Finding fluid form: A process aesthetic as a means to engage with the prevailing entitative model of thinking in ecological art

Andy Webster

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Abstract

This thesis considers common approaches to eco-art practice and its established discourses. Through a critical review of the field it identifies problems in practice and theory that are potentially counterproductive. It outlines methods used in eco-art that, whilst seeking to address environmental concerns, may unintentionally perpetuate the approaches and attitudes of the prevailing view. The thesis argues that as these approaches and attitudes are widely understood to lie at the cause of current problems its continued use is inappropriate for engaging with ecological issues.

In response to this problem the thesis draws together insights from arts practice and theory, Systems Thinking, Cybernetics, Artificial Life research, Deep Ecology and Process Thinking. It develops an experimental framework to guide the initiation, production, dissemination and evaluation of arts practice, which can critically engage with the approaches and attitudes of the prevailing view, but do so without perpetuating these. For the purposes of this thesis the framework is called a process aesthetic.

The thesis describes how the process aesthetic is developed and tested through the undertaking of new creative practice, and the critical reflection upon this. The written component of the thesis concludes with an evaluation of the relevance and potential of a process aesthetic, and a consideration of what it might offer to our understanding of ecological art.

The thesis contributes to the field of eco-art by drawing upon thinking and practices normally considered peripheral to its discourses. This identifies problems, which contradict its aim of challenging the approaches and attitudes of the prevailing view - problems which to date have been under-acknowledged and not adequately theorised. It establishes that arts practice guided by the process aesthetic demonstrates an approach that can overcome problems recognised within existing eco-art and can act as a critical tool for disturbing the approaches and attitudes of the prevailing view. The thesis establishes that the process aesthetic can be used as a guide for future eco-arts practice and can be a means of regrouping existing artworks, which would normally be overlooked by eco-art discussions. This extends the diversity of eco-art discussions to positively broaden its critical discourses. It thus offers a new and appropriate methodology for arts practice that seeks to engage with environmental issues and ecological thinking.

Contents

4.0 An outline of some of the attitudes, approaches and guiding metaphors of the prevailing model; re-imagining the world as process, and considering arts possibility for thinking and acting differently

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Acknowledgements

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1. Submission statement

This research project consists of the written thesis and an accompanying DVD portfolio of artwork. The portfolio presents documentary materials, publications and an exhibition history of practice.

1.1. Introduction

Research questions:

How might arts practice work within the approaches, attitudes and guiding metaphors of the prevailing view to set up the possibility so that alternative ways of thinking and acting might come to the fore?

How might an experimental framework be developed which can be used to help guide new arts practice to open up the possibility for alternative ways of thinking and acting?

1.2. Statement of the research problem

The contemporary context of ecological crisis has established an imperative to reconsider and re-evaluate the principles on which we base our comprehension of the world. Growing awareness of the consequences of climate change and recognition of the human contribution to the escalation of the ecological crisis has necessitated an urgent reassessment of the principles we use to think about and act in the world.

The guiding principles of the prevailing model of thinking are founded on a conception that understands the world as being composed of static, separate and discrete entities, which for the purposes of this thesis this is described as an 'entitative' view. Informing this conception are epistemological errors widely recognised to be the cause of dysfunctional attitudes and relations between humans and the environment that have led to current social and environmental problems. There is a clear imperative to find a way of overcoming this epistemological error, and a growing urgency to establish a means of addressing the dysfunctional attitudes, approaches and principles of the prevailing view.

A process model of thinking provides an alternative to the prevailing entitative interpretation of the world. Rather than thinking of the world in terms of static, separate entities, a process view describes the world as ceaselessly changing interconnected processes. This process conception of the world is recognised as a means of overcoming the epistemological error associated with the entitative view.

Drawing together ideas from diverse fields of study, including Artificial Life Research, arts practice and theory, Cybernetics, Deep Ecology, Process Thought, and Systems Thinking, this thesis seeks to develop an experimental framework which can be used to help guide arts practice so as it may critically engage with dysfunctional traits related to the prevailing entitative view. Through doing this, the arts practice seeks to open up the possibility for alternative ways of thinking and acting, such as is suggested by a process model. For the purposes of the thesis this experimental framework is called a 'process aesthetic'.

The research problem is to define, develop, and explore the possibilities and potential of the process aesthetic in relation to the dysfunctional traits of the prevailing entitative model and alternatives such as those suggested by a process model. The research seeks to define and explore how arts practice may work to critically engage with the approaches, attitudes and guiding metaphors of the prevailing view, and through doing so, consider how this might set up the possibility of alternative ways of thinking and acting to emerge, such as those embodied in the process view. The research engages with this problem and explores how the experimental framework can be used to guide the initiation, production, dissemination, and evaluation of new arts practice.

The thesis explores approaches found within the field of eco-art and considers these in relation to those of the entitative model. The research identifies formerly under-acknowledged problems in the field and considers how the experimental framework can be used to develop approaches which overcome these. The research identifies how some approaches in eco-art, whilst seeking to critically engage with the dysfunctional traits of the prevailing view,

unintentionally reinforces rather than challenges the entitative and thus perpetuates the underlying cause of the problems. The thesis establishes that the approach encouraged by the framework can be used as a guide for future eco-art as it is shown to critically engage with traits of the approaches, attitudes and metaphors of the prevailing model of thinking, but do so without perpetuating these.

The thesis demonstrates that the experimental framework can be used to re-evaluate existing arts practices, typically overlooked by eco-art and its discourses, and regroup these towards a new body of arts practice that opens up the possibility for alternative ways of thinking and acting. The research establishes that regrouping existing works in this way may productively extend and contribute to discussions within eco-art and its discourses.

1.3. Aims of the research

The thesis aims:

1. To consider how arts practice might work within approaches, attitudes and metaphors of the prevailing entitative view to set up the possibility for thinking and acting differently.

2. To bring together aspects from systems thinking, cybernetics, artificial life, deep ecology and process thinking to produce a framework for a practice-led approach that can critically engage with aspects of entitative thinking.

3.   To develop a body of work that explores, tests and demonstrates the capabilities of the process aesthetic.

4.   To consider how this approach might avoid problems recognised in existing eco-arts practices and discourses, and guide future artworks within this field.

5.   To consider how this approach might help re-evaluate and regroup existing arts practices to expand the scope, possibility and discourses of eco-art.

1.4.   Literature and contextual review

Chapter two describes the literature review and this establishes the context and conceptual overview from which the thesis was developed. The literature review is organised into four separate chapters, starting with the outline of the review in chapter two, which is then extended in subsequent chapters (4, 5 & 6). Together, these related chapters establish an extensive review of the literature and context. Chapters 2, 4, 5 & 6 address a primary question of the research which asks how might an experimental framework be developed which can be used to help guide future arts practice so as it might open up the possibility for alternatives to come to the fore?

The review draws upon a wide range of literature from diverse fields including Artificial-Life research, Arts Practice, Art Theory, Cybernetics, Deep Ecology, Evolutionary Biology, and Process Philosophy. I establish a metaphor of '*fabric*', derived from the cybernetic thinking of Gordon Pask (1961), to

express the relations between the discourses and ideas, which the research draws together. Pask's concept of *fabric* describes an indeterminate substrate of materials, processes and events that encourages connections with their environment. The constituents of a Paskian fabric are ambiguous and not known in advance; hence how they might forge connections with their environment cannot be predetermined. A rich fabric, Pask argues, is fundamental to setting up the possibility for novelty and surprise within a system. This metaphor describes the conceptual ambition of this study, which is to draw together a diversity of literature, ideas, media and thinking in the search to produce something akin to a rich fabric. Given the indeterminate nature of the fabric, articulating and conceiving how these materials might come together has been a significant process throughout the research.

The image of a fabric being produced by the weaving together of ideas found in the literature is appropriate. However, the metaphor that I have used to guide the study has not been one of a woven cloth but something more akin to patterns that emerge in fluids. I draw on ideas in Carter (2006) to imagine the process of bringing ideas together from differing sources and diverse areas of literature as analogous to the wakes produced by vessels moving across the sea. One might imagine that the meeting and overlapping of wakes produced by these different vessels (different sources, texts, ideas) as moving in different directions, with differing purposes, and often with seemingly little relationship between each other. These wakes might be preserved to yield emergent, temporary interconnective patterns, a fluid and dynamic weaving of sorts, what Carter (2006) describes as a 'cross-weave of thought' (2006: 23). The overlapping of the wakes, produce points, patches, blotches where ideas meet,

fuse and blend, and this ephemeral wake generated weave is analogous to the formation of Pask's fabric.

The literature review establishes a way of producing and then reflecting on this wake-generated weave, and of considering the connections and relations that have been formed. The main body of the literature review is organised into three related sections:

a.   The first section (Chapter 4) establishes some of the attitudes, approaches and guiding metaphors of the prevailing model; it re-imagines the world as process; and then considers arts possibility for thinking and acting differently (see Chapter 4, p.60).

b.   The second section (Chapter 5) defines some of the characteristics of eco-art. It considers eco-arts possibility to generate alternative approaches, attitudes and metaphors to the prevailing model of thinking, but also identifies how it might perpetuate these (see Chapter 5. p.91).

c.   The third section (Chapter 6) develops an experimental framework, a process aesthetic, and proposes this as a means of generating places of breakdown and new relations within the metaphors, attitudes and approaches of the prevailing model of thinking (see Chapter 6, p.129).

1.5.   Methodology

In Chapter 3, the principles underpinning the practice-led emergent methodology are described. It establishes the rationale and principles

underpinning the development and use of the methodology (3.2). The chapter presents an overview of the specific research methods used and describes three principal strands of the inquiry that are used to undertake the research (3.3). This includes: the search for and development of the constituents of the experimental framework (3.1.3); the testing, development and application of this framework through the iterative making processes of practice (3.1.4); and the analysis, re-evaluation and re-grouping of existing practice using the framework (3.1.9).

Chapter 3 establishes how these strands might be brought together to evaluate the findings of the study, to establish the usefulness of the framework, and to review the thesis that has been arrived at. The methodology for the research project is practice orientated and references aspects of action research. As revealed in chapters 6 through to 9, it is iterative and reflective in nature. To this extent the methodology, integral as it is with the practice, is implicitly established in these chapters. It is supported by peer feedback through public exhibitions, international conferences, catalogues and accompanying refereed papers, which can be found in the appendices within the DVD portfolio.

1.6. Outline of chapters

1.6.1. Chapter 4

Chapter 4 (see, p. 60) describes characteristics of the approaches, attitudes and defining metaphors of the prevailing model of thinking understood to lie at the root cause of the current ecological crisis. It establishes how insights from

Deep Ecology and Process Thought represent alternative ways of thinking that could overcome many of the problems associated with the prevailing view. It considers how one might break from and produce a shift from away from the attitudes and approaches that contribute to the current ecological crisis. It describes how this is neither straightforward nor perhaps desirable as the approaches proposed typically embody traits of the prevailing view. It describes how, as a consequence, an alternative approach is necessary that does not perpetuate those of the prevailing view. The chapter considers how art might set up the possibility for alternative ways of thinking and acting. From the perspective of the prevailing view, art is typically viewed as insignificant in comparison to other areas of study, such as the sciences, and as a consequence its possible contribution to discussions is frequently overlooked. The chapter argues that arts practice might, in contrast to the rational, scientific and technologically driven problem solving approaches of the prevailing model, be able to set up the possibility to produce alternative metaphors, and different ways of thinking and acting.

1.6.2. Chapter 5

Chapter 5 (see, p.91) focuses upon a field of arts practices known collectively as eco-art and establishes that this is perceived as offering an alternative way of thinking and acting to the prevailing view and as a consequence is understood to be capable of addressing current environmental and social problems. The chapter argues that although eco-art seeks to encourage an alternative way of thinking and acting, some approaches and attitudes perpetuate and reinforce

rather than disrupt the prevailing view and, by doing so, may unintentionally maintain the cause of the problems it seeks to address. The chapter establishes some approaches found in eco-art and then draws upon thinking from outside of its field to help evaluate these. It identifies some aspects that perpetuate rather than challenge the prevailing model of thinking. It describes recent eco-arts practices, in particular those that encourage a *dialogic* approach, which overcome problems associated with the earlier work. It considers the implications of the co-option and instrumentalisation of the language of environmentalism, evidenced in the shift of its terms from a peripheral dissenting voice to the dominant mainstream, and questions the viability of the continued use of its terms and language.

1.6.3. Chapter 6

Chapter 6 (see, p.129) establishes the conceptual and contextual basis for an experimental framework, which for the purposes of the thesis is described as a 'process aesthetic'. The process aesthetic is used to guide new arts practice that works with the approaches, attitudes and metaphors of the prevailing model of thinking to set up the possibility for thinking differently. Chapter 6 considers how new artworks might be organised in ways that foster the surprising, novel and unpredictable. It draws upon insights from Bateson (2000), Zepke (2005), and O'Sullivan (2006), to describe the idea of the artwork as an encounter and considers how such artworks encourage the possibility of a different way of thinking about the world. It describes approaches used by a grouping of artists, who orchestrate artworks such that emergent events might occur. The artists

set up their work in ways that can lead to new patterns, structures and events that are irreducible to earlier states and cannot be predetermined. The chapter draws upon insights from the field of cybernetics, specifically from the thinking of Ashby (1956) and Pask (1961) and establishes the idea that for a work to be surprising and novel a requirement is that elements of the artwork have to be left open-ended and indeterminate, and set up in ways such that feedback from the environment can contribute to its configuration. Chapter 6 describes how this open-ended approach may be understood to encourage a different attitude to engaging with problems. It suggests that finding a way to address a problem does not mean asserting more control but in fact potentially the opposite – it seemingly requires less control. It considers how this approach might be developed such that it can be used to guide new work that critically engages with aspects of the prevailing entitative model of thinking, but does so without perpetuating these. It considers the implications of the co-option and instrumentalisation of the language of art, in particular its notions of creativity and innovation, and discusses how the continued use of its terms and language has been problematised. The chapter concludes by summarising the experimental framework, which the thesis describes as a 'process aesthetic' and considers how this might produce different metaphors that break from those of the prevailing model and sets up the possibility for ways of thinking differently about the world.

1.6.4. Chapter 7

As described below, chapters 7 to 9, describe the development, testing and application of the process aesthetic through the production of new creative practice. Chapter 7 discusses how the process aesthetic is used to guide the first iteration and preliminary strand of new practice. It describes how this new arts practice works within traits found in existing artworks that are recognised as perpetuating characteristics of the prevailing model of thinking. The chapter discusses how this new work engages with attitudes and approaches that consider materials as inert and subordinate to the artist's intentions and describes how it seeks to disturb the notion of the artist as a visionary figure. It reflects upon and evaluates the artworks to consider how the use of the process aesthetic might have helped set up the possibility for different relations with materials and making processes. It establishes how the new artworks can be seen to critically engage with and disrupt notions that materials are subordinate to the artist's intentions and visions. It describes how the new work can be understood to translate the relations between artist and materials to produce a different vocabulary than the prevailing model. A consequence of this is that materials are no longer seen as passive but dynamic; rather than being subordinate, the materials are active participants in the unfolding of the artwork; they are no longer chaotic and without order, but are understood as active generative processes capable of self-organisation. The chapter identifies aspects of the approach that conforms to, rather than challenges, the prevailing model of thinking. In particular, it identifies how the dissemination of the work is predictable and conforms to accepted ideas of exhibition, and as a consequence could be understood to maintain rather than translate traits found in the prevailing model. It establishes that although the process aesthetic was

successfully applied to guide and steer the production of new artwork, it was not used to critically engage with the conventions of exhibition and of the display and documentation of these works. It acknowledges the necessity to apply the approach to all aspects of the works' development, production and dissemination.

1.6.5. Chapter 8

Chapter 8 describes developmental works which use the process aesthetic to engage with aspects of the prevailing model of thinking but which also respond to the problems found in the first iteration of practice. An aim in the new work is to further explore the dissolution of existing forms as a critical and dissenting practice. The new work focuses on aspects of the entitative model of thinking found in dominant cultural narratives that have in some way become fixed and entrenched, and attempts to proceed by loosening, opening, and encouraging these to be more fluid and responsive to feedback from the environment. The approach is extended and adapted to not only use existing traits, approaches and attitudes as the starting point for work, but also, to use forms that are already rich and potential dissenting in the context of the prevailing model of thinking.

1.6.6. Chapter 9

Chapter 9 describes the third iteration of work, which it calls the application of the process aesthetic, which focuses on working within traits found in

institutional thinking and, more widely, in prevailing cultural narratives. It uses a process aesthetic to engage with aspects of these narratives that appear static, over-determined and closed and seeks to set up possibilities for thinking and acting differently. The new work does not seek to change or correct these existing forms or to propose an alternative model to replace these, but to engage with the existing forms in ways that can offer new interpretations, new translations, and ways of working within the prevailing view.

1.6.7. Chapter 10

In Chapter 10, the process aesthetic is used a means of helping re-evaluate and re-group a body of existing arts works. The vocabulary of the process aesthetic is used as a means of engaging with the artworks and conceiving the work in terms of fabrics and as sets of unfolding interactive processes. In these works one is able to recognise that a basic operation of the process aesthetic, one of dissolution and reconfiguration, is performed, and as a consequence, these works, I argue, produce a different way of thinking and acting in the world. Such works, I argue, might be repositioned to extend existing eco-art discourses, and may be seen as a grouping of art practices related to eco-art that are defined by methodology and not subject matter.

