Art as ecology: A mutual nod

Rebecca R Burrill

Rebecca is a dancer, artist, movement-based child developmentalist and educator based in Cape Cod, USA.

There is a deep evolutionary and developmental language that is kinship bond between humans and Nature. At its perceptual roots this language is aesthetically organized, and this aesthetic way of knowing and communicating is the basis for human communication, art-making and the arising of a natural sense of morality in both the ecological and social spheres. This *primary language* is *ecocentric* in perspective, and therefore necessary for the vision, understanding and enactment of right relationship and right action by humans with respect to the local places and communities making up planet Earth. In modernity, this aesthetic kinship language is marginalized and devalued in favour of an abstracted and detached perspective, and a delocalized organization of ecological and social lifeways.

Keywords: art
Citation: Burrill RR (2022) Art as ecology: A mutual nod. *The Ecological Citizen* 5(2): 178–85.

It is through art that humans are innately ecological – that is, in deep kinship with all of Nature. By *art* I mean aesthetic intelligence: a particular perceptual process of communicating that arises from conception *in utero*, that is both our primal (evolutionary) and primary (developmental) embodied and embedded experience. This experience is a call-and-response between ourselves and our place. Aesthetic intelligence is thus necessarily a reciprocal way of making and communicating meaning – what I call primary languaging.

Primary languaging happens in the immediacy of experience – that of moving, sensing and perceiving our world. Movement is primary, for we must move first in order to perceive our world. In this way, movement is a perception, and is the first perception through which we learn (Bainbridge-Cohen, 2012). First perceiving begins *in utero* 23 days after conception as the embryo becomes primed to respond to the movement-touch vibration of sound (Hannaford, 2005).

In utero movement and sound are perceived as a single, unified perception: movement makes sound and sound is movement. In this way, the embodied experience of movement is unified with the resonant tone quality of vibration at deep cellular levels – which, in turn, unifies our interactional experience of self with the place where, and with whom, we are embedded. This interactional

experience is a language, a communication. It is our first languaging; it is ecological – with place, with other.

Primary language and aesthetics

The aesthetic nature of primary language is twofold. One is the psychobiological nature of first experience. Through our embodied and embedded experiences, we internally encode forms that match the gestures, contours and qualities of the world. These forms spontaneously evoke psychic meanings, by which I mean the felt feeling, emotional and minded sense of experience, both conscious and unconscious, as well as numinous – sacred presence, mysterious unknown.

For instance, moving upward with lightness has a different felt sense than moving downward with strength. Try moving these contrasting felt qualities yourself. And the sound contour of the vowel 'o' can be experienced as open, flowing and deep; while the contour for the consonant 't' can be experienced as closed, sharp and light. From these felt qualities arise immediate meanings that are our first communications – primary languaging.

This immediate meaning-making is seen clearly in the non-verbal languaging – dance and song attunements – between mother and infant, such as when an infant's high-pitched voicing is matched with her mother's gestures of raised eyebrows, shoulders, upper torso and high intensity of energy. This process is spontaneous and improvisational, operating at perceptual and sub-perceptual levels of knowing (Chapple, 1982). It arises from our inherent embodied and embedded ecology of being. This is our psychobiological reality.

The second aesthetic aspect of primary languaging is that it operates through perceptual metaphor – that is, metaphor that arises from direct psychobiological experience. The dance and song of infant-mother dialogue is prototype for this operation. This song and dance is expressed across changing sensory modes of sound, sight and movement. In the above example, infant voicing is translated across visual and auditory modes into body-gestural and felt-visceral kinaesthetic modes in the mother.

From our psychobiological experiences we internally encode forms that are expressed as sensory-perceptual presentations. These presentations, in neuroscience parlance, are referred to as images, those of all kinds – visceral, moving, feeling, hearing, touching, smelling, tasting, seeing and more. These images operate as signs or codes imbued with meaning, and are the ingredients of cross-sensory process. What is being translated across modes are resemblances in the gestures, contours and qualities of felt experience. It is the reciprocation of these resemblances, across sensory modes, that establishes shared meaning and belonging – kinship – between infant and mother. This living process is creative and improvisational, and is fundamentally the operation of perceptual metaphor.

