

on the w@terfront



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"O Brave New World": A Change in the Weather.

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1. ABSTRACT / INTRODUCTION

1.1 SUMMARY

*The concept of "Waterfronts" becomes a powerful poetic metaphor. A point of departure and arrival in understanding arts practises. The ebb and flow between definitions of Nature and Culture. The littoral from which evolutionary transition is made. Referencing *The Tempest* by William Shakespeare (1564 -1616) some paintings by Turner and the drawings of Leonardo da Vinci (1452 - 1519), this presentation considers how Public Art in the context of urban and social development may start to engage the issue of Climate Change. It will also explore our relationship with water from different perspectives, as a learning process.*

1.2 APPROACH / PHILOSOPHY - IN PRACTICE

Acting as a creative catalyst I devise collaborative strategies to engage the economic, social and environmental values of the day - to further the understanding of 'Creative Ecology' as an interdisciplinary art form. My development of active research at the Manchester Metropolitan University with Arts for Health and Water & Well-Being play an important part in this.

1.3 UNCERTAINTY & RISK / FEAR & UNDERSTANDING

With the best intentions, anthropocentric intervention can sometimes destroy the very things it values - including itself - and it develops the language to do it. Predicting the effects of art can be as risky as forecasting the weather. "Waterfronts of art" will prompt stories of creation, but 'A Change In The Weather' may evoke evolution? "O Brave New World".

SFX Thunderstorm introduction to - "Riders on the Storm" ...

SLIDES Leonardo - Deluge Turner - Storm

"O, wonder!

How many goodly creatures are there here!

How beauteous mankind is! O brave new world,

*That has such people in't!" [Miranda, Act V, sc. 1 - *The Tempest*]*

Please indulge me in this presentation. Shift your focus and suspend your disbelief.

2. WATERFRONTS

I would first like to explore and contribute some of the active metaphors evoked by the notion of "Waterfronts". This will introduce the broad issues I wish to address and some of the poetic possibilities. With the help of William Shakespeare, Leonardo da Vinci and few other ecological artists, I hope to add to the diversity of the conference theme.

2.1 TIDE MARKS & TEMPESTS

So what of Waterfronts? The edge dividing land from sea, or bank from river? Or perhaps the shoreline, marking the pattern of tides. Between one time and another. Between one place and another.

Perhaps, Waterfronts looks to the Littoral. The edge between atmospheres. The place between states of being, where the ebb and flow of evolution finds a rhythm. And we may consider 'fronts' and membranes, fractals and Mandelbrot facets when identifying riparian or coastal forms. The boundaries and integrity of a place. The surface tension containing every drop.

Waterfronts like The Tempest can be a metaphor for transition. A Tempest, a shocking shift from one state of being to another - from hot to cold (Ref: Beuys) from high to low pressure. A confrontation or an electrifying exchange. A cacophonous release of energy. The sort of dynamic event that prompts a revolution or an evolution. It could even provoke a paradigm shift in thinking - in seeing?

2.2 NATURE & CULTURE - SCIENCE & ART

As an Englishman, delivering this presentation in Barcelona, I am very aware of our histories of maritime discovery, of Empire, trade, industry and the exploitation of natural and human resources. I am aware of the 'Public Art' that celebrates these historical 'Waterfronts' and some that proclaim hope for the future.

Based in Manchester, once the heart of the Industrial Revolution, with its docks and constructed sea route, I am also aware of another water phenomenon - the weather; and rain in particular.

This brings me to The Tempest by William Shakespeare. Published and performed in 1623, some 130 years after Columbus voyaged from this city's 'waterfront' to the New World.

Shakespeare's play is based on the "Bermuda Pamphlets", a true account of a trade mission to the English plantations in Virginia.

*The play starts with an enormous storm that splits the King of Naples' ship from the fleet. Blown off course, the ship is fortuitously grounded within reach of land. The survivors are delivered onto a paradise island where they engage a 'New World'. There, amidst a power struggle for the Dukedom of Milan and a political marriage of convenience, Shakespeare's characters enact a debate that continues to this day. Led by Prospero the rightful Duke of Milan and his spiritual adversary, Caliban the perennial question of '**Nature versus Nurture**', which is supreme and which should we favour in our actions? Mind or matter? Culture or biodiversity? Art or life? Science or Art?*

This schism has been paradoxically central to cultural development since Leonardo's Renaissance. And the polarised way of thinking continues to prevail in the Western perception and understanding of our world and indeed the universe.

