

Karen MacLean

E-MAIL: karen@maclean.dk

Rhizomatic Languages: The Importance of Nature and Arts and Crafts in Children's Education

ABSTRACT

The two strands of nature-, and arts- and crafts- education are traditionally considered distinct. Recently, the intersection of these two strands has been attracting attention, one objective being the creation of lasting connections between children and nature.

However, most of this education is based on the spoken and written word, which can create barriers to connection. These barriers are a consequence of the Western mind-set, covertly conveyed in our words and metaphors. Three such barriers consist of the organisation of our world in binaries, their hierarchical features, and our dominating, extractive relationship to our planet. Together mind-based, subject-object, and extractive relations with nature pose obstacles to connection inadvertently perpetuated in our spoken and written words.

Our culture, however, has the languages of arts and crafts to hand, which give us the tools to express our sensory experiences and connections to nature, as well as to create our own individual knowledge. This knowledge can be characterised as rhizomatic, as it is experiential, individual, and yet connected. The languages of the arts and crafts – also known as the 100 languages – match rhizomatic knowledge in that they have the same characteristics of individuality and connection.

To foster connections with nature, educators must, on the one hand, bring children to nature and, on the other, engage them profoundly in art and crafts. In this way, we allow them to escape the binaries, hierarchies and domination of our spoken and written languages. We also give them the potential to reshape our relationship to our planet.

KEYWORDS: nature education, arts and crafts, rhizomatic knowledge, nature connection

Introduction

Since the work of Jean-Jacques Rousseau (Rousseau & Rousseau, 1979) in the 18th century, the debate about the importance of nature education has waxed and waned. Likewise, educators and philosophers such as John Dewey (Dewey, 2005), Rudolph Steiner (Steiner, 1923a, 1923b, 1995), and Loris Malaguzzi (1993) have contributed to successive waves of interest in the role that arts and crafts

can play in children's education. Today, both trends are receiving more attention both in scholarly literature, educational practices, and in cultural debates at large (Charles et al., 2018; *Education Naturally! Forest Kindergartens and Schools Conference*, 2019; Saefurrohman, 2024).

Interest in nature education focuses largely on the ways in which it can support the extrinsic outcomes such as academic subjects or children's physical or mental health (Gilchrist, 2023; Maller, 2009; Summers et al., 2019). Little attention is paid to the unique aspects of nature education for children. The same often concerns arts education (Fleming, 2013; Schneider & Rohmann, 2021; Winner & Hetland, 2000).

However, prioritising, on the one hand, arts and crafts, and, on the other, nature education, provides unique educational opportunities. Moreover, working in the intersection between the two allows educators to explore a wide range of sensory experiences with the children, and simultaneously to engage more widely with other forms of artistic expression (3rd *International Scientific Conference. Alternative Education. Culture of the People of the Earth*, 2025).

One goal for educators who work concurrently with nature and arts and crafts is to nurture unique, lasting connections between children and nature (Gilchrist, 2023). Moreover, climate activists often consider children's connection to nature to constitute a foundation for respectful stewardship of nature in its many forms (Charles et al., 2018; Louv, 2010; O'Neill et al., 2023).

This essay takes its point of departure in the importance of this intersection of nature-, and arts- and crafts education in fostering connections between children and nature, focusing on the role of language. I start by complicating our use of the spoken language when working with children in nature and elucidating how the spoken language may work against the goals of connection. Then I discuss the ways in which nature and arts- and craft-based education foster new kinds of knowledge, and which non-verbal languages we can use to articulate these knowledges. I conclude by suggesting why arts- and craft-based languages better support children's connections to nature.

The work of words

A lot if not the most of our work with children and nature relies on speech and writing. We teach children words about nature: the names of plants and animals, of places in nature, and nature's processes. We focus on animal names in our native languages and later in Latin. We teach not only local place names, but different kinds of biomes and ecological niches. Finally, we teach children the names of processes such as the water cycle or complex climate processes.

In progressive school contexts or nature-based education spaces, we may also talk to children about their sensations and experiences in nature, and they, in turn, use words to share with us. Indeed, many educators use words to discuss connections among adults and children, among children, and between children and nature. Moreover, words, for example in lectures, often also form the basis of efforts to nurture children's impetus towards the care for and stewardship of nature.