Perceptual metaphor operates through felt resemblances. For example, the way the scent of a wild rose can evoke a resembling sound tone, or when a sound can resemble the perception of a colour and more, as in the sound of a loon's wail:

My core resonates
The colour of indigo
Tone of a loon's song

In this haiku it is the felt resemblances within the vowel alliteration of the round voluminous 'o' sounds, the evoked images of colour, resonance, tone and embodiment that translate meaning across kinaesthetic, auditory, visual and visceral sensory modes. It is clear here how perceptual metaphor is at the source and heart of human art-making. In my *listening* with Nature, my core resonating the colour of indigo is not a symbolizing process: colour does not stand in for sound. It is an attuned communication with Nature through an analogical living process.

Aesthetic communication

In this way, from first experience – *in utero* movement-sound unity, primed in an embodied and embedded reality – arises an aesthetic way of knowing and communicating. This way is our kinship bonding with place-other through primary languaging. Evolutionarily it is our bonding with Earth first and our primal kin ecology with all of Nature. All entities of Nature are ecological – that is embodied and embedded in reciprocal response-ability between self and place-other. That is, they are all in a *listening* relationship with one another.

Aesthetic intelligence is thus a process of communicating signs that have co-evolved and developed between entity and environment – place-other – from deep time. In Nature this signing process is called *biosemiotics* – the interpretation and communication of meaning by way of signs and codes throughout the biological world. As Gregory Bateson writes, metaphor is not just pretty poetry, "but the logic upon which the biological world is built" (Bateson and Bateson, 1988: 28). This can be seen, for instance, in the evolutionary progression of shared resemblances, or homology, as when the shape-gesture of the ancestral fish jaw morphs into a part of the inner ear of mammals (Anthwal *et al.*, 2013).

Another instance of the aesthetics in natural processes arises in the way that the sign and code communication of biosemiotics can be thought of as living poetry. As Shapiro (2022: 81) remarks,

> *At a time when we pride ourselves for being able to read DNA sequences with increasing speed, it is salutary to keep in mind that we are still far from knowing how to interpret the complex overlapping meanings contained in the genomic texts we store in our databases. DNA, like poetry, often has to be read in several ways.*

That is, any single stretch of DNA can have multiple meanings for the cell or organism. This means that interpretation and expression of information – signs – is often a creative, improvisational process on the part of cells while in conversation with one another over the task of building bodies (pers comm: Shapiro).

The signing process of primary languaging is a part of human semiotics, which is founded upon biosemiotics (Wheeler, 2016). As touched on above, primary language is a pre- or proto-symbolizing process (Dissanayake, 2018); there is no abstraction of meaning condensed into a static, fixed symbol. Rather, the resembling images exchanged in primary languaging 'shape-shift' their meaning. They are a set of formed and forming sign relations arising from the psychobiology of immediate experience. In this process, meanings are necessarily open-ended – contextually changeable – as in the cellular interpretation of genetic codes, and the combining of qualities in cross-sensory process to make and communicate meaning. Open-endedness allows for creative, improvisational tactics for coping and playing in a vastly changing and unpredictable world.

Open-ended immersion stories

Open-endedness allows for and acknowledges the unknown. The inclusion of the unknown – including the numinous – is intrinsic to aesthetic and creative processes, from which the primary languaging of art-making emerges. For instance, the haiku above is a *story* arising from an immersed full-bodied *listening* with the presence of Nature – place. The story communicated in the sound of a loon's wail evokes in me a sense of the numinous, and I am only able to express this through perceptual metaphor, in this case mostly in the shape-contour of sound and felt-resonance of colour. These are extremely opened-ended offerings. To pin this experience down to more specific meanings, would entail the loss of numinosity – the unknown – from which the depth of this meaning arises, and in which it remains.

Similarly, as a dancer I practice immersion dancing with place. For instance, in dancing – *listening* – with the movement-sound of ocean and sandbar environs, I find myself in an immediacy of full-bodied gestural response. This story unfolds in a spontaneous flow of languaging – an improvisation of qualities in perpetual call-and-response with place. It is the numinosity of myself-within-place that calls, is an invitation to dance, to make relations – kinship – through felt sense. From this performed communion arises shared meanings. I find that in closure there spontaneously arises a felt, mutual *nod* of acknowledgment between myself and the numinosity of this place. This coincides with the Latin root for 'numinous' – *nuere*, 'to nod', transferred to 'nod of a deity' (Simpson, 1968). In this story-making through immersion dancing, I am co-communicator with, as well as student of, Nature and place.