1.6.8. Chapter 11

Chapter 11 restates the research problem and reviews the major methods used to conduct the study. The major sections of this chapter summarise the results

and discuss some of the implications of the findings of the thesis. It evaluates how the experimental framework, the process aesthetic can be used to guide new practice so as it critically engages with traits associated with the prevailing model, but does so in ways that do not reinforce this prevalent way of thinking and acting. Contributions to knowledge are considered and the strengths and limitations of the research are evaluated. Implications of the thesis for future research are also considered.

1.7.   Contribution to knowledge

This research makes a contribution to knowledge through the development of a process aesthetic, an experimental framework that brings together ideas from Cybernetics, Process Thought, Artificial Life and Systems Thinking. The framework is shown as a means to guide the initiation, production, dissemination and evaluation of new artwork. It is used to critically engage with traits from the entitative model of thinking as found in some eco-art, wider arts practice, and in the approaches, attitudes and metaphors of the prevailing view. The framework is shown as capable of helping art to set up the possibility for generating alternative ways of thinking and acting. It is recognised as a means of overcoming some problems within existing eco-art and is also shown as a potential guide for future practice. It is used as a means of regrouping a body existing artworks so as these might contribute to and extend the discourses of eco-art.

1.8. Contexts and motivations for the research

Well-established personal, professional and theoretical motivations lie behind the research.

1.8.1. Personal motivations

From a personal perspective the worsening eco-crisis had prompted the need to reconsider my own contribution to this situation. It had caused me to consider how I was implicated in the problems, and to reassess how I thought and acted in the world. This reassessment had prompted me to ask what role art may have within this crisis, and how it might also set up the possibility for thinking and acting differently. Addressing these questions has been a fundamental motivation for the research.

1.8.2. Professional motivations

Insights gained from teaching at undergraduate and postgraduate level affirmed the importance, wider relevance, and the necessity of asking such questions. Over the previous decade I had become aware of a proliferation of interest by students in environmental issues and problems[1]. A reoccurring question that students asked and continue to ask is what role can art have today? Engaging with this question, expressing a role for art as a response to the current ecological crisis has been a focal point of many important discussions.

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[1] This led in 2009 to the development of a MA course in Art & Environment

Through these discussions I became aware of some reoccurring traits within the conversations. There were tendencies during the discussions for students and lecturers to unproblematically propose that arts' role should be as an instrument of change, as a tool for provoking a shift in consciousness and for changing the behaviour of others. I became concerned by the dogmatic nature of such views and the unproblematic acceptance of instrumental problem solving attitudes. My instinct was that such narrow attitudes, irrespective of good intentions, were fundamentally part of the same problem that lay at the root cause of dysfunctional relations between humans and the environment. I believed that at the heart of this discussion, the desire to change the behaviour of others, was narrow, linear and purposeful – a particular attitude that contradicted what I believed to be ecological perspective.

I regularly experienced the narrowness of such problem-solving attitudes in the tendency for students and lecturers to dismiss whole bodies of arts practice as self-indulgent unless it explicitly sought to engage with problems. The problem was not that the students and lecturers saw the art as irrelevant, as this clearly mirrored widespread attitudes to art in general, but that they ignored or overlooked the possibilities that art had because it was perceived as irrelevant. They chose to ignore a history of dissenting arts practices, from Dada to Arte Povera to post-modernist work, which had exploited and politicised arts reduction to an irrelevance by the prevailing attitudes. This tendency was found in influential discourses from the field of eco-art, such as Gablik (1991) and Spaid (2002) who, likewise, reduced art to either productive or a self-indulgent irrelevance. I believed that this simplistic binary attitude, expressed by my colleagues, students and fellow artists, was in the same vein as those

who dismissed art as an irrelevance and thus omitted it from participating in wider discussions about the ecological crisis. Exploring these issues, in particular the problem of using problem solving approaches, is a central motivation of the thesis.

1.8.3. Theoretical motivations

An important influence on developing the focus of the research project was the theoretical insights drawn from my own earlier practice which had been an extended discussion on the potential of orchestrating open-ended artworks. An important part of this early work was a collaborative discussion[2] and practical exploration that considered alternative strategies to problem solving. This discussion compared approaches found in Artificial Intelligence and Artificial Life research. Artificial Intelligence was shown to be reliant on top-down problem solving approaches that sought to engineer linear solutions to problems. In contrast, Artificial Life research proposed the use of open-ended approaches; these often involved tinkering with existing forms, with no particular purpose, in an attempt to set up generative conditions so that novelty and surprise might occur. This open-ended approach of Artificial Life research is something that I draw upon throughout this research project.

Earlier I had used insights and ideas about generative processes and applied them as constraints to guide curatorial projects. The impetus in this work was to use open-ended strategies to challenge the top-down approaches typically

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[2] This discussion has been with Jon Bird, who is currently Research Fellow in the interdisciplinary Pervasive Interaction Lab at the Open University

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used by curators. Using an open-ended approach led to curatorial projects that were open, evolutionary, and quite unlike predetermined exhibitions. Many of the methods and findings from this earlier research were relevant to the current questions about arts' role, about problem solving approaches and attitudes, and desires to affect change, and these insights have guided the development of the research question. As such the research presented in this thesis draws heavily on the findings of this earlier work and revisits many of the earlier discussions with ideas from Systems Thinking, Artificial Life research and Cybernetics.

My interests as an artist are in setting up artworks as open-ended generative systems and from a conceptual viewpoint this has many analogies with discussions within existing eco-arts practice, in particular with its approach derived from systems thinking. However, my work has rarely been described or considered as eco-art. Thus, for many of my students and colleagues, artworks that did not explicitly engage with issues and concerns, such as my own work, were perceived as irrelevant and impotent. By implication my work fell into the impotent and pointless categories and I was surprised how divisive this was.

I am very interested in generative systems, evolutionary thinking and how arts practice might embody some of the ideas from these areas. I believed that such work had something to contribute to discussions within eco-art in terms of its emphasis on processes, systems, and ecologies. In terms of the question 'what role for art within the current eco-crisis?', I saw the important contribution that a process approach, as found in my earlier practice, could make to the discussion. A motivation for the research was to explore why work such as mine could be so easily overlooked in favour of the explicit linear approaches

to problem solving that were favoured by my students and many of the discourses in eco-art. Being overlooked by the discussions within eco-art was not negative. My earlier work did not look like A-life art, generative art or cybernetic art, and although I was in discussion within these fields my position as an artist was always peripheral and not central to the discourse. Likewise the curatorial projects that I worked on were very clearly not like typical curated shows. Again, whilst participating in curatorial discussions this was always from the periphery of the discourse. My approach produced something that did not fit or correspond with the normally accepted and sitting on the periphery of the discussions had allowed the earlier work to have an irreverent criticality and I believed that aspects from this work could be developed in the current discussion. Based on my experience from the earlier research I could see that it would be possible to embed my own work within the methods and discourses associated with eco-art, and be possible to apply and develop my own method as a means of engaging with it, critically and experimentally. I wished to explore how some of the dominant framing narratives of eco-art, those that clearly embodied the prevailing model, might be adjusted, opened up and reanimated. I believed that this line of enquiry would make a useful contribution to the existing discourses and methods of eco-art.

2.   Literature review

2.1.   Introduction

The previous chapter has given brief outlines of the content of subsequent chapters. This chapter also considers the various chapters related to the literature review in turn (4, 5 & 6) but puts the emphasis on establishing the context and conceptual overview, which has guided the development of the thesis.

Throughout the thesis, I refer to linear problem solving approaches as contributing to the maintenance of the attitudes of the prevailing model of thinking. As a consequence, I suggest the need to find ways of resisting this approach, and to explore alternative ways of engaging with questions and problems. It is, however, very difficult to avoid thinking in terms of problem solving given the dire need to find a response to the causes of the ecological crisis. Thus much of the study has been finding a way to negotiate between the need for answers and solutions and the desire for alternative approaches.

The question that is asked at the start of the introduction to chapter one is how arts practice might work within the approaches, attitudes and metaphors of the prevailing view to produce the possibility for an alternative way of thinking and acting? Finding an adequate means of addressing this question has shaped the inquiry. The terms of this question, its use of 'might' and 'possibility' are intentionally soft and hesitant. The use of 'might' rather than 'can' attempts to encourage a nuanced response and to stymie desires that seek immediate

answers to problems. In *Modest Proposals* (2005) Esche speaks of 'possibility' as meaning 'the space to think the world otherwise than it is' (2005: 1). This possibility for thinking otherwise might occur, he states, by working within existing structures, across a location, at a particular moment and between groups of people, with the artwork as a catalyst for this, and emerges as a consequence of open-ended relationships between these. Esche proposes that in this instance art might be an experimental site for social, economic, technological, ecological, and political alternatives. Rogoff in *Academy as Potentiality* (2006) states that for something to have potential, this means that it might or might not happen, that it 'inhabits the realm of the possible without having a plan' (2006: 15). I have drawn inspiration from Rogoff's insight to imagine that the possibility for thinking and acting differently may not be something that can be necessarily planned or intended; 'difference is something that has to arise: it can't declare itself' (Bourriaud cited in Gallois, 2009).

The literature review draws upon ideas found in a range of literature from various fields including Process Philosophy, Deep Ecology, Artificial-Life research, Cybernetics, Evolutionary Biology, Arts Practice, and Art Theory. Diverse insights and ideas are grouped and discussed in the following chapters (4, 5 & 6) to reveal different perspectives and responses to this question.

Chapter four seeks to define the attitudes, approaches and metaphors of the prevailing model of thinking that contribute to the current ecological crises. It establishes that to encourage a shift from away from these characteristics requires an alternative approach that does not perpetuate those of the prevailing view. It considers how views found in Deep Ecology and Process Thought might produce the possibility to overcome some of these problems. The

chapter also proposes that art might encourage the possibility for alternative ways of thinking and acting.

The focus of chapter five is a field of arts practice known as eco-art. These practices are widely perceived as offering an alternative way of thinking and acting to the prevailing view and as a consequence are promoted as capable of addressing current environmental and social problems. The chapter draws on thinking normally considered outside of the field of eco-art to argue that although it seeks to encourage an alternative way of thinking and acting, some approaches and attitudes perpetuate and reinforce rather than disrupt the prevailing view, and by doing so, may unintentionally maintain the cause of the problems it seeks to address. The chapter establishes that to produce the possibility for alternative ways of thinking and acting, the dysfunctional traits of the prevailing model, in particular its linear problem solving approach, should be fully acknowledged and carefully negotiated. The chapter also discusses how the terms of environmentalism are now recognised as complicit with the prevailing view and as a consequence the continued use of these is problematised.

Chapter six considers how new artworks might be organised in ways that set up the possibility for surprise, novelty and unpredictability. It considers approaches from a body of existing arts practices and literature from Artificial-Life research, and Cybernetics to explore how artworks might be organised so as emergent events might occur. It develops an experimental framework, which for the purpose of this thesis is called a *process aesthetic,* and it considers how this might be used to guide artworks that set up the possibility for different ways of thinking about the world.

The review uses a metaphor of 'fabric' to imagine the way the individual

discourses, ideas and practices, which form the literature review, relate to each

other and are brought together. The notion of a fabric, suggests metaphors

related to woven materials, and the different resources as threads of ideas that

are woven together. Although this is apt, the idea of fabric that inspires this

study is one derived from the Cybernetic thinking of Gordon Pask (1961).

Pask's concept of a fabric is not something woven on a loom but an undefined,

indeterminate substrate that encourages connections, feedback and the

possibility of new relations with its environment. The constituents of this kind

of fabric are not known in advance and how they might come together to forge

connections with their environment, likewise, cannot be predetermined or

understood. Pask argues that whilst identifying a fabric is difficult, frustrating

and potentially fruitless, it is fundamental to setting up the possibility for

novelty and surprise within a system. Thus the search for this is a worthwhile

and necessary activity. This thesis seeks to conduct a search inspired by Pask's

idea to bring together a diversity of materials, media, ideas, software, actions,

and literature to produce something akin to a rich fabric. Throughout the study

the idea of producing a fabric has been considered as fundamental to

encouraging the possibility for thinking and acting differently.

Given the indeterminate and obscure nature of a fabric, articulating and

conceiving how or what materials might come together has been a significant

but speculative process throughout the research. I found a useful metaphor in

Material Thinking (2006) by Paul Carter, which spoke about the nature of

tracks left in the sea by the criss-crossing of trading vessels, as if 'scoring lines

upon its face' (2006: 18) and this helped to conceive of the processes in action

during this search for a fabric. Carter imagines that the wakes of the vessels (the literature, contexts, media, processes), their ephemeral traces might be preserved to yield an emergent, temporary pattern, a fluid 'cross-weave of thought' (2006: 23). This fluid wake generated a weave of ideas felt analogous to the way that I conceived of the formation of Pask's fabric. Carter's metaphor helped to think about the unfolding shape of the literature review, how individual texts, books, bodies of writing could set in motion their own wakes. These would travel, overlap, and interfere with wakes from the other sources. In some areas where several sources met, temporary blotches would emerge; an indistinguishable substrate akin to Pask's idea of a fabric, a moment where fluid would find temporary form. These overlapping traces represented points where ideas met, fused and blended, and these became the points of real interest for the study.

Fig. 1.   Andy Webster, *A wake generated weave* (2006)

The wake-generated patterns could occur at different frequencies, different paces and places. Each movement, each engagement or encounter might affect and adapt the emerging unfolding pattern. The blotches caused by these overlapping wakes were a raw and potent fusion of threads of thinking that suggested the possibility of new connections, new conversations, and new approaches. Reflecting on this wake-generated weave, exploring the connections and relations that occurred at these intersections has been that has been a central concern of the thesis.

2.2. Chapter four

Chapter four describes some of the characteristics of the approaches, attitudes and defining metaphors of the prevailing model of thinking and establishes how these contribute to the dysfunctional attitudes that have led to the current ecological crises. I refer to ideas found in *Environment and Philosophy* (2000) by Vernon Pratt to help describe the prevalent view, which conceives of reality as being comprised of separate entities that occupy distinct places in space and time, and I adopt his term, the '*entitative*' to describe this conception. I repeatedly turn to ideas found in the writing of cybernetician Gregory Bateson, in particular in *Steps to an Ecology of Mind* (2000b). I was introduced to Bateson's cybernetic principles during collaborative projects with Jon Bird from the University of Sussex, and the relevance and application of Bateson's ideas to the arts, in particular to understanding the relationship between art and ecology, were made apparent through lengthy discussions with him. I became aware that Bateson often appeared as little more than a footnote in literature

from Art Theory, Ecological Art, Process Thought and Deep Ecology. Although, for example, the relevance of the writings of Gilles Deleuze and its relationship to art have been discussed at length in recent arts literature, there has been little acknowledgement in this writing of the correlation between Deleuze & Guattari's *A Thousand Plateaus* (1988) and Bateson's *Steps to an Ecology of the Mind* (2000). Likewise, until recently, reference to Bateson is almost completely omitted from discussions within major eco-art exhibitions and its literature, such as *Fragile Ecologies,* (1991) by Barbara Matilsky, *Natural Reality* (1999) by Heike Strelow, *Ecovention* (2002) by Sue Spaid & Amy Lipton, and *Groundworks* (2005) by Grant Kester. More recently Bateson's relevance to eco-art discourses has been acknowledged by writers such as T.J. Demos in *The Politics of Sustainability: Contemporary Art and Ecology* (2009) and Heike Strelow in *Ecological Aesthetics* (2004).

In *Steps to an Ecology of Mind* (2000), Bateson asks how do we come to know the world? On what principles do we base our comprehension of the world? Engaging with these questions has been a constant reference point throughout the thesis, and has shaped the direction and critical development of the research. Bateson's inquiries, in particular, discussed in the later essays in *Steps to an Ecology of Mind* (2000), reveal the entitative view as a fundamental epistemological error, as a distorted and dysfunctional principle on which to base our understanding of the world. Insights found in *A Recursive Vision* (2002) by Peter Harries-Jones, and Fritjof Capra's book *The Hidden Connections* (2002) helped me to comprehend how the repercussions of this error manifested itself across every aspect of our emotional, intellectual, verbal and non-verbal, or theoretical domains. I found this significant, for example,

when trying to come to terms with attitudes in the eco-art discourse, such as its seemingly unproblematic acceptance and promotion of problem solving approaches. For Bateson (2000) it was evident that problem-solving approaches, no matter how well meaning, embodied and perpetuated the characteristics and attitudes of the prevailing view, which were at the cause of problems. For a discourse that sought to develop alternative ways of thinking and acting it seemed a contradiction for eco-art to be using these, without acknowledging or interrogating the complexities and contradictions of the approach. Through Capra and Harries-Jones, I began to see that such contradictions were a manifestation of the epistemological error at the root of our thinking. I was further alerted to the dysfunctional consequences of the entitative view, in particular that it distorted how the relations between humans, society, and the larger eco-system were understood, by ideas found in *Deep Ecology for the 21st Century* (1995) by George Sessions. The essays in Sessions took me to *Ecology, Community, and Lifestyle* (1989) by Arne Naess, and both writers helped me perceive the depth of the influence of the entitative view, and how its metaphors and distortions were still prevalent across modern social, scientific and political thought. Ideas found in *Political Nature* (2001) by John Meyer, *The Ecological Self* (1991) by Freya Mathews, and *Skeptical Environmentalism* (2002) by Robert Kirkman help study the historical contexts from which the entitative viewpoint emerged and further describe some of its consequences and implications. Mathews' (1991) description of the mechanistic conception of the world, which depicts a separation between the mind of the human and the mindlessness of the rest of reality, helped me comprehend the depth of the problem and in particular how, as a result of this,

everything that was not a human mind could be subsequently considered as machine-like, passive and inert. It follows that this view encourages the conditions for human-centred viewpoints and attitudes that sought to control, alter and exploit nature as a resource. Ideas found in *Political Physics* (2001) by John Protevi, and *The Open-Ended Becoming of the World* (1999) by Manuel Delanda, describe how this view runs throughout the heart of social and political thought. Their ideas helped me conceive that the mechanistic view of nature, as something that is inert, passive and subservient, has been applied to the realm of humanity and human society, in particular, in order to justify the subordination and oppression of women and the worker. Throughout the study, Delanda and Protevi's ideas inspired my search to find ways to counter attitudes that view nature, the environment and people as passive and subservient.

