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Embodying Milpa: Centering Place to Cultivate Polycultures of Reciprocity in Learning Environments

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Article abstract

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Embodying Milpa: Centering Place to Cultivate Polycultures of Reciprocity in Learning Environments

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Abstract

Milpa is an ancestral agriculture technique that has been passed down by Indigenous communities in so-called North America for millennia through stories of place. As an Indigenous knowledge system that is based on the symbiotic cultivation of diverse species, learning from milpa gifts lessons to cultivate polycultures of reciprocity. Drawing from my lived experience as a Mestizx educator from Mexico, I propose embodying milpa in learning environments as a horizon of possibility to refuse and disrupt the ways in which education has been limited, standardized, controlled and confined to colonial monocultures (Shiva, 1993). I use the cultivation of milpa as a metaphor to represent the transformation of modernist education systems that prioritize individuality and rationality shifting towards collaborative learning environments that are complex, messy, and entangled with the land. Late Indigenous Professor Michael Marker (2018) invites scholars to center place as the beginning point of inquiry when excavating the specific effects of colonization on Indigenous landscapes and communities. Following his advice, I use stories of milpa to experience placeness and provide a representation of the transformation of modernist education systems through the resurgence of Indigenous knowledge systems. I begin this paper with a piece of the Mexica creation story to center "the consciousness of landscape" (p. 453). I continue to explain how from a modern perspective, place has shifted to produce bordered monocultures that eradicate diversity. I conclude by narrating the story of three sisters to embody milpa and form polycultures of reciprocity inside learning environments where animate and inanimate beings are all connected inside a web of relations belonging to the land.

Introduction – Walking in two different worlds

My life has always felt like walking in two different worlds. When I was born, my parents were too young to raise a child, so the responsibility was given to both sets of grandparents. Most of what I learned and imitated during my childhood came from two contrasting worldviews anchored to very different perspectives of life and ways of being. My mother's parents are settlers with European ancestors who have reaped the benefits and privileges of colonialism in Mexico. On my father's side, my abuelitos are Nahua and P'urhépecha. They belong to Indigenous communities who have suffered at the expense of social injustices that continue to dehumanize Indigenous peoples in Mexico. As both families come from very distinctive cultures and perspectives, they have completely different understandings of the meaning of education. One trapped me inside four walls, forcing me to fit the neoliberal capitalist mold that would open doors of modern success, while the other wanted me to learn embodied lessons that embrace our interdependence and relationality with the land.

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The teachings from my Nahua and P'urhépecha abuelitos reflect an embodied relational way of experiencing our place as human beings belonging to the entire cosmos. As I reflect back, I think about how every lesson taught by my abuelitos was related and connected to land. An education that started in the fields and always ended in a shared table. A cycle of sustenance, reciprocity, gifting, and ceremony. The most beautiful memories I have with my abuelita Cristina are cooking beside her, tasting food she had just prepared and hearing the question, "¿le falta sal?" Growing up, I would spend hours inside the kitchen helping her prepare wholesome blue tortillas through the intricate process of nixtamalization, a traditional preparation in which dried kernels are soaked in calcium to make them soft and be ground into masa. I enjoyed the entire process of making tortillas, from raw gifts given by the land to a synergy of flavor and aroma that holds the ones you love tight. My abuelita is an expert in the kitchen, I am fortunate to have learned many traditional recipes that were left by our ancestors and represent a big part of our culture. I hold tight to that knowledge, and every time I cook one of her dishes, I feel their embrace.

After leaving my abuelitos pueblo to go to school in the big city, I would ask where to buy the blue tortillas my abuela made. My settler grandparents would tell me that you can only get those tortillas in the pueblos, not in the city. Blue tortillas were handmade from scratch with a type of maize that is more challenging to cultivate, in comparison with the normal yellow/white corn which is massively produced in cornfields with machines that save time and make more money. My grandparents would always remind me that time is of the essence, that time is money, and that time waits for no one. They would also mention that only poor Indians eat corn tortillas and that white flour ones are much better. The rush of the city in comparison with my abuelitos pueblo was palpable and affected me in every sense. The sound of the crickets, the sky full of stars, the breeze of the wind and the aroma of the land after it rained, were memories that were starting to fade away. In contrast, growing up in the city, I began to be engulfed with gray desires that would never be fully satisfied, dreams of having more – more comfort, more privilege, more space, more money. I stopped visiting my abuelitos as I learned it was a waste of time to go to rural pueblos. I only visited when big celebrations that gathered most of the family would force me to go.