In the deep past, perceptually-immersed acuity opened us to the ways of place with the mineral, vegetable, animal and ecospheric realms and beyond. In this immersion we humans *apprentice* with the Earth-biology and psyche of Nature. This is a practice of reciprocal kinship-enacting (Abram, 1997; Kane, 1994). As mythographer Sean Kane (1994: 33) writes, the meanings of first mythtelling arise in the moment and place of their actual performance.

> *Because a people coevolve with their habitat, because they walk the paths their ancestors walked, mythtelling assumes that the stories already exist in nature,*

> *waiting to be overheard by humans who will listen for them. Such stories have a semi-wild existence; they are just barely domesticated and so are free to enact the patterns of the natural world.*

In this ecocentric apprenticeship the natural world is respected teacher (Abram, 1997). As Dennis Martinez (2008), a native scholar-activist who coined the term 'kincentric', says: "What we have the right to do is to make our case, as human beings, to the natural world" (Martinez and colleagues, 2008: 89). This is a relationship that seeks encounter with Nature through a receptive, mutually entrusting perception.

From these perceptual relationships arose Palaeolithic mythtelling, ceremony, and ritual. It is clear that these indigenous communicative forms are made up of all arts contained within the performing arts of dance and song – innate movement-sound gesture semiotics. These lived arts are a language through which humans organize, practice and celebrate right relationship with Nature, renewing balance and reciprocity in deep ecological kinship.

Locality

The aesthetic principles of primary languaging function through *locality*, which refers to the land and community of human and non-human persons of a local place. Enactment of locality, based in reciprocating relationships, traditionally engages teachings of right relationship with our ecological kin, which in turn is pattern for our right relationship with our human others. Right relationship and consequent right action are moral undertakings, enacted in a kinship circle of mutual trust (Burkhart, 2019; Nelson, 1993).

Natural morality can be seen in the infant–mother dialogue (Gratier and Apter-Danon, 2009). Within this aesthetic interplay of movement-sound gesturing, tacit agreements form concerning norms of shared process and meaning: what is intended and what is expected in our semiotic play. In doing so, we validate who and where we are together. Within these parameters arise natural rules of right relationship, for which we are each responsibly entrusted. From this experience of right relationship arises a natural wisdom, that is, the power and discernment of true and right action (Nelson, 1993). These are processes of locality, for as Native philosopher Brian Burkhart writes, "moral action is determined by relational context" (Burkhart, 2019, 227):

> *From a Native perspective, the business of actually figuring out what path I ought to walk through life is wrapped up in the talk of relationships, respect, reciprocity, kinship, and the like [...] An understanding of who I am in the context of my particular place helps determine what sorts of actions are respectable and what are not, which makes it difficult to create universal statements of moral relationship. (Burkhart, 2019: 287)*

It seems that *art as ecology* is tied up with: we humans making our case to the Natural world, with openness to the numinous and a mind to listen, with the natural morality of right relationship and consequent right action within both natural and

social ecologies, and all this enacted through the embodied and embedded language of *locality* – primary languaging – in the immediacy of experience.

In the locality of our deep past, human intimate relations with Nature paralleled an art practice centred in natural systems and interwoven with everyday life activities. For instance, the practice of Native science was intrinsically connected with natural morality (Burkhart, 2019) and ceremonial arts. This can be seen, for instance, in the 'original instructions' about companion crop planting, given by the Three Sisters – corn, beans, and squash – to the Seneca people of North America centuries ago (Deloria, 1999). In reciprocation for this revelation, the Three Sisters asked for the performing of specified ceremonies to help ensure that they would thrive. These sister plants share a spiritual relationship, as well as being key parts of a sophisticated natural nitrogen cycle that keeps the land fertile, and both are maintained through ceremonial practice of right relationship and action. There is a "unity and completeness" in this Native science that "weaves together all of the important aspects of our lives" (Burkhart, 2019: 233).