Encountering ideas by writers such as Bateson (2000), Naess (1989) and Mathews (1991) inspired a widening of the review to consider the effect of the mechanistic view upon education. Having worked in education for almost two decades I had a tacit understanding of how educational systems produced and perpetuated the fundamental epistemological error that Bateson argued was at the root of our thinking and acting. Two influential texts were *Education, Cultural Myths and the Ecological Crisis: Toward Deep Changes* (1992) by Chet Bowers, and *Ecological Literacy: Education and the Transition to a Postmodern World* (1992) by David Orr, which helped establish how mechanistic viewpoints were still deeply influential in the organisation of education, in particular its modular curriculum design, teaching styles, and assessment processes. Orr's writing also helped me understand how the

elevation of the sciences and the denigration of the arts throughout education was a consequence of mechanistic attitudes. I draw upon Orr's thinking to establish why, from the prevailing view, subjects perceived to embody the sensual, intuitive, aesthetic and somatic, such as art and music, are often relegated to insignificance, whilst those that are supposedly neutral, natural, and culture free, which privilege notions of rationale thought and objectivity, are elevated in status. Orr's writing recognises that this not only perpetuates the distortions of the mechanistic view but also legitimates the removal of art and its discourses from international discussions regarding the future welfare of the planet. A clear example of this was evidenced at the Rio Earth Summit (1992) and Agenda 21's omission of art from its discussion and planning. As a consequence, art isolated from contributing to such discussions appears even more impotent. It follows that from a seemingly neglected position art begins to believe that it should foreground its problem-solving capacities. Arts instrumentalisation, however, may only help maintain and perpetuate the approaches and attitudes of the prevailing view, thus contradicting its desire to challenge these. I draw upon insights from *The Perception of the Environment* (2002) by Tim Ingold to propose that arts practice, through its possibility to work in a sensual, intuitive and somatic way, can, due to its ignorance by the prevailing view, set up the possibility for alternative ways of thinking and acting. Ingold's insights describe that art might represent a genuine alternative way of thinking and acting by not attempting to problem-solve, and by avoiding the rational instrumental attitudes and agenda's of the prevailing view.

At the outset of this research project the wider context was one of a growing public awareness of the current ecological crisis, in particular regarding the

causes and consequences of climate change. Wide sweeping consciousness-raising of the issues had occurred through the governmental reports, such as The *Stern Report* (2005), *Climate Change 2007: Synthesis Report* (IPCC, 2007), The *Global Environment Outlook* (Geo-4) United Nations Environment Programme (2007), and through media, film, and best selling books such as Al Gore's *An Inconvenient Truth* (2007), James Lovelock's *The Revenge of Gaia: Earth's Climate Crisis & The Fate of Humanity* (2006), Bill McKibben's *The End of Nature* (2006), and Elizabeth Kolbert's *Field Notes on a Catastrophe* (2006). Although these materials presented varying opinions as to how deeply we had fallen into crisis, it represented unequivocal evidence of the anthropological contribution to climate change. Given this widespread awareness of the current ecological crises, the lack of response to this at individual, local, national and international levels was arresting. Ideas in *The Viable Human* (1987) by Thomas Berry helped me comprehend how, even with an awareness of ecological problems there is a lack of comprehension of the magnitude of the present catastrophic situation. Val Plumwood in *The Ecological Crisis of Reason* (2001) gave me a different perspective to work with and an understanding that the lack of response was not attributable to ignorance, but was rather a conscious decision led by deeply acculturated attitudes and beliefs. To help discuss this idea of acculturated attitudes hindering a response to the ecological crisis, I draw upon thinking in Bateson's essay *Conscious Purpose versus Nature* (2000a), in particular his ideas about conscious purposiveness, to explain how dysfunctional attitudes that have, for example, resulted in the devastation of the natural environment, have become both acceptable, and often imperceptible. Drawing on Bateson (2000), I argue

that it is these approaches, prominent characteristics of the prevailing model of thinking, that perpetuate and maintain the dysfunctional attitudes that lie at the cause of current social, political and environmental problems. I draw upon insights in Fox (1995), Capra (2002), Grieg (1989), and Thiele (1999) to describe that although these attitudes appear acceptable to the prevailing view, from the perspective of Deep Ecology and Process thinking, such attitudes are recognised as deeply pathological.

Ideas found in the ecological thinking of Fritjof Capra's *The Web of Life: A Synthesis of Mind and Matter* (1996) and *Towards a Transpersonal Ecology* (1995) by Warwick Fox led me to comprehend the absolutely necessity of shifting the principles on which we base our comprehension of the world. Fox (1995) led me to see that human-centeredness, regarding assumptions of human importance that pervade our culture, has resulted in these pathological attitudes and a consequence of this is that irrespective of the dysfunction and damage caused by our actions, human interests are always put ahead of the welfare of the non-human world. Capra (1996) identified the need to find ways that go beyond the narrow concerns of humans, and led me to believe that a shift from this anthropocentric view to a biocentric philosophy would encourage a move from the approaches of the prevailing mechanistic view towards what Grieg (1989) describes as an 'ecological consciousness' (1989: 62). Insights in Fox (1990) convinced me that a move towards an ecological consciousness was a necessary precursor to encouraging the possibility for genuinely different ways of thinking and acting than the prevailing model. I draw upon ideas in *The Challenge of Co-evolution* (1999) by Paul Thiele to describe a way of thinking about the world, which he characterises as Process Thought. He describes that

process thinking conceives the world as events that are ceaselessly interacting, unfolding, and transforming, and he argues that this change in view is necessary so as to break with the prevalence of metaphors derived from mechanistic views. A further challenge to mechanistic views was found in Fritjof Capra's *The Hidden Connections* (2002) where he argues that from a process view, process is the character of everything, and it follows that mind understood as a process can no longer be conceived as separate from matter and that humans cannot be thought of as separate from the environment. These insights contradicted the conceptions at very core of mechanistic thinking and helped me further comprehend how inadequate it was as a means of thinking about and knowing the world. Ideas found in Robert Mesle's *Process-relational Philosophy* (2008) and *The Greening of Protestant Thought* (1995) by Robert Booth Fowler proposed that conceiving the world from a process view, as ceaselessly interconnected relational processes, had the capacity to significantly alter the way one felt and acted in the world. Booth Fowler, Capra and Mesle's insights helped formulate my response to Bateson's question, which asks on what principles do we base our comprehension of the world? In contrast to the mechanistic view, an understanding the world based on a process perspective appeared more consistent with the actual reality of experiencing the world, and it is upon these principles that I sought to base my own understanding of the world and it is this view that informs this research project.

Following the thought of Capra, Mesle and Booth Fowler, encouraging some kind of shift in thinking from the mechanistic to a process view appears to be a desirable goal, but how one might go about achieving this is, however,

problematic. In *Steps to an Ecology of Mind*, Bateson (2000b) argues that the challenge is to find alternative ways of thinking and acting that break from and interrupt the approaches of the prevailing model. Bateson saw linear problem solving approaches guided by conscious purpose as the embodiment of the logic and error of the mechanistic approach, as 'akin to a deviant mind…a kind of insanity' (2008: 5). This view by Bateson shaped my own thinking. I became aware, for example, that advocating a process view of reality as a solution to the dysfunction of the entitative/mechanistic attitudes would perpetuate the mindset of linear problem solving approaches. Likewise, although Deep Ecology and Process Thought represent an alternative to the prevailing model, I draw inspiration from Bateson to argue that it is not a case of proposing that the entitative is replaced with a systemic view. This, I argue, would embody the conscious purpose of linear problem solving approaches and as a consequence would perpetuate the attitudes of the prevailing model. The need is to develop experimental approaches that break from rather than reinforce conscious problem solving approaches and the deeply acculturated assumptions that believe only these can be applied to plan our actions or to resolve problems.

To do this I consider ideas found in Bateson, what he calls *pre-cognitive glimpses* (2000), and I also refer to what Tim Ingold describes as *sentient ecologies* (2000) and to Simon O'Sullivan's concept of *art as encounter* (2006). Bateson describes that arts practice might be able to help overcome approaches shaped by conscious purpose. He points to the moment when one first encounters an artwork, and suggests that it is here at a pre-cognitive level that one might perceive 'glimpses of connective underlying pattern' (Bateson,

2000: 219), normally hidden by the considerations of conscious purpose. Bateson's argument is that when one's thinking is led by considerations of purpose one delimits and narrows one's view of the world so that the problem can be addressed. This narrowing effect means that one becomes oblivious to the patterns and connections between things. Art, he states, because of its capacity to work at a pre-cognitive level, reveals glimpses of these patterns and as a consequence we might temporarily perceive the world differently. Bateson's insight alerted me to arts potential to set up the possibility, from a process view, to perceive the world as interconnected, ceaselessly unfolding processes. Tim Ingold's ideas in *Culture, Nature, Environment* (2000) clarified the need to use one's intuitive, sensuous and emotional experiences of the world when trying to comprehend events and phenomena. Like Bateson, he points to a moment of pre-cognition where the world he states is 'pre-ethical and pre-objective' (Ingold, 2000: 25) and as a consequence is encountered in the full, through the whole of one's senses. He describes the kind of understanding that emerges from this sensate intuitive engagement with the world as moving towards a 'sentient ecology' (Ingold, 2000: 24). Thinking about Ingold's ideas alongside Bateson helped me see the possibility for thinking about arts as a sentient practice. This idea was reinforced by Simon O'Sullivan's concept of *Art as Encounter* (2006), which speaks of art working on an affective level, almost compulsively to disturb and break from the known. Through reading this literature I became aware that arts capacity to work at a sensual, sentient level might be its possibility for thinking and acting differently, and that this might realise alternative approaches, attitudes and guiding metaphors. It helped me begin to speculate on how art might be

orchestrated, not to explicitly and consciously change attitudes or solve problems, but to set up possibilities for disturbing, dissolving and causing fissures in the habitual and the known, processes that Zepke describes in *Art as the Refrain of Life* (2005) as potentially leading to the *'emergence of the unknowable'* (2005: 33). This is something I discuss further throughout the subsequent chapters.

2.3. Chapter five

Chapter five focuses specifically on a field of arts practices known collectively as eco-art, which have a shared aspiration to be a means of finding an alternative way of thinking and acting. To gain an understanding of the breadth and scope of eco-art practices I survey a range of literature. A particular focus is upon discourses that have accompanied major surveys of eco-art such as *Fragile Ecologies* (1991) by Barbara Matilsky, *Natural Reality* (1991) by Heike Strelow, *Ecovention* (2002) by Sue Spaid and Amy Lipton, *Groundworks* (2005) by Grant Kester, *Beyond Green* (2005) by Stephanie Smith, and *Radical Nature* (2009) by Francesco Manacorda. By following the discussions that emerged from these shows, this allowed me to recognise consistencies, reoccurring themes and ideas, changes and developments in the evolving discussion.

The defining characteristics of eco-art are expressed as *reconnective* in Gablik (1991), *restorative* in Matilsky (1992), *re-enchanting* in Shaffer (1991), *problem-solving* in Spaid (2002), *dialogic* in Kester (2005), re-*integrative* in Wallen (2006), *communal* in Carruthers (2006), and *interventionist* in Rahmani

(2009). In *Natural Reality* (1999a) Heike Strelow states that eco-art is a means of addressing problems associated with the prevailing model of thinking. The form of this address, she states, ranges from awareness raising, proposing solutions to problems, to developing sustainable visions within a community and celebrating a communities relations within nature. Lucy Lippard (1983) defines eco-art as having an emphasis 'on social concern, a low profile, and more sensitive attitude toward the ecosystem' (1983: 229). Likewise, Don Krug (2006) in *Typologies and Multiple Perspectives* states that the term eco-art describes a dynamic and evolving body of arts practices, diverse opinions and broad philosophical positions that collectively seek to address the consequences of and provide alternatives to the prevailing model of thinking. Ruth Wallen (2006) in *Towards a Definition of Ecoart* describes that eco-art seeks to reintegrate the social and the ecological and thus foregrounds communities and collective inter-relationships and, similarly, Patricia Watts proposes in *Ecoartists: Engaging Communities in a New Metaphor* (2003) that eco-art seeks to become '*advocates for communities*' (2003: 1). Through reading Strelow, Krug, Wallen and Watts this helped me establish a view of eco-art as often embracing a collective / collaborative approach to engage with problems associated with the prevailing model of thinking and, in particular, to promote natural and social ecosystems. Ideas in Barbara Matilsky's *Fragile Ecologies* (1991) affirm this view by proposing that eco-art engenders an integrative approach that is socially and communally orientated, and that reintegrates art into the social fabric of a community. Likewise Suzi Gablik, in *Connective Aesthetics: Art After Individualism* (1995) states that eco-art seeks to re-evaluate and re-orientate art from an activity of individual expression

towards a participatory connective aesthetic that can assist in the production of a new paradigm of thought. Through reading Gablik and Matilsky, I became aware that the idea of working collaboratively, and forming communal collectives was understood as intrinsic to producing an alternative way of thinking and acting to that of the prevailing view. A reoccurring feature in this literature is eco-arts ambition to raise awareness of issues, and to effect change in ways so as to address these problems. In *An Eco-art Manifesto* (2004) Weintraub and Schuckmann describe that eco-art seeks to develop awareness and a functional response of the impact of humans on the living and non-living environment. In *Mapping the Terrain of Contemporary EcoART Practice* (2006) Beth Carruthers describes that eco-art seeks to both raise awareness of issues and also to develop a means of living with and addressing these. Likewise, Heike Strelow (1999) describes eco-art as raising questions about environmental problems, generating discussions to help develop solutions to these and to *'strive for their realisation'* (1999: 161). I became aware that this instrumental motivation within eco-art acted productively as catalyst to make things happen and in seeking to find a means of addressing problems, eco-art forged participatory collaborative processes within communities formed of artists, educators, politicians, planners, and scientists. In *Visionary Aesthetics, Post Industrial Ecologies and Practical Art* (2008) Tim Collins proposes that a characteristic of eco-art is that it is fundamentally interdisciplinary and reaches out across disciplines to establish opportunities and platforms for social engagement that would not be obtainable otherwise. Aviva Rahmani (2009) in *Ghost Nets* describes that eco-art often requires widespread collaborations with 'scientists, city planners, architects and others, that results in direct intervention

in environmental degradation' (2009: 1). Amy Lipton in *Ecovention* (2002) describes that these processes, are integrating and lead the way towards *'a new paradigm of environmental consciousness and sensitivity'* (Lipton in Spaid, 2002: 178). This literature helped me identify that at the root of much eco-art is a participatory aesthetic that focuses on the collective, the community and the environment. A common characteristic of approaches in eco-art is that they seek to produce a way of thinking about the world that promotes connections, relations and mutual inter-dependencies between humans, the environment and nature. A key aim of eco-art is to a produce a deeper awareness and recognition of these relationships. It embodies a shift from the production of art objects towards relationships and processes, a move from thinking in terms of the individual to the communal, and from ideas of separation, to those of connections and relations.

By reviewing the literature, I recognised that many of the practices and discourses of eco-art embody a philosophical move away from the mechanistic attitudes, approaches and metaphors of the prevailing view towards something akin to an integrated systemic / process model of thinking. As a field of arts practice, eco-art can be understood to represent a sustained critical address towards the fundamental problems caused by the prevailing model of thinking. There were, however, some reoccurring traits within eco-art and its discourses that I intuitively felt uncomfortable with and as consequence I decided to conduct a survey of literature that might help evaluate and question some of eco-arts approaches. To help do this I drew upon ideas found in literature including *Green Delusions: An Environmentalist Critique of Radical Environmentalism* (1994) by Martin Lewis, *Art & Social Transformation*

(2000) by Malcolm Miles and *Ecology Without Nature: Rethinking Environmental Aesthetics* (2007) by Timothy Morton. A reoccurring discourse in Strelow (1999), Matilsky (1992) and Gablik (1991) is that we have lost touch with earlier ways of behaving and we have become disconnected from nature and as a consequence contemporary life has become alienating and disenchanting. They advocate approaches that are restorative and reconnective, and which seek to reconnect with what has been lost. Ideas in Morton (2007), Miles (2000), and Lewis (1994) suggest that the approaches in Matilsky and Gablik may perpetuate and reinforce, rather than disrupt, the attitudes of the prevailing view. Ideas in *The Enchantment of Modern Life* (2001) by Jane Bennett describe how traits within the eco-art discourse maintain rather than narrow a perceived separation between nature and the urban, and '*generates the very conditions that it describes*' (2001: 15). Within the official discourses of eco-art, such as Matilsky (1992), Spaid (2002), Gablik (1991) and Spaid (1999) there is limited critical evaluation of this kind and I found the insights in writers such as Morton (2007), and Bennett (2001) really important as this enabled me to begin to reflect critically on this field of practice. It motivated me to look further into the practices and its discourses to develop a critical position. In Morton (2007) I found ideas which helped to identify problems within discussions in eco-art that depict humans as disconnected from nature, which, he states, work to objectify and idealise nature. Ideas in Bourriaud (2009) and (Lewis, 1994) help to recognise that discussions within eco-art that promote ideals about origins and attitudes of earlier societies may work counter-productively to fetishise the primitive and pre-technological and may be little more than utopian fantasies. I draw upon ideas in *Art & Social Transformation*

(2000) by Malcolm Miles to describe that such traits perpetuate the very same attitudes that are recognised as lying at the cause of dysfunctional relations between humans, the environment and nature. In more recent eco-art discourses, such as Strelow (1999) and Smith (2005), a range of practices, such as the work of Lois Weinberger, Henrik Håkansson and Laura Almarcegui, are described that challenge the traits described above and problematise and question artistic interventions in nature. This critical discourse continues in *Radical Nature* (2009) by Francesco Manacorda and advances the discussion in eco-art and adds critically to the discourse. An insight that I gained from engaging with this literature was an awareness of the reflexive role of art as a means of developing this criticality within the discourse. By this I mean that arts practice such as Almarcegui's, which proposes to leave urban wastelands as wasteland should be understood as a critical refrain that questions desires in earlier eco-art to restore such spaces. Much of my own arts practice, as described in later chapters, works within this critical reflexive approach.