However, our reliance on words to describe nature, to share our experiences, and to connect in and with nature may in itself constitute a barrier to these goals. In fact, words, whether spoken or written, may pose a serious threat to our goal of connection with nature.

The Western mindset

Generally speaking, Western, Judeo-Christian cultures prize the intellectual realms above the physical, material, embodied realms (Descartes, 2009). Their mindset values rationality and detachment, relying on what are considered to be facts and evidence, acquired through logic, reasoning, empirical observation, and other scientific methods.

Thereby, we also value speech and writing and the sense of vision above all. For example, some of our first tools for generating facts and evidence were visual tools such as microscopes and telescopes. Tools which, while they brought the objects of our interest closer, in themselves constituted hierarchical barriers between ourselves and these objects (Haraway, 1988). To a certain extent, language has served the same purpose. Bringing the world closer through naming and organising, yet simultaneously creating distance and hierarchy.

This mindset has a long and complicated history, from Greek philosophy, to the Enlightenment thinkers and to modern science. At this time, our cultures are infused with this mindset. Our words and our metaphors reflect these systems and values. Our everyday speech unwittingly emphasises ways of thinking that analyse, organise, and also often judge.

Three significant barriers arise when words function as our main portal to nature. One is the binaries installed by our Western word-based mindset. The second is the hierarchies inherent in these binaries. The third is what I refer to as the mindset of the fox, our cultural drive towards domination and extraction.

Barriers

The first barrier I will discuss here is our unconscious encoding of the world and its contents in mutually exclusive pairs. These binaries are implicit in

the mindset that has trickled down and out into our cultures, and which we express in speech or writing. Masculine *vs.* feminine, thinking *vs.* feeling, nature *vs.* culture, etc.

These pairings do not exist on a continuum but are rather understood as mutually exclusive. There is no sliding scale between masculinity and femininity, nor between nature and culture. Instead, an entity, a phenomenon or an action belongs to either one category or another.

The second barrier is comprised of the hierarchical nature of these binaries. One part of each pair is unconsciously ranked higher than the other, and the “higher” part is often posted as the standard against which the other is judged.

Thus, “masculine” outranks “feminine,” and its component attributes such as rationality, ambition and agency constitute standards against which femininity is measured and falls short. These encodings have no connection to the lived reality of actual men and women, of course, or anyone identifying outside or on the continuum in between.

Thought, moreover, is considered superior to emotion as it is associated with rationality, masculinity and the “head” of the body. Whereas emotions and physical experience are associated with the materiality and “irrationality” of the rest of the body, which, in turn, is coded feminine.

Finally, “culture” is considered superior to “nature” in that it is deliberate and characterised by rationality and processing. Cooked, in the words of Claude Lévi-Strauss, versus the raw wildness of nature (Lévi-Strauss & Lévi-Strauss, 1996). Again, the binarity of masculine and feminine are in effect, where culture is associated with masculinity and where nature is associated with feminine traits such as intractability and lack of intentionality. Nature – like the feminine – exists to be disciplined, organised and systematised.

As a consequence, then, of our mindset, thinking about nature is considered superior to sensing, experiencing, and connecting with nature. Objective analysis and organisation are valued above the materiality of connecting with nature, body to body, so to speak. Our mindset, with its binaries and hierarchies and as it is articulated in speech and writing, functions as a barrier to connecting with nature.

There is, however, a third, insidious barrier. Which is that we dominate and instrumentalise nature and use it as a resource.

The mindset of the fox and the geese

What I call mindset of the fox is inextricably intertwined with our Western binaries and hierarchies. In this metaphor, the fox does not see the geese as

fellow animals. She sees meat. She sees the world in terms of what she can use it for, in terms of how it serves her needs.

In like fashion, the words and concepts of this mindset convey the West's past and current relationships of dominating and using the world. It ranks rational, disciplined, purposeful humans over random, wordless, mindless animals and nature. This ranking allows us to objectify and resource nature and all that constitutes nature (Haraway, 1988). Our words conceptualise materials and things, animals, and other people as resources to meet our human – first world – needs.

This mindset of domination and extraction prevails despite the fact, that many of us have or want to have other relationships and other connections with nature. Our words fail us. They covertly perpetuate the very mindset that educators in nature- and arts education as well as climate activists need to disrupt and replace in order to reach their goals.

