voices are important

in shaping society, and public spaces are places for creative and free expression"²³. The physical

manifestation of public art and its concepts are ever-changing. Still, the motivations for

https://ottawa.ca/en/city-hall/your-city-government/policies-and-administrative-structure/administrative-policies. ²³ "About Creative Time," Creative Time, accessed March 2, 2020, http://creativetime.org/about/.

²¹ *Public space* was originally part of the Commons, meaning it was not governed by any entity, it belonged to all. This altruistic concept is still a part of the public space's ethos, meaning that the space can be accessed and used, however all space, including public space is governed by one or more entities. Truly public space has been replaced by accessible space.

²² Office of the City Clerk, "Administrative Policies," September 5, 2019,

producing these types of work seem to be unified amongst the industry— making art visible and accessible to the public.

Public art has a responsibility to space and its users. It is imposing matter and meaning in a place that is sanctioned for all. Therefore it is imperative that artists and practitioners be inclusive, transparent, and accountable in their processes.

The function of public art is to make or break a public space, on the other hand, it hunts down public spaces, it finds them where none existed before, in the nooks and crannies of privacy (in between buildings, at the edge of buildings); the of public art annexes territories, into the public realm. On the other hand, it loses public space; it takes space that's ordained to the public, as institutionalized public space, and comes up from under it: the act of public art disintegrates the public spaces so that the public can take it with them, on their backs or in their nerves.²⁴ -Vito Acconci, 1993

A successful and socially valuable piece of public art is conceptually relevant, aesthetically pleasing, and plays a role in a space. Most importantly, it represents the values and the issues faced by a given community. In this way, the artwork's presence can generate a sense of place and connection. In these places, beings other than humans are also confronted with public art. This is especially true in outdoor public spaces with an ecosystem comprised of flora, fauna, and fungi. These beings are not always considered a part of the community as prominently as their human counterparts.

²⁴ Vito Acconci, *Making Public* (The Haag: Stroom, 1993), 16.

Chrysalis Arts published a workbook on sustainably in public art²⁵. This study has a section on environment and resources which outlines four areas to address, biodiversity, resources, minimalizing pollution, and heathy living, all with actionable items. The goal of sustainability in their context means to "live within the environmental limits"²⁶. Given the rapid progression of our environmental state crisis in the last decade since this publication, I believe that we should not only live within these limits but redefine them through nurturing interspecies collaboration. These limits are our limits; the human species is part of the environmental fabric in which we are all active participants in defining its possibilities.

The pervasive trend in environmental suitability is conservation. We would like to conserve the earth in our lived image, our human-centric timeline. I can only imagine this feeling was shared by the billions of species on the verge of extinction²⁷ that came before us— wanting to conserve a state of existence. Physicist and astronomer Adam Frank talks about the future of humans and the planet earth. Frank articulates a view on environment sustainability that resonates with me— long term holistic planning for the planet. Humans, like each individual species, experience time differently, planets, trees, ants, and fungi do not operate on our circadian rhythm. "The effect of ambience is always anamorphic - it can only be glimpsed as a fleeting, dissolving presence that flickers across our perception and cannot be brought front and centre."²⁸ This unbridgeable difference shaped our perceptions and our assumptions about what

²⁵ "PASA-Guidelines1.Pdf," accessed March 2, 2020,

http://www.pasaguidelines.org/downloads/PASA-Guidelines1.pdf.

²⁶ "PASA-Guidelines1.Pdf," 10.

²⁷ The difference in scenarios is that we are the asteroid- as exemplified in Justin Brice Guariglia's billboards: *We are the Asteroid I, II and III*, 2018

²⁸ Timothy Morton, *Ecology Without Nature* (Cambridge, Mass.; London: Harvard University Press, 2009), 51.

is "good" or "bad" for the environment. Frank suggests that we must consider these multiple timelines in our environmental planning. Public art, like all matter, exists on its one timeline, and we must consider how it fits in the larger equation.