I grew up with a sense of being split in half. In the city, I quickly learned to neglect, shame, and hide my Indigenous roots, to look down on Nahua ways of knowing and on our culture. In Mexico, there is a common way of thinking that our Indigenous heritage is not worth as much as those that come from more developed, European, and wealthy countries (Gallardo, 2021). I started to feel inferior for being Mestizx and embarrassed by my grandparents for being brown, poor, and Indigenous. I learned to conceal my indigeneity in a place where a damaged narrative was established about Indigenous peoples. One day back in the pueblo, my abuelita made blue tortillas and I remember telling her that I would prefer a white flour tortilla and asked if I could go buy the branded ones from the store in the corner – the ones from the city. After I returned from the store with my flour tortillas, my abuelito sat next to me while eating them and told me a story about the place of maintenance that gave strength to humans. It was a piece of the creation story of the Mexica people and a widely public story for children. I retell this story as it was taught to me by my abuelito, Virgilio Miguel Gallardo – a story he learned from our Nahua community about our Mexica ancestors. The story of *Quetzalcoatl and the red ant* is a Mexica

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creation story from Anahuac about how humans received inside a milpa the gift of Chicomexochitl – sacred corn.

QUETZALCOATL AND THE RED ANT

> Quetzalcoatl, the feathered serpent, had brought humans back to life after recovering their bones from Mictlan, the land of the dead. At the beginning of creation, humans would only survive by eating roots and animals they hunted, but during seasons when plants didn't grow and animals would not appear, they became weak and hungry. The four coloured Tezcatlipoca creators started to get worried about the fate of humankind.
>
> "What will the humans eat?" cried red Tezcatlipoca also known as Xīpe Totecuh.
>
> "They seem to be starving! What if they vanish?" continued blue Tezcatlipoca also known as Huitzilopochtli.
>
> "They won't disappear! Not on my watch! I will find and bring food to them" said white Tezcatlipoca, also known as Quetzalcoatl.
>
> Quetzalcoatl looked down at the jade-green earth, trying to find food. It flew swiftly across the turquoise blue sky until reaching the sacred waters of the lake. As time passed, Quetzalcoatl worried about not finding any food and decided to stop for a moment to reflect on what to do next. Out of somewhere, a red ant carrying an enormous corn kernel walked by.
>
> Quetzalcoatl anxiously asked, "Wise red ant, where did you find that corn kernel?"
>
> The red ant looked at Quetzalcoatl in all its grandeur and, puzzled, continued walking by, ignoring its questions.
>
> Quetzalcoatl begged, "Please, the food is not for me. It is for humans who don't have anything to eat. Help me!"
>
> The red ant stopped and replied, "I can't help you… even if I show you the way, it is a treacherous small path ,and someone as big as you could never follow along."
>
> With a smirk in its eye, Quetzalcoatl quickly transformed into a small black ant and confidently said, "Lead the way!"

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> Quetzalcoatl started to follow the red ant through dark caves, dense foliage, steep hills, and gentle rivers. In the trails ahead, they navigated all types of environments until arriving at Tonacatépetl, the maintenance mountain.
>
> The red ant climbed up to a tiny crack, and as they entered the mountain, a flourishing place with a milpa full of food was revealed. "Here you will find metl (maguey), nopalli (nopal), chili (chile), ayotli (squash), etl (beans), uautli (amaranth), and tlaolli (maize). Everything that sustains our beings is cultivated inside this milpa!" The red ant cheered.
>
> "Thank you for guiding me to Tonacatépetl" replied Quetzalcoatl as it happily climbed a stalk of maize and found humanity's most precious gift, Chicomexochitl – sacred corn.

