

## Garden Entanglement as Ecological-Becomings: An Arts-Based Diffractive Methodology

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My house is the red earth; it could be the center of the world. I've heard New York, Paris, or Tokyo called the center of the world, but I say it is magnificently humble. You could drive by and miss it. Radio waves can obscure it. Words cannot construct it, for there are some sounds left to sacred wordless form.

—*Joy Harjo, Secrets from the Centre of the World, 1989*

### Introduction

In my doctoral research, I intend to articulate approaches to food system transformation associated with food-related initiatives at First Nations Technical Institute—a Haudenosaunee<sup>1</sup> post-secondary institution on Tyendingaga Mohawk Territory, Ontario where I both work and have ancestral family connections. This paper presents an aspect of my methodology, in which I draw out and develop poetic insights from my garden-based autoethnographic journaling process to better understand my own life-experiences, family history, and a deep continental citizenship that is only possible with the recognition that we compose and are composed of other beings, such as the Three Sisters (corn, beans, and squash) and sunroot, that live and have evolved on Turtle Island<sup>ii</sup> over millennia. The profound and entangled relationships between humans and the more-than-human (Whatmore, 2004), implicit in Haudenosaunee ontology, offers alternatives to the human exceptionalism inherent in the Western philosophical underpinnings of contemporary agriculture, higher

education, and more broadly in the possibilities we can envision for human society and our role in the ecosystem (Oyserman, et al., 2002). A lived experience of the aforementioned relationality will help me to better understand and effectively engage in food system transformation initiatives employed at First Nations Technical Institute. Insights presented in this paper may help others engaged in similar food system initiatives in Indigenous contexts.

The next several sections outline the theoretical influences shaping my work including *kasasten'sera*, Deleuzian becomings, arts-based methodologies, and axiological considerations. Next, I present an overview of my methodology, and finally a poem and photograph (see Figure 1) that emerged from this process.

### ***Kasasten'sera***

Long before European contact, the Peacemaker, a political philosopher born on the northern shores of Lake Ontario, devised a peaceful solution to the conflicts plaguing the Iroquoian peoples. This solution took the form of a body of teachings called the *Kaienerekowa*, or Great Law of Peace. The *Kaienerekowa* provided the foundation for peace and good governance between the warring Iroquoian nations through the establishment of the Haudenosaunee Confederacy. One of the teachings from the Great Law is the principle of *kasasten'sera*, which is both spiritual and political (Akwesasne Notes, 2005), and is variously translated as strength or power (Alfred, 1999; Antone, 2013).

*Kasasten'sera* is the power of unity, of the collective, and the strength that comes from thought and action unified with all of creation and the cycles of life (Antone, 2013). *Kasasten'sera*, a lens through which I view human and more-than-human (Whatmore, 2006) ecologies, has influenced the becoming-ecological methodology presented here.

**Becomings as Alliance, as Symbioses**

Deleuze and Guattari (1987) introduce “becomings” in their post-structural work, *A Thousand Plateaus: Capitalism and Schizophrenia*. Becomings are different from the individuality and stasis associated with being. Becomings always involve actors in relation; they are never relationships of filiation or descent, but rather transversal alliances across strata, kingdoms, or other disparate categories. Becoming-corn is a relevant example of becoming in Indigenous societies of Turtle Island and also in mainstream Western society. Corn holds special significance in Haudenosaunee society, as a staple food-source with some estimates suggesting that corn composed at least 65% of the pre-contact diet (Lewandowski, 1987). Corn also figures prominently in the Haudenosaunee creation teachings and is a vital component of the seasonal cycle of ceremonies (Cornelius, 1999). Corn has changed as much as humans from this alliance. The corn plant is profoundly dependent upon humans, corn cannot reproduce without human aid, and the diversity of corn varieties that evolved in association with Indigenous farmers is astounding (Berthaud & Gepts, 2004; Parker, 1910; Prasanna, 2012). This trans-kingdom alliance, in which the lines between people and corn are crossed and blurred could be viewed as a “Deleuzian becoming.” The population growth associated with Europe’s Industrial Revolution has also been linked to corn consumption (Warman, 2003), affording sustenance to early settlers in the Americas allowing for the colonization of this continent (Parker, 1910; Warman, 2003), and providing the raw material that facilitated the rise of contemporary industrial agriculture (Pollan, 2006). In articulating the myriad ways in which corn has infiltrated mainstream North American diet—primarily as high-fructose corn syrup, a highly versatile industrial food additive—Pollan describes North Americans as “processed corn, walking” (p. 23), all of which could be viewed as a becoming-corn.

