

A QUESTION OF VALUES: ART, ECOLOGY AND THE NATURAL ORDER OF THINGS

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Part 1:

INTRODUCTION

*poetics of now
a time of uncertainty
now, being the flow*

A few years ago a publisher invited me to write a book, provisionally entitled, *Ecology in Practice: the Art of Transdisciplinarity*.^[1] I had a lot of other commitments at the time, so I thought a less burdensome option might be to edit an anthology of essays and contribute one of these myself, plus an introduction and conclusion. The aim of this book was to develop a transdisciplinary epistemology based on ecological arts practices, and to creatively generate the potential space for ‘post-disciplinary’ discourse based on ‘grounded’, ecological whole systems resilience in response to climate change.

Starting with the current discourse on transdisciplinarity,^[2] the book will engage the work of the main proponents, Edgar Morin and Basarab Nicolescu to place this in the context of natural and social scientific concepts and phenomena including ‘the embodied mind’,^[3] ‘autopoiesis’,^[4] ‘non-equilibrium thermal dynamics’,^[5] ‘syntrophogenesis’,^[6] ‘*Rta*’,^[7] and ‘dialogue’.^[8] then, to consider the fine and applied art of artists including Helen Mayer Harrison and Newton Harrison, Marcel Duchamp and Leonardo da Vinci, James Joyce, and my own practice to counterpoint and re-frame the current intellectualisation of this branch of complexity, ecology, systems thinking and Art.

ON PRACTICE (REFLECTION AND PHILOSOPHY)

I contacted several friends who were enthusiastic about the idea and they contributed many thoughts, but the project became even bigger and more unwieldy. I became very keen that the book would not be a catalogue of academic texts about art, ecology and transdisciplinarity, but an ecological artwork that *is* itself transdisciplinary. I realised that I was now looking at two books, maybe? Then, life and a couple of near death experiences got in the way and the project(s) paused.

As I recovered, I started to write this essay as a response to rereading Robert Pirsig's two books, *Zen and the Art of Motorcycle Maintenance*^[9] and *Lila: an inquiry into morals*.^[10] I first read the former as an art student in London in the early 1970s and it partly led to my dissatisfaction with much art production at the time, to favour more philosophical and political experiences. I read Pirsig's second book in the early 1990s while working for the pioneering celebratory arts company, Welfare State International. This was at a crucial point in my personal re-enchantment with art, and coincided with the revelations that came from the 1992 Earth Summit in Rio^[11] – environmental degradation, Global Warming and Climate Change.

As this essay progressed, the rereading of Pirsig's books and the proposal for my book(s) have merged, so this text has become an exploration of the key concepts and values within my own ecological art practice. For the past twenty-three years, my work has revolved around two key ideas derived from *Lila: an inquiry into morals*. They are the Sanskrit word, *Rta*, that means the dynamic process by which the whole cosmos continues to be created, virtuously,^[12] and the sentence, '*The most moral activity of all is the creation of space for life to move onwards.*'^[13]

Part 2:

**RTA: THE DYNAMIC PROCESS BY WHICH THE WHOLE
COSMOS CONTINUES TO BE CREATED, VIRTUOUSLY**

*streams to the ocean
spiralling with gravity
the Earth in motion*

ETYMOLOGY

In many previous writings I have expanded on Pirsig's definition of *Rta*, to explain my ecological arts practice, but it is worth developing this theme even further. The word, *Rta*, was first written in the *Rig Veda* between 1500 and 1200 BCE, and travelled with the Indo-Aryan migration of peoples and languages from what is now North India and Iran to Europe.

In contemporary Hindi, *Rta* retains its original Sanskrit meanings, as Panikkar comments in his book, *The Vedic Experience: Mantramāñjari*, '*Rta is the ultimate foundation of everything; it is 'the supreme', although this is not to be understood in a static sense [...] It is the expression of the primordial dynamism that is inherent in everything...*'^[14] *Rta*, also, gave rise to many other words and concepts of worth associated with human endeavour, including art. In Ancient Greece *Rta* became 'arete', meaning excellence, moral virtue, or living to one's full potential. In fact this excellence could be applied to anything of the highest quality.