Indigenous creation stories introduce our beings to relational understandings of our place in the world. The story of *Quetzalcoatl and the red ant* is mostly used in Spanish courses to learn to read in primary grades, not necessarily to teach about Mexica origins and the nature of place. Inside Spanish lessons, the story is labeled as an imaginary fable regarding the beliefs of ancient civilizations. With this story, my abuelito Virgilio wanted me to remember that we come from a land sustained by corn and that our Mexica ancestors and communities are people of corn. As I try to remember the exact words my abuelito used to say, I better comprehend the meaning and teachings of the story of *Quetzalcoatl and the red ant*. The beautiful irony of a tiny insect teaching the magnificent creator where to find one of the most precious gifts to humans. The creator is not depicted as an almighty omnipotent being. Instead, Quetzalcoatl is learning in relation to the creation. Humble lessons that remind us of our dependence to the land and ground us in relationality. The red ant gave humanity a gift that made us healthy and strong. A gift that sustains our existence. Do we ever think about what we are doing in return for our older ant siblings? What is our gift to them?

My primary school in Mexico City was in the borough of Azcapotzalco, which means, "at the anthill," in Nahuatl. I've learned from my abuelito Virgilio that Azcapotzalco is the place where Quetzalcoatl met the red ant, and I have wondered why, as a student, I never got to make that seamless connection to the landscape that surrounds us. The only times I would hear about my abuelitos' Indigenous culture and language were during history and sometimes Spanish classes. Inside the Mexican public curriculum, there is a lot of historical and anthropological content about the diversity of Indigenous peoples before colonization but almost nothing after (Masferrer, 2016). The erasure of multiple communities to a single Indigenous group is clearly seen in the history textbooks. After the colonization, diverse pre-Columbian nations disappeared, all to become Indigenous (Bonfil Batalla, 1981). As in many other parts of the world, Indigenous perspectives are denoted as inferior, primitive, unsophisticated, and little evolved (Masferrer, 2016; Shiva, 1993). This erasure happens when Indigenous knowledge systems are represented

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as knowledge from the past, and the current neoliberal education is the needed progression toward standardization, development, and modernity.

In this paper, I explore how modern logics of education in its neoliberal iteration has led to the production of monocultures that eradicate interconnectedness with place and push binary mechanisms of division and exclusion to demarcate borders in students' learning experiences. Students in modern schools are shaped to become standardized individuals trapped inside "monocultures of the mind." Indian environmentalist Vandana Shiva (1993) defines this concept as the effect of western dominant knowledge systems to disappear local Indigenous knowledges by labelling them as primitive, irrational, and unscientific. Late Indigenous scholar Michael Marker (2018) reminds us that place contains the ontological meaning of Indigenous knowledges as "place and the consciousness of landscape contain the primordial elements for the Indigenous mind" (p. 453). According to Marker, within a modernist ontology, place "has been abstracted, divided, and bordered into a component of reality rather than the progenitive holism that Indigenous knowledge systems begin with" (p. 453). As monocultures rely on the violent erasure of native, messy, and complex knowledge environments to replace them with a single narrative, how can education subvert dominant ideologies and unbind from modernist monocultural entrapments? Drawing from my lived experience as a Mestizx educator from Mexico, I propose embodying milpa in learning environments as a horizon of possibility that centers place to refuse colonial monocultures. Embodying milpa aims to cultivate polycultures of reciprocity to transform modernist education systems that prioritize individuality and rationality, shifting towards collaborative learning environments that are complex, messy, and entangled with the land.

They Were All Yellow – Colonial Monocultures

For the Spanish language dictionary of the Real Academia Española (RAE, 2023), milpa means a field dedicated to the cultivation of corn and at times other seeds. According to the Spanish dictionary, the word comes from the Nahuatl words, milli (inheritance) and pan (on top). When translated to Spanish, the meaning of inheritance is associated with ownership, making milpa a place that belongs to an individual. For Nahuas, milli is not represented as property. In Nahuatl, the most common words for land are tlalli and milli. Tlalli means land, soil, ground, or earth. Milli means the land performing an action, in this case, cultivation. As Nahuatl is a primarily verb-based language, the translation would be "cultivating land." The difference with Spanish, though subtle, is profound; in Spanish, milpa is a noun, a thing, an object. In Nahuatl, milpa is a verb, it denotes action, an intention. This particular action is based on holistic nourishment, not only to each human being but to the broader community, animate/inanimate beings, and the entire cosmos. Milpa is revered as a being that provides our sustenance and, as I have learned from our Nahua community, we belong to milpa, not the other way around.