The "unity and completeness" of this deeply contextual integration of daily lifeways – locality – became marginalized in the long roundabout road from the Neolithic to Modernity (Kane, 1994). In this was a progressive distancing of humans and our art-making from natural systems (Guthrie, 2005), paralleled by a loss of art-making as intrinsic to the organization of everyday lifeways (Collingwood, 1958). This loss included not just 'art' as an ecocentric way of making with our hands and bodies; but also entailed the marginalizing and devaluing of the aesthetic ways of knowing and making meaning that the semiotics of primary languaging endows.

These losses came into full bloom in the Renaissance with the distinction made between peasant, Earth-centred art as mere 'craft', and that of elitist, human-centred 'fine' art. This was amplified by the Enlightenment's objective and rational science, which reduced the unity and completeness of both Nature and human social-life to abstracted, standardized, compartmentalized, measurable quantities. All this was done through symbol-dominated literacies, for the efficient management and control by newly evolved nation states (Scott, 1998). This hyper delocalization of experience and meaning has wreaked its own nemesis in the deep ecological and social catastrophes of our time.

What is needed is a remembering of the languages of Nature (biosemiotics) as kinship language with human primal and primary semiotics – aesthetic intelligence – as a seed or beginning place for the transition from a human-centered artificiality to an Earth-centered lifeway vision and practice. One potential contribution to this development is the eco art movement.

The eco art movement

Eco art arose in response to the environmental justice movement that was spawned by the publication of Rachel Carlson's *Silent Spring* in 1961. Artists who defected from fine art culture and joined in the environmental justice movement pioneered what became *eco art*, which is perhaps the "definitive artistic movement" of our times (Weintraub, 2012: xiv). This movement

decentred fine art world conventions, recentring the focus of art-making in natural and social ecologies (Geffen *et al.*, 2022). In the terms I have used here, this can be thought of as a return to *locality*, in which the role of art-making is integrated back into the full spectrum of the Nature-human arena. The practical intent is to affect moral awareness and right action centred in ecological and environmental needs. This is achieved in multifarious ways.

Eco art practice spans a continuum from, for instance, community projects incorporating the open-ended aesthetic processes of artists in partnership with scientists and policy makers in solving ecological problems (Heras *et al.*, 2021), to gallery installations of seemingly scientific experiment in structure, to what I would identify as direct encounter though primary languaging with the Natural world, such as my own 'site-specific' immersion dancing as discussed above (Burrill, 2020).

Another example of a site-specific 'happening' is *Easy* (1968), which was choreographed by pioneering eco artist Allan Kaprow, and performed by a group of California Institute of the Arts students in a dry riverbed ecosystem (Weintraub, 2012: 90). The core of the improvisation consisted of each participant carrying a chosen, wetted stone downstream on a hot windy summer's day, until the wetness of the stone has evaporated. This open-ended encounter with the subtle interplay of ecosystem forces, unique to each person–stone dyad, evoked common experiences: a felt camaraderie with stone, an altered Earth-centred perception of time and place, and insight into human-centred insensitivity and disruption of ecosystems.

At the opposite end of the eco art spectrum is a controversial example, by bioelectronic technician Andy Gracie, of an in-studio installation. The installation – *fish, plants, rack* (2004) – is a 'burlesque' of a biotechnical communication loop set up between one fish in a tank of water, plants in a hydroponic tube, and a robot. The technician-artist asks of bioartificial technology "how will [we] be able to get what we need from nature once we have fully removed ourselves from it" (quoted in Weintraub, 2012: 193).

This work is starkly anthropocentric, including the phrasing of the artist's quoted comment. However, what the installation can do as a work of eco art is present to the public without judgement, leaving the meanings open-ended and at the viewer's disposal, the grotesque isolationism of mechanistic pro-artificial technologies, bereft as they are of the ecological interrelationships and biosemiotics of life born of kinship.

Conclusion

At the heart of aesthetic intelligence is the ecological unity of person and place. Primary languaging happens through open-ended meaning making, within the lived (local) psychobiological play of perceptual metaphor. There is an aesthetic, and therefore ecological, paradox in the notion of unity and completeness, because this unity and completeness includes, and is kin with, the ever-perpetual unknown. In order to be complete, we must listen for, apprentice with, dance with, improvise with, what we don't know. This encounter happens through feeling and value. And in this participation, we can

share in that primal and primary *mutual nod of acknowledgment and kinship* that always arises spontaneously ... with a small touch of surprise.