So, the idea that art is somehow directly related to the concept of *Rta* became the key principle of my practice. Freed from being a noun, Art, or art could be an adjective or even a verb; an action or activity of the highest value, rather than value added commodities; evolutionary change, or the emergence of life, rather than static collectables. Like knowledge, art may then be understood as a dynamic phenomenon in which we may all participate, if our intentions are correct. This concept of excellence pulls into focus the contributions of artists like Giotto, da Vinci, Michelangelo, Durer and Duchamp with scientist/philosophers such as Copernicus, Darwin, Einstein and Bohr – people who didn't just add to art and knowledge, but changed and advance the way we see and think. The dynamic processes of creation and change then become moral imperatives, above facts, laws and aesthetics.

The definition of *Rta* I use, ‘the dynamic process by which the whole cosmos continues to be created, virtuously’, was distilled from many sources, so it’s worth unpacking some of the elements.

RTA: THE DYNAMIC PROCESS

<i>seeing the patterns</i> <i>dynamic knowledge</i> <i>undisciplined</i>
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A notion of shifting environmental and social ecological tempo is a key concept of Gunderson and Holling’s book, *Panarchy: Understanding transformations in human and natural systems*:

‘A fundamental unit for understanding complex systems from cells to ecosystems to societies to cultures is an adaptive cycle. Three properties shape the pattern of dynamic change in the cycle: Potential sets limits to what is possible – it determines the number of options for the future. Connectedness determines the degree to which a system can control its own destiny, as distinct from being caught by whims of external variability. Resilience determines how vulnerable a system is to unexpected disturbances and surprises that can exceed or break that control.’^[15]

Indeed, they define their development of ‘Panarchy’ as:

‘The theory that we develop must of necessity transcend boundaries of scale and discipline. It must be capable of organising our understanding of economic, ecological, and institutional systems. And it must explain situations where all three types of systems interact. The cross-scale, interdisciplinary, and dynamic nature of the theory has lead us to coin the term panarchy for it. Its essential focus is to rationalise the interplay between change and persistence, between the predictable and unpredictable. Thus, we drew upon the Greek god Pan to capture an image of unpredictable change upon notions of hierarchies across scale to represent structures that sustain experiments, test results, and allow adaptive evolution.’^[16]

And life, as the Belgian physical chemist and Nobel Laureate, Ilya Prigogine, explains functions far from equilibrium.^[17] Stasis is death.

In many ways the notion of *Rta* is close to the Chinese concept, Tao, in that they both understand the universe to be a dynamic process of perpetual change. Indeed, to be cognisant of potential change is the essence of the *I Ching, or book of changes*.^[18]

And the process of change is the energy ‘flow’ within the *Tao* and *Rta* that shares similar properties to ‘non-equilibrium thermodynamics’ (NET) described by Schnieder and Sagan;^[19] except that all descriptions of the *Tao* and *Rta* are inadequate, so we must to some extent accept the enigma and paradox of life as being intrinsic qualities of life itself. Throughout his two books Pirsig argues for ‘Dynamic Quality’ over static patterns, but recognises the existence and need for both to come into play in the way that nature, humans and society continue to evolve.

In terms of art, as I mentioned above, *Rta* liberates art from static patterns of contemporary Art theory and production to be understood as a dynamic phenomenon that flows with the natural order of evolution. The preeminent ecological, American artists, Helen Mayer Harrison and Newton Harrison, term this flow of art as ‘conversational drift’^[20] – the notion that the art of an artwork comes to life in the dialogue between people, after they have experienced it. Similar to Tim Ingold’s idea of ‘correspondence’^[21] the art is released from the object as a flow of energy, suggesting an emergent kind of making, different from predetermined design.^[22]

RTA: THE WHOLE COSMOS

<i>the time between space</i> <i>between belief and myth</i> <i>the space between time</i>

The universe, or cosmos is a complex system that contains many other systems, but *Rta*, like the *Tao*, is non-dualistic and considers the myriad elements, concepts and realities to be part of a whole system acting in concert, or ‘the cosmic order of things’.^[23] Apparent opposites, Yin and Yang are *yinyang*; the realisation of connectedness at quantum, micro, meso, macro and cosmic scales of being, simultaneously – a prerequisite of transdisciplinarity. Romanian physicist, Basarab Nicolescu, provides the three postulates for the founding of transdisciplinary methodology:

- 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.*^[24]

As Big Bang, Bootstrap and String theories expound, this is the cosmic order of everything, of all evolution, from the primordial to now, and to the future. On Earth, *Rta* is the synergy of materials, forms and processes that we may consider to be ecological whole systems, or ‘Deep Ecology’.^[25] Here we understand the complex interconnectedness, interdependence and natural order of all things.