When thinking of milpa, one might tend to automatically picture a yellow corn cob. Thinking of a yellow cob is a cognitive limitation created by colonial monocultures through capitalism and consumption demands required to sustain our modern way of living. The most efficient type of corn was selected to satisfy human needs, and in turn, became the most grown plant on earth – over 99% of cultivated corn – is yellow dent, and most of it is genetically modified (Roberts,

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2008; Fussell, 1992). As humans grow the same type of corn more than any other plant on earth, "there is every reason to believe that corn has succeeded in domesticating us" (Pollan, 2006 p. 23), yet capitalism goes far beyond just domesticating. It tames intimately and invades at a deep genetic level. The global flourishing of corn gifted many varieties, sizes, and colors that have been lost due to the voracious consumption needs of progress and development, which require monocultures of sameness. The existence of corn has been reduced to a product of modernity. For Nahua Temachtiani (teacher) Santos De la Cruz Hernández, the disrespect of the plant for capitalist purposes has come at a big price, and the many colors of corn are now gone; chicomexochitl is no longer here, and we are left with industrialized artificial corn. He explains the following in Nahuatl, "tehuantin ayoc cintli totec, chicomexochitl ayoc tohuan pilitztoc (we come from an abandoned grand milpa, we are no longer of corn, chicomexochitl no longer lives with us)" (2019, 01:26). One need to only glance at the environmental impacts and social-economic disparities caused by the commodification of yellow corn to recognize the haunting words of Temachtiani Santos De la Cruz.

Brazilian decolonial scholar Vanessa Andreotti has frequently utilized the spread of yellow corn as a metaphor for an education that presumes dominant worldviews as the only possibility for progress, development and evolution. The "myth of the yellow corn" (Andreotti et al., 2017, p. 46) refers to controlled imaginaries where we can only picture the cob to be yellow – limitations that narrow our knowledge and understanding of the world. The myth of the yellow corn exemplifies the continued exclusion of other than dominant colonial epistemic and intellectual traditions. These colonial/modern impositions strive by silencing other knowledges and "perpetuating the myth of frozen exotic sameness" (Marker, 2003, p. 367) in which Indigenous people are othered through a colonial gaze and seen as inferior. The monocultures of the yellow corn are an analogy that represents a homogenous agenda demanding education to teach a Eurocentric version of knowledge. As Marker reminds us, "the White society set the terms for what would count as "truth" and how that truth would be spoken; the Indigenous voice was constrained and repressed" (2003, p. 364). A single narrative framed through the lens of the ones with power, the only ones who get to write (his)story. Stories that tell us that the corn can only be yellow.

Indian environmentalist Vandana Shiva (1993) shares a similar conceptualization, using "monocultures of the mind" to explain the effect of western dominant knowledge systems to disappear local Indigenous knowledges by labelling them as primitive, irrational, and unscientific. She argues that these pervasive monocultures have led us not only to ecological devastation but also to cultural erasure. For Shiva, the unnaturalness of monocultural farming is characterized as reductionist and fragmentary, a colonial system that destroys diversity through rationalist thinking. As the Age of Reason was in full bloom in Europe during the colonization of what came to be known as "America," western worldviews arrived at these lands fixated on the notion of an absolute truth, a one-sided narrative, an omnipotent god, a uniform language, a united nation, and a single crop. Blackfoot scholar Leroy Little Bear reminds us that the worldviews of Indigenous communities do not center on individuality, but instead are rooted in ontological pluralism – understandings about relationality, wholeness, spirituality, and entanglements within diverse ecologies. These fluid non-binary notions were discounted by

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European bourgeoise rationalist settlers, whose critical focus of life was owning land, people, resources, and knowledge. Correspondingly, U.S. anthropologist Anna Tsing reminds us that plantations of a single crop became "the engine of European expansion. Plantations produced the wealth—and the modus operandi—that allowed Europeans to take over the world" (2012, p. 148). Monocultures became a key agent of imperial expansion since early colonial times as they rely on the violent erasure of native, interdependent, and complex knowledge environments, provoking massive dispossessions of land that are crucial to modernity's development.