Throughout the eco-art discourse the advocation and use of problem solving approaches appears naturalised and is considered unproblematic. For instance Matilsky (1992) proposes that eco-art 'seeks to find solutions to problems' (1992: 61). Strelow (1999) states that eco-art 'propagates concrete solutions to environmental problems' (1999: 16), and in Spaid it 'provides solutions to problems' (2002: 4). Ideas found in literature such as *Steps to an Ecology of the Mind* (2000) by Gregory Bateson, *The Aesthetics of Change* (1982) by Bradford Keeney and *The Pattern that Connects* (1982) by Michael O'Callaghan question and problematise the use of such problem solving approaches. Bateson (2000) describes that problem solving approaches

maintain rather than correct errors in our thinking and acting, O'Callaghan (1982) argues that a problem solving approach guided by conscious purpose denies the possibility for a systemic comprehension of the world. Such insights made me recognise that the problem solving approach of eco-art may work to contradict its desire to encourage a holistic and systemic view. It problematises practices that seek linear solutions to problems as these may embody the methods and approaches of the prevailing model and thus maintain these. I remain puzzled by the omission from the eco-art discourse of an interrogation of the problem of using problem solving approaches. I draw on ideas in *The Cybernetics of the Self: A Theory of Alcoholism* (2000) by Gregory Bateson to consider how contradictions in eco-art may be thought of as akin to an addiction. Bateson suggests that to overcome an addiction the whole system of addiction, and not just the symptoms, have to be acknowledged and changed. Bateson argues that even though addicts may desire to give up and change their ways, they will not succeed unless the system of addiction is changed. Eco-art, through using the problem solving approach maintains the addiction to the approaches of the prevailing view, and as a consequence can only address the symptoms of problems but never the cause.

What I recognised by reading Bateson was how likely it was that the viewpoint upon which we base our thinking and acting, was itself shaped by its own errors and distortions. Ideas in Keeney's *The Aesthetics of Change* (1982) highlighted the need to challenge assumptions within the eco-art discourse that presupposed that eco-artists were in possession of the *right* kind of knowing. Prominent discourses within eco-art, such as Matilsky (1992), Gablik (1991), Spaid (2002) appear to ignore aspects of its approach that perpetuate rather than challenge

the attitudes of the prevailing model of thinking. Keeney's writing raises

questions that ask, given the selectivity and partiality of its discourse, how do

eco-artists know that their own views and values are not distorted and

dysfunctional? Insights in O'Callaghan (1982) help to understand that linear

problem solving approaches cause one to narrow one's view and subsequently

deny a systemic comprehension of a problem. It follows that if an eco-artist

consciously limits their view by using a linear problem solving approach, their

perception of the problem will be based only on a partial, narrow and

potentially distorted view of the world. Michael Shellenberger and Ted

Nordhaus in *Break Through: From the Death of Environmentalism to the*

Politics of Possibility (2007) describe that this narrowing of view is evidenced

though environmentalists who pursue single issue causes, which mean that they

are unable to form the broad coalitions necessary to met their goals of effecting

change. The idea of the eco-artist as a visionary figure, like the problem

solving approach is used unproblematically throughout the discourse. In

Gablik (1991) for example the eco-artist is a seer-like, shamanic figure; in

Matilsky (1992) they are a healer of a split between nature and culture; in Goto

(2005) they are visionaries and creators of utopian ideals and realities, and in

Spaid (2002) eco-artists are able 'to act above polluted mortal vision' (2002: 3).

In Watts (2003), eco-artists work as 'visionaries for transforming ecological

communities' (2003: 1). I draw on ideas in Bourriaud (1999) to argue that the

idea of the visionary may be both outmoded and unproductive, and use ideas in

Protevi (2001) to describe that this concept embodies the hierarchical and elite

attitudes of the prevailing model. I cite Miles (2000) to argue that maintaining

the notion of the visionary may stymy the desire within the eco-art to move

towards integrative, collective, and participatory approaches. There are, however, a body of recent eco-arts practices that provide a response to the problems discussed above. I draw on ideas in Lippard (1997) who argues that if artists are to evolve alternative approaches that defy conventional thought, they have to find ways to break with the existing methods and search for forms and methods as yet not recognised. She states, 'ideas catch fire in dialogue, when we brainstorm or play with possibilities, and someone else's eyes light up. Art itself can be that spark, both catalyst and act of recognition' (Lippard, 1997: 290). In *Groundworks* (2005), Grant Kester describes recent arts practices that avoid the use of linear problem-solving approaches and specifically aim to keep open dialogues that would normally be foreclosed by approaches narrowed by conscious purpose. Kester (2005) describes that, whilst conventional problem solving approaches often close down dialogue, some eco-art provides an openness that allows for and encourages a sustained dialogue, and through this new thinking might emerge. Kester describes this as a 'dialogic' approach, where art is not instrumentalised to solve problems, but rather acts as a catalyst that fosters and keeps open dialogues normally foreclosed by purposeful or narrowed attitudes. Tim Collins in *Landscape, Ecology, Art and Change* (2003) describes that this conversational approach focuses on encouraging 'informed dialogue that intends from the outset to create change, not artefacts' (2003: 111). The artists, Helen Mayer Harrison and Newton Harrison describe the characteristics of this kind of artwork as working to produce a 'meeting ground for discourse' (cited in Kester, 2004: 64), and an opportunity for art to participate in wider conversations often dominated by government, planners, economists and scientists. It is through these conversations, they argue, that

public awareness of issues and possible scenarios for change might occur.

They describe this process as a *Conversational Drift* which is meant to reflect the processes of interchange they believe occurs when eco-art sets up situations that encourage conversations 'to open up, to change, and to drift toward innovative and creative solutions to real-world problems' (Harrisons in Adcock, 1992: 33). The strategies found in these 'dialogic' practices appear to overcome many of the issues found within earlier eco-art and its discourses and represent a model approach for an arts practice that seeks to set up the possibility for thinking and acting differently.

During the review I became aware of a range of literature, such as *Captive State: The Corporate Takeover of Britain* (2001) by George Monbiot, *The Shock Doctrine: The Rise of Disaster Capitalism* (2008) by Naomi Klein, and *Break Through: From the Death of Environmentalism to the Politics of Possibility* (2007) by Nordhaus and Shellenberger, which describes how the key vocabulary of environmentalism, and hence the language at the core of eco-art, has been co-opted and instrumentalised by governments, and multi-national corporations. Monbiot (2001) describes that this co-option problematises the continued use of such terms, and argues that these were an embodiment of the prevailing model. Klein (2008) describes that the terms and language of environmentalism had moved from a provisional, minor, and dissenting voice to become be part of the dominant mainstream, and had become ubiquitous rhetoric of global capitalism. Shellenberger (2007) describes that a consequence of this was a waning of the power of environmentalism (2007). I reference Guattari (2000) to describe that this has reduced the languages potency as a dissenting force to become an ossified and homogenised voice

(Guattari, 2000). I draw on ideas in T.J. Demos, *The Politics of Sustainability: Art & Ecology* (2009) to argue that as the vocabulary of environmentalism was now integral to media, governmental and corporate discussions, this had 'shifted the discourse on the environment' (2009: 17), and it was now necessary to re-evaluate terms, such as 'sustainability,' as these needed to be de-naturalised and seen as a complex, ideological and political. Through this literature I became aware that a reassessment of the use of environmentalism's terms was needed as the continued unproblematic usage of these may only work to reinforce rather than present alternatives to the traits of the dominant view.

2.4. Chapter six

In Chapter six, I look further into how arts practice might set up the possibility for novelty and surprise, which may in turn produce the potential for thinking and acting differently. I develop thinking inspired by Simon O'Sullivan's idea of the art encounter (2006) which suggests that art has the capacity to disturb and break from the known, and through this process of disturbance may bring one to new thought, to think about the world differently. I draw on thinking from a grouping of artists, amongst which my own practice has been shown, who share an interest in the concept of emergence. Peter Cariani's text *Emergence and Artificial Life* (1991) helped to clarify ideas related emergence, emergent phenomena, surprise and novelty. Cariani's description of emergence refers to how a variety of interactions between processes can lead to the production of new structures, functions, and patterns that cannot be reduced to

the properties of pre-existing ones. This insight provoked me to think about how arts practice might be conceived in similar terms as a method that set in motion a range of interactions and processes that result in unexpected, unforeseen outcomes that cannot be reduced to their starting point. Insights from *The Darwin Machine: Artificial Life and Interactive Art* (1996) by Simon Penny and Manuel Delanda's essay *The Open-Ended Becoming of the World* (1999) help describe examples of emergent phenomena in the natural world, and also to comprehend how the concept of emergence might be used to account for evolution of social, economic, technological systems, as well as natural systems. I was interested in how art, which set up the possibility for emergent processes to occur might lead to genuinely surprising and novel outcomes. It also seemed appropriate to set up artworks in ways that had affinity with the unfolding processes of reality. I refer to a range of projects by artists who have worked in this area, and discuss Reynolds (1986), Verstappen and Driessens (1996), and Haque (2004) to consider the possibility of artworks that produce emergent phenomena. I draw on ideas found in *An Introduction to Artificial Life* by Moshe Sipper (1995) to highlight the characteristics of the emergence that occurs in these works. A striking insight is that the works do not represent emergence but set up the condition for actual emergent phenomena to occur. As a result, on encountering the work one is not engaged with a representation but witnessing actual emergent phenomena occur. This is genuinely surprising and disturbing, and is akin to O'Sullivan's (2006) notion of an *art encounter*. Such work, I argue, produces insights analogous with Bateson's (2000) discourse as it reveals glimpses of relations and pattern that

are normally hidden and as a consequence on encountering such artworks one might temporarily experience the world differently.

There are some recognised issues in such works, in particular how after a short period of time they seem to become somewhat predictable and unsurprising rather than novel. I refer to ideas in *The Blurring of Art & A-Life* (2001) by Jon Bird and Andy Webster to describe how aspects of the approach used constrains the possibility of the work unfolding in genuinely surprising ways. Ideas found in the cybernetic thinking of Ross Ashby (1956) and Gordon Pask (1961) are used to demonstrate a way of overcoming this problem. Ashby (1956) in *An Introduction to Cybernetics,* describes that for a system to unfold in surprising and novel ways, elements of this have to be left under-determined and orchestrated so as feedback from the environment can contribute to its configuration. From this, if one imagines the artwork as a system, the same criteria might apply for the artwork to unfold in surprising ways. I draw upon Gordon Pask's concept of a *fabric* (1961) to establish the importance of the relationship between these open elements of a system and its environment. Rather than separating systems components from their context, Pask gives a crucial insight into thinking relationally about feedback, connections and interactions between these. The system and its environment are conceived not as separate entities but as co-joined by a very real, if indeterminate substrate of processes and materials, a rich fabric that Pask states fosters connections and feedback, without which novelty and surprise cannot occur. I draw upon ideas from *Gordon Pask and His Maverick Machines* by Jon Bird (2008) to describe the significance of Pask and Ashby's insights and to argue that it is through the open-ended processes of interaction between elements of an artwork and its

environment, the production of a *fabric,* rather than the intentions of the artist, that may produce the possibility for surprise and novelty. I draw these insights together to establish the basic working premise for an experimental framework that for the purpose of thesis is called a *process aesthetic*. Weaving together premises found in Ashby (1956), Pask (1961) and Bird (2008) I propose for an artwork to unfold in ways that might be genuinely surprising it should firstly be situated in the physical world; elements of the work should be left open and unconfigured; feedback, dialogue and interactions between open elements and the environment should be encouraged, but not pre-specified, and this may set up the possibility for the work to unfold in unforeseen ways. There are some repercussions of using this framework and I refer to ideas in Penny (1996) to demonstrate that this has implications for the approach that the artist uses, as they cannot control the open-ended processes in a work, but may only set up the conditions so as this might occur. I draw on ideas in Sipper (1995) to describe how, because of these, the role of the artist is altered, as they are no longer responsible for making the artwork as it appears. The unfolding artwork cannot be solely related to or attributed to the artist's intention, or their individual creativity, and I argue that this rightly problematises ideas about artists as creative visionaries.

By pulling together these insights my aim is to establish the theoretical and contextual basis for an experimental framework, a *process aesthetic*, which I use to guide the production, dissemination and evaluation of new arts practice, which is described in subsequent chapters (7, 8, & 9). Because of the indiscernibility of what might or might not be used as a *fabric* there is a difficulty in selecting what to use. As a response I draw upon a method from

my earlier practice, which uses existing artworks as the starting point for new work, and consider how this may be a means of overcoming the problem of selecting what materials one might use. I draw on ideas found in Cage (1995) to help describe that an implication of this is that the artist is liberated from the generation of the materials, and as a consequence is able to work with and within the pre-existing forms and subjects, and hence is able to focus on orchestrating possibilities for open-ended interactions with the environment.

Whilst conducting the review, I became aware of a range of literature that represented a challenge to my embrace of the discourse of innovation and surprise. Much of the ambition of my research had been concerned with how art might work to break with the known to produce something that was novel and surprising. However, literature such as *Against 'Creativity': A Philistine Rant* (2003) by Thomas Osbourne, *In Praise of Negativism* (2009) by Alberto Toscano, *The Philistine Controversy* (2003) by Dave Beech, and *Modest Proposals* (2005) by Charles Esche, revealed a breadth of writing that described how the traditional vocabulary and language of art had, since the early 1990's, been co-opted and instrumentalised by multi-national corporations and governments. The position of these authors was that this co-option had changed the meaning of these terms to the point where their continued use was questionable and problematic. For example, Toscano (2009) described how terms such as creativity and innovation, forms historically associated with art, were now '*ubiquitous within global capitalism*' (2009: 43). Zepke (2008) described how the continued uncritical usage of such terms was to perpetuate traits that were now intrinsic to the prevailing model of thinking. I found these texts provocative and disturbing, and they were akin to an encounter described

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in O'Sullivan (2005). This had an immensely productive impact on my thinking as I had to find a response to the reality check and consequences of the co-option of arts terms and language. It became clear that for art to produce the possibility for thinking differently, this would surely mean that it would have to encourage alternatives to the terms and metaphors of the prevailing view. Ideas in Osbourne (2003) helped me understand that as a consequence of the co-option and instrumentalism of the language of art, notions such as innovation and creativity were deeply political and implicated in the attitudes, approaches and metaphors at the root of current social, economic and environmental problems. I understood that as a consequence these should now be considered the potential subjects and focus of a dissenting arts practice and that I might develop strategies to disrupt these. This recognition inspired me to begin to look for ways that the experimental framework that I was developing might be adapted to act in response to these insights. What followed was an avalanche of possibilities, many of which are tested throughout the practice described in the later chapters (7, 8 & 9). I refer to Beech (2003) to describe that a strategy of the approach might be to actively negate notions of creativity, and to work to cultivate something akin to a philistine approach as a critical tool of dissent (Beech, 2003). I draw upon ideas in Toscano (2009) to suggest that an approach might be developed that avoids the language of creativity by not seeking to innovate, but by appearing to be uncreative. I make use of ideas in Zepke (2008) to consider how as an artist I might be seen to contemplate everything but appear to do nothing, and as a consequence deny and stymie any sort of production. I refer to Cage (1973) to make work that is purposefully purposeless, to engage in *purposeless play* (1973: 27) as a foil against the

explicit purpose and problem solving approaches of the prevailing view. I draw

upon ideas in Esche (2005) to propose that my new work might be better

understood as a 'modest proposal' rather than an attempt to change a paradigm,

as is for instance expressed in Gablik (1991). I use insights found in Esche's

(2005) writing to theorise an approach that conceives of a dissenting arts

practice as engaging with problems, but not in ways that are explicitly

confrontational, but instead use underhand strategies such appearing purposely

purposeless. I refer to ideas in Stephen Zepke's essay *The Readymade: Art as*

the Refrain of Life (2009) to consider how existing forms, subjects, and traits

from the prevailing model of thinking might become the materials and starting

point for my new works, and through processes of dissolution and

reconfiguration of these this might be used to break from the habitual and

recognisable and as a consequence be understood as '*a form of political*

resistance' (2008: 33). Ideas in *Kafka Toward a Minor Literature* by Deleuze

and Guattari (1986) help me describe how this the approach might take an

existing dominant form and disturb this by betraying its original terms,

vocabulary, and imagery to produce a *minor narrative* from these. This minor

narrative, Deleuze and Guattari argue, can be understood as a strategy of

resistance. I draw on ideas in Toscano (2009) to describe that a consequence of

the production of the minor is that the normally coherent voice of the dominant

narratives is replaced by the emergence of incoherent forms and this might

represent '*freedoms of speech, liberated from the control of the prevailing*

model' (2009: 48). I draw on ideas in Zepke (2008) and Carter (2004) to

describe how, through generating such places of breakdown within the forms of

the prevailing view, this might set up the possibility for unforeseen and surprising events to occur.