The Anthropocene describes the current geologic time period and is characterized by unprecedented human impacts on the climate, ecosystems, and biodiversity (Creutzen, 2006). The Anthropocene identifies our impacts on the earth as problematic and potentially leading to the extinction of all planetary life (Lewis & Maslin, 2015). Deleuzian becomings recognize the profound entanglement between humans and the rest of the natural world, as an alternative to the ways of perceiving and enacting our relationships with the more-than-human that led to the Anthropocene, such the philosophical separation of humans from nature, rampant capitalism, and nascent neoliberal regimes (Ruddick, 2017; Stark, 2017).

### **Arts-based Methodologies can Support Becoming-Ecological**

My approach to becoming-ecological challenges dominant logico-linguistic ecological standards—specifically those related to food and agriculture—of colonial North America via an arts-based approach. Arts-based methodologies employ “the arts, in the broadest sense, to explore, understand, represent and even challenge human action and experience” (Savin-Baden & Wimpenny, 2014, p. 1). Arts-based methodologies free us from reified cognitive constructs, diversify our perspectives, recognize multiple ways of knowing, attend to complexity, and generate more questions than answers (Barone & Eisner, 2011; Cole & Knowles, 2008). I have been using poetry to explore or represent “people’s lived experiences of complex existential principles and processes” (Furman, 2007, p. 1). According to Richardson (1998), “[p]oetry, as a special language is particularly suited for those special strange, even mysterious moments when bits and pieces suddenly coalesce” and “poetry appears to be a way of communicating instances when we feel truth has shown its face” (p. 451). Poetry, for me, is a way to both understand and represent experiences and insights that might

otherwise evade notice using conventional logico-linguistic and linear qualitative research methodologies.

Discursive representationalism—the description of objects, persons, phenomena or other processes by strictly linguistic means—has been critiqued by several noteworthy scholars. Carolan (2008) identifies “more-than-representational” knowledge based on “sensuous, corporal, and lived experience(s)” (p. 412) that are difficult to articulate in prosaic discourse. Zwicky (2012) also discusses ineffability, which she defines as “a complex of perceptions, feelings, thoughts, and memories, something we undergo” (p. 198) that defies adequate description by linguistic means. Ineffability “responds to the gestural root of meaning” and “manifest in the physical world” (Heiti, 2015, p. 188). Zwicky’s lyric philosophy attempts to unite logico-linguistic, or rational, approaches to understanding the world with lyric thought. Lyric attends to complexity and specificity, seeks coherence through resonance, uses metaphor as both a device to actualize lyric thought and exemplar of it, and is compatible with logico-linguistic or rational epistemological approaches (Zwicky, 2014). Finally, lyric “is an attempt to comprehend the whole in a single gesture” as a kind of gestalt (Zwicky, 2011, p. 73).

Sheridan and Longboat (2006) introduce animist realism as an ontological orientation that inscribes, as animate, the human, non-human, and non-living entities that compose our world. “Animist realism attempts to mirror Creation’s temporal and material totality by accounting for the unseen and the dreamt in a complex impicature that intersects with and provides passage to other domains of knowledge and understanding” (p. 68). The authors counter Western ontological anthropocentrism with the Haudenosaunee concept of *Onkwehonwe*, which translates as “original people” and implies the unassimilated Haudenosaunee mind that views “any assumption concerning the existence of

autonomous, anthropogenic minds to be aberrations that violate the unity, interrelation, and reciprocity between language and psychology, landscape and mind” (p. 366).