Modern education is subordinate to monoculture logics as it conceives the student as a standardized unit measured through metrics of productivity. Behind this dominant neoliberal vision lies the assumption that students can be taught systematically; they are seen as empty vessels to be filled with predetermined knowledge. Perpetuated by neoliberal dreams of success and autonomy, students are taught to aim toward individual triumphs and reproduce western knowledge systems. Students follow the same path in order to become contributing citizens of the global market and learn how to operate modern mechanisms for accumulation. These ongoing forms of colonialism have made western education "one of the most insidious and destructive" places for Indigenous peoples, who all experience "some form of oppression, racism, violence, and discrimination" (Nelson, 2017, p. 49). Mexican scholar Cristina Verónica Masferrer León (2016) analyzed how official public school textbooks in Mexico constitute a space where racism is learned by reproducing stereotypes, negative assumptions, and stigmas of Indigenous peoples. She concluded that racism is upheld when teaching content that maintains social hierarchies by tokenizing Indigenous identities and minimizing their contributions to human understanding. Masferrer León exemplifies how images and narratives of these official SEP textbooks link brown skin to that which is "dirty, negative and ugly" (2016, p. 10). With these forms of teaching, the Mexican schooling system maintains and reproduces colonial monocultures that direct students towards valuing whiteness, Eurocentrism, and capitalism. An educational system that neglects and shames Indigenous students' interconnected and place-based experiences through racist and eugenic rhetoric.

I understand the dominance of yellow corn as a metaphor for monocultures in education, where coloniality's agroindustry synthesizes Eurocentric, racist, heteropatriarchal seeds that use fertilizers to grow a single crop in accordance with white supremacist and neoliberal values. Western education has created factory schools where students are to become standardized homogenous products. The use of modern fertilizers and the non-stop growth of dense fields of corn are destroying the land and exterminating much of the planet's biodiversity. In the same sense, monocultures of mind are hindering the livelihood of people around the world, fragmenting cultures and erasing ancestral knowledge systems. Monoculture farming of yellow corn has led to an unsustainable maze where society is entrapped by modernity's dead-ends. Inside this maze, yellow corn has become a thickening agent that prevents the deformation of sameness. I wonder how to confront the myth of yellow corn to begin a transformative (un)learning journey toward cultivating polycultures of reciprocity. Maybe listening to the story of corn can help us answer this question.

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Chicomexochitl – Nahua Cosmology

The story of Chicomexochitl (native corn) begins thousands of years ago in Mesoamerica with the cultivation of an ancient grass called teosinte. After thousands of years, Indigenous communities bred maize into one of the world's most important edible crops. It is a story about our relationship with the land, a relation that grew out of reciprocity. I am reminded of the words of Potawatomi botanist, Robin Wall Kimmerer (2013), indicating that "if we use a plant respectfully it will stay with us and flourish" (p. 163) – and corn did flourish. Maize is very significant in many Indigenous communities. In particular, within Nahua cosmology, Chicomexochitl is a crucial member of the creation story, an elder, a knowledge keeper and a teacher. Many Indigenous communities in Anahuac see themselves as the hijxs del maiz, the children of Chicomexochitl, the ones who were created from corn (De la Cruz Cruz, 2015; Kimmerer, 2013; Rios, 2012; León-Portilla, 1963). Mestiza scholar Gloria Anzaldúa beautifully encapsulates her embodied understanding of corn by writing "Indigenous like corn, like corn,…the mestiza is tenacious, tightly wrapped in the husks of her culture. Like kernels she clings to the cob; with thick stalks and strong brace roots, she holds tight to the earth she will survive the crossroads" (1987, p. 103).

In Nahua cosmology, all practices, spiritual elements, and contributions are rooted in the land and cultivated through relationships that form who we are and allow us to experience our place in Cemanahuac (entire cosmos). For Nahuas, the connection between place and cosmos is the base of life. An awareness of the entangled relations between self, animate/inanimate beings, the land, the water, the movements of astronomical bodies, the stars, the moo,n and the sun. Every year, Nahuas hold spiritual ceremonies, sacred rituals, and traditional celebrations connected to rain and agricultural cycles to commemorate Chicomexochitl. Many of these ceremonies occur during various Christian patron saints' days, an appropriation tactic used by Spanish priests to assimilate Indigenous peoples with their own traditions; fortunately, they remain grounded in the land. Two of the most important offerings are the Chicomexochitl and Elotlamanaliztli ceremonies. The ceremony of Chicomexochitl is a ritual that takes place in the milpas at the beginning of the cultivating cycles to ask the creators for a good harvest and prayers for rain. Nahua scholar Victoriano De La Cruz Cruz (2015) narrates that at the end of the ceremony, the Huehuehtlacatl (the Elder) speaks to the land by hitting the ground, saying, "Nican tiitztoqueh, nican timitzmactialiah nochi tlen moaxca (here we are, here we give you everything that belongs to you)" (p. 139). The ceremony of Chicomexochitl reminds us that we belong to the land.