With regard to art, *Rta* is also concerned with, and is, all the creative processes and actions that contribute to and support the whole. This is the art of everything and everybody.^[26] To live in harmony and act with this trajectory is to do the right thing, and when the whole is damaged, it needs to be healed.^[27]

RTA: CONTINUES TO BE CREATED

*rain falls and life forms
beginning in the beyond
capable futures*

There are many myths and beliefs concerning the nature of evolution – creation. Despite the different metaphors, Hindu (Vedic) and Taoist explanations seem to equate to the most widely held scientific theories.^[28] Evolution has not stopped, it continues to emerge, but how it emerges is dependent on many factors, none of which are certain until they have happened. This state of indeterminacy can be most unsettling for a society trained to see the world through the myopic vision of scientism (not science *per se*). Indeed, I use this concept to question the whole notion of ‘sustainability’ that tries to retain gross living standards for the few, while the many live in poverty with the accelerating effects of Climate Change. There is little

science in this scenario, just political and fiscal gain for the powerful. As the Anthropocentric age develops, we witness the pattern of evolution shift, through human endeavour, to the shape of human greed, at the expense of other species and resources to the detriment to humans ourselves.

While ‘ecological resilience’^[29] sees eventual collapse^[30] as the *tabula rasa*, or Sixth Extinction,^[31] from which the potential for life will regenerate, society maintains a form of ‘engineering resilience’^[32] that ensures endurance of the status quo, and blind faith in the technologies and industries that caused many of the environmental and social problems we currently face. This situation profoundly compromises the trajectory of the natural order of things and a realistic view of the future, denying the potential for many futures – diversity.

However, creation and destruction are, also, not to be understood as opposites, but like diversity and redundancy they are essentially, ecologically united in evolution. Referring, again, to the idea of Panarchy, we see destruction as a natural episode in the course of continuing creation^[33] and this is echoed in the healthy metabolism of all multicellular beings, as certain cells are produced expressly to be killed. Indeed, an over abundance of some cells are the cause of disease. It’s the continuum that matters to all living beings and dissipative structures.^[34]

What we as humans, as artists may do, is to act correctly, and this involves the fundamental human act of making. Art, then, is more than a theoretical concept of aesthetics, it is a dynamic physical process.

VIRTUOUSLY

<i>the creative works</i> <i>sublime success, furthering</i> <i>through perseverance</i>

One meaning of the word, ‘grace’ is becomingness, and it may be understood as an ethical imperative, without religious affiliation or dogma – the virtue is in (aesthetically) doing the right thing, in the right manner, righteously. And from *Rta*, righteousness conveys adherence to a complex concept of our direct connectedness to on-going evolution. It is worth mentioning that (Vedic) Hinduism is different from most Western notions of a religion. It is more like a collection of diverse belief

systems that provide philosophy for ways of living, and the many deities represent different aspects of this philosophy. If we consider the triumvirate of evolution, *Rta*, may be understood as the art of living: Brahma shakti is the force to create something new; Vishnu shakti is maintenance; and Shiva shakti is bringing in transformation, filling in life and destroying it. As Pirsig points out: *‘The physical order of the universe is also the moral order of the universe. Rta is both. This is exactly what the Metaphysics of Quality was claiming. It was not a new idea. It was the oldest idea known to man.’*^[35]

RTA AS ART

*creating the void
for life to fill and fulfil
connected in time*

Pirsig contends that: *‘Art is high-quality endeavour. That is all that really needs to be said. Or, if something more high-sounding is demanded: Art is the Godhead as revealed in the works of man.’*^[36]

As I have mentioned, *Rta* is, also, the root of many other notable words of quality: arithmetic, aristocrat, rhetoric, worth, rite, ritual, wright, right (handed), right (correct), righteousness and art. Pirsig surmises the collective meaning of *Rta* as the *‘first, created, beautiful repetitive order of moral and aesthetic correctness.’*^[37] The moment I first read about the direct link between *Rta* and art, was like an epiphany, or the realisation of a Zen koan (a paradoxical metaphor to see the ‘nonduality of subject and object’).^[38] To think that art really did have a fundamental meaning greater than anything the contemporary ‘Art World’ could offer, and this was what I had been seeking since my disillusionment with Art, in my final undergraduate year at art school in 1974. I then discovered that it resonated with the notions of Deep Ecology being pursued by a small number of artists – ecological art, or eco-art.