References

Abram D (1997) *The Spell of the Sensuous*. Pantheon Books, New York, NY, USA.

Anthwal N, Joshi L, and Tucker AS (2013) Evolution of the mammalian middle ear and jaw: Adaptations and novel structures. *Journal of Anatomy* **222**: 147–60.

Bainbridge-Cohen B (2012) The action in perceiving. In: Bainbridge-Cohen B, *Sensing, Feeling, and Action: The experiential anatomy of body–mind centering* (3rd ed. Edited by Nelson L and Smith NS). Contact Editions, Northampton, MA, USA: 114–18.

Bateson G and Bateson MC (1988) *Angels Fear: Towards an epistemology of the sacred*. Bantam Books, New York, NY, USA.

Burkhart B (2019) *Indigenizing Philosophy through the Land: A trickster methodology for decolonizing environmental ethics and indigenous futures*. Michigan State University Press, East Lansing, MI, USA.

Burrill RR (2020) Languages of nature, languages of art. Available at https://is.gd/oQHqoy (accessed January 2022).

Chapple E (1982) Movement and sound: The musical language of body rhythm in interaction. In: Davis M, ed. *Interaction Rhythms: Periodicity in communicative behavior*. Human Sciences Press, NY. USA: 31–52.

Collingwood RG (1958) *The Principles of Art*. Oxford University Press, London, UK.

Deloria V (1999) *Spirit and Reason: The Vine Deloria, Jr., reader* (edited by Deloria B, Kristen F and Scinta S). Fulcrum Publishing, Golden, CO. USA.

Dissanayake E (2018) Ancestral minds and the spectrum of symbol. In: Malotki E and Dissanayake E. *Early Rock Art of the American West: The geometric enigma*. University of Washington Press, Seattle, WA, USA: 91–129.

Geffen A, Rosenthal A, Fremantle C and Rahmani A (2022) *Ecoart in Action: Activities, case studies, and provocations for classrooms and communities*. New Village Press, New York, NY, USA.

Gratier M and Apter-Danon G (2009) The improvised musicality of belonging: Repetition and variation in mother–infant vocal interaction. In: Malloch S and Trevarthen C, eds. *Communicative Musicality: Exploring the basis of human companionship*. Oxford University Press, New York, NY, USA: 301–27.

Guthrie D (2005) *The Nature of Paleolithic Art*. University of Chicago Press, Chicago, IL, USA.

Hannaford C (2005) *Smart Moves: Why learning is not all in your head*. Great River Books, Salt Lake City, UT, USA.

Heras M, Galafassi D, Oteros-Rozas E *et al.* (2021) Realizing potentials for arts-based sustainability science. *Sustainability Science* **16**: 1875–89.

Kane S (1994) *Wisdom of the Mythtellers*. Broadview Press, Peterborough, Ontario, Canada.

Martinez D, Salmon E and Nelson MK (2008) Restoring indigenous history and culture to nature. In: Nelson MK, ed. *Original Instructions: Indigenous teachings for a sustainable future*. Bear & Company, Rochester, VT, USA: 88–115.

Nelson R (1993) Searching for the lost arrow: Physical and spiritual ecology in the hunter's world. In: Kellert SR and Wilson EO, eds. *Biophilia Hypothesis*. Shearwater Press, Covelo, CA, USA: 202–27.

Scott JC (1998) *Seeing Like a State*. Yale University Press, New Haven, CT, USA.

Shapiro J (2022) *Evolution: A view from the 21st Century*. FT Press, Upper Saddle River, NJ, USA.

Simpson DP (1968) *Cassells' Latin Dictionary*. Macmillan, New York, NY, USA.

Weintraub L (2012) *To Life! Eco art in pursuit of a sustainable planet*. University of California Press, Berkeley, CA, USA.

Wheeler W (2016) *Expecting the Earth: Life, culture, biosemiotics*. Lawrence and Wishart, London, UK.