When the rainy season ends and the milpas bear their gifts, the ceremony of Elotlamanaliztli begins – a celebration to thank the land for the arrival of cintli (corn cob). During harvest season, white, yellow, purple, and red kernels beautifully paint the cobs. Nahuas believe that those colors are the four creators that give life and sustainment. The colors represent the sun, the moon, the water and the land, beings that guard Chicomexochitl's growth. The ceremony of Elotlamanaliztli honors and holds deep reverence towards the creators. It is an expression of gratitude for our sustainment towards the land, which includes food offerings, music, singing, and dancing. The ceremony is led by the Huehuehtlacatl (the Elder) who begins with a limpia (smudging), a practice to purify and cleanse our entire beings (De la Cruz Cruz, 2015). It is a

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ceremony of gratitude that compares with Kimmerer's understanding of gratitude as "so much more than a polite 'thank you.' It is the thread that connects us in a deep relationship, simultaneously physical and spiritual, as our bodies are fed and spirits nourished by the sense of belonging, which is the most vital of foods" (2022, 05:18). Both reverence ceremonies to maize form a collective ritualization that contemplates the world as gift, when knowing that our collective belonging lies inside a web of reciprocity. A web for mutual flourishing – an expansion of self that includes all beings within complex, messy, and entangled environments.

The embodied experience of cultivating native corn with ancestral seeds is transformative. To plant seeds of maize "is not a passing survival instinct…but is instead a response to deep connections to the land based on material—bodied— experience" (Rios, 2012). Cultivating Chicomexochitl is a bond so mysterious and profound, it is impossible to fully comprehend. A relation with the land that makes us transcend the limitations that impede us from having a good life; a relation that grows roots and that connects us to our bodies, minds, hearts, and spirits. It is by harvesting true corn that a serpent grows its feathers. It is by cultivating ancestral knowledges that Chicomexochitl resurges with all their colors. Corn will teach us everything about living collectively as our relation dates back ten thousand years. Maize is part of our genetic code and family tree; we are people of corn, as Kimmerer reminds us: "of all the materials, why is it that people of corn would inherit the earth…? Could it be that people made of corn are beings transformed? For what is corn, after all, but light transformed by relationship?" (2013, p. 343). I hold the ear firmly, pull it down, and twist its husk so the cob comes off effortlessly. I feel the corn silk and the rough powerful stalk. I smell the leaves and hiding kernels. My connections with corn transcend the limitations of my imagination, as our community's routines, celebrations, art, traditional foods, and ceremonies are intertwined with the cycle of corn inside our milpas. When we cultivate corn, we are cultivating ourselves – sin maíz no hay país.

Embodying Milpa – A story of three sisters

Milpa is a knowledge system that has been passed down by Indigenous communities in so-called North America for millennia through oral traditions. Milpa holds the place to cultivate what Kimmerer (2013) refers to as the "genius of Indigenous agriculture" (p. 129), a story she shares known as the "three sisters":

> THE THREE SISTERS
> Some stories tell of a long winter when the people were dropping from hunger. Three beautiful women came to their dwellings on a snowy night. One was a tall woman dressed all in yellow, with long flowing hair. The second wore green, and the third was robed in orange. The three came inside to shelter by the fire. Food was scarce but the visiting strangers were fed generously, sharing in the little that the people had left. In gratitude for their generosity, the three sisters revealed their true identities— corn, beans, and squash—and gave

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> themselves to the people in a bundle of seeds so that they might never go hungry again. (p. 131)