Carolan suggests that embodied (2008) and affective (2015) approaches to understanding human experience in the landscape can help to change attitudes towards the natural world. Zwicky (2011) proposes that the logico-linguistic operating principles behind the institutionalization of human affairs are “in their essence, exploitative” and view other humans and the rest of the natural world “as a means to an end independent of a thing’s well-being” (p. 51). Lyric philosophy attempts to revive a more holistic “language of thought” (p. 76) and reconnect us with that from which we have been severed through Cartesian dualisms based in logico-linguistic thought systems. Sheridan and Longboat (2006) invoke Cajete (1994) in asserting that “[t]hinking and believing in the diverse minds that assemble ecosystems allows humans to understand what their animal teachers and spiritual helpers guide and instruct, in the ways of ‘being’ of the continent” (p. 368). From these relational assertions, enacting a land-based animist realism is critical for the construction of a territorial imaginary to nourish decolonized Indigenous self-determination. My research methodology integrates Haudenosaunee concepts such as *Onkwehonwe* and *kasasten’sera* in tandem with compatible Western philosophical orientations that recognize the importance of metaphoric thought, affectivity, and the vibrancy of matter. The methodology presented here offers a more relational and holistic alternative to Western onto-epistemological approaches that have arguably resulted in the large-scale habitat destruction and loss of biodiversity associated with the Anthropocene (Ruddick, 2017).

### **Axiological Considerations**

Weber-Pillwax (2001) suggests that Indigenous research must feature respect, reciprocity, and responsibility. Wilson (2008) formulates several questions to guide those working within Indigenous research paradigms which point towards a relationally accountable research practice and can also guide assessments of the value of the approach presented here. The most salient criteria, of those developed by Wilson, involves answering the question “[a]m I being responsible in fulfilling my role and obligations to the other participants, to the topic and to all my relations?” (p. 77)

Diffraction methodology involves reading assemblage processes “through one another’ to engender creative, and unexpected outcomes” (Barad, 2003, p. 30). In a later paper (Barad, 2014), Barad further illuminates diffraction. For Barad diffraction involves:

re-turning as a multiplicity of processes, such as the kind earthworms revel in while helping to make compost or otherwise being busy at work and play: turning the soil over and over - ingesting and excreting it, tunnelling through it, burrowing, all means of aerating the soil, allowing oxygen in, opening it up and breathing new life into it. (p. 168)

Barad (2014) describes diffraction as “cutting together-apart (one move) in the (re)configuration of spacetimemattering” (p. 168). My understanding of Baradian diffraction is that it ruptures, or cuts, established dichotomies (such as male/female, subject/object), which are themselves “cuts,” so diffraction essentially re-unites what had been ruptured in a new configuration (Barad, 2014). Doing so, as the earthworm quotation above suggests, requires a thorough inhabiting of a given research-event assemblage.

The diffractive cut focuses on an element of the data that has a specific resonance with or significant for, the researcher (MacClure, 2013). In this way, diffraction is similar to Richardson

and St. Pierre's (2005) notion of "validity" via crystallization which relies on depth of insights gleaned through the research process. "Validity," for this method, is contingent on the extent to which I have fulfilled my roles to all my relations and diffractively inhabited the garden, forest, and the subsequent richness of insights generated.

### **Becoming-Ecological Method**

The method presented in the following paragraphs articulates an aspect of my autoethnographic journaling process. One of the aims of First Nations Technical Institute's food system activities is to support learners' in their decolonizing journey (Williams & Brant, 2019). Our broader aim is to support the Indigenous food sovereignty movement through a suite of coordinated food-related initiatives. My autoethnographic journaling process, and the subsequent insights derived from that work, mark my own decolonizing journey based on rebuilding the delegitimated web of relationality associated with the seasonal food cycle: planting, tending, harvesting, sharing, eating, and saving seed from traditional Turtle Island food plants. I hope that this methodological approach will help me to better understand, and effectively engage in, food system transformation initiatives employed by First Nations Technical Institute.

