

Art, Ecology and Reality: the Potential for Transdisciplinarity

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'The modern pathology of mind is in the hyper-simplification that makes us blind to the complexity of reality.' (Morin 2008)

To begin, a poem:

This is the real world
A real world situation
This is disjuncture

Trying to make sense
The culture of climate change
Uncertain futures

Blind to the machine
Must override the default
And blind to itself

—

Action escapes will
Our part in the way of things
Culture of contempt

Complicit comfort
In cognitive dissonance
Suspend disbelief

A three-ring circus
A convenient justice
And hypocrisy

—

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From vain certainty
To extreme environments
Indeterminate

Breaking the threshold
Going beyond dangerous
This is becoming

Embodied we are
Autonomy - dependence
See how to listen

—

Order. Disorder
In reframing the questions
Organisation

Writing's on the wall
Celebrating paradox
Growth ecology

Time of metaphor
Profound Not Knowing
Madly letting go

As a polemic text, this paper will briefly consider the appropriation and neutering of art as philosophical and political acts. Then, using examples of my practice and other artists, I will explore the potential for art as ecology to generate the conditions for transdisciplinarity, necessary to meet the challenges of the 21st Century.

To set the scene, this quote from Lakoff and Johnson's seminal work, *Philosophy in the Flesh*:

The problem with classical disembodied scientific realism is that it takes two intertwined and inseparable dimensions of all experience – the awareness of the experiencing organism and the stable entities and structures of encounters – and erects them as separate and distinct entities called subjects and objects. What disembodied realism (what is sometimes called “metaphysical” or “external” realism) misses is that, as embodied, imaginative creatures, we *never were separated or divorced from reality in the first place*. What has always made science possible is our embodiment, not our transcendence of it, and our imagination, not our avoidance of it.’ (Lakoff & Johnson 1999, p. 93)

Not everyone sees the world as I see the world. That's good, but I suggest that there is a whole area of knowledge, and more important, a whole way of seeing, knowing and doing that for the most part is denied us. As the French philosopher

Edgar Morin puts it: 'The modern pathology of mind is in the hyper-simplification that makes us blind to the complexity of reality.' (Morin 2008)

The potential for complexity and transdisciplinarity are, I argue, not just questions of academic discourse or utopian new ageism, but essential to our survival as a species. Furthermore, these paradigms may be considered as an art of a 'fundamental culture' (Morin 2005).

Ecology & Art

To briefly contextualise my perspective, I refer to my practice as ecological art. I define ecology as the study of organisms, their relationship to each other, and their relationship to their environment – my practice is concerned with those relationships. The word 'art' is derived from the ancient Sanskrit word, '*rta*'. *Rta* retains its meaning in contemporary Hindi as a noun-adjective for the dynamic process by which the whole cosmos continues to be created, virtuously. It refers to the right way of evolution and we still talk about excellence, or the correct way of doing something as an 'art' – the art of cooking, the art of football, the art of gardening, 'The Art of Archery', 'The Art of Making Cities', and even 'The Art of War'. So, rather than being trapped in 'The Re-enchantment of Art' (Gablik 1992), *Rta* offers an epistemological shift in our understanding of what art may become, how it may work, what it may do and our part in its future.

It is the potential convergence of art and science that drives this ecology; from the dynamic tension between these seemingly discordant elements (art and science, culture and nature) the practice emerges through diversity and the synthesis of knowledge. Morin referred to the condition of science when he wrote: "... knowing, is at the same time separating and connecting, it is to make analysis and synthesis. Both are inseparable..." (Morin 2005, p. 25)

Taking a further step, we may move from 'an art of ecology', implying the use of art to creatively address environmental issues, to 'an ecology of art', whereby the potential of ecology becomes a 'catalytic feedback loop' that potentially takes art to a new level of understanding in Culture *and* Nature, and from this understanding new patterns (forms) of practice may emerge. And so, we move on from Morin's notion of emergence, 'order, disorder, organisation', to understand a complex system of art I have termed *ecopoiesis*.¹ *Ecopoiesis* being the 'living

¹ HALEY, D. (2001) 'Oh brave new world': A Change in the Weather'. I created the word 'ecopoiesis' as an extension of Maturana and Varela's term, autopoiesis, that denoted the self-making, or self-organisation of living cells. *Ecopoiesis*, therefore, takes 'eco' from the Greek *oikos* meaning household or dwelling and now has relational attachments, and adds *poiesis*, another Greek work that means to make or create and from which we get the word poetry. Co-joined, they refer to ecological evolution. The association with poetics is intentional. Since this paper was presented (1999) and published (2001), it has come to light that the word 'ecopoiesis' was first coined by Robert Haynes in 1984, with regard to space exploration and the process of 'terraforming'

organisation' from which art (or *arta*) may emerge. Of course the concept, *ecopoiesis*, is not passive, but an active process of becoming or contextual evolution; the methodology, *ecopraxis*, is intrinsically a form of critical learning; and the critical learning, *ecopedagogy*, is dynamic knowledge.