Not only was this art the right thing to do, it was the right way of doing things, with excellence. We still apply this idea to many other activities; the art of gardening, the art of cooking, the art of football, *The Art of Archery*,^[39] *The Art of War*,^[40] and of course, *The Art of Motorcycle Maintenance*. In this context, art is freed from being a noun for artefacts, the static end of a creative process. It becomes an adverb, both describing and actioning the way in which all things come into being, correctly,

harmoniously with evolution. This, in turn, implies a moral correctness. So, in a Duchampian way, art continues through and beyond objects. This is the ecology of art, as much as it is the art of ecology.

We may then shift the focus away from the common position of having to justify art in an ecological context, or even justifying ecology in an arts context. Let us consider the position that both art and ecology exist naturally in the world, but that many societies continue to spend much time, effort and money extracting and destroying these embodied phenomena, resources and values. While some artists' practical interventions reveal ecology through their art, or contribute new perspectives to ecology, their art may also transform the material world, ecologically. These intentions and manifestations are very different from art that merely illustrates nature, or art as a tool to popularise scientific endeavor. Here, ecological art is a necessary component in interdisciplinary thinking and research, and through creative practices, may emerge as new 'transdisciplinary' forms of working towards ecological thinking and action. Furthermore:

'Rta conjugates into the verb 'ritu' (ritual), that refers to the correct order or sequence of rta (i.e. the cyclical pattern of the seasons, or the progression from seed to leaf and root to tree to blossom to seed). 'Art' may have lost much of its etymological meaning, but maybe it retains the potential to re-emerge as a metaphor for sustainability, like a flower waiting for rain in some future desert?'^[41]

Part 3:

*‘THE MOST MORAL ACTIVITY OF ALL IS THE
CREATION OF SPACE FOR LIFE TO MOVE ONWARDS’*

*between the branches,
between the leaves there is sky
ginkgo in the wind*

From the value of virtue, to the moral value of space, or creating the opportunity for life to follow the natural order of evolution. This is not the Art of making objects, but the art of creating the opportunity for the furtherance of life. Rather than being a trivial social fad, we may think of novelty as the essence of evolution. In fact, we may see new objects as a necessary function of this space-making, and the objects become living conduits of art, with a life of their own, emergent forms – acting with the natural order of evolution.

THE ART OF ECOLOGY AND THE ART OF ECONOMICS

*oil over water
money and fire over life
carbon over time*

Like ecology, economics, is a social construct, but unlike the connecting pattern of ecology, economics may create an abstract reality that disconnects us from the natural world. Auditing and the language of accounting have generated a culture of efficacy for efficacy’s sake, where the desired ethos is primarily monetary value. However, this perceived economic benefit ignores environmental and social justice, as these values exceed the realms of a cost-benefit analysis; accountability is then limited to the fiscal meaning, rather than any other responsibility. We all know the truism that we ‘know the cost of everything and the value of nothing’.

So, despite having the same Greek derivation, ecology and economics inherently express different sets of values – the first, the natural order of connectivity

and interdependence of all forms of life and inert matter; the second, quantitative systems of production, distribution and consumption of goods and services. Edgar Morin's view of the social science of economics explains more:

'The need for contextualisation is extremely important. I would even say that it is a principle of knowledge: Take for example the economy, the most advanced social science from a mathematical point of view, but which is isolated from human, social, historic, and sociologic contexts: its prediction power is extremely weak because the economy does not function in isolation: its forecasts need to be unceasingly revised, which indicates to us the disability of science that is very advanced but too closed.'^[42]

It would seem, therefore, that economics is not a good means of studying ecology, and a very bad means of managing the environment and society. This calls us to fundamentally question the way in which the concepts of 'Ecosystem Services' and 'Natural Capital' have been adopted and developed by governments and global markets for the purpose of controlling and industrialising the processes of the natural world for profit and political power. Vandana Shiva comments:

'Limitless growth is the fantasy of economists, businesses and politicians. It is seen as a measure of progress. As a result, gross domestic product (GDP), which is supposed to measure the wealth of nations, has emerged as both the most powerful number and dominant concept in our times. However, economic growth hides the poverty it creates through the destruction of nature, which in turn leads to communities lacking the capacity to provide for themselves.'^[43]

There is an obvious synergy between *Rta* and ecology that becomes corrupted when we introduce economics. This is not to say that economics is intrinsically a bad thing, but that it carries a different set of values that are not inherently moral. And when it comes to politics, education, healthcare, popular social and cultural concerns of the developed world, it is economics that represents the highest value system for our contemporary society. Ecology has been appropriated by policymakers and accountants, to remove ethical values from the environment and culture. In a similar way, the arts are marginalised or anaesthetised by commercial sponsorship, particularly the carbon fuels industries.

Part 4:**LEARNING THE FUTURE**

*from yesterday, learn
today, act creatively
for tomorrow, learn*

TRANSDISCIPLINARITY

The potential interaction between arts practices and transdisciplinary methodologies are clearly stated by Morin^[44] and Nicolescu^[44·45] however, few people have explored these claims further. Those who have, do so mainly through theoretical discourse, rather than arts practice (i.e. Dieleman^[47] and Kagan),^[48] so my aim here (in the book) is to explore the synergy between arts-led, practice-based research, and transdisciplinary methodologies. I further contend that the development of a transdisciplinary epistemology has to be realised through ‘grounded’ practice, and that this, among other things, may contribute to a dynamic form of knowledge, the realisation of resilience, and moral values. Nicolescu writes:

‘Transdisciplinarity Knowledge, TK, corresponds to a new type of knowledge – in vivo knowledge. This new knowledge is concerned with the correspondence between the external world of the Object and the internal world of the Subject. By definition, the TK knowledge includes a system of values.’^[49]

The topic of transdisciplinarity is accelerating in popularity, but is becoming both better defined and obscured by misunderstanding and misrepresentation as interpretations abound. In the hands of French philosopher, Edgar Morin and Romanian physicist, Basarab Nicolescu, clarity prevails with both agreeing on the importance of the creative arts to pursue transdisciplinarity in practice. As an artist/researcher, I hope to reveal through my twenty-year pursuit of ‘an ecology of art’, the emergence of this ‘third way’^[50·51] of thinking, acting and being.

Against the grain of much contemporary Art and science research, I have gathered diverse material from disparate sources to demonstrate the necessity for a paradigm shift in knowing the world; and indeed an epistemic shift in knowing

creatively. But this discourse is not about generating new knowledge, rather than creating the space for new knowledge to emerge. The objectives are to:

- 1 Generate discourse that critically challenges the precepts of transdisciplinarity – epistemology.

Indeed, one of the pitfalls developing from the arguments and definitions around transdisciplinarity, is that it remains locked into the disciplinary discourse from which it wanted to escape.

- 2 Explore the potential synergy between arts-led, practice-based research, transdisciplinary methodologies and ecological resilience.

Firstly, I consider the idea of ‘Transdisciplinary Art’ to be an oxymoron. While the art of transdisciplinarity may resonate with *Rta*, the notion of Transdisciplinary Art negates the inclusion of other disciplines and therefore the potential to emerge ‘beyond all disciplines.’^[52]

- 3 Consider ‘post-disciplinarity’^[53] and the potential emergence of ‘Transpoiesis’, as a practical insight to evolution.

Conceived by Helen Mayer Harrison and Newton Harrison, ‘post-disciplinarity’ like Postmodernism, may offer the antithesis to disciplinarity, by conceiving of all the disciplines participating equally, at a round table to address the ‘ennobling problems’, or questions of the day, such as Climate Change. Here, the need to act as a whole, an ecology of disciplines, is predicated on the idea that the disciplinary hierarchies currently afforded by our society reflect the imbalance of thinking that has caused many of the problems we currently face. Addressing this imbalance should, at least, create the necessary space for a whole systems approach, without denying the value of any discipline.