I began journaling in the spring of 2018, continued throughout the garden season and, to a much lesser extent into the winter of that year, through the 2019 garden season, and now into the winter of 2020. Autoethnographic research emerged from the crisis of representation in the 1980s (Ellis & Bochner, 2000), which was predicated on new understandings of the relationships between author, text, and reader (Barthes, 1977). Autoethnography is a methodology that recognizes the subjective nature of research and the value of positionality for generating rich insights into social phenomena and inscribing a space for the expression of otherwise



marginalized voices (Adams, 2005). Autoethnography, according to Adams, Holman-Jones, and Ellis (2015) is both a methodology and a product that generates “stories of/about the self told through the lens of culture” and are “artistic and analytic demonstrations of how we come to know, name, and interpret personal and cultural experience” (p. 1). Insights from my autoethnographic journaling process take the form of journal entries, poems, and photographs that will eventually inform the structure and content of my dissertation.

My process is embedded within the seasonal food cycle. Although my approach can be described as a series of activities, they follow a more circular rather than linear pattern involving three intra-acting phases—*garden entanglement*, *representing the unrepresentable*, and *re-turning, diffracting*—separated here for illustrative purposes:

- *Garden entanglement* – I find myself entangled in the garden when I am planting, weeding, mulching, watering, hand-pollinating, taking a break, harvesting, canning, drying, sharing, and eating the food grown in the garden. This phase requires an embodied immersion in the garden that engages the senses (Carolan, 2008; Ingold, 2000; Nakamura, 2013), the affective dimension of experience (Carolan, 2015) as well as the imagination (Sheridan & Longboat, 2006) in an intra-active becoming. While engaged fully in these activities, I wait for something significant to resonate with me; by resonate, I mean “an experience of meaningful coherence,” occurring as a gestalt (Zwicky, 2011, p. 133), in which two or more dissimilar things or phenomena are united by their similarity via metaphor *sensu lato* (Zwicky, 2003).
- Once I have experienced resonance, I attempt to *represent the un-representable*. In this phase of work—in order to communicate the complexity of a layered, holistic, and aesthetic

gestalt—I take a few notes either in the field or otherwise as soon as possible, using words to “reach beyond their syntax” (Zwicky, 2011, p. 133). I essentially “point and hope” (Zwicky, 2003, p. 92) to effectively capture the contours of the gestalt experience.

- The final stage of my process—*re-turning, diffracting*—involves a thorough inhabiting of the initial impulse or experience of resonance, through a diffractive process. I thoroughly inhabit the original poetic impulse by returning to the words that I wrote in the *representing the un-representable* phase and try to evoke the same gestalt understanding. I also approach the same phenomenon from different vantages, to highlight potentially complementary or contradictory impressions. For example, encounters in my garden, with sunroot (Jerusalem artichoke) led me to photograph and observe and photograph more feral sunroot populations and to experiment with different recipes using sunroot.

As mentioned earlier, diffraction is a “cutting together-apart (one move)” (Barad, 2014, p. 168). Diffraction, unlike reflection or reflexivity, does not separate the researcher from the phenomena under consideration. Instead, diffraction recognizes the profound intra-activity of actors participating in phenomena and the difference engendered by those intra-actions. The attention to difference reveals a horizon of open futurity. This difference and the otherwise unimaginable futures engendered by this diffractive methodology are what I hope to reveal through my autoethnographic journaling.

The final section of this paper presents a poem and photograph informing, and informed by, my autoethnographic journaling process. I have yet to fully realize the insights from this process, but the poem—*a vocabulary of being*—and the associated photograph titled *this tidal river’s meander* (Figure 1) helped me to reorient my thesis topic to focus on resilience and margins, both social and ecological.

*a vocabulary of being*

...tubers drift  
up and down this tidal river's meander.  
Reaching skyward, settling in  
where the river bends  
and the sandy-loam beckons...

Plant-time passes, rivers change course  
and root gathering dwindles,

while leagues away  
from the intervalles, waterways,  
field-edges of eastern Turtle Island,  
reincarnated by an industrial imaginary...  
she is born again, and again.

A mash-up.  
At once nomadic and sedentary,  
wild and cultivated, raspy-leafed  
and smooth-tubered, sought-after,  
loathed, forgotten...prefiguring  
the posthuman, long ago.