However, we must be aware that the application of the prefix, 'eco' is not a mere affectation of 'green thinking', but the deployment of ecological principles, qualities, and values – interdependence, systematic process, complexity and emergence.

Complexity & Reality

In the modern world, notions of complexity and ecology evolved at approximately the same time and bounced off one another to create meanings for each other, finding resonance with gestalt psychology, cybernetics, and other forms of systems thinking. But somehow, despite their successful interpretations and applications, they have been accepted by neither mainstream science, nor mainstream culture. Both of these powerful institutions have pushed complex modes of thinking and being to the margins of normative knowledge and behaviour, without ascribing any real value or worth.

So, maybe our 'culture of unsustainability' is what in theatre is referred to as the 'suspension of disbelief' – the ability to turn off *our* critical faculty, so that we may be entertained by cathartic stories of fiction? For here, I believe is the real issue, the reality of unsustainability; and it is embedded in how our society is educated to think. Just as an athlete trains their muscles to perform particular activities in certain ways, so too, we are coached to think about certain things in particular ways – it is a question of epistemology, or knowing how to know. When we see this process taking place in other cultures, we call it 'indoctrination' and 'brainwashing', but of course in our own culture, it is considered to be 'maintaining our values', 'heritage', and 'freedom'.

Transdisciplinarity Potential

Now we move on to 'transdisciplinarity', and it may be useful to provide some contextualising definitions. I use the terms from Basarab Nicolescu's book *Transdisciplinarity: Theory and Practice* (2008), not those being appropriated by the culture of the market.

'Multidisciplinarity concerns studying a research topic not in just one discipline but in several at the same time.' (Nicolescu 2008, pp. 2)

(http://en.wikipedia.org/wiki/Robert_Haynes), but this is now claimed and re-conceptualised in an artistic context.

'Interdisciplinarity has a different goal from multidisciplinary. It concerns the transfer of methods from one discipline to another.' (Nicolescu 2008, pp. 2)

'As the prefix "trans" indicates, *transdisciplinarity* concerns that which is at once between the disciplines, across the different disciplines, and beyond all disciplines.' (Nicolescu 2008, pp. 2)

While the emergence of transdisciplinarity may be the means by which art realises its potential as a diverse, complex system of becoming, the possibility of creating such conditions may require an essential shift in thinking, indeed it may require a new paradigm. A strategy proposed by the preeminent ecological artists Helen Mayer Harrison and Newton Harrison suggests that the effective deployment of ecological art may both require and generate 'post-disciplinarity'. Here, all disciplines meet at a conceptual round table – all are present, all are equal. Art, like all other disciplines, must be valued equally. At the centre of the table we place the challenges of the 21st Century. These, The Harrisons call the 'ennobling problems' - though I prefer the term, 'ennobling questions'. Why 'ennobling'? Because approached in this way, these challenges have the potential to liberate thought and action, and potentially change the thoughts and actions that created them in the first place, thereby 'turning the face of disaster to the face of opportunity', as The Harrisons put it. (Mayer Harrison & Harrison 2008)

So what does art bring to the table? Well, keeping the notion of *rta* in mind, if we consider art to be a verb, rather than a noun, then we may enlist the human enactment of art, or the inherent processes of artfulness. Social scientist, Hans Dieleman, refers to 'artful knowing/doing':

Some of the competencies presented look like the 'skills' we usually refer to, as they are action oriented. But these competencies are not to *apply* knowledge, but to *acquire* knowing and understanding. Moreover, the knowing is not in terms of analytical or theoretical knowledge or practical information, but in terms of symbolic meaning, metaphors, visions or images and experiences, integrating cognitive knowing, emotions and values. One more major difference lies in the activity of inquiry: the shaping, forming, constructing, mimicking or manipulating of reality through engaging in activities such as painting, sculpture, performances, installations, literature, music, theatre and the like (Dieleman 2010).

With reference to its etymological, Ancient Greek, root, *poiesis*, - to make/create-poetry may be more broadly viewed in my works and texts as acts of 'making' and in many cases as acts of making questions integral to the work. They are intended to critique society – tease out the absurd and let the absurdities tell their own story, and thereby, become a form of 'creative intervention'. The poetic form permits the artist to 'speak truth to power' (a charge given to Quakers since the eighteenth century to face tyrannical situations passively), much like the Trickster or a court jester (Hyde, L. 2008). Adopting this precariously privileged position of 'provocateur' (Beuys, J. 1990, p. 86) may generate discourse with people about topics they would not normally engage. This is at times as true for those

promoting works like *The Writing on the Wall* series as it is for passers-by, thereby shifting thinking, or finding ‘leverage points’ in the system (Meadows 1999).