The three sisters is a popular story with a beautiful lesson of reciprocity combined with a system of knowledge that continues to sustain all beings. The beautiful synergy of the sister plants: tlaolli (maize), yetl (beans), and ayohtli (squash), "feed the people, feed the land and feed our imaginations, telling us how we might live" (Kimmerer, 2013, p. 129). A synergy of reciprocal relations where the plants rely on each other to survive, grow, and prosper. Kimmerer (2013) recalls that when settlers arrived in so-called North America and saw Indigenous gardens, they deduced that Indigenous people did not know how to farm. For European settlers, cultivating plants had to be done in parallel monocultural rows, "not a three-dimensional sprawl of abundance" (p. 129). Consequently, the connotation of milpa changed to settler ways of knowing, so now when thinking of the word, we are taught to picture straight rows of yellow corn. From a Nahua perspective, milpa is an inherited ancestral knowledge system that gifts a place of maintenance. It is an Indigenous knowledge system that represents cultures of reciprocity that are not just companion planting but companion thinking, acting and performing – a beautiful messy relation of beings that care for each other. A milpa indicates more than the growth of diverse crops, it demonstrates an intimate intention to tend and nurture self, community, and land – a place where the collective "transcends the individual" (Kimmerer, 2013, p. 140).

Kimmerer writes that the three sisters offer a metaphor for relationality; they teach us lessons of reciprocity to cultivate a "polyculture of complementary knowledges" (2013, p. 139). As an ancestral agricultural Indigenous technique that is based on the symbiotic cultivation of diverse species, milpa teaches that all animate and inanimate beings are part of dynamic, messy, and complex networks where spaces, resources, and experiences are shared within an ecosystem. Embodying milpa embraces a cross-pollination of relationships to enrich our interconnectedness with all beings. Every breath we take reminds us that our bodies are completely dependent on our environments. As the most planted crop in the world, the mutualities between corn and humans can be seen in gas exchanges. Maize fields are instrumentally important in regulating our breathing through oxygen and carbon dioxide, while humans give carbon dioxide to corn in our exhalations – humans help create corn with our breathing. To embody milpa in learning environments is to cultivate a pluriversal place together with the land to guide, support, and protect each other's growth. Changing a monocultural mind to a polycultural one is a collective return to foster, nurture, and sustain a holistic relation with self, community, and land.

As a knowledge system that honours Nahua cosmology, milpa is grounded in Indigenous holistic understandings to live a good life. Milpa are interconnections with self, community, and land within the physical, intellectual, spiritual, and emotional realms of a person. What would it mean to embrace the teachings of milpa inside educational practices? By centring holism, milpa is cultivated through relationality – an understanding that our entire beings have always been a collective, where our reflection includes all animate/inanimate beings that make who we are. I relate embodying milpa in education to learning complex relationships, traditions, and legacies that we inherit in the specific places in which we live. Embodying milpa as a transformative

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pedagogical praxis follows Marker's (1998) considerations in which "genuine experiences that produce revelations cannot be assembled from abstracted domains; they must be welded to the people and traditions of a specific place" (p. 476). An education that moves beyond monocultural practices and colonial binary logics to cultivate learning environments that are asymmetrical, complex, messy, and entangled relationships within the dynamic of placeness. Cultivating milpa as a new space of consciousness in education restores webs of interconnectedness with place to harvest "intentional communities of mutual self-reliance and reciprocity" (Kimmerer, 2022, 40:14). Teachings that reflect an embodied relational and reciprocal way of experiencing our place as human beings belonging to Cemanahuac (entire cosmos).

Embodying Milpa in education allows us to imagine a transformative process that refuses and disrupts colonial/modern monocultures. The transformation of our modes of cultivation inside learning environments represents a shift in consciousness where habits, beliefs, and ideas that maintain and reproduce the dominance of the myth of the yellow corn become eroded. This transformation includes restoring human intimacy with place and finding belonging in the land that feeds our being with gifts. A milpa education is about embracing the messiness of intimacy, as Anishinaabe/Metis ecologist Melissa K. Nelson (2017) describes "the act of 'getting dirty'…a visceral way to literally reconnect to Mother Earth and to explore and learn about the magical alchemy of soil, water, and seeds—the basis of all life" (p. 57). Embodying milpa in education follows the call of Mississauga Nishnaabeg Leanne Betasamosake Simpson (2017) to strive for an education in which "the land must once again become the pedagogy" (p. 160). An education where teachings come directly from the roots of the land full of complex messy imperfections. By embodying milpa, the resurgence of Chicomexochitl is possible – a cherished imaginary where cobs are never the same, and although some may still be yellow, there are endless combinations of colors, forms and sizes. The diversity within a milpa represents a pluriversal place of maintenance that honors the Zapatista call for a world in which there is room for many worlds.