One way to counter disconnection, hierarchy and domination could consist of seeking to speak and write differently about nature and our place in it. However, as we have seen, using words can be a considerable barrier to creating and expressing connection because these elements are built into our mindset and our words.

These invisible barriers make it difficult for us to form our own experiences of nature, to form our own connections. They complicate the expression of our individual experiences, and they block sharing our emotions and connections.

Words are our tools, but also a cage. So how do we escape? Aren't they all we have?

Other languages, other knowledges

The supremacy of the language of words in Western culture has obscured for us the number other languages that we have at our fingertips. Educator and psychologist Loris Malaguzzi (Malaguzzi, 2012) reminds us that human culture affords us a multiplicity of languages. These languages take their point of departure in our senses: in our apprehension and experience of the world outside us through hearing, taste, sensation, sight and smell. As well as the world inside us through interoception, proprioception, the vestibular sense, etc.

Furthermore, these sensory experiences build knowledge within us which we can articulate, to a certain degree, in spoken or written words, or better yet, in Malaguzzi's perspective, through the multiple languages of form. That is to say that we can manipulate the materials of the world – including our own bodies – to give expression of another kind.

From handprints in ancient caves, to Noh theatre and Banksy installations, we weave, paint, chip, or resource our bodies to dance or acrobatics or song, in order to articulate what we experience. Thus, through these languages, we are able to create and express knowledges of another kind. Knowledges rooted in our own experiences and our own articulations, through languages that we ourselves choose. Knowledge of the world, of ourselves and of our web of relations – connections – to the people, entities, phenomena, or actions around us.

Like spoken and written words, these languages in turn go on to shape our interpretations of the world around us and to communicate both experiences and interpretations. Moreover, they allow each of us to create our own unique vast bank of knowledge.

Rhizomatic knowledge

Unlike the knowledge that Western cultures prioritise, this knowledge is individual and local. This means that it is based on the experiences and interpretations of each of us present, and on our individual needs and intentions. This knowledge is rooted in specific contexts, in specific places, under specific circumstances, with particular features and with certain people present. Thus, if several individuals are together, we may take in widely different experiences and form distinct knowledge of the self-same situation.

Consequently, this knowledge is also interconnected. It is decentralised, distinctly located in each individual, but also connected at random and indefinite points. Points inside and outside of us. It is dynamic and evolving, because we are never done experiencing, connecting and reconnecting. It is non-linear, because new experiences and interpretations circle back to earlier ones.

Borrowing from Deleuze and Guattari (Deleuze et al., 2007), we might think of it as rhizomatic knowledge (Brailas, 2020; Honeychurch, 2021; Liljenberg, 2022). Knowledge that is both subterranean and deeply rooted in each individual, yet also able to return to the surface for sharing. Knowledge that branches, connects, and branches again. Knowledge that shares nourishment and information. Knowledge that reaches out, grows and spreads.

In Western terms, rhizomatic knowledge is an oxymoron. Physical and material, rhizomes belong to “nature” and cannot be subjected to external organisation or domination. Whereas knowledge as we understand it in the Western mindset is disembodied, hierarchical and disconnected. It must be so in order to count as true knowledge.

Lost in translation

Our words are a poor tool for this rich rhizomatic knowledge because they belong to the mindset of systems, the so-called rationality and objectivity, as well as hierarchies, domination, and extraction.

When we only give our children the words of this mindset, we limit their scope of experience and prevent them from expressing themselves individually. We risk blocking them from articulating the connections that each of them experiences. We limit their ability to access and draw on the cornucopia of knowledge that they build inside themselves.

Whenever we ask children to translate what they experience and think and feel into the words of our current mindset, they lose what is individual and specific to them. They miss or forget the aspects of their experience that old words do not allow.

They lose the sense of the rhizomaticness of knowledge. Of connection, randomness, individuality, and vibrancy.

Yet how can we bypass our mindset and its vocabulary? How can we not only create new knowledges but bring those knowledges to the fore, to share them and use them? For example, to connect with nature.

And into the forest we go

On the one hand, we must provide children with wide, deep, and complex sources of sensory experiences. With cocktails of external and internal sensory information. The best way to do this is to take them to nature.