TRANSPOIESIS

However, post-disciplinarity, as a model of egalitarianism does not itself offer transformation or the emergence to a new state of thinking and being – the potential for evolutionary change. Here, I introduce the word, ‘transpoiesis’. This word fuses the

Latin prefix, *trans* (meaning ‘across’, ‘beyond’ on the ‘other side’) to the Ancient Greek word, *poiesis* (the root of ‘poetry’, a verb meaning, ‘to make’, or an action that transforms and continues the world). I define transpoiesis in Pirsig’s words as, ‘*The most moral act of all is the creation of space for life to move onwards*’, or the emergence of ‘capable futures’.^[54] This is not, however, a matter of predetermined design, but the art of emergence – *Rta*.

Out of dissatisfaction with the appropriation and corruption of meaning that has rendered transdisciplinarity ineffective in its ubiquity, I searched for an alternative concept. I arrived at ‘transpoiesis’ via the invention of other words that sprang forth from the word, *poiesis*. The first invented word, ‘autopoiesis’^[55] refers to the self-cognitive evolution of early cellular life-forms that enabled their reproduction and maintenance. As a corollary, I invented the word ‘ecopoiesis’^[56] to conceptualise the arts practice of reinventing ecological whole systems. Referencing ecopoiesis and Edgar Morin’s sociological work on complexity, Sacha Kagan developed the word ‘auto-eco-poiesis’^[57] to describe the co-evolution of anthropomorphic and bio-diverse environments.

Transpoiesis, therefore, is making that space and time, and generating the capacity. It is not about the making of objects or the act of planting, but about generating the capacity, creating the opportunity, the potential for emergence. It is making possible the transformation from one state to another, an iteration that permits a next step. And from an evolutionary perspective, the next step is towards the next generation, to bring forth greater diversity. But this moral imperative is not necessarily about goodness and sustaining the ‘good life’ for the few, or even the many. It is to understand that ecological transformation may occur through destruction as well as creation. This is the dance of Shiva Nataraja, bringing forth life and death. As I have already mentioned, death and destruction are necessary functions to make the space for life to move onward.

If ecology is ‘the pattern that connects’, then transpoiesis is the pattern that transforms and the process of transition – working with an emergent trajectory of evolution, creating the void for life to fill. Making the potential possible. Transpoiesis is the art of transdisciplinarity, in the sense that *Rta* is the art of living with evolution. Transpoiesis is the art of creating capacity for life. Using the tenets of transdisciplinarity to recognise its epistemology, transpoiesis potentially makes the conceptual and practical space for evolutionary discourse to move on as art, or ‘*Rta*’.

This may be witnessed in a jig performed by Irish folk musicians. There is no prescribed sheet music, product, commodity, output, outcomes or impact

intended, other than the experience of the music in the moment. What emerges from a space of trust is across, between and beyond^[58] all the participants. Each player performs their own part simultaneously. Given basic roles (melody, rhythm, beat), together, the sum of their parts emerges as a whole (tune). Nobody knows exactly where it will go, how long it will last, or what may become of it. It comes from many previous sessions performed by these and other players. It is not designed. It is just the time and space that has been created for something to happen. Jazz improvisation provides a similar space and time.

Part 5:

CONTINUUM

<i>'speak truth to power'^[59]</i> <i>maintain a radical voice</i> <i>question all beliefs</i>

A QUESTION OF VALUES

Ranchor Prime writes:

'If we are to resolve the environmental problems that now beset us, we must examine the connection between our environment and our way of life. A way of life does not exist in a vacuum. It is based on a way of thinking, a philosophy of life.

Gandhi recognised this truth. He believed that it would not be possible to bring about change in society without a corresponding change in the way people behaved. To change the way people behaved meant to change the way they thought. Therefore Gandhi's primary objective was to influence people's philosophy of life.'^[60]

In matters of environmental and social justice, and the capacity for ecological resilience to adapt to climate change, transpoiesis may offer a non-strategy strategy. A holistic revolution in thinking and living the evolutionary transition to a new state of being. In addition to shifting genetic structures, this transpoietic transformation

is the potential for a redirection of global energy – a complete change in values. Although this revolution may be considered by some to be a dangerous threat to Western values of ‘Sustainable Development’, or the established norms of the status quo, to others it represents an egalitarian idealistic dream of social and environmental justice, with the hope of reparations.

