

A DROP IN THE OCEAN - A TRACE OF LIFE© [PROPOSAL FOR HOMECOMING, AN ATLANTIC ODYSSEY©]

INTRODUCTION: ART, ECOLOGY, QUESTIONS

I perceive our ability to survive climate change as the enactment of an evolutionary narrative. My interdisciplinary research attempts to integrate quantitative and qualitative methodologies into the creative process. This informs my arts practice that generates poetic dialogues to resonate as creative interventions, in pursuit of aesthetic diversity to develop communities of inquiry for an eco-centric culture.

I refer to my practice as 'Ecological Art' and I use two definitions to help me situate it. From the Oxford English Dictionary - **ecology**: the study of organisms in relation to one another and to their surroundings, derived from the Greek word, *oikos*, meaning house, or dwelling. But for **art**, I look to the word, '*rt*' from an Indo-Aryan noun/adjective of the *Rg Veda*, meaning the dynamic process, by which the whole cosmos continues to be created – virtuously. I was assured by Vandana Shiva that this word is used in contemporary Hindi.

My arts practice revolves around my need to ask questions – it's how I got into research. Unlike many artists, I'm not particularly interested in the product, the art form or the style of my work – I use and do whatever I need to do, to make and address those questions. Essentially, I'm concerned with the process of creating proposals or, in the original sense of the term, 'making an argument' – finding agreement.

One such consideration about the nature of water started ten years ago and it continues fascinate me, so I'd like to share it with you.

CONTEXT & CONTENT

A Drop in the Ocean

This presentation makes a proposal for a touring gallery artwork that will, itself, form the basis of a proposal for a subsequent 'live' artwork that will trace the journey of one waterborne bacterium from the source of the River Mersey in the Pennine Peak District, as it flows through the Irish Sea, into the North Atlantic Drift, where it flows West past Greenland before vaporising into a cloud and blown South down Canada and the USA to fall as rain on the Appalachian Mountains, forming the Chattahoochee River, flowing through Atlanta and down to the Gulf of Mexico, passing Bermuda to float East across the Atlantic Ocean in the Gulf Stream, drifting by Portugal and Spain, to vaporise again into a cloud, then arriving on a South-Westerly, to precipitate on the Pennines and rise again as the Mersey.

A Trace of Life

Initially taken from the River Mersey, the bacterium will be identified, named 'Ulysses *species nova*' and given a unique phosphorus tracer tag before being released back into the river. Conceptually, it is possible to detect our bacterium at each place of water sampling on the journey. However, it could equally remain in an Atlantic trough for 500 years and provide some alternative story-lines. The potential for sightings and the ensuing dialogue are as important as actually witnessing the arrival of our bacterium.

Atlantic Odyssey

The work is designed to evoke themes of enquiry in critical futures and foresight studies through a form of 'transformative, reflective practice' (Habermas). Some of the questions it raises are:

- Water and the sun's energy offer potential for life on Earth. Bacteria represent a possibility for new life to evolve. The Atlantic Ocean is one ecological system that offers habitat for such hope. How will global warming and climate change affect this situation?
- Can a bacterium adapt to and survive the different states of water on this journey (liquid, solid, vapour, fresh, saline)?
- Does the presence of bacteria in water, with their ability to swap genes, evolve according to need and even create new atmospheres, suggest that the weather is a biological phenomenon?
- If the weather is a biological phenomenon, does this suggest that 'climate change' is an expression of biological evolution?

FORM

The work for gallery exhibition is a 9-minute audio-visual, animation and digital film sequence. Audio and visual elements are completely integrated in this charting of the potential journey and sightings of the bacterium.

Using GIS and meteorological satellite animation together with moving and still, archive and personally shot images, the work is a rhythmically edited visual narrative. The soundtrack comprises a composite of samples edited and 'laid down' with an extended Haiku-style poem, narrated by a voiceover.

POTENTIAL EXHIBITION OUTCOMES

Homecoming

The exhibition will initiate the creation of a trans-Atlantic 'footprint' of partners and collaborators from diverse disciplines to participate in this extended live artwork. The artwork presents a series of critical futures narratives drawn from the dialogue of diverse, perspectives, to make new metaphors of understanding.

Adapted from Homer's *Odyssey*, the idea of 'homecoming' plays out in: coming home - becoming home - evolving - arriving home - homebecoming – *eco-ontogeny*.

As the journey of a migrating bird might reveal its story to science, our 'tagged' bacterium will generate data on a trans-Atlantic weather cycle as a multi-media epic tale. The analysis and performance of sighting this bacterium will create an enquiry of poetic rigor ('eco-poiesis'), a dialogue to determine the biological nature of the weather and contribute to our understanding of climate change as an expression of evolution. Perception and understanding of these issues will form a contemporary creation myth to question our relationship to micro/macro-biotic life – our embodied ecology.

The project starts with current knowledge about the life and behaviour of bacteria in the context of evolution and then views this in climate eco-systemic terms. The 'dissipative structure' of water (Prigogine 1980 and Schwenk 1996), the 'autopoietic' nature of bacteria (Maturana & Varela 1998) and the possibility of inherent cognitive processes present in the weather (Margulis 1998) provide the background.

Charting the path of prevailing currents and winds, the artwork will plot our understanding of the ability of microorganisms to survive changing states of water - and their ability to change the state of water they inhabit. It will, also, develop methods of sampling, isolating, visualising and identifying microorganisms in twenty-seven (or more) trans-Atlantic sites – foregrounding the ocean and the dynamic processes of water.

IN THE MEMORY OF WATER

As a research project, *A Drop in the Ocean, A Trace of Life* joins another of my projects, *Rivers from the Future* to form *In the Memory of Water*, MIRIAD's contribution to a research collaboration with INTERFACE at the University of Ulster and CLEAR at the new University of Cumbria. Together we have developed WATERFUTURES : DETERMINING CULTURE, a five-year research programme.

So, engaging with the natural sciences, my two arts practice led projects converge as one. *Rivers from the Future* and *A Drop in the Ocean: A Trace of Life* become *In the Memory of Water*. As E. O. Wilson (1998) quotes from William Whewell's *The Philosophy of the Inductive Sciences* (1840):

“The Consilience of Inductions takes place when an Induction, obtained from one class of facts, coincides with an Induction, obtained from another different class. This Consilience is a test of the truth of the Theory in which it occurs.”
Or, ‘a “jumping together” of knowledge by the linking of facts and fact-based theory across disciplines to create a common groundwork of explanation.’

Here, the value of freshwater and watershed ecology, under culturally induced stress, coincides with trans-Atlantic water/weather systems as a bio-climatic expression of evolution. Together they situate more than my arts practice and questions, they situate our interdependence in water.

DRAFT EXTRACT

A DROP IN THE OCEAN - A TRACE OF LIFE ©

A homecoming
A drop in the ocean
A trace of life

Drawn from the source
Named and cast back to flow
Under the sun

Water, sand, time
Life drawn in the mingling
Mud, mist and scum

Preserving cultures
In extreme environments
Draw breath, mark time

Singing a round
Of fish, storms, clouds and mountains
Time to question

We are the landscape
Embodied evolution
Of our making

Being and knowing
Towards the sixth extinction
Water as life

Connected in water
Where the seas touch the sky
Tears bring forth oceans

Homecoming: '... drifts with
The rise and fall of the surf ...'
Phytoplankton blooms