3. RENAISSANCE & REGENERATION

*Shakespeare's *Tempest* addresses the New World in the context of the Old. Like the work of Leonardo, it looks at a New World emerging from the Old - a new perspective. The potential of the future to be born out of the past, not frozen in a heritage time-warp, or as Helen Mayer Harrison & Newton Harrison (*The Harrisons*) put it: "Every place bespeaks the story of its own becoming". Today, Regeneration and Urban Renewal tell their own stories.*

Regeneration like the Renaissance is driven by economic values with belief systems often based on misconceptions of the past. And just as Prospero's Art is used to re-address injustices, so too are artists today often expected to perform magic to patch up political, social and environmental problems. Rarely is this the 'Social Sculpture' proposed by Beuys. I am pleased to say, however, that there are signs in the UK of attempts to address such issues, even at a meaningful scale of government and planning. It is easy to be cynical, but New Labour's New World is actively moving towards something called Social Inclusion and this is being approached holistically. The effect, with regard to funding policy, may be a significant shift away from architectural forms of Public Art to social processes and outcomes.

Over the four two years, through my practice, work with The Harrisons and various research and planning institutions, I have seen proposed visions move to research projects, to policy, and even to strategic planning. It never happens exactly how you want it, but that's part of the process of understanding, adoption and implementation.

Two brief examples of this are:

a) The first, initiated by 'artranspennine98', sees the moves towards acceptance by the Regional Development Agencies in the North of England to promote housing development in the form of the Harrisons' "Eco-Urban Edge", a principle already adopted as policy in Holland, which favours development along the edges of existing towns and cities. This maintains the separate physical cultural integrity of urban development, while conserving the continuity of biodiversity.

b) the other example is from my research at the Institute for Terrestrial Ecology (ITE). They have used the Countryside Information System (CIS) as a database and design tool to present planning proposals and predictions on land use for government and industrial use, since 1988. CIS uses data sets gathered from field studies and satellite imaging, and this information is used in conjunction with specified 'Landscape Categories'.

In their review and update of the System last year, they became perplexed by my problems with their definitions of 'Urban' and 'Rural'. It was obvious to me that there was no cattle farming in central Manchester, but that there are vast, unrecognised, tracts of 'Brownfield' wildernesses that form an integral relationship between the urban and rural land. So, ITE recognised 'Urban' as a Landscape Category.

As a result of this recognition, they had to acknowledge something called 'Human' as a criterion to define Urban. This in turn forced them to include this new criterion in the definition of Rural Landscape Categories. So, it is now officially recognised that humans are integral to the landscape and not separate from it.

Finally, on this point, the Institute of Terrestrial Ecology are now considering ways of linking up with the Institute of Hydrological Ecology ... someone asked if water and land patterns should not be inter-related?

4. AN ECOLOGICAL ART,

LEARNING & UNDERSTANDING

4.1 ART IN THE PUBLIC INTEREST

As an artist, what is the most important thing I need to do now to bring the whole to life?

The Tempest considers the skills and abilities needed to survive the 'New World' and challenges our dominant perspectives. Many commentators have noted the possible auto biographical characterisation of Shakespeare's Prospero's and that he used the role to promote his own 'Art'.

The word art in Greek meant skill, or the practice of skills and was personified by Daedalus the inventor. We still talk of the art of doing something well - cooking, gardening, football. The how of doing things, tekhnē, has become technology, but now the idea has less to do with the exercise of practical skill and more to do with power. So, we loose the Art, practised by Prospero and Deadelus - an intimate and integrated relationship of art, technology and magic - in favour of cultural abstraction..

Although 'cultured', Prospero's Art remains practical, inventive and virtuous. His Art is employed to achieve supremacy over the natural world by holy magic and supernatural virtue- the absolute perfection of "Natural Philosophy" (Science). It incorporated astrology, alchemy, and ceremonial magic and its purpose was to redeem the world of civility and learning. Its antithesis of black magic was the practice of his vile opponent from the New World, Caliban - the 'salvage' man of Nature.

But that notion of art being virtuous actually predates the Greek word, areta, with rta from an Indo-Aryan noun/adjective of the Rg Veda, and it is the root of many words of virtuous quality.

Rta meant the dynamic process, by which the whole cosmos continues to be created - virtuously.

*Here I make the link to what may be called 'ecological art'. **Ecology** "... the study of organisms in relation to one another and to their surroundings...", derived from another Greek word, oikos, house, or dwelling.*

To help me define ecological art and my own practice, I wrote the following:

4.2 STATEMENT OF PRACTICE ...

ECOPOIESIS©: Creative Ecology.

*To draw on arts processes, to **question** concepts, values, perceptions and practices currently held by our society.*

*In cultural diversity and biodiversity, the aim is to further **understand** our relationships to one another and to our environment.*

*Through artworks and collaborative projects of many media, we need to **envision** and invent systems, networks and **capabilities** that value future generations.*

Developmental experience and management skills from community, industrial and commercial contexts may contribute to creative ecological research / practice.

*The practice generates **dialogue** to provoke critical debate, and this may evoke an equitable community of enquiry, learning and care.*

ECOPRAXIS©: Practising the art of Ecology.