However, ‘the future is not given’^[61] and change happens, evolution is an indeterminate phenomenon, or as Morin puts it, ‘*ecology in action*.’^[62] No theory can guarantee future predictions. We can only prepare the conditions for what we hope will emerge, destiny and fate will do the rest. So, the revolution mentioned here is but a statement of the immense paradigm shift necessary to address the current realities and future trajectories of Global Warming, Climate Change and the Sixth Extinction. There is evidence of this revolution taking place, not as insurrection or riots on the streets, but as individuals, families and neighbourhoods opt for and make their own lifestyles to determine their own capable futures in local food production, minimising carbon emissions, waste and water usage, reducing their dependency on civic services, and promoting ecological literacy. These and many other initiatives are emerging locally and internationally as a shifting tide of positive reaction to political, legal, institutional, industrial, commercial and economic dogma of unsustainable development and power.

However, the two communities that need to be liberated are the majority of the world’s population, the poor, and the minority of the world’s population, the rich. The former are unable to change and the latter are reluctant to change. These seemingly polar opposites represent the potential spaces of opportunity for creative intervention^[63] and resolution to shift values and transform energy at all levels of reality. This is the emergent potential of transpoiesis, calling on transdisciplinarity, post-disciplinarity and all the diverse systems that promote life.

Additionally, to further contextualise Gandhi’s approach, Gregory Bateson posits:

‘The question is not only ethical in the conventional sense, it is also an ecological question. The means by which one man influences another are a part of the ecology of ideas in their relationship, and part of the larger ecological system within which that relationship exists.’^[64]

Here lies the potential for arts practices that focus on *Rta* rather than *Art*; art that is not so much a career option, but a way of living, a ‘philosophy of life’ for both the artist and those affected by their artwork.

Of course, there is no solution, arrival, or conclusion, but more questions and the potential means of continuing – making transition, transformation, or transpoiesis. From this starting point, the book will not be about transdisciplinarity and ‘post-disciplinarity’, it is, and will be, transdisciplinary and post-disciplinary. The book as an artwork may transform ideas into a cohesive form, like complexity moving from order to disorder to organisation.^[65] Hopefully, this text has created the space for the book to emerge. Like an embryo, this piece of writing should contain the potential for all the different parts of the book to grow as a whole entity. Hopefully in the context of its environment it will then contribute to current discourse, creating the space for others to follow and fill with their capable futures...

art of transition
energy transformation
energy flows on

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- 1 / Prologue to a work in Progress: Hopefully, without being too self-indulgent, I'm taking a risk. This text is unfinished. I have realised that what was emerging through the process of writing this text is a book for which I was writing a proposal. This text is in fact, the conception of the book, not the proposal, or a sketch. In its present state it is both, incomplete and complete, in a state of 'becoming' – as a foetus is always complete in itself in the process of its development. So, dear reader, please understand that you are about to read a rather untidy 'living text', an artwork in the making. Indeed, this process of making, this act of creating is the core content of the book itself. It is the ecological practice, or emergence of this artist. As Fritjof Capra puts it: "... emergence... has been recognized as the dynamic origin of development, learning and evolution. In other words, creativity – the generation of new forms is a key property of all living systems. And since emergence is an integral part of the dynamics of open systems, we reach the important conclusion that open systems develop and evolve. Life constantly reaches out into novelty." (Capra, F. *The Hidden Connections*. London: Harper Collins, 2002, p. 12).
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 - 3 / Lakoff, George and Mark Johnson. *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought* (New York: Basic Books, 1999).
 - 4 / Maturana, Humberto R. and Francisco J. Varela. *The Tree of Knowledge: The Biological Roots of Human Understanding* – Revised Edition (Boston: Shambala Publications, Inc. 1998).
 - 5 / Schneider, Eric D. and Dorian Sagan. *Into The Cool: Energy Flow, Thermodynamics, and Life* (Chicago: University of Chicago Press, 2005).
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- 6 / Margulis, Lynn. *The Symbiotic Planet: A New look at Evolution* (London: Weidenfeld & Nicholson, 1998).
- 7 / Pirsig, Robert M. *Lila: An Inquiry Into Morals* (London: Black Swan, 1993).
- 8 / Bohm, David, Donald Factor and Peter Garrett. *Dialogue, A Proposal* (1991) – http://www.david-bohm.net/dialogue/dialogue_proposal.html (accessed 15 May 2015).
- 9 / Pirsig, Robert M. *Zen and the Art of Motorcycle Maintenance: an inquiry into values* (London: Alma Books, 1991).
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