2.5.   Summary

The chapter has outlined three groupings of literature, insights and ideas that each reveal different perspectives and responses to the question of how might arts practice work within the approaches, attitudes and metaphors of the prevailing view and encourage the possibility for an alternative way of thinking and acting? The following chapters (4, 5 & 6) discuss this more fully.

3.   Methodology

3.1.   Introduction - A practice-led emergent inquiry

In this chapter, the rationale and principles underpinning the practice-led emergent methodology are discussed. The chapter identifies the rationale for a practice-led emergent research methodology (3.2), presents an overview of the methods, and describes the principal strands of the inquiry that are used to undertake the research (3.3). These strands are:

- The search for and development of the constituents of the experimental framework (3.1.3).

- The testing, development and application of this framework through the iterative making processes of practice (3.1.4).

- The analysis, re-evaluation and re-grouping of existing practice using the framework (3.1.9).

This chapter describes how these are brought together to consider and evaluate the findings of the study and to establish the usefulness of the framework.

3.2.   Rationale for a practice-led emergent inquiry

The following considerations identify the need for a practice-led emergent research methodology. The key aims of the study are:

1. To develop an experimental framework, which for the purposes of the research is called a process aesthetic.

2. To use this framework to help initiate, and guide the production, dissemination, evaluation and understanding of new work.

3. To discuss and evaluate how this new work might set up the possibility for thinking and acting differently.

4. To consider how this framework and practice might help avoid problems recognised within the approaches of the prevailing model of thinking, in particular those found within some eco-art.

5. To explore how this approach might be applied to re-evaluate a body of existing artwork, and to extend the discourse within eco-art.

From the outset of the study, it was necessary that the methodology should be flexible, adaptive, and open-ended so as it might be shaped through the processes of engaging with the above aims and by responding to the findings of the study as it unfolded. In particular, I sought to place an emphasis on the type of knowing gained through the *making* of each project, theorising as it were from the bottom up, rather than fitting making into a pre-specified theoretical framework. Integral to the study was the desire to foster a way of expressing and acknowledging the kind of insights gained through making. A guiding metaphor that I used throughout the study to describe and express the relationships between ideas and making is cybernetician Gordon Pask's idea of a *fabric* (1961). He describes a fabric as being akin to a substrate of undifferentiated, indeterminate materials and processes, and this, he argues,

sets up potentials for relationships, feedback, and connections with the environment. Finding a fabric or generating the conditions for this to emerge, Pask argues, is a fundamental task as it is from such substrates that innovation and surprise may occur.

Pask's metaphor inspired me, from the outset of the study, to conceive of the methodology as something akin to a fabric, and to think of the principal strands of the inquiry as part of this substrate of materials, processes and events. Pask describes that the constituents of a fabric cannot be prescribed or perhaps even recognised; one cannot predetermine the relations they may make, or predict how they might respond to feedback. Finding or recognising a fabric is difficult due to this and there can be no linear problem solving approach to address this. One has to proceed heuristically through processes of trial and error. Pask's idea of a fabric and the experimental method of searching for this was an important guiding metaphor for the research process and expressed the nature of the development of this study. It allowed materials to be grouped without prescribing why or how, or predetermining what their use might be. When one thinks of the term *fabric,* one almost by default thinks of processes and forms generated by weaving. However, the image of a fabric generated on a loom, the sideways movement of a shuttle between warp and weft felt too ordered and constrained to be analogous with Pask's notion. A metaphor found in *Material Thinking* by Paul Carter (2005) helped conceptualise the idea of a fabric towards something more resonant with Pask and more appropriate to the study. Carter describes how the consequences of individual ideas, actions, making and thinking processes might be imagined as akin to the wakes produced by vessels on the sea. This image of actions, thinking, making setting

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in motion a wake, suggested that when these encountered each other these might overlap, interfere and generate new patterns, new relations between these ideas. I draw on this idea as it gives conviction to the method of bringing ideas together from divergent sources, such as Artificial-Life research and Process Thought. I conceived of these various sources, including literature, practices, media, systems, processes as generating their own wakes. The wakes from these would meet each other, overlap, dissolve, scatter and redistribute into new combinations. Through this process dense blotches of pattern were produced and were akin to a wake generated weave of thinking and acting. These dense intense blotches, I believed, were analogous to Pask's idea of a fabric and, although ambiguous, indeterminate and momentary, within these was the possibility for new and surprising insights. As a consequence, a central method of the study is to work to set up the possibility to produce such blotches, and this necessitated that an Emergent Methodology was chosen to design this study.

Wright (2009) describes that an Emergent Methodology sets up processes that are iterative in nature, adaptive, flexible and changeable. According to Robson (2002), a characteristic of a study that uses an emergent methodology is that the early design of the research is under-specified, open-ended and may seek to combine elements of randomness and opportunism with other choices that are more purposeful and carefully considered. Wright (2009) describes that an emergent methodology is useful when the researcher recognises that the study is likely to unfold in ways different than initially anticipated and wishes to encourage the findings to influence the design of the research. This was entirely appropriate for the search for something akin to Pask's fabric and

Carter's wake-generated weave. The understanding is that this flexible design encourages the research to evolve, develop and find form as it proceeds, and 'the detailed framework ... emerges during the study' (Robson, 2002: 81). The selection of the emergent methodology is appropriate as:

- The practice-led emergent design of the study fosters a heuristic explorative approach that is both flexible and adaptive to the specificity and complexity of the research questions.

- Arts practice is the main strand within the study and it is fitting for research projects that engage in, and encourage experimental open-ended processes, to use this flexible approach.

- The open-ended, evolutionary nature of the study is mirrored by the unfolding methodology.

3.3. Principal strands of inquiry

A motivation of undertaking the study was to develop an experimental framework for arts practice, *a process aesthetic*, to help guide the initiation, production, dissemination and evaluation of new practice and to help extend and re-frame existing practices. Within this was the aim of setting up the possibility for new models of practice. As a consequence, the search for the constituents of this framework was a primary strand of inquiry (3.3.1). Testing and developing this framework through new practice, was central in guiding the inquiry, and this iterative process formed the second strand of the study (3.3.2). The development and testing of the framework was conducted in close relation

to practice, both new and existing, and it was used to re-evaluate and regroup a body of existing arts practice, which became a third strand of the inquiry (3.3.3). These strands were undertaken concurrently and acted as a reciprocal conversation, which informed and influenced the development of each other.

3.3.1. The constituents of the process aesthetic

A guiding question throughout this study was how might an experimental framework be developed that can be used help guide the initiation, production, dissemination and evaluation of new arts practice? In response to this question the first strand of the inquiry considers what might become the constituents of the framework, which is called a process aesthetic. This search was undertaken through a review of literature and context (see chapter 2), conducted in close relation to practice, and drew upon ideas from diverse fields of study, including arts practice and theory, Systems Thinking, Cybernetics, Artificial Life research, Deep Ecology, and Process Thought.

Some questions that this strand of inquiry considered and which focused and delimited the search were:

- How might this framework be composed in ways that encourages new arts practice to set up the possibility of thinking and acting differently?

- How might this new practice avoid some of the problems recognised within the approaches of the prevailing model of thinking, in particular those identified within eco-art?

3.3.2. Practice-led research

An aim of the study was to develop an experimental framework, *a process aesthetic*, to help guide the initiation, production, dissemination, evaluation and understanding of new arts practice. The thesis describes eleven practical projects initiated as part of addressing this aim. The emergent design of the study is expressed through describing three iterative cycles, which are identified in the thesis as the preliminary, developmental, and application stages of practice. Within and throughout these iterative cycles my own observations and assumptions were constantly challenged and critically interrogated by the processes of undertaking and performing new practice, by the particular kind of knowing encountered by making. This knowing through making is frequently understood as a kind tacit knowledge, as something, which is perhaps difficult to communicate because of its nature or its ambiguity. The aim to develop the experimental framework was fundamentally a way to help comprehend and foreground the nature of this kind of tacit making knowledge. As a consequence, my own experience of testing this method through making, of gaining tacit knowledge through initiating, producing, disseminating new work, lies at the core of the research and is a guiding force in the design of the study. The different stages of the study became points of reflection where the experiences and findings from the new practice are evaluated and substantiated by cross-comparative analyses from insights gained through the other strands of the inquiry.

3.3.2.1. Preliminary practice

The preliminary practice represents the first testing of the framework and consists of four projects that are described, and evaluated. A focus of the work in this preliminary iteration is to interrogate and rethink traits found within existing arts practice that are understood to embody attitudes and approaches of the prevailing model of thinking. In particular, it attempts to challenge approaches that treat materials as a passive and subordinate resource, and also seeks to disrupt the related conception of the artist as a visionary creator. This new work seeks to embody and encourage an alternative way of thinking and acting that reduces the artist's influence on the unfolding of work, that diminishes the artist's imposition of form and control over materials, that foregrounds the inherent characteristics of materials and through doing so disturbs the idea of the artist as a visionary.

- Project one (*51 Aqueous dispersals, 2006*) explores how the artist, rather than imposing form upon a supposedly inert and passive substance, might have a relationship with materials which is fundamentally collaborative and reciprocal, one where it is the materials voice rather than the artists that is foregrounded.

- Project two (*1 litre of soap solution inflated 129 times, 2006*) further develops ideas about collaboration and reciprocity between materials and artist so that the inherent qualities within the materials used guide and dictate the unfolding of the artwork rather than the intentions of the artist.

- Project three (*From Splashing to Solar stacking, 2006*) investigates the idea that an artwork might be loosely orchestrated so that feedback from

the environment leads to the configuration of the work. In this instance the work explores how a liquid system responds to solar energy and as a consequence generates form. The sculpture that emerges from this can be understood as due not to the artist's intentions or creativity but as a consequence of a set of connective feedback processes, a fabric, that results in the generation form.

- Project four (*Thread system generated by the sound of its own making, 2007*) develops further the idea of an autonomous, self-organising artwork which unfolds in real-time, dissolving and reconfiguring itself in response to feedback from its environment.

All four of these preliminary projects explore the potential of setting up the artwork so that qualities immanent to the materials, their response to feedback from the environment, might act to ceaselessly configure, dissolve and reconfigure the unfolding of the work. At the basis of these projects is an attitude that seeks to encourage the materials to speak to us, to foreground their immanent capabilities and to diminish and deny the artists imposition of form upon these. Pask's idea of a fabric was a guiding metaphor for the organisation of this work. It encouraged the work to be set up in ways that appeared loosely configured and indeterminate. The ambition in the work was to seek to set up the conditions for connections and relations with feedback from the environment and to allow this to be the configurer of the work. This approach contrasted with the existing artworks, the starting point for the work, which embodied attitudes that conceived materials as inert and passive and in need of the artist's hand to orchestrate these and give them form. The resulting projects explore how setting up the artwork so that the material might talk back

might lead to a kind of making that encourages an empathetic knowing usually denied by approaches that perceive matter as inert, passive and chaotic and awaiting ordering.

Work made during this first iteration of practice was exhibited widely and presented at conferences, seminars and workshops. The dissemination of the work through exhibition gave a critical context for study which was productive and significant as feedback gained through this process helped the evaluation and reflection upon the framework. An observation was that the kind of tacit knowledge gained through the making of the artwork was quite different that gained during its exhibition. For example, throughout the experience of making, I was deeply aware of the qualitative difference between the approach of the new work and that of the existing art that I was reconfiguring. However, the method used for the artworks exhibition often embodied an approach that was consistent with, rather than challenging to the typical and normative display of artworks. In the process of displaying the new work the critical reference points and translation of earlier approaches and attitudes were sometimes lost. This identified that a necessary modification to the process aesthetic should be to apply it across all stages of the production and dissemination of the new work. The findings of this process formed the basis of papers presented at conference and published as catalogues. The presentation of the work at symposia allowed the critical dialogue between new and existing work to be foregrounded and as such became a crucial part of all subsequent practice. A comparative review of insights gained from these projects and the findings from the other strands led to the development and

adaption of the framework, which was applied during the second iteration of
new practice.

3.3.2.2. Developmental practice

A second iteration of new practice was made in response to the critical
evaluation of the preliminary work and its working processes, and consisted of
four projects made concurrently. For this body of work, the framework is
adapted so that the selection of existing forms is no longer limited to
reconfiguring existing artworks but expanded to explore attitudes and
approaches embodied in wider cultural forms, including literature, music, and
mediated events. The particular focus and intention of the new work is
consistent with the earlier practice and seeks to work with aspects from the
prevailing model of thinking that appear fixed, entrenched and the embodiment
of the attitudes, approaches and metaphors of the prevailing view. The new
work seeks to dissolve these existing forms in ways such that they might be
loosened, opened and made more fluid and flexible, towards something akin to
Pask's fabric. The ambition is that feedback from the environment might
reconfigure the materials towards something unforeseen and unexpected.

- Project five (*40 Part Motet for Karaoke, 2007)* explores ways to produce the
  dissolution an existing choral work and the reconfiguration of this towards a
  collective that is more heterogeneous, amateur, and unauthorised, and to
  encourage forms that appear to set up the possibility for thinking and acting
  differently.

- Project six (*An Incomplete Uncertainty, 2008)* investigates how the narrative in Al Gore's book, *An Inconvenient Truth* (2007) might be translated in a way that denies the rhetoric and voice of authority in the original, that betrays its original terms, vocabulary, and imagery to produce an alternative minor narrative. In comparison to the fluency of the voice of the prevailing view, although seemingly incoherent and stuttering, this alternative expresses the potential for different ways of thinking about the world.

- Project seven (*Riffs and Variations on a Theme of Ecocrisis, 2007)* seeks to find a means of moving beyond the literal and ossifying rhetoric and master narratives of the event, *Live Earth* (2007). The work explores strategies in response to the alienating nature of the event, and seeks to displace the forms and subjects of the original event in ways that might allow an alternative meditation on the issues, and a more personal subjective expression of the ecological crisis.

- Project eight (*Lost Tape Jukebox, 2005 – present)* investigates how one might act to temporarily revise and halt the disappearance of the individual and collective acts of making and distributing homemade tapes. The new work aims to reframe and reassert the potency of the crafting of these artefacts, and to promote the sensitivity and nuance that went into their making. The new work reconfigures these disparate forms into a new collection but does so without categorisation or hierarchy.

The work produced for this second iteration of practice seeks to test further how the framework might be used to guide new work, to engage with existing forms that had become in some way fixed or stalled, and to dissolve these so

they might become flexible and adaptive again. An aim of this act of dissolution is to produce something akin to Pask's fabric (1961), which might act to set up the possibility for the artwork to unfold in surprising or novel ways. As I develop a clearer understanding of the operation of the process aesthetic, more appropriate methods are integrated into the design of the new projects. For example, the framework is developed so that the starting point for a new work might be to use forms that are not traits of the prevailing approach, but rather are recognised as already expressing alternative ways of thinking and acting. Such materials are recognised as disparate and heterogeneous, and rich with possibilities and are considered as already producing something akin to Pask's fabric.

3.3.2.3. Application of practice

A third iteration of practice seeks to apply the insights gained through undertaking the research. The understanding gained through the making processes of the first two iterations of work and the evaluation of these suggested that the existing forms chosen as starting points for new work were sometimes too obvious and easy targets. The intention of the third iteration of practice is to use the framework to set up the possibility to work from within existing forms that are real approaches and attitudes in action, particularly those found in institutional, bureaucratic thinking and acting. Whereas the starting point for a preliminary work might have been an image of an action such as Goldsworthy's *Rowan Leaves* (1995), throughout the third iteration I sought to

engage with attitudes and expectations generated by real-time situations, such as those of an expedition or an actual environmental problem.

- Project nine (*Radio Tours, 2009 – ongoing)* sets out to reconsider and reconfigure apocalyptic attitudes embodied in literature such as *The Road* by Cormac McCarthy (2007). The projects starting point is to explore how amateur, homemade recordings, movies and soundtracks might be used to recreate road journeys analogous to the travelogue undertaken in *The Road*. As the project evolves the materials become the playlist for several live radio broadcasts.

- Project ten (*Social Cycles, 2008 – ongoing)* investigates how the framework might be used to help initiate a work in response to local environmental problems. Its particular focus is on how the framework might encourage a response to problems caused by the rapid expansion of a university campus, which were further amplified by institutional/bureaucratic rhetoric that had sought to address the problems. The project explores the possibility of setting up an alternative way of thinking and acting, and 41 hybrid bicycles were made available free of charge to students and staff at the Universities for the duration of their studies and employment.

- Project eleven (*Crazy Tourist, 2009)* is a response to participating in a Cape Farewell expedition to the source of Dollis Brook, a river in London. The expectation was that the artists who had participated in the expedition would make a creative response to this, and that this would reinforce existing values and ideas about the consequences of climate change. The

work developed in response to the expedition was guided by the framework and produced a way of thinking and acting that broke away from the kind of work that was anticipated.

These eleven projects provide the principal source for gathering and generating knowledge through making. Descriptive accounts of each project are provided in the following chapters (7, 8 and 9).

3.3.3. Re-grouping a body of existing arts practice

This third strand of the study uses the framework to help re-evaluate and re-group a range of existing artworks. It focuses on six existing artworks and explores how these can be understood to embody and perform aspects of the process aesthetic. Each of the artworks is identified as breaking with an approach or attitude of the prevailing view and as a consequence produces a different way of thinking about the world. Each work is described as disrupting an existing dominant narrative, as producing something akin to a minor tale, and this dissolution is seen to produce a fabric that generates new connections and interactions, which results in the work being configured in unexpected and unforeseen ways. It considers how by bringing these practices together the strand can be understood to identify a formerly unrecognised provisional grouping of practice.