We must leave the classroom and let them dig holes in dirt, clay and sand, and experiment with these different materials. Let them build forts with sticks or stones and line them with leaves or vines. They must be allowed to build fires, whittle wood, balance on rocky beaches and shimmy up tall trees.

We must let them run through different kinds of forests where the trees and the light and the ground underfoot expand their knowledge of what a forest is – beyond the names of the trees – what it feels like and what emotions it elicits. The fear of a dark, dank pine forest or the crunchy elation of a bright, tall beech stand. We must let them poke at yucky beetles and worms in fallen trees that are slowly merging with the forest floor. Let them climb a wide-branching oak tree or gather chestnuts and maple whirlybirds.

Moreover, we must let them sink into the silence of ocean or forest and let the sounds of birds and waves come slowly to them. We must bring them to awe-inspiring vistas and intimate nooks, for them to feel infinitely small and close, and connected to it all.

The power of the 100 languages

On the other hand, we must engage them in what Malaguzzi called the “100 languages of children” (Malaguzzi, 2012). We must build on their affinity for creating and support their use of the multitudinous languages of arts and crafts.

The power of these 100 languages is the doors they open for children to articulate their knowledges, both the knowledge we teach them, and the knowledges they amass themselves, what I call the rhizomatic knowledge. This power derives from five characteristics of the practices of arts and crafts.

Firstly, arts and crafts are in themselves sensory and experiential. We sense the scratchiness of the wool, the tacky coolness of the clay, or the wobble of a sorrowing voice. An experience articulated in one – or more – of the 100 languages is re-rooted, re-sensed, re-interpreted.

Secondly, arts and crafts are connective. Through them we connect with the material world and with each other. We splash our bare feet in the cold clear water to create cascades of drops that refract the light. We hold hands and twirl, let go and hold hands again. Together we hammer nails or collect plants for dyeing. We sing in counterpoint or build a drama out of nothing but our own ideas.

Thirdly, arts and crafts are interpretive. By shaping the materials of the world or our bodies, we create our own systems – or delight in a lack of systems – to organise and respond to the world in- and outside of us. Moreover, in experiencing and reacting to others’ creations we build a rhizomatic network of interpretations, answers, rebuttals, agreements, and expansions.

Fourthly, arts and crafts are of necessity local, individual, and based on a specific context. They are based on our needs and intentions and on the needs and intentions of those present with us. They can give rise to connection, and be shared and recognised, but their purpose is not to develop objective or generalisable knowledge.

Finally, arts and crafts are not as such hierarchical. Our culture may value some more than others. But in the process of crafting and creating, there exists no hierarchy, only a web of collaborations. Collaborations that take place between us and the loom and the linen threads, or between ourselves and three other acrobats tumbling together, and with those of us who watch.

These collaborations engender connections through shaping the world, crafting together, interpreting each other’s creations, and in turn reinterpreting our own.

In conclusion, like the knowledge each of us creates through our senses, the languages of arts and crafts are rhizomatic. They reach in and out, connect and shape, reshape or repeat, grow and branch out. They support the

creation, interpretation, sharing and reintegration of our many, individual knowledges. The rhizomaticness of our knowledges is matched by the rhizomaticness of arts and crafts.

Thus, through arts and crafts – that is, through the 100 languages – we can escape the prison of spoken and written words. We can express new and unique things, that surpass what words can say. Most particularly, the connectivity of these practices fosters, supports and intermingles inextricably with our connection to nature. This happens as long as the lion's share of the experiences we articulate take their point of departure in nature.

The foxes pass the baton

Thus, when we bring children to nature's cocktail of sensory information and, in turn, draw on arts and crafts in our work with them, we let them connect with nature in their own unique ways. We allow them to know nature and to express themselves and their connection with nature in their own unique ways. To share new knowledge with each other and, in turn, again form and reform their connections to the world.

We give them the opportunity to escape the old mindset with its binaries and hierarchies. We allow them to discard traditional, Western words and ways of knowing, or to recycle them and give them new form and meaning. We give them the tools to integrate different kinds of knowing. We give them the potential to begin to reshape, on a cultural level – not just for themselves – our relationships to our planet.

It is for us, who were raised as foxes, to bring our children to nature and open up for them to explore, experience, relate, know, and connect. And it is for us to engage them in the arts and crafts, to give them back Malaguzzi's 100 languages. And a hundred more.

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