Outdoor public art is in direct dialogue with its environment; it cannot separate from it, as it is inescapably both its subject and object. Nature as the subject is an ephemeral experience; painters such as Henri Matisse, performers such as John Cage, and writers such as Henry David Thoreau endeavored to represent. On the other side of this, nature as an object is a tangible experience; sculptors such as Louise Kruger, choreographer Pina Bausch, and writers Wendell Berry use the materiality of nature to create their work. Public artworks such as Agnes Denes's Tree Mountain or Robert Smithson's Spiral Jetty exemplify public art that speaks about the environment in its subject and as an object by constructing the work from natural materials. These examples of eco-art make evident links between public art and the environment, but what I propose is that nature is the subject and object of public art in outdoor spaces regardless of their concept or material construction. With this idea, I postulate that the topic of the environment is present as the subject of an artist-designed bench and present as the object of an artwork tracing public transit. As unintentional or secondary nature may be in a piece of public artwork in an outdoor space, it is visibly or invisibly present due to the setting and space it occupies—nature is public art's symbiont²⁹.

²⁹ *Symbionts* are the beings that live in symbiosis, meaning that they are in close proximity and are reliant on each other. Usually this relationship is commensalistic, where public art gains from nature, but nature stays the same. The entire basis of this exploration is to further the former.

Humans are not the only ones to be affected by an artwork in a space because flora,

fauna, and fungi are also present. This is especially true in outdoor public spaces where other than human beings are abundant and part of a diverse ecosystem. Throughout various parts of its planning and implementation, public art must take into account its stakeholders, that is to say, the audience for whom the artwork exists. A stakeholder³⁰ is "an individual, group or organization who may affect, be affected by, or perceive itself to be affected by a decision, activity or outcome of the project."³¹ This definition usually extends to the human community yet other beings are affected by public art. These "others" are not always considered as equal stakeholders to their human counterparts. One reason could be due to ontological considerations. If we consult Object-Oriented Ontology, all matter has life and energy, from bells to beetles to beetroot.

Accordingly, OOO places all beings on equal ontological footing. Apart from its rejection of anthropocentrism, this nonhierarchical approach to being calls into question an exclusionary concept of nature, as well as the perception that nature exists in specific places, namely those untouched by humans.³²

Therefore the definition of "group" or "organization" can reference human collectives and can also encompass groups and organizations of organisms. Stating that stakeholder is one who "perceives itself" has Cartesian and epistemological consideration, which could, in turn, deny this extension of stakeholder to non-humans. On the other hand, panpsychism³³ is a theory that proposes the concept that everything has a mind. Like our diverging perception of time, thought

³⁰ The definition of the term *Stakeholder* is articulated later in this document. I am amused by this word; a stake could mean something to risk, usually inferring economic risk, or it could be a pointed stick. These different interpretations make this term ideal for this discourse.

³¹ Project Management Institute, *A Guide to the Project Management Body of Knowledge (PMBOK Guide)* (PA: Newtown Square, 2004).

³² Jade Hagan, "The Dark Ecology of William Gibson's 'Neuromancer': Technology, Object-Oriented Ontology, and the Dawning of Entanglement" (ProQuest Dissertations Publishing, 2013), III,

http://search.proquest.com/docview/1411904298/?pq-origsite=primo.

³³ William Goff Philip, Seager and Sean Allen-Hermanson, "Panpsychism," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, Winter 2017 (Metaphysics Research Lab, Stanford University, 2017), https://plato.stanford.edu/archives/win2017/entries/panpsychism/.

is ubiquitous yet individual. This fear of the unfamiliar consciousness of the "other" can often inhibit our validation of their knowledge, but we must overcome this separation. I postulate that the following environmental elements such as soil and its fungal composition³⁴, flora, and fauna, could and should be considered major stakeholders in the creation, development and implementation of public art in outdoor spaces.

As we've established, Public Art has the ethical responsibility of serving the public; by occupying public space, artworks should be of value to all beings that use said space, otherwise known as stakeholders. The challenge in extending this status to diverse beings is first determining who, or in this case, what they are. The acknowledgment and extension of this title to a larger segment of beings requires an adaptation in practices and the utilization of both hard and soft information— scientific data and meaningful engagement.