- Project one (*Hotel Palenque,* Robert Smithson, 1972) describes how Smithson breaks from the expectations and constraints of a commission

that seeks to reinforce and reaffirm existing value systems, and by doing so produces a completely different way of thinking about the context and relations at a site. The work provides an example of the dissolution of a dominant narrative and its reconfiguration to reveal a glimpse of normally overlooked patterns, processes and connections. It describes a consequence of this, which is that the artwork exists in multiple forms, a photo documentary, a form of presentation, a film installation, a publication, and sculptural scenarios.

- Project two *(Zocalo,* Francis Alÿs, 1999) considers a film made by Alÿs, which charts the movement of the shadow of the flagpole in the Zócalo (Mexico City) across the course of one day. It describes how Alÿs finds events, spontaneous organisation and ordering and processes that are out of the ordinary and which reveal glimpses of underlying patterns normally over-looked or not recognised. The potency of this work is that we find that it depicts a site where its incompleteness becomes a catalyst for change. It is an example of a change in behaviour stimulated not through intention or purpose but through a kind of lacking that seizes the imagination, an indeterminacy connected to feedback from the environment that becomes the catalyst for configuring the site in novel and unexpected ways.

- Project three (*Life is Sweet in Sweden,* Aleksandra Mir, 1995) discusses Mir's response to the prevailing attitudes and corporate approaches that were shaping the development of Gothenburg's preparation for the European Championships in 1995. It describes how Mir responds to the

formulaic corporate ideals shaping the management of the event by reconfiguring these to provide an alternative experience and space in the city for the duration of the games. Mir's objective was to provide a space of free exchange that would provide a simple means that disrupted the dominant narratives across the rest of the city. The dissolution of the exiting attitudes and their reconfiguration towards an alternative approach is an example of how arts practice might set up the possibility to think and act differently in the world.

- Project four (*Off Voice Fly Tip,* Bob & Roberta Smith, 2009) describes a work made as part of the Tate Triennial in 2009. It describes how Smith's work can be understood, in the context of the major exhibition, to act as a kind of minor aside, as a peripheral event, akin to something that is found in the appendices or footnotes of the main narrative. The form of the work, its method of production, its display and self-deprecation, is orchestrated to contrast with other works displayed in the exhibition, which appear in contrast significant and serious. The work is open and unfixed, and relations are continuous and transient, and in a perpetual state of becoming and perishing. Smith's intervention operates as a kind of mute curatorial project in the context of the larger conceit of the major narrative of the exhibition and disrupts and presents an alternative to this. It is an example of how arts practice might think and act differently from within the approaches and attitudes of a dominant narrative.

- Project five (*Beyond Art: Dissolution of Rosendale, New York,* Raivo Puusemp, 1980) describes a project by artist Raivo Puusemp who was

elected as Mayor of Rosendale and worked for one term with the peoples of the town to find ways of addressing local environmental, social and economic problems. His approach was to set up public discussions, participatory workshops in ways that empowered the locals to take control of their town planning, and which led to the successful resolution of many of the problems they faced. It was not until several years later that Puusemp announced that the project was part of his arts practice. It stands as a clear example of an arts practice that sets up the possibility for thinking and acting differently in the world.

- Project six (*Recordings,* Gabriel Orozco, 1997) considers a series of films made by Gabriel Orozco, which use a method of filming whilst wandering around urban spaces. The resulting films depict the unfolding flows of the city, reveal fleeting phenomena, and fuse, frame and make visible patterns, wakes of events and activities that underlie the seemingly chaotic city. The subjects and focus of the films are often banal, seemingly pointless and without purpose but collectively evoke an often overlooked perception of the world as in flow, as interconnected and dynamic. The films represent a clear departure from a logic driven by instrumental purpose and as such offer the possibility for thinking differently in the world.

One consequence of this is that this new grouping breaks with the type of categories produced by thinking in terms of subject areas and disciplines and as such encourages a discussion with practices which might normally be excluded by discourses orientated and defined by subject matter or field of study. This

can be understood as potentially expanding the scope of artworks associated with discourses that seek to find a means of addressing the current ecological crises. I argue that works in this notional grouping can be understood to act as examples of practices that set up the possibility for thinking and acting differently. These artworks can be understood to avoid problems recognised within the approaches of the prevailing model of thinking, in particular those found within eco-art. They can act as examples to guide the initiation, production, dissemination and evaluation of new artwork. This new grouping of works forms a context for understanding and interpreting the creative practice of the current project.

3.4. Bringing the findings of these strands together

How are the strands brought together to cohere the findings of the study into a form of understanding which is useful and intelligible, and does this establish the usefulness of the framework?

The three strands of inquiry described in this section (3.3), namely the search for the constituents of the framework (3.3.1), the testing of this through new practice (3.3.2), and the re-evaluation and regrouping of a body of existing arts practice (3.3.4), are entirely interdependent and inform each other throughout the study. The metaphors, inspired by Carter (2004) and Pask (1961), of *a wake-generated weave of thinking*, a substrate of thought akin to a *fabric,* express an image of how the findings from these three strands of inquiry are interrelated and are woven together. Each of the individual strands of the

research process of this study bring together different kinds of inquiry to produce their own weave of blotches and pattern. Raking through these, surveying and exploring their composition has been integral to the emergent development of the framework. I sought to identify how each of the three individual strands had set in motion their own wakes, and to locate moments when these had come together to generate a blotch, a fusion of the thinking from each of the strands. However, from the beginning of the study the strands were already integrated and fused together and as a consequence it is difficult to separate out or isolate the findings from these unfolding processes. The knowledge could not easily be lifted out of the fabric from which it emerged, and comprehending the qualities within such blotches was not straightforward as it was often dense and opaque, constantly shifting, changing and mutating. Willing these strands to come together to form a coherent understandable outcome felt somewhat contrived, and did not ring true with the emergent methodology of the study or the nature of the practice.

It became more useful to think of wakes both coming together to form new patterns yet also dissipating, losing energy and disappearing, and to allow this metaphor of growth and dissolution to be an integral part of the methodology, to acknowledge the ebb and flow of the research process, where ideas emerged but also disappeared. The ebb and flow of my thinking throughout the study was inspired by Kierkegaard's (2000) argument that life has to be lived forward, but can only be understood backwards

Insights from *The Radicant* (2009) by Nicolas Bourriaud help cohere the findings into a form which is understandable. Bourriaud (2009) describes how

the metaphor of the root has informed the foundations of much artistic, political

and other radical thinking throughout the 20th century. The image of thinking

as akin to a tree of knowledge is widely understood and this is deeply

influential on the way we think about thinking, learning, problem solving, and

undertaking research. This image is rooted, solid, and represents ideas of

strong foundations, origins, and a stable central core. Bourriaud proposes that

an alternative artistic response is emerging which is composed in resistance to

this kind of radicalism, and defies imaginations guided by the idea of roots,

origins and identities. He describes this as a *radicant* aesthetic, which in

contrast to the deep enrootedness of the radical, lays shallow roots to help it

move along the ground, only adding new roots to help advance across the

surface. Bourriaud asserts that to be radicant, one sets one's roots in motion;

one's identity is emergent, and relational to processes of movement and

encounter. He states that the roots of the radicant aesthetic are temporary,

precarious, and contextual; they are responsive and behavioural and not

imposed or imported. The metaphor of the radicant, he argues, illustrates the

idea of constant becoming rather than that of being. The emergent

methodology of this study has much affinity with Bourriaud's ideas.

Throughout the study individual projects have sought to efface and deny rather

than express a sense of origins and roots. The focus of each project has been on

the present, the experimental, the relative, and the fluid. Each work has sought

to proceed by questioning notions of origins and roots, to disturb and disrupt

ideas about the fixed, solid and permanent. The artwork has sought to break

from the known and existing, to move from formulas, ideals, and categories to

foreground experiment and exploration, to favour the event over order, the

ephemeral over permanent, and fluidity rather than fixity. Each artwork can be understood to have laid down temporary roots, within its local context, so that it may move and traverse this but not establish any sense of permanence or fixity. Each subsequent work has performed a similar process. An image of the overall study may be something more akin to a plant that does not have a single root but rather spreads 'in all directions on whatever surfaces present themselves by attaching multiple hooks to them, as ivy does' (Bourriaud, 2009: 51). There has been no single origin to guide the unfolding of each project but rather there have been 'successive, simultaneous acts of enrooting' (Bourriaud, 2009: 52). Bourriaud's insights help one understand how the findings of the study do not come together or cohere to form a tree of knowledge, but rather remain distributed across multiple surfaces. The aim to bring the strands of the methodology together to evaluate the findings of the study has meant not trying not to define any one singular focal point of the practice, but rather emphasising the need to think in terms of the links and relations between successive and simultaneous works, to express what Glissant describes as the 'poetics of relations' (1997).

4.0 An outline of some of the attitudes, approaches and guiding metaphors of the prevailing model. Re-imagining the world as process, and considering arts possibility for thinking and acting differently.

4.1 Introduction - Thinking the world to pieces

A common argument in writers such as Naess (1989), Sessions (1995), Fox (1995), Bateson (2000) and Capra (2002) is that the approaches, attitudes and metaphors of the prevailing model of thinking lie at the root cause of the current ecological crisis. An imperative, they argue, is to recognise ways of addressing this. Finding a response is, however, not straightforward, as rather than using the approaches of the prevailing view, which may perpetuate the cause of the problems, it is recognised that alternative approaches are needed. As a consequence they acknowledge that there is a need for new guiding metaphors to help think and act differently. From the perspective of the prevailing view, art is typically thought of as insignificant in comparison to other areas of study, such as the sciences, and as a consequence its possible contribution to discussions is frequently overlooked. This chapter considers how arts practice, in contrast to the rational, scientific and technologically driven problem solving approaches of the prevailing model, can offer a different approach, which might may produce new guiding metaphors and set up the possibility for thinking and acting differently.

This chapter aims to describe the conceptual and contextual overview that lies at the core of the research project, which, in later chapters, is developed, tested

and evaluated through new arts practice. It begins by describing approaches, attitudes and defining metaphors of the prevailing model of thinking. It identifies how the world is often thought of as being composed of clearly defined, separate and self-contained entities. For the purposes of this thesis this is called an entitative view. It outlines how the entitative view has been influential across modern social, scientific and political thought and how its metaphors still continue to inform the way the world is conceived and understood today. It describes a consequence of this view is the idea that humans are separate from the entities they observe and experience, and how this has resulted in a perceived separation between the mind of the human with the rest of reality, which is seen as mindless, purposeless and mechanical.

The following section describes some of the consequences of this and considers how these may affect how we think and act in the world today. It outlines how this view has led to a mechanistic approach, which has been deeply influential on the study of the world and the production of knowledge. It describes how a mechanistic approach is a symptom of an epistemological error that manifests itself across all aspects of life including dysfunctional and pathological attitudes towards the environment. This approach denies a systemic understanding of the world and one consequence of this is the current ecological crisis and the subsequent denial, ignorance and reluctance to address this.

The next section considers alternative ways of thinking derived from Deep Ecology and Process Thought and considers how these may break from the mechanistic metaphors of the prevailing view. It considers some of the consequences of this, in particular how it produces new guiding metaphors, and

describes how a change from a mechanistic to a systemic view may have the capacity to alter the way one feels and acts in the world, and may simultaneously resolve many of the problems associated with the prevailing view. Although the need to find ways to rethink the mechanistic metaphors of the prevailing model is recognised, there is also a need to reconsider the way we approach problems and the way we try to find solutions to these. The following section considers some of the complexity of affecting a change in thinking and acting and describes how this is neither straightforward nor, perhaps, oddly, even desirable. It argues that it is necessary to avoid the use of problem solving approaches guided by conscious purpose, as these are understood as a symptom of an epistemological error, which embody and perpetuate the prevailing view. The final section draws upon on insights from the writing of Bateson (2000), Ingold (2000), Graham (2001), O'Sullivan (2006), and Charlton (2008), to consider how art can be a means of overcoming some of the issues recognised in the prevailing problem solving approach.

4.2   Recognising the problem - a growing awareness of the ecological crisis

Writers such as Naess (1989), Sessions (1995), Fox (1995), and Capra (2002) have described some of the causes, implications and imperatives of the current ecological crisis. In *Towards a Transpersonal Ecology* (1995) Warwick Fox states that recognising the crises is not difficult as dealing with environmental problems is now part of our everyday existence. Acknowledging the human contribution to these problems, he argues, however, has been limited. Fox

argues that this is due to the *human-centeredness* (1995: 9), assumptions of human importance that pervade and shape our culture. A result of this, he states, is that irrespective of the dysfunction and damage caused by our actions, human interests will always put ahead of the welfare of the non-human world. Like Fox, Naess argues in *Ecology, Community, and Lifestyle* (1998) that to acknowledge and then address environmental problems there is a need to find ways that go beyond the narrow views of humans. George Sessions in *Deep Ecology for the 21st Century* (1995) proposes that to address the crises, a reconsideration of our consumption and production lifestyles, a reduction of the industrial activities that support these, and a reduction in the population boom is needed. Each of these writers propose that a way of overcoming the crises is to encourage a conception of the world that is based on ecological principles. Fritjof Capra's *The Web of Life: A Synthesis of Mind and Matter* (1996) presents a clear argument in support of these principles, what is known as Deep Ecology. If such insights were once the domain of specialist discussions, and perhaps as a consequence easily overlooked, at the outset of this research project the wider context was one of a growing public awareness of the current ecological crisis, in particular to the causes and consequences of climate change. Wide sweeping consciousness-raising of the issues was occurring through the media, film, and best selling books such as Al Gore's *An Inconvenient Truth* (2007), James Lovelock's, *The Revenge of Gaia: Earth's Climate Crisis & The Fate of Humanity* (2006), Bill McKibben's, *The End of Nature* (2006), and Elizabeth Kolbert's, *Field Notes on a Catastrophe* (2006). The Stern Report (2005) presented evidence of the reality of the ecological crisis, as did *Climate Change 2007: Synthesis Report* (IPCC, 2007). The IPCC

reported that we were living in an era of escalating anthropological climate change, caused by global warming. The IPCC predicted a future where up to half the world would be uninhabitable due to rises in sea level, and raises in temperature, which would lead to droughts, scarcity of drinking water, and famines. Similarly the *Global Environment Outlook* (Geo-4) United Nations Environment Programme (2007), issued a comprehensive report, which highlighted the unparalleled environmental changes affecting the contemporary context including 'climate change, land degradation, collapse of fisheries, biodiversity loss, and emergence of diseases and pests, among others' (2007: 43). Although there were varying opinions as to how deeply we had fallen into this crisis, these materials present unequivocal evidence of the anthropological contribution to climate change.

4.3   Aware of the problem…but unable or unwilling to change

> Are we ever guided by the wise words we hear? Isn't wisdom to be appreciated only with the twenty-twenty vision of hindsight? (Saro-Wiwa, 1996: 42).

Demos (2009), Porritt (2009) and Curry (2006) argue that the discussions and growing awareness about the eco-crisis has shifted the discourse on the environment and necessitates a reassessment of the way we think about and act in the world. These materials, they argue, are an imperative for developing a new and different ethics for future living, and are a catalyst for a global reassessment of our lifestyles, attitudes and behaviours, which can no longer be ignored by individuals, communities, councils and governments. However,

according to Porritt (2009) no amount of instruction, information or facts about the ecological crisis has produced a change in attitudes or behaviour; people had in the main continued their lifestyles as normal. Berry (1994) and Porritt (2009) suggest that our reluctance to acknowledge the full implications and consequences of our own lifestyles is because we cannot comprehend the magnitude of the problems facing us. Berry (1994) writes 'people just don't get it…they don't comprehend how deeply rooted it is, the crisis that confronts us...the order and magnitude of the present catastrophic situation is so enormous, so widespread, and we don't know what we are doing' (Berry in Hope, 1994). Why then, even when faced with compelling evidence that it is our lifestyles that are contributing to the worsening ecological crisis, do we still continue to ignore and even deny the consequences of our thinking and acting? In *The Ecological Crisis of Reason* (2001) Plumwood draws analogies between the story of the Titanic and ignoring the need to respond to current ecological crises. In both narratives, she argues, the warnings of catastrophe were clear and understood, and there was ample time to take action, yet in both instances this was completely ignored. She writes 'nothing, not even the ultimate risk of the death of nature, can be allowed to hold back the triumphant progress of the ship of rational fools' (Plumwood, 2001: 6). Bateson (2000) suggests that it is highly probable that the lack of response is no longer attributable to ignorance of the facts but is conscious and purposeful led by deeply acculturated attitudes and beliefs. Bateson's view is acknowledged amongst theorists, writers and philosophers, including Birch (1988), Mathews (1991), Pratt (2000), Meyer (2001), and Kirkman (2002) who argue that it is the attitudes, approaches and metaphors of the prevailing model of thinking that are inextricably implicated

in current social and environmental problems, and not simply ignorance of the causes of these.

4.4 Considering some of the premises that inform the attitudes, approaches and guiding metaphors of the prevailing view.

In *Steps to an Ecology of Mind* (2000a), a reoccurring question that Bateson asks is on what principles do we base our comprehension of the world? It is, he argues, crucial to consider and evaluate how we come to know the world, how we decide to view the world and what logic, principles or premises guide our understanding of the relations between humans, society, and the larger eco-system. In response to Bateson's question, the following section looks at the underlying societal principles that shape our perceptions, attitudes, and values and the guiding metaphors that provide the foundations for our subsequent thinking and acting.