Conclusion – Nomatca Nehuatl

In 2017, Mujeres de Maiz, a Chicanx ARTivist and wellness collective, presented its 20th anniversary through an exhibition about women's relationships with corn. The painting, Mujer de Maiz (Woman of Maize) by Xicanx, Debora Kuetzpal Vasquez, illustrated a woman being embodied by the corn representing our entire beings belonging to Chicomexochitl. This beautiful painting illustrates the words of Mestizo poet Francisco X. Alarcón (2008), who reminds us that we are people of corn and that "this is not just a metaphor; corn is your sister – made of corn" (p. 282). Correspondingly, Chickasaw lawyer James "Sakej" Youngblood Henderson indicates that within Indigenous worldviews the "notion of self does not end with their [Indigenous] flesh, but continues with the reach of their senses into the land. Thus, they can speak of the land as their flesh" (1995, p. 221). When explaining the importance of collective belonging, Tewa scholar Gregory Cajete recounts that his grandmother used to tell him, "we are all but corn" (TEDx Talks, 2015). Through this thinking, Chicomexochitl is an analogy for the structure of a community, and the kernels are individuals that make up the community. The colorful kernels are all different but close together; they lean up against each other and support one another. An

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understanding that even when diverse, we are still united and belong together; we are all kernels in the same cob nurtured by the land.

Milpa is a complex, messy and entangled terrain in which animate/inanimate, supernatural and celestial bodies are not independent forms but are interconnected with each other. Alarcón (2008) explains this entanglement using the Nahua concept of nomatca nehuatl, in which "we recognize ourselves as part of the universe. There's no separation between self and the universe" (p. 282). When translated to Spanish, the meaning of nomatca nehuatl is, "I myself"; it denotes individuality. Nahuatl is a polysynthetic language, where this phrase merges with other words to form a collective meaning – more than one and less than two. The meaning of nomatca nehuatl can be seen in the cultivation of milpa as a place of maintenance that alludes to feminist cyborg scholar Donna Haraway's Chthulucene, which "entangles myriad temporalities and spatialities and myriad intra-active entities-in-assemblages – including the more-than-human, other-than-human, inhuman, and human-as-humus" (2015, p. 160). Embodying milpa is rooted in nomatca nehuatl to propose ecocentric worldviews that cultivate polycultures of reciprocal relations and focus deeply on the meaning of placeness. A milpa education instills that everything is given by the land and nothing can survive without it. Humanity is an extension of a single whole belonging to the land nurtured and sustained by all our relations.

Our modern world is surrounded by fields of yellow corn, and the oppressive dominance has come at a big price. The capitalist needs of the global colonial/modern power are destroying the place we belong to, both literally and cognitively. This paper proposed learning with milpa to bust the myth of yellow corn and its monocultural impositions. Embodying Milpa in education fosters the deconstruction of colonial monocultures by changing the conditions of growth inside learning environments to cultivate polycultures of reciprocity and gratitude. Monocultures rely on border structures to manage growth drawn by individual pursuits; in contrast, embodying milpa gifts the possibility to abandon mapped boundaries and embrace unbounded collective messiness inside the land that holds our web of relations. Westernized mainstream education has invested so much over centuries – politically, personally, intellectually, and philosophically – into the idea of "identity" that the idea of "relationality" seems like an exotic presumption. Before settlers came to so-called North America, Indigenous peoples in their homelands did not have rights to fish, hunt, and gather; they had relationships with fish, four-leggeds, birds, and plants. How does education put the idea of relationality into its core curriculum when "identity" and "individual" are everywhere? When thinking of individuality versus collectivity, Kimmerer explains that evolutionary biologist David Sloan Wilson found that in comparison with individual competition, cooperation is better to not only survive but thrive (2022). Our livelihood in this world depends on the reciprocal relationships we have between all beings. This paper illustrates a split between two contrasting forms of cultivation, one for sustainment and revitalization that grows cultures of reciprocity and nurtures the consciousness of landscape, and the other an auto-destructive individual model that does not return anything to the land but instead just takes. Embracing milpa in education may help heal the sick metabolism colonial monocultures continuously maintain. The harvest of milpa provides an imaginary where communities are similar to corn cobs of diverse colors, all uniquely different leaning on each other and forming polycultures of reciprocity for collective belonging. By planting, nurturing,

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tending, and protecting the growth of our milpa, we cultivate a place where together, leaning and holding onto one another, we paint the colored cob of Chicomexochitl.

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