Six sets of chromosomes, not two.  
An enchantment, fusion/rupture,  
again, and again...a new self  
forming impressions on tributaries,  
pollinators, palates, our minds.

Testing limits, stretching the vocabulary  
of being, we become fluent in sunroot,

river, intervale.

Sunroot composition, syntax, grammar,  
composing our star compass, stick chart,  
magnetic north, line of flight,  
as we wayfind becoming...  
belonging.



*Figure 1.* this tidal river's meander (author's photograph).

## References

Adams, T. E. (2005). Speaking for others: Finding the “whos” of discourse. *Soundings*, 88(34), 331-345.

- Adams, T. E., Holman Jones, S., & Ellis, C. (2015). *Autoethnography: Understanding qualitative research*. Oxford, UK: Oxford University Press.
- Akwasne Notes. (1978). *Basic call to consciousness*. Summertown, TN: Native Voices.
- Alfred, T. (1999). *Peace, power, righteousness: An Indigenous manifesto*. Oxford, UK: Oxford University Press.
- Antone, R. (2013). *Yukwalihowanahtu yukwanosaunee tsiniyukwaliho:t^ As people of the Longhouse, we honor our way of life tekal^hsal^ tsiniyukwaliho:t^ praise our way of life*. Unpublished Ph.D. dissertation, Buffalo, NY: State University of New York.
- Barad, K. (2014). Diffracting diffraction: Cutting together-apart. *Parallax, 20*(3), 168-187.
- Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs, 28*(3), 801-831.
- Barthes, R. (1977). The Death of the Author. In S. Heath (Ed.), *Image, Music, Text* (pp. 142- 148). New York, NY: Noonday Press.
- Barone, T., & Eisner, E. W. (2011). *Arts based research*. Thousand Oaks, CA: Sage Publications.

- Berthaud, J., & Gepts, P. (2004). Assessment of Effects on Genetic Diversity. In *Maize and Biodiversity: The Effects of Transgenic Maize in Mexico*. Secretariat of the Commission for Environmental Cooperation of North America.
- Braidotti, R. (2013). *The posthuman*. Cambridge, UK: Polity Press.
- Brodsky, A. E. (2008). Researcher as instrument. In L.M. Given (Ed.), *The Sage Encyclopedia of Qualitative Research Method: Volumes 1 & 2* (p. 766). Newbury Park, CA: Sage Publications.
- Carolan, M. (2015). Affective sustainable landscapes and care ecologies: Getting a real feel for alternative food communities. *Sustainability Science, 10*, 317-329.
- Carolan, M. (2008). More-than-representational knowledge/s of the countryside: How we think as bodies. *Sociologia Ruralis, 48*(4), 408-422.
- Cajete, G. (1994). *Look to the mountain: An ecology of Indigenous education*. Durango, CO: Kivaki Press.
- Cole, A., L. & Knowles, J. G. (2008). Arts-informed research. In J. G. Knowles & A. L. Cole (Eds.), *Handbook of the arts in qualitative research: Perspectives, examples, and issues* (pp. 55-71). Thousand Oaks, CA: Sage Publications.
- Cornelius, C. (1999). *Iroquois corn in a culture-based curriculum: A framework for respectfully teaching about cultures*. Albany, NY: SUNY Press.

- Crutzen P. J. (2006). The Anthropocene. In E. Ehlers & T. Krafft (Eds.), *Earth System Science in the Anthropocene*. Berlin & Heidelberg, Germany: Springer.
- Deleuze, G., & Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia* (B. Massumi, Trans.). Minneapolis, MN: University of Minnesota Press.
- Ellis, C., & Bochner, A. P. (2000). Autoethnography, personal narrative, reflexivity. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 733-768). London: Sage Publications.
- Furman, R. (2007). Poetry and narrative as qualitative data: Explorations into existential theory. *Indo-Pacific Journal of Phenomenology*, 7(1), 1-9.
- Heiti, W. (2015). What is lyric philosophy? *Philosophy and Literature*, 39(1), 188-201.
- Ingold, T. (2000). *The Perception of the Environment*. London, UK: Routledge.
- Lahman, M. K. E., Geist, M. R., Rodriguez, K. L., Graglia, P. E., Richard, V. M., & Schendel, R. K. (2010). Poking around poetically: Research, poetry, and trustworthiness. *Qualitative Inquiry*, 16(1), 39-48.
- Lewandowski, S. (1987). Diohe'ko, the Three Sisters in Seneca life: Implications for a Native agriculture in the Finger Lakes region of New York state. *Agriculture and Human Values*, 4, 76-93.