And within the transformative poetic of cognition, metaphor generates new Realities, as Lakoff and Johnson write:

‘From the experientialist perspective, metaphor is a matter of *imaginative rationality*. It permits an understanding of one kind of experience in terms of another, creating coherences by virtue of imposing gestalts that are structured by natural dimensions of experience. New metaphors are capable of creating new understandings and, therefore, new realities. This should be obvious in the case of poetic metaphor, where language is the medium through which new conceptual metaphors are created.’ (Lakoff & Johnson 1980, p. 235)

Questions of Epistemology and Art

This calls upon established methodologies, like the ‘Observer Practitioner’, ‘Action Research’ and ‘Practice-Led Research’ to be used with the intent of making art as knowledge. In particular, the application of performance and drawing art forms as means of involving oneself and engaging audience/participants directly in the production of knowledge, by living the artwork as an event. An example would be *Seeking An Unacceptable Profile: species nova [to see anew] #1* (Haley 2000) that used the findings from a scientific experiment it had initiated to devise an installation, poetic texts and performance to further explore the language of science in contemporary culture and how this mediates or suppresses our understanding of Climate Change. In the work, each element generated a ‘feedback loop’ to support the artwork as a whole understanding. Indeed, as Basarab Nicolescu writes:

The methodology of transdisciplinarity is therefore founded on three postulates:

1. There are in Nature and in our knowledge of Nature, different levels of Reality and, correspondingly, different levels of perception.
2. The passage from one level of Reality to another is insured by the logic of the included middle.
3. The structure of the totality of levels of Reality or perception is a complex structure: every level is what it is because all the levels exist at the same time. (Nicolescu 2008, p. 10)

While not being confined to any one style, art form, discipline or skills-base, my practice/research has consistently focused on ecological issues to:

- i) generate questions,
- ii) shift the thinking of others and
- iii) propose future possibilities.

To pursue these objectives, I have used poetry, performance, sculptural installation, walking, film, calligraphy and academic writing. This freedom to select form, media, process and materials to suit the meaning and intention of the artwork is one that is used by many ecological artists, as a ‘Dialogical Aesthetic’

(Kester 2004), or as David Bohm wrote: 'Dialogue is really aimed at going into the whole thought process and changing the way the thought process occurs collectively' (Bohm 2008, p.10).

Question-based Learning

Now let us consider a concept I am developing, 'question based learning' (QBL). When it's practiced intuitively by many artists and creative people, this approach may open up situations for exploration in non-linear ways. Problems may be found and resolved and new questions may be formed in the process. QBL is based on 'whole systems' seeing and thinking to promote wider, deeper learning, rather than solutions. This is potentially an ecological approach to learning – ecopedagogy, or 'Eco Literacy' (Capra 1999) - generated by context, relationships and complex systems, that include analytical methods of understanding the world.

Above all, QBL promotes questions that are feedback loops of creativity and expansive knowledge - resonating with the image of *rita*, or art mentioned earlier. Knowledge, then becomes an 'open system' that may be created from the relationship of many parts, and the parts may be shared by multiple disciplines; thus knowledge itself can be considered plastic, dynamic, and ecological. Nicolescu writes:

'It is only if we question the space between, across, and beyond disciplines that we have a chance to establish links between *the two* post-modern cultures, integrating both science and wisdom. Transdisciplinary Knowledge is able to bring a new vision, not only of academic disciplines but also of cultures, religions, and spiritual traditions.' (Nicolescu 2008, pp. 14)

Now let us move to an indeterminate 'Next Generation' of art narratives that create the conditions for diverse and complex systems to emerge, operating in 'dynamic equilibrium' – grace in evolution or 'ecopoiesis' (Haley 2001).

And to close, another poem:

RESILIENCE

As tipping points pass
Believing what is normal
Grace under pressure

Profound distractions
Vanity of vanities
Left to the Market

On the ship of fools
Singing deaf and dancing blind
Now, we're acting mad

Elite ignorance
Inertia from white box brains
Expert arrogance

In a complex world
Leading a child by the hand
Here, under the sun

Not so much knowledge
Living in a quantum world
A shift in thinking

Create and destroy
The rhythm of Shiva's drum
Never stop dancing

Richness of life
You to me to them as one
This is all there is

As the globe warms
The other side of collapse
My tears taste of salt

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