4.4.1 A mechanical and entitative view of the world

Chia & King (1998), Pratt (2000) and Meyer (2001) describe that at the heart of the prevailing model of thinking is an understanding that conceives the world as being comprised of separate entities that occupy distinct places in space and time. This view of the world is attributable, they argue, to René Descartes (1596-1650) as well as thinkers such as Newton, Bacon and Locke and has since informed the roots of the dominant scientific, technological paradigm that governs Western society. At the core of Cartesian thinking is an understanding

that conceives of a separation between the mind of the human and the mindlessness of the rest of reality. A consequence of this idea, Mathews (1991) and Meyer (2001) argue, is that the human subject is understood as able to act purposefully, whereas the rest of reality, such as animals, trees, plants, and rocks, are perceived as being incapable of acting with purpose. Kirkman (2002) and Huckle and Martin (2001) argue that as material substances have no capacity for experience or mind, and cannot act with purpose, a consequence of this is that they can only relate to other materials spatially. Thus, the study of phenomena, including the human body, animals, plants, rocks, rivers, stars and planets, focuses on spatial relations, proximity, relative motion and contact. To assist in studying phenomena in this way, Chia & King (1998) argue that the world is conceived as composed of discrete, separate and self-contained entities that are at rest. The influence of this is that prevalent modes of thinking about the world favour the observation of the unchanging and immobile, the separate and self-contained. This influences the way movement is thought about, which they argue is conceived in terms of individual entities that move from one place to another and as such can be observed, measured, and computed. In turn, a consequence of this is that the language of change, movement and becoming is subordinate to the vocabulary that elevates notions of stability, continuity and permanence. Capra (1982), Birch (1988) and Mathews (1991) argue that for Descartes, and Newton after him, everything that is not a human mind is considered a machine. A consequence of this view, they state is that the workings of complex systems, including the human body, animals, plants and the natural world are seen as mechanical and it is assumed that knowledge can be attained by reducing these into separate parts and through studying the

behaviour of these. Capra (1982), Birch (1988) and Huckle & Martin (2001) argue that the kind of knowledge produced by conceiving the non-human world as a machine could be utilised and manipulated to extend our control over the Earth. The study of and construction of the world by reducing it into parts, Mathews (1991) writes was 'raised to the status of a philosophy, a worldview encompassing all that was real' (1991: 16). Bowers (1992) and Smith (1992) argue that mechanistic views still influence the underlying metaphors that guide much of our thinking today.

4.5   Some of the consequences of the attitude and approaches the prevailing view

A conclusion one can draw from the above arguments is that traits within the approaches, attitudes and guiding metaphors of the prevailing model are likely to still be deeply influential today. This next section considers some of the consequences of the mechanistic view and how it continues to affect the prevailing model of thinking.

4.5.1 A fundamental epistemological error and a partial view shaped by conscious purpose

Porritt (2006) argues that at the root of the ecological crises is the assumption of separateness which he describes as an 'overwhelming philosophical folly' (2009: 6). Capra (1982), Keeney (1983), Bateson (2000e) and Harries-Jones (2002) argue that the idea of humans being separate from the environment is not only a fundamental misconception but an epistemological error that lies at

the root of our thinking about the world. This error affects how we come to know and view the world and distorts how the relations between humans, society, and the larger eco-system are understood. Bateson writes that 'epistemology is the great bridge between branches of the world of experience – intellectual, emotional, observational, theoretical, verbal and wordless. Knowledge, wisdom, art, religion, sports, science are bridged from the stance of epistemology. We stand off from all of these disciplines to study them and yet stand at the centre of each' (1991: 231). Following Bateson's view one can surmise that an error at the root of our thinking may manifest itself across every aspect of our emotional, intellectual, verbal and non-verbal, or theoretical domains.

4.5.2 On what do we base our comprehension of the world?

> As individuals think within the language of their culture their language thinks them (Bowers, 1992: 43).

Bateson (2000d) argues that a consequence of this epistemological error is that it denies the possibility of a systemic understanding of the interconnectedness and unity across ecosystems, society and humans, and because of this humanity is destined to act in ways that disturbs the equilibrium of the system. Without a systemic understanding we can only have a limited partial understanding of the world, and as a consequence we have to consciously and purposely select what should be perceived as significant and important. Bateson asks 'on what principles does your mind select that which you will be aware of?' (Bateson, 2000a: 438). An answer is found in Capra (1982), Bowers (1992) and Smith

(1992) who each argue that we rely on the principles of mechanistic thinking to give us the underlying metaphors, language and vocabulary to guide our perception. The implications of this, they argue, are found in the crises that dominate the contemporary context. It is clear to Bateson that as we are guided by mechanistic metaphors we are caught in a cycle of dysfunctional that reinforces and perpetuates further error. Bateson argues that because of the lack of a systemic awareness we are destined to act in ways that are destructive. The consequences of this error are not limited to any one aspect of life, but are made manifest across all social, mental and environmental ecologies. The following section considers some of the consequences of this.

4.5.3 At the root cause of environmental problems

> As you arrogate all of your mind to yourself, you will see the world around you as mindless and therefore not entitled to moral or ethical consideration. The environment will seem yours to exploit (Bateson, 2000f: 468).

Bateson (2000), Rorty (2000), Pratt (2000), and Morton (2007) argue that the ecological crisis is a symptom of the epistemological error at the core of our thinking. They argue that a precondition of a dysfunctional, pathological conception of the world is the idea of the human subject who believes they are detached and separate from the environment they observe. They claim that this mechanistic conception objectifies the environment to produce the conditions for its exploitation and the pathology of this idea is further amplified, they argue, by conceiving of everything outside of the human mind as inert, passive and mindless substances that can be controlled and exploited. Bateson (2000) and Mesle (2008) argue that this metaphor of separation stymies the emergence

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of ethical thought. Mesle writes, 'If I see my life as disconnected from others, no moral vision is possible. It is only as I see that you and I are connected, that our lives and actions affect each other, that the possibility of ethical thought and action emerges' (2008: 18).

4.5.4 At the cause of social and political problems

Delanda (1999), Meyer (2001) and Kirkman (2002) argue that mechanistic metaphors that reduce the human body, animals and the natural world to entities that are inert and mindless, produce dysfunctional and exploitative attitudes that seek to control, alter and exploit nature and treat nature as an unlimited resource for human consumption. They argue that these metaphors are deeply acculturated and are evidenced not only in attitudes towards the environment but found throughout the heart of social and political thought. The mechanistic view of nature as something that is inert, passive and subservient has, they argue, has been applied to the realm of humanity and human society. An example of this, Merchant (1989) and Plumwood (1993) argue is the subordination and oppression of women through Western history.

4.5.5 At the root of our learning and teaching

Bateson (2000) argues that the ecological crisis is a crisis of mind, perception, and values. Bowers (1992) and Orr (1992) argue that our education system plays a fundamental role in the production of these and it is not surprising, given the widespread acculturation of its metaphors, that education is imbedded

within mechanistic thinking. They argue that the current ecological crisis is also an educational crisis which challenges those institutions presuming to shape minds, perceptions and values. They argue that contemporary education, its attitudes, its language, forms and structures, are deeply influenced by the metaphors of mechanist thinking. This can be seen in the organisation of study into separate specialist disciplines, in the preference for linear and modular characteristics in curriculum design, teaching styles, and assessment processes.

4.5.6 Promoting the distinctive individual

Bowers (1982), Greig (1989) and Orr (1992) argue that a primary focus of the education system is the development and recognition of an individual's intelligence. This is related, they state, to wider cultural assumptions that conceive of the individual as the primary social unit. Recognition of intelligence is identified as something that occurs within the individual's mind. The emphasis here on the separate individual and their mind can be seen to embody and perpetuate metaphors from mechanistic thinking. Within the education system to aid the measurement of intelligence there is an emphasis on acquiring specialist skills and knowledge. Orr (1994) and Graham (2001) argue that consistent with specialisation is the emergence of hierarchies and inherent competition as individual achievement is measured in relation to others. A consequence of this, Graham (2001) states, is that it further encourages boundaries, disciplines, separation, and division.

4.5.7 Studying parts to understand the whole

> Our educational system fosters a common intellectual skill: thinking the world to
>
> pieces (McInnis, 1982: 210).

Subjects are taught separately based on the assumption that they can be reduced into separate component parts and studied separately to provide an education. This is a mirror of the primary idea of mechanistic thinking. This metaphor is continued with the focus being on topics and facts rather than concepts and relationships. Subjects are separated and studied in isolation, often with little recognition of the inter-relations and connections between these. Implicit in this model is the idea that the component parts of each discipline can be brought together and assimilated in the mind of the student to form a whole understanding of the world. Orr (1992) states that because of such views contemporary education fails to nurture a systemic comprehension of the world. He writes that 'the great ecological issues of our time have to do in one way or another with our failure to see things in their entirety' (Orr, 1994: 94).

An example Bateson (2000c) uses to describe the consequences of this lack of systemic awareness is that of medicine / medical science. He argues that conscious purpose samples and determines what should and should not come under the consciousness of medicine. The process of how research purposely focuses on solving particular problems is an example, as vast amounts of energy and resources are applied for a specific purpose and when these are solved the research moves onto the next problem, and so on. He argues that although this problem-solving approach achieves some great successes, there is

as a consequence of the methods used little systemic whole knowledge of the body and little understanding of its internal interdependencies as an interactive system. Medicine, he argues, appears to be the embodiment of the mechanist attitudes.

4.5.8 A partial view of learning

Following Bateson's idea of the epistemological error at the root of our thinking, given the partial view that we possess due to our lack of systemic understanding, we have to rely on conscious purpose to guide what we perceive as important or not within education or medicine. As a consequence the metaphors and attitudes of mechanistic thinking are still influential in determining what is considered important in education, in deciding what the focus of study should be, and how study should be undertaken. Capra (1982), Bowers (1992), and Graham (2001) argue that the prevailing metaphors privilege rationale thought, namely subjects such as maths and the sciences that are supposedly neutral, natural, and culture free. In contrast subjects perceived to embody the sensual, intuitive and somatic, such as art and music, are frequently relegated to insignificance.[1] Greig (1989), likewise, argues that within the education system there exists the legacy of mechanistic thinking in the division between the 'rational mind of the sciences, which is perceived as separate from and superior to the bodily, the spiritual, the emotional and the intuitive of the arts' (Greig, 1989: 47). Ingold (2000) argues that in the tradition of Western thought and science, the sensual, felt and intuitive have

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[1] I will argue later that this perceived insignificance is actually an opportunity for art to develop an alternative approach.

been diminished and denigrated in comparison with products of the rational intellect. Intuition, Ingold states 'has been widely regarded as knowledge of an inferior kind' (2000: 25). Greig (1989) and Graham (2001) argue that the logic informing this is deeply ingrained and this thinking is imbedded throughout the traditional hierarchical structures of our education systems.

4.5.9 Unable to adequately account for the dynamic nature of the world

> We are caught up in the world and we do not succeed in extricating ourselves from it in order to achieve consciousness of it (Merleau-Ponty, 1962: 5).

Graham (2001) and Goodlad (1984) argue that the dominant systems of the contemporary world are anachronistic, without the capacity to adequately cater for the unfolding needs of today's constantly changing society. Referring to the higher education system, Graham argues that large-scale faculties with hierarchies of authority and power are overly bureaucratic. Such institutions, she states, are faceless, anonymous and disenfranchising, and ultimately destroy the potential closeness of humankind, and stifle the emergence of any collective sense or vision. In *The Radicant* (2009), Bourriaud depicts the contemporary world as in endless flux, fluid, ceaselessly moving and ever changing. Whether writing about commodities, objects and artefacts, social life, or the labour market Bourriaud describes a condition of the contemporary as precarious and fragile, as constantly being updated or reformatted. Capra writes 'we live today in a globally interconnected world, in which biological, psychological, social, and environmental phenomena are all interdependent.

Capra, Bourriaud and Graham argue that the metaphors within the prevailing model of thinking that foreground separation, stasis, stability and permanence appear inadequate to engage with, comprehend or adequately account for the dynamic nature of the contemporary world.

4.6   Maintaining the attitude and approaches the prevailing view

> No amount of enforced instruction about today's interdependencies and even physical
>
> indivisibility has as yet dislodged it from our dominant worldviews (Porritt, 2009: 6).

Berry (1987) and Capra (1987) claim that the idea of humans as separate from a passive and mindless environment is firmly rooted, both culturally and politically, throughout Western thinking to the point where it seems difficult to imagine any different or alternative way of conceiving the world. Bateson (2000c) states that the epistemological error is not only the root cause of the ecological crisis but is also the cause of the acculturation and perpetuation of the error in all subsequent thinking and acting. He writes that 'the immanent threat of ecological disaster is a product of epistemological error and, even more horrible than the apathy or addiction which makes it difficult, perhaps impossible, to meet this threat with appropriate action, is likewise a product of epistemological error' (Bateson, 2002: 169). The reference to addiction by Bateson is appropriate as it designates how deeply engrained the error is and how difficult breaking from it is as it is analogous to the hold on one's life that alcohol has on an alcoholic. The alcoholic may recognise the dangers of excessive drinking but a compulsion drives them to drink regardless of this. This compulsion becomes an underlying and reoccurring pattern of alcoholism,

which is repeated irrespective of the problem and dangers. It follows that the addiction of the alcoholic can be understood as synonymous with the widespread compulsion to maintain our consumption and production lifestyles. Like the alcoholic this recurrent behaviour is ceaselessly repeated even though we recognise the dangers of this.

4.6.1 Thinking and acting driven by individual needs

> If you go through purposive, cognitive levels, people only hear or will only want to hear what is expected (Bateson, 2000: 452).

Bateson (2000c) proposes that at a fundamental level we consciously and purposefully shape, order and control the world according to one's individual needs, 'ones survival unit will be you and your folks or conspecifics against the environment of other social units, other races and the brutes and the vegetables' (Bateson, 2000f: 468). The alcoholic's worldview is intentionally and compulsively shaped to support the reoccurring patterns of the illness and likewise the view of the prevailing model, Bateson (2000c) claims, is purposefully and unconsciously maintained and as a system that recursively 'perpetuates how the relations between humans, society, and the larger eco-system are conceived' (2000c: 446). A thought-provoking consequence of the influence of the metaphors that guide the attitudes and approaches of the prevailing view is how they encourage a dislocation from ethical considerations and it follows that this allows us to continue with our addictions irrespective of the dangers. A symptom of this is the conception of the non-human world as a machine, as something that can be utilised, manipulated and controlled for

one's own purposes and benefits, and imagined as a passive resource to be exploited. Thus for centuries the exploitation of the land has been acceptable irrespective of the consequences. In today's context, although we are well aware of the ecological crisis and the need to change our lifestyles, the truth of the matter is that our own immediate individual interests override and disengage with today's imperatives. The consequences of such actions, Bateson writes, are 'overlaid and rendered unavailable to us by our self-conscious purposiveness' (cited in Charlton, 2008: 1). He uses the term 'conscious purposiveness' to describe how we have learnt to identify single goals for our own purposes, to achieve ends that suit our own needs and personal interests without comprehending the relations with and effects of this on the wider living world. He writes that 'human consciousness…is organised in terms of purpose…to enable you to quickly get what you want: not to act with the maximum wisdom in order to live but to follow the shortest logical or causal path to get what you next want…dinner…sex. Above all it may be money or power' (Bateson, 2000: 439).

It follows that an effect of conscious purposiveness is to condition attitudes to decide what is and what is not deemed important. As a consequence, thinking that might contradict this becomes imperceptible as it is obscured by the dominance of the considerations of purpose of the prevailing model. What we may interpret from this is the extreme difficulty facing ideas that might contradict or challenge the attitudes of the dominant perspective. Thus in the context of today's ecological crisis one can begin to understand why widespread calls to act in response to the crisis and to reconsider the way we think and act frequently falls on deaf ears. It is not that the arguments about

ecological crisis are not rational or not understood but that the attitudes and behaviours symptomatic of the prevailing model, in particular those shaped by considerations of purpose, mean that they are rendered invisible to become imperceptible and obscured or are simply ignored. This narrowing effect of conscious purpose is felt ever more profoundly, Bateson claims, when one encounters 'self-maximising entities…trusts, companies, political parties, unions, commercial and financial agencies, nations and the like' (2000c: 452). Such agencies, multi-nationals, and nations, he argues have a defining role in the production and maintenance of values.

Following Bateson's argument, it is possible to understand how our own individual interests override and render invisible today's imperatives. It is likely that we do not perceive the world in a systemic way, and that hence we can only have a limited partial understanding of the interconnectedness and unity across ecosystems, society and humans. It follows that the errors within this partial understanding will be further amplified when the world we perceive is selectively redrawn to answer problems and questions defined by our own conscious purpose. A question to ask is what happens when such partial and narrow viewpoints are applied to consciously address a problem, such as to find a way to produce more food, to make travel easier, or to make larger profits? Bateson is particularly worried about the affect of modern technologies combined with the approaches determined by conscious purpose. He writes that, 'Today the purposes of consciousness are implemented by more and more effective machinery, transportation systems, airplanes, weaponry, medicines, pesticides, and so forth. Conscious purpose is now empowered to upset the balances of the body, of society, and of the biological world around us. A

pathology – a loss of balance – is threatened' (Bateson, 2000a: 440). Bateson fears the scenario of dysfunctional attitudes combining with advanced technologies when he writes, 'Your survival unit will be you and your folks or conspecifics against the environment of other social units, other races and the brutes and vegetables… If this is your estimate of your relation to nature and you have an advanced technology then, your likelihood of survival will be that of a snowball in hell' (Bateson, 2000f: 468).