³⁴ *Humus* is the Greek word for soil, *Humus* is also the root of the work *Human*; we are of the soil. Healthy soil is the foundation of a healthy ecosystem. Testing the soil which the outdoor public art will occupy can not only give you an idea of the past history of the space but can also inform its future potential, limited or expansive. I include mycelium as a composite of soil. Mycelium is the director of the entire ecology of the space, like an unofficial mayor.

The ecological components of a region can collectively or individually be considered as a stakeholder. If we do breakdown an environment into segments, the list is seemingly endless; soil composites, water, wildlife, flora, and climate, as well as other factors, could be broken down and considered stakeholders. The decisions on who or what to consider can be dictated by acknowledged authorizes such as fisheries, wildlife preservation organizations, or government bodies such as the Parks Departments. The idea is to consult subject matter experts and site-specific communities to get a biological portrait of the space. Predominantly these engagement decisions are left to the discretion of artists or practitioners leading the project. This task of valuation is inherently biased, who and what we consult is based on our geo-biographical roots³⁵.

One's visualization of an ecosystem or a natural landscape and its various elements, would differ from another —would an environment be flat or mountainous? Would there be bodies of water, and if so, what type? What species of trees be present you see, and what creatures would scurry around them?

Our family orchard is rooted on a high hill among rolling hills. The colorful fruit-bearing trees run alongside a dark pine forest. The orchard used to grow in a field but is now surrounded by a maintained lawn. This change happened when my grandparents civilized the place. A few trees were even cut down to install a pool, which my grandmother deemed necessary so her eight children could learn to swim. The cows get into the

³⁵ *Geo-biography* determines how the geography you have experienced will influence your autobiography.

orchard a lot, most likely because the surrounding fence is more of a suggestion than a reinforced border, and the apples are enticing. The soft soil crumbles under their weight as they saunter through the orchard, creating divots. Although I pick fallen apples every day around mid-day, the sun often blinds me to those apples hidden in divots. Over time the cows' footprints become terrestrial tide pools, a microhabitat. These footprints become microcosms of insects and fungi, surrounded by a community of birds and other wildlife, all fueled by decomposing apples.

Our vision of nature is inherently personal but is also scientific. I live in the Mixedwood Plains Ecozone, as described above but biologically it is:

a complex Precambrian bedrock [...] frequently exposed, creating the rugged landscape associated with the region. Where bedrock is not visible, it is covered with ground moraine (till) of variable depth. The ecoregion is dominated by mixed forests. Lakes and rivers cover over 10% of the surface area of the ecoregion. Wetlands are relatively rare and represent only 2.5% of the total land cover.³⁶

The two types of descriptions above, anecdotal and scientific, describes the same place. A collaboration between these two languages is imperative to gather a holistic understanding of a place to engage the full spectrum of its stakeholders.

In most infrastructure development projects, a report is gathered to determine pre-existing environmental factors in a space. A general description of the environment is assembled in an Environmental Assessment (EA) and then analyzed in an Environmental Impact Assessment (EIA). The goal of an EA report is to generate information that can give us an understanding of

³⁶ Hudson Bay, "Eco Ezco Zones of Ontario," 2007, 8.

the different environmental elements in a space, and an EAI will analyze how the project will affect these elements. When endeavoring to generate a new piece of public art, an analysis such as these can provide an in-depth understanding of the ecological context and makeup of a given space, and therefore determine potential stakeholders with whom to engage in the creation of the public artwork.

EA specialists are biologists and environmental scientists who generate lists of possible environmental factors. These lists elements of a given ecozone as well as their specific habitat patterns. This is a thorough and somewhat comprehensive analysis of the space, like a full physical, testing health, reflexes, and flagging any areas of concern. These lists are assembled using pre-existing data relating to the larger scientific research on the area. Supplementary site-specific data is collected in person through monitoring over a short, designated period of time.