4.3 DEEP ECOLOGY MOVEMENT

Embedded in that statement is the idea of creativity in its broadest sense being fundamental to both art and nature. This notion is made more potent by the concept of Deep Ecology.

Ecocentric, not anthropocentric. A philosophy that enables its supporters to ask deeper questions.

Arne Naes, the Norwegian philosopher, contrasts the difference between the Shallow and the Deep Ecological movements and we can see many of its elements entering our consciousness:

"1. The Shallow Ecology movement:

Fights against pollution and resource depletion. Its central objective is the health and affluence of people in developed countries.

2. The Deep Ecology movement:

(i) Rejects the human-in-the-environment image in favour of the relational, total-field image. ...

(ii) Promotes Biospherical egalitarianism - in principle ...realistic praxis..

(iii) Advocates principles of diversity and symbiosis. Diversity enhances the potentialities of survival, ...

(iv) Anti-class posture. Diversity of human ways of life. ...

(v) Fight against pollution and resource depletion. In this fight ecologists have found powerful supporters, but sometimes to the detriment of their total stand....

(vi) Complexity, not complication. ...

(vii) Local autonomy and decentralization."

4.4 WATER & WELL-BEING

So, an art of the highest utility? Perhaps, this is a learning-focused type of creative education that Fritjof Capra has developed from Steiner to 'ECO-LITERACY, or Susan Lacy's 'Service Art'. Or Sculpture Chicago's "Culture in Action".

Anyway, I am pleased to say that the Manchester Metropolitan University embarked on a programme of Social & Environmental Research Practice, thanks to Professor Margaret Harrison. The Faculty of Art and Design recognised that a number of individuals were

researching and pursuing their arts through similar themes and saw the potential for issue-based development. From this "Water & Well-Being" was set up by a fine artist (Mel Chantrey), a landscape designer (John Dyke), the Director of Arts for Health (Peter Senior) and myself.

Within a year, we have each developed and diversified our individual practices, while contributing to the central theme of studying the creative use of water in public domain.

W&WB has initiated and been invited to join many pure and applied research projects. These include:

Designs for fountains and water sculptures,

Neuro-physiological experiments into the effects of water on people,

The psychological role of water in environmental contexts

The creative use of water in Psychiatric Care,

A History of Landscape Design in Psychiatric Institutions,

A Celebration of Water Features in Manchester.

My work includes new developments in **ARTS for HEALTH** - with a particular regard to Social Inclusion and the development of a Creative Health Strategy. And with regard to water, I am developing three Research/Practice projects concerned with Microbiology and Climate Change:

Dialogue with Streamers: Drawing with Algal Biofilm Flow Forms ©

With the introduction of Health & Safety legislation to minimise the risk of water-borne diseases (such as Legionella), artists and designers of water-based public artworks currently rely on approved (BS / ISO) mechanical filtration systems and regimes of chemical purification to inhibit the growth of algal and bacteria biofilms. This strategy is normally considered separately from the aesthetic purpose of the artwork. With regard to Leonardo da Vinci's designs for sewage systems and current mathematical modelling and flow analysis simulation, this study considers the integrated management and control of biofilm within the design process, thus developing a sustainable aesthetic and practise for practical application.

Ethic Cleansing: Including the Excluded ©

In the 1970's advances in the technology of scientific instruments prompted a rapid increase in the discovery and registration of new bacteria. By the end of the decade, as a matter of expediency, the names of 250,000 'species' were purged from the taxonomic classification of bacteria. A constant 25,000 remain recognised. In the name of cleanliness, our culture continues to pollute water systems with biocides to rid itself of the 'other', the unclean, while society is fed on fear and antibiotics.

Through the publication of a rediscovered bacterium, a name will be identified and restored. An installation of scrolls will reveal the bacterium in its taxonomic and ecosystemic contexts. A counter memorial set of scrolls will name the 'disappeared' taxonomy of bacteria. The Latin, taxonomies will be set to a chant and performed from the scrolls.

This bacterial rite of passage maps a metaphor to resonate with cultural actions at the macrobiotic scale.

A Drop in the Ocean: A Trace of Life ©

This 'live' artwork will trace the journey of a water- born bacterium from Manchester's River Medlock to Liverpool, in time for the Society of Ecological Restoration's Symposium, and then through the Irish Sea to the North Atlantic Drift where it evaporates into the atmosphere and is blown South down the USA to fall as rain and flow into the Chattahoochee River, passing Atlanta in time for an exhibition at the Atlanta College of Art Gallery in October 2000, then down to the Gulf of Mexico where it follows back across the Atlantic Ocean in the Gulf Stream, evaporating again and precipitates on the Pennines to flow back to Manchester, via the River Medlock.