- Lewis, S. L., & Maslin, M. A. (2015). Defining the anthropocene. *Nature, 519*(7542), 171-180.
- MacLure, M. (2013). Researching without representation? Language and materiality in post-qualitative methodology. *International Journal of Qualitative Studies in Education, 26*(6), 658-667.
- Nakamura, K. (2013). Making sense of sensory ethnography: The sensual and the multisensory. *American Anthropologist, 115*(1), 132-135.
- Oyserman, D., Coon, H. M., & Kimmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin, 128*(1), 3-72.
- Parker, A. C. (1910). Iroquois uses of maize and other food plants. *Museum Bulletin No. 144*. Albany, NY: New York State Museum.
- Pollan, M. (2006). *The omnivore's dilemma*. London, UK: The Penguin Press.
- Prasanna, B. M. (2012). Diversity in global maize germplasm: characterization and utilization. *J. Biosci. 37*, 843-55.
- Richardson, M. (1998). Poetics in the field and on the page. *Qualitative Inquiry, 4*(4), 451-462.



- Richardson, L., & St. Pierre, E. (2005). Writing: A method of inquiry. In *The Sage Handbook of Qualitative Research* (3<sup>rd</sup> ed, pp. 959-979). Thousand Oaks, CA: Sage Publications.
- Ruddick, S. M. (2017). Rethinking the subject, reimagining worlds. *Dialogues in Human Geography, 7*(2), 119-139.
- Savin-Baden, M., & Wimpenny, K. (2014). *A practical guide to arts-related research*. Rotterdam, NL: Sense Publishers.
- Sheridan, J., & Longboat, D. (2006). The Haudenosaunee imagination and the ecology of the sacred. *Space and Culture, 9*(4), 365-381.
- Stark, H. (2017). Deleuze, subjectivity and nonhuman becomings in the Anthropocene. *Dialogues in Human Geography, 7*(2), 151-155.
- Warman, A. (2003). *Corn and capitalism: How a botanical bastard grew to global dominance*. Chapel Hill, NC: University of North Carolina Press.
- Whatmore, S. (2004). Humanism's excess: Some thoughts on the 'post-human/ist' agenda. *Environment and Planning, 36*, 1360-1363.
- Williams, K., & Brant, S. (2019). Good Words, Good Food, Good Mind: Restoring Indigenous Identities and Ecologies through Transformative Learning. *Journal of Agriculture, Food Systems, and Community Development, 9*(B), 1-14.

Wilson, S. (2008). *Research is ceremony: Indigenous research methods*. Black Point, NS: Fernwood.

Zwicky, J. (2014). What is lyric philosophy? *Common Knowledge*, 20(1), 14-27.

Zwicky, J. (2012). *What is ineffable? International Studies in the Philosophy of Science*, 26(2), 197-217.

Zwicky, J. (2011). *Lyric philosophy*. Kentville, NS: Gaspereau Press.

Zwicky, J. (2003). *Wisdom and metaphor*. Kentville, NS: Gaspereau Press.

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<sup>i</sup> Haudenosaunee peoples (formerly called Iroquois), or people of the longhouse, are the confederacy of six First Nations—Mohawk, Cayuga, Oneida, Onondaga, Seneca, and Tuscarora—all united by a common goal to live in harmony (Mohawk & Barreiro, 2010).

<sup>ii</sup> “Turtle Island” refers to the North American continent. This term was popularized, in English, by poet Gary Snyder in his 1974 collection *Turtle Island*. The name is based on the significance of turtles in the creation teachings of various Indigenous nations (including Haudenosaunee).