Similarly, environmental engineers create an Environmental Impact Assessment (EIA) that interpret the data and determines the needs of the listed elements. Like the EA, the EIA report is produced in a clinical manner with scientifically proven information on who and what the public art may affect. For example, considering the risk of soil contamination during excavation and installation or recommend habitat offsetting³⁷. This type of specialized analysis is invaluable³⁸, measuring the affects and effects can help steer the priorities of a public art project. The caveat is that even these reports cannot capture the immense interconnected complexity of

³⁷ Habitat Offsetting compensates an ecosystem for any disturbances. If implemented correctly, public art could also play this role.

³⁸ Unfortunately, EA and EIA are not standardized or regulated. Each company can analyze different elements and provide varying conclusions based on factors such as equipment variance, budgetary restrictions or political pressures. These external influences can alter the outcomes of the reports.

an ecosystem. This is where the supplementary anecdotal information is required to complete our ecological literacy.

Valuable data on potential stakeholders can be sourced using scientific processes, but it can and must also be identified anecdotally. "Logic, intelligence, and reason are satisfied, but the heart goes hungry."³⁹ Anecdotal information is often ephemeral, unrecorded, and undocumented. Tools necessary to collect this type of knowledge are time and care. Connections to a space and its community of users generate valuable information, noticing how the shadows travel through a space, observing the daily patterns of the birds, or experiencing the choir of humming insects that surround flowering fruit trees can only be achieved in-situ. This collection of knowledge can be done by an artist or commissioning body, but it resides with the people or other organisms in the space. This is where a consultative methodology and community engagement practices can come to use.

Communities surrounding an environment can help collect and distribute this knowledge of the diverse and complex ecology of the space. Many environmentalists, individuals, and organizations such as beekeepers and amateur botanists, as well as indicator species⁴⁰ hold valuable knowledge. These beings have dedicated time resources and care towards the development of kinship with other species. Even more importantly, they have the best interests of their counterparts in mind and at heart. Knowledge keepers, hobbyists, and other species can

³⁹ Alan Watts, *The Wisdom of Insecurity* (New York: Quality Paperback Book Club, 1994), 16.

⁴⁰ *Indicator Species* are bio indicators, they can tell you information about other species or general factors of an ecosystem. If implemented correctly, public art could also play this role.

help interpret the needs of the identified stakeholders and help to bridge the cross-species language barriers.

Ecology is the bringing together of all stakeholder, humans and nonhuman through scientific and community engagement, in the stewardship of shared outdoor space. Redefining the role of public art as an agent in this stewardship will not only lead to ecological remediation, but its effects can ripples into new areas; this methodology can set an example and provide much needed research content for other industries. The developed bodies of knowledge can be used to set new standards for the management of public spaces.

In the Summer, apples fall to the ground, and I pick them. Sometimes apples fall to the ground while I am picking them. It is quite humbling to see a task perpetuate itself in front of your eyes— a reminder that work is never finished.

I pick apples off the ground and fill one five-gallon bucket at a time. Five-gallon buckets are a hot commodity on the farm, they stand upright, the width and height seem perfectly engendered. The buckets are multipurpose; they are big enough to hold large quantities of grain, water, or vegetable, but not too large as to be unmanaged and difficult to carry. I have no idea what the origin of the buckets are, but we have had four my entire life. As I pick apples from the ground, I move the bucket along with me in a waltz under the tree's canopy. My dance is accompanied by a soundtrack of rhythmic thumps, as the apples hit the inside of the bucket. The bucket is my gong, and the apples are my mallet. The song's tone changes tones, both as the bucket's content rises and as the seasons' apples grow. I am familiar with this song, and so are my cow friends who watch and listen, as they have come to understand that this sound translates to "snack time".

It has happened once or twice that this song was altered, its rhythm changed. We called this the bucket phenomenon. It is an elusive event, which is not seen but only heard. Well, my sister claims she witnessed it with her eyes once, but my father and I remain skeptical. The bucket phenomenon is when an added thump is magically added to your song without your doing. This happens when an apple falls from the tree, directly into your bucket. When I hear the thump ring out without me, I jolt up to look over at my bucket in disbelief— the tree and I are collaborating in this melody. Interspecies collaboration can be accomplished with a willingness to invest time in synchronizing to other species rhythms and willingness to invest care in developing one's eco-dialect.

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