Conceptually, it is possible to detect our bacterium, and many others, at each water sampling on the journey. Is the Ocean that separates our two cultures not the thing that connects the UK with the USA? Is the dynamic weather system more important than terrestrial closeness? Can a bacterium survive the different states of water (liquid, solid, vapour)? Dose the presence of bacteria with the ability to swap genes and evolve according to need suggest that climate, itself, is a biological phenomenon?

4.5 INTERDISCIPLINARY RESEARCH INITIATIVES

One of the most important achievements for Water & Well-Being, has been the methodology/practice that has evolved. As many of you are aware, the debate about what may or may not constitute research in art continues to be a thorny issue. I am not going to pursue that here, except to acknowledge that each side could learn a lot from the other.

The name, Water & Well-Being, has become synonymous with our understanding of what arts research / research in art might be. From an inter-disciplinary viewpoint, our small unit involves all the Departments in the Faculty of Art and Design It also works across the different Faculties within the University, so we are able to work with quantitative methods from the Natural Sciences (water) and qualitative methods from Social Sciences (well-being). The ampersand (&) is what we contribute as creative catalysts - bringing the other disciplines together. This is largely achieved by not concentrating on departmental discipline, but by focusing on the issue at hand, be it practical or philosophical. Each is embedded with its own aesthetic.

This diagram starts to map a possible set of relationships, based on Fritjof Capra's synthesis of elements existing in all living forms.

Structure - Pattern - Process

water well-being

natural science social sciences

thesis

/antithesis

quantitative

qualitative

structure

pattern

&

arts synthesis

creative process

5. INVENTING THE FUTURE

5.1 A CONFLUENCE OF IDEAS

Finally, I would like to consider an art of creative ecology and its contribution to Waterfronts of art in the context of climate change. Each of the following elements must be considered embedded within the others and of no greater importance.

5.1.1. The processes of urban development and regeneration must be understood in terms of its social AND ecological implications for the transformation of the city to be sustainable. < COGNITIVE PROCESS >

5.1.2. The public artist's role in this context is to act "on the urgency of the moment" [Helen Mayer Harrison & Newton Harrison]. A prime activity is the development of creative relationships between diverse disciplines to generate the capabilities necessary to invent solutions for dwelling. < PATTERN POIESIS >

5.1.3. The support from higher education is crucial for the development of artists to contribute to the generation of a 'community of enquiry'. Artists need to learn how to be creative practitioners and how to care. Institutions need to be dynamic 'learning organisations'. < DISSIPATE STRUCTURE >

5.2 CLIMATE CONSIDERED

Tell the Story. It's a creation myth for survival.

First consider climate as a biological phenomenon.

Then ask 'what is our part in this?'

The unpredictability of weather suggests that it is

Not a question of cause and effect,

But perhaps,

A Dynamic symbiotic, structure, pattern and process.

Now consider the part played by water.

Anaerobic organisms evolved from the first domain

Hosting cells to respire to create a new atmosphere.

Forming themselves to become the second domain.

Is our survival to be a reaction to climate change,

Or a response to climate evolution?

What part will water play then?

5.2 NOT KNOWING THE ODDS

As an allegory for enquiring of the Old World through our attitude to the New World, The Tempest also examines our fear of the unknown. Not just fear of embarking from the safe harbour of knowledge across the sea of uncertainty, but of the unpredictable changes that transform our familiar world into the unknown. Columbus's New World put the known world into a new context. It questioned old belief systems and in so doing, it generated great fear of uncertainty. No wonder that Descartes, the great mathematician, cartographer and philosopher found refuge in the clockwork mechanism.

This is illustrated by the Renaissance fashion for Apocalyptic visions and Leonardo's late drawings of the Deluge also show this preoccupation. Water becomes a frightening phenomenon in violent climatic conditions. His aesthetic, however, was to envision this as the stuff of life. He continued to invent and create with pathological optimism, knowing his ultimate fate in the face of Natural forces. And with regard to our response to Climate Change, or Climate Evolution, I suggest we follow his example. He wrote on the subject of morals:

"Now you see that the hope and the desire of returning to the first state of chaos is like the moth to the light, and that the man who with constant longing awaits with joy each new springtime, each new summer, each new month and new year - deeming that the things he longs for are ever too late in coming - does not perceive that he is longing for his own destruction. But this desire is the very quintessence, the spirit of the elements, which finding itself imprisoned with the soul is ever longing to return from the human body to its giver. And you must know that this same longing is that quintessence, inseparable from nature, and that man is the image of the world." [Leonardo da Vinci - (1162)]

David Haley, August 1999

NOTES & REFERENCES

DATES: Christopher Columbus (1451-1506 - First voyage to New World 1492)

Leonardo da Vinci (1452- 1519)

William Shakespeare (1564- 1616: The Tempest 1623)

Rene Descartes (1596-1650)

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