4.7   An alternative view to help reduce the problems within the prevailing model of thinking

It is widely acknowledged that the attitudes, approaches and mechanistic metaphors of the prevailing model of thinking lie at the root cause of the current ecological crisis and finding a means of addressing this is now an imperative. The ecological crisis, Bateson (2000) argues, cannot be understood or addressed in isolation as it is a facet of a deeper total crisis caused by an epistemological error at the root of our thinking. Capra (1987) argues that this has led to a crisis in perception that is just as likely to manifest itself in dysfunctional economic approaches, attitudes to poverty, approaches in education, patriarchal value systems, religious fundamentalism as it is in the destruction of the natural environment. Finding an effective means of addressing the dysfunction that has led to the current eco-crisis may require a shift in approach. This may mean dealing not with the symptoms of specific problems but focusing on the epistemological error which Bateson and Capra describe as the cause of the dysfunction.

4.7.1 Deep Ecology

Naess (1984), Capra (1987) Berry (1994), Devall and Sessions (1985) and Fox (1990) argue that an alternative to the prevailing model of thinking is found in a view known as Deep Ecology. They argue for a complete change in ontology, claiming that only a widespread change in human consciousness and a fundamental change in the way people relate to the environment may begin to address the ecological crisis. They propose to deal with the root causes of the crisis rather than its effects and argue that 'a shift is needed from an anthropocentric (person-centred) philosophy with its built in 'biospheric inegalitarianism', to a biocentric (life-centred) philosophy which humbly recognises that we are within the environment; that reverence rather than ruthlessness is due to the natural world; that, however special and significant, we are but one creature in an incredibly complex and seamless web of life' (Greig, 1989: 9). Capra (1987) describes that a consequence of this is that the prevailing mechanistic view will dissipate towards a one that is more ecological, systemic and holistic.

A fundamental concern of Deep Ecology is with the nature of the cultural transformation needed to achieve sustainable lifestyles. Devall (1993) claims that deep questioning is the starting point towards this transformation. Naess (1984), Devall and Sessions (1985) and Fox (1990) propose that from this questioning arises a notion of self-realisation, a crucial component of this transformation. What this notion means in its simplest form is a state of ecological consciousness that emerges from and produces a systemic and

holistic view. For supporters of Deep Ecology this notion of self-realisation or ecological consciousness is a necessary precursor, a first step to realising a way of thinking and acting that can solve the eco-crisis.

4.7.2 Process thinking

Thiele (1999) similarly argues for the necessity to think ecologically and systemically. He states that an ecological view is positively at odds with and contradicts the mechanistic attitudes and metaphors of the prevailing model of thinking and as such cannot be reached by using approaches derived from the latter. To begin to move towards an ecological perspective, Thiele suggests that a change in perception is necessary so as to break with metaphors derived from mechanistic views. This, he argues, means to conceive the world as in flux, as processes and events that are ceaselessly interacting, unfolding, and transforming and to move towards a mode he characterises as *process thinking*. Chia & King (1998), Thiele (1999) and Delanda (2005) describe the basis of process thinking is to conceive the world as sets of interconnected, ceaselessly unfolding and changing events and phenomena. They argue that from a process viewpoint the fundamental ontological principles of reality are concerned with 'becoming' rather than 'being'. This idea of becoming relates to conceiving the world as composed of unfolding processes that are ceaselessly interacting, unfolding, and transforming themselves.[2] In comparison to metaphors derived from a mechanistic conception of the world, the fundamental features of reality no longer begin with separate entities but

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[2] This concept informs the practical work of the research and is discussed further in the later chapters.

with processes of change, movement and transformation from which actual entities may appear and disappear. Whitehead (1998: 464) proposes that the idea of reality as relentless processes of becoming and perishing should be the fundamental generalisation around which one should weave one's philosophical system, and that ceaseless flow and change must be understood as the basic ontological principles of reality. Delanda (2005) and Chia & King (1998) argue that one should study the processes that lead to entities rather than the entities themselves as notions of stasis, permanence and separation that dominate mechanistic metaphors are only temporary states which are neither indicative of reality nor what one should found their ontological principles upon. They argue that the entities that we see are a temporary manifestation of process, just moments in a perpetual state of assembling and disassembling. In process thinking, movement and change are conceived as fundamental to reality, and immobility is only an extreme limit of the slowing down of such movement, a concept according to Chia & King (1998) that is only reached in human thought but never realised in nature. Chia & King (1998) argue that this process view, where all things are perceived as in a process of relentless becoming and perishing, is better suited to conceiving the ceaselessly unfolding in-flux nature of reality. Capra (2002) and Chia & King (1998) argue that an implication of process thinking is that it alters the way one thinks about change. From a mechanistic view one typically thinks in terms of things changing as something that occurs to an entity-like substance. However, from a process view, there is no need to think of any discrete entity as undergoing change as everything is change, and change is process and process is the character of everything. Capra (2002) argues that if process is the character of everything

then one can begin to understand mind and consciousness, not as things but as processes. Following Capra's insight, if mind is understood as a process then it can no longer be conceived as separate from matter, thus contradicts the very core of mechanistic thinking and its metaphors. If process is recognised as the character of everything then the ideas of separation that underpin the prevailing model of thinking, fail to make any sense. Mesle (2008) and Booth Fowler (1995) each argue that as a consequence of conceiving the world from a process perspective, as ceaselessly interconnected relational processes, this has the capacity to significantly alter the way one feels and acts in the world. From a process perspective, where everything is tied together as a fusion of interrelated processes of which humans are integral, there can be no external observer and no separation and thus it may be understood as a foil against entitative conceptions of reality. Humans are inextricably interwoven into participating in the unfolding processes of the world and, as a consequence, one is able to recognise that all of our actions and choices contribute to the processes of forming the world. Hence fostering an attitude based on recognising the world in terms of change and process may be an important means of engaging with the epistemological error understood to lie at the root cause of problems today. It may help establish an understanding that we and all other entities, processes and events are aspects of a single unfolding reality. A view of the world from a process perspective produces an explicit critique of the mechanistic attitudes and the methods of the prevailing model and suggests an entirely different set of metaphors to help comprehend the world. The process view of Booth Fowler (1995), Chia & King (1998), Delanda (1999), Capra (2002) and Mesle (2008) is consistent with discussions found in the

ecological thinking of Deep Ecology writers such as Naess (1994), Sessions (1995) and Code (2006). A common understanding throughout the literature is the necessity of finding ways of producing whole systemic viewpoints to counter the partial, selectivity of the approaches of the prevailing model.

4.8   Towards a change in viewpoint

The insights found in writers such as Naess (1994), Sessions (1995), Chia & King (1998), Delanda (1999), Capra (2002) and Code (2006) appear to offer a credible alternative to the attitudes, approaches and ethics produced by the mechanistic metaphors of the prevailing model of thinking. The metaphors used in Deep Ecology and Process Thought encourage a systemic and ecological view that foregrounds the non-linear, emergent and dynamic complexity of communities of living systems, which celebrates diversity, adaption and change and the patterns and interdependences within and between systems. My position based on this information, is that the approaches and guiding metaphors produced by Deep Ecology and Process Thought offer an understanding of the world that is relevant, informative, and which supports the basis of this research project which, in later chapters, is developed, tested and evaluated through new arts practice.

The previous chapter described how the ecological crisis had led to a re-evaluation of arts role. A central aim of the study is to consider in what ways art might be able to contribute to thinking differently about this contemporary crisis. In the context of the prevailing view, most art appears irredeemably flawed. Characteristics typically associated with art's practice, such as the

intuitive, sensual and affective, are ignored in favour of rational problem

solving approaches of subjects such as science and economics. As a

consequence art may move to adopt and adapt to the logic and approaches

rational problem solving attitudes and begin to seek ways that it can work

instrumentally to solve problems. Through doing this, I argue that it begins to

reinforce rather than challenge the approaches of the prevailing view. Arts

instrumentalism may also ignore its possibility for producing new guiding

metaphors that suggest alternative ways of thinking and acting. A further

consequence that follows is that within this context of instrumentalisation, art

that does not explicitly set about trying to solve problems may well be

dismissed as self-indulgent naval gazing. The discourses in eco-art, I argue, are

particularly prone to this literal, narrow-minded dismissal of arts possibility and

this is discussed in chapter five. The following section argues that the kind of

art's practice easily dismissed as impotent by the prevailing view may embody

the possibility for acting and thinking differently. It considers the possibility for

arts practice and briefly introduces some strands of thinking that will be more

fully explored throughout the subsequent chapters.

4.8.1 Worries about how to proceed and perpetuating the problems

Throughout Bateson's late writing and against the context of a worsening

ecological crisis, there is an urgency to find an adequate means of addressing

this problem. Although he acknowledges the benefits of a change in

consciousness from the mechanist metaphors of the prevailing model to a

systemic and ecological view, he is reluctant to propose or advocate how this

might be achieved. Bateson is particularly concerned about the use of linear problem solving approaches in response to the crisis as he argues these are deeply implicated in the attitudes of the prevailing model of thinking and in the production of the crisis. A linear approach to problem solving, Bateson claims, is a symptom of error at the core of the prevailing model. He states that the conscious problem solving approach of the prevailing model is pathological and that we shall maintain these pathologies for as long as we continue using its premises, approaches and metaphors. He is worried that using linear problem solving approaches will exacerbate and perpetuate rather than address the problems, and that any approach, irrespective of good intention, that seeks to solve problems will be guided by values, beliefs and motivations that may contain their own systemic error and dysfunction. Bateson (2000) is also worried that attempting to change the behaviour of another, even if well intentioned, assumes a position of power and knowing over a subordinate. He argues that at the root of desires to control and change another's behaviour are problematic attitudes that are symptomatic of the hierarchical approaches of the prevailing model prevalent, what Bateson describes as 'philosophies of control' (2000b: 49). It follows that before trying to solve a problem we need to acknowledge the potential dysfunction in our own views and also to consider the way our approach may perpetuate the very problems we seek to address. He summarises this problem when he writes that 'the problem of how to transmit our ecological reasoning to those who we wish to influence in what seems to be an ecologically good direction is itself an ecological problem' (Bateson, 2000a: 473).

Bateson argues that whilst using a linear problem solving approach may temporarily address problems, in the long term one cannot know if this may also lead to further problems and thus lead to more dysfunction. In the context of the current ecological crisis, attempts to address causes of climate change through developing new technologies may bring about some solutions but may also result in the amplification of problems or the perpetuation of dysfunction. For example, in trying to address the problem of CO^2 emissions, bio fuels and nuclear power have been considered as potential solutions. Although both options present a way of addressing the symptoms of the problem, the deeper malaise at the root cause of the ecological crisis is ignored, and thus the dysfunctional attitudes remain. Bateson is deeply concerned that ameliorative actions determined by ones own considerations of purpose, although potentially well meaning, may well not only perpetuate the approaches of the prevailing model but also the fundamental epistemological error at the root cause of the problem. Charlton (2008) writes that 'decisions made by processes of conscious reasoning would inevitably be tainted and rendered dangerous by the very fact that they were the product of the same linear conscious purposefulness that was producing so much ecological damage' (2008: 115). Bateson describes problem solving approaches steered by conscious purpose as an aberration, akin to 'a deviant mind, a kind of insanity' (2008: 5), yet they will more than likely be the basis for actions that seek to address the worsening ecological crisis. It seems clear that we need to find a means of address that does not perpetuate or embody the narrow purposive attitudes and mechanistic metaphors of the prevailing model. It follows that speculating upon how we

might begin to think differently means to devise ways so that one might break from approaches defined by conscious purpose and linear problem solving.

The insights from Deep Ecology and Process Thought produce metaphors that can help imagine an alternative way of thinking about the world that may address many of the problems caused by the error at the root of our thinking. However, it follows that one cannot simply propose these as the solution to the problem as this would simply reinforce the logic of the linear problem solving approach. Also, even though the benefits of adopting a Process or Deep Ecology view are recognised, it is not a given that one can simply switch one's perspective even if one wishes to. The thesis argues that seeking to switch perspective from mechanistic to systemic is the embodiment of the problem solving prevailing view. Thus the aim of the research is not to propose that the Deep Ecology or Process view should replace the prevailing model as this is neither possible nor desirable. Seeking to replace one view (mechanistic) with another that is supposedly more adequate (Process) would clearly embody a mechanistic attitude.

As a consequence the aim is to shift the way one thinks about the problem so that one seeks to find ways to critically engage with, rather than replace the prevailing model of thinking. The insights from Deep Ecology and Process Thought represent alternative ways of thinking about the world and provide the theoretical basis and guiding metaphors for what this critical engagement might mean and achieve. The research problem is to explore how art can contribute to this alternative view and act critically within the prevailing model, and set up the possibility for thinking and acting differently. The subsequent chapters

discuss this problem fully. The final section briefly considers how art might

work to set up the possibility for an alternative way of thinking and acting.

4.8.2 Arts possibilities and potentials

The chapter has expressed a desire to find ways that one can break from the

approaches, attitudes and guiding metaphors of the prevailing model of

thinking. To begin to do this, it has become clear that one needs to adjust the

way one feels, thinks and acts in the world but in doing so also simultaneously

resist trying to affect change through using the problem solving approaches

employed by the prevailing model. Integral to this may be the possibility for

developing experimental approaches that break with assumptions which believe

that only conscious problem solving approaches can be applied to plan our

actions or to resolve problems. How might one organise our lives so as to

encourage other normally excluded, less conscious, less purposeful approaches

to more fully shape our thinking? In the face of the ecological crisis such

questions may at best seem deeply indulgent. However, insights found in

Bateson (2000), Ingold (2000) and O'Sullivan (2006) suggest how this might

be a credible means towards thinking differently about the world.

Bateson (2000) argues that it is necessary to devise ways to tap into and feed

off pre-cognitive, pre-purposive, unconscious awareness, that might allow

intuited processes normally inhibited or filtered by consciousness to seep

through and help shape our thinking and acting. Ingold (2000) likewise argues

for the need to foster the possibility of intuited and felt insights, which occur

before consciousness orders our thinking and shapes our responses. He states

that 'intuitive understanding, in short, is not contrary to science or ethics. Nor

does it appeal to instinct rather than reason, or to supposedly 'hardwired'

imperatives of human nature. On the contrary, it rests in perceptual skills that

emerge, for each and every being, through a process of development in a

historically specific environment. These skills provide a necessary grounding

for any system of science or ethics that would treat the environment as an

object of its concern. The sentient ecology is thus both pre-objective and pre-

ethical' (Ingold, 2000: 22). Bateson (2000) suggests that art can work at the

pre-cognitive, pre-ethical level that Ingold describes. A way of seeing beyond

the narrow views shaped through conscious purpose may be achieved, he

argues, through actively engaging with processes related to art, music, and

dance. Bateson believes that engaging with art and aesthetic experience can

help one access systemic insight normally denied by consciousness and the

considerations of purpose and because of this it has the potential to act as a

corrective to the pathologically narrow perspective of human consciousness. It

can do this, he states, through providing a 'glimpse that makes us aware of the

unity of things, which is not consciousness' (1991: 300). Such glimpses,

Bateson proposes, have the capacity to work as bridges between 'branches of

the world of experience – intellectual, emotional, observational, theoretical,

verbal and non-verbal' (2002: 9). This, he states, may be a means of bypassing

thinking shaped by conscious purpose and thus avoiding the pathological forms

derived from mechanistic viewpoints. If the dominant metaphors propagate

views of separation and distinction, art and aesthetic experience can, he

believes, work to embody glimpses of normally hidden connective patterns, and

as a consequence may act as a corrective to thinking derived from error-ridden epistemologies.

4.8.3 Art as an encounter

> Something in the world forces us to think. This something is an object not of
>
> recognition but of a fundamental encounter (Deleuze, 1994: 139).

Bateson writes that when we encounter art 'we do not assume well formulated purposes…definite motivations or the presence of clear intentions' (2002: 50). This lack of explicit purpose and intention, Bateson argues, provides balance to our conscious purposiveness as it allows access to normally dismissed intuitive, somatic and sensual realms, to what he describes as 'wider-than-conscious mental processes' (2008: 157). Charlton (2008) argues that an effect of art is to provide conduits to ways in which we can receive 'from more-than-human nature, elements of experience that contribute to our well-being, and to our sense of being at home in the world. It may be that we receive real systemic communication that is enabling and restorative' (2008: 158). This idea is developed in O'Sullivan (2006), through what he describes as an art 'encounter'. O'Sullivan states that an art encounter's essential characteristic 'is that it can only be sensed' (2006: 35). Encounters have the capacity, he argues, to disturb, disrupt, and break from the known, to destabilise existing assumptions, and in doing so potentially begin to undo habit. Zepke (2005), likewise, suggests that this disruption on encountering art is real and often jarring, something he describes as akin to a 'gasp caused by the emergence of the unknowable' (Flaxman, 2008: 13). O'Sullivan contrasts the effect of an

encounter with that of an object of recognition which, he states, forms the basis of representational systems that work to reconfirm an already existing understanding of the world and one's place in it. Representational models, he states, support 'our propensity for hierarchy, fixity, stasis (or simply representation) with which we are all involved, but which, ... can stifle creative, and we might even say ethical, living' (O'Sullivan, 2006: 12). He claims that it becomes difficult to think differently than the prevailing viewpoints as 'we are caught... on a certain spatio-temporal register: and see only what we have already seen' (2006: 47). These ideas are analogous to the partial comprehension of the world which Bateson describes; the mechanistic metaphors that shape guide our thinking both consciously and unconsciously mean that 'the world partly becomes – comes to be - how it is imagined' (Bateson, 2000a: 453), 'we see only that which we are interested in' (O'Sullivan, 2006: 47) and 'as a consequence no thought takes place' (O'Sullivan, 2006: 1).

4.8.4 Art as a refrain of life

Both Bateson (2000) and O'Sullivan (2006) identify the need to break from the habitual thinking and acting of the prevailing model. O'Sullivan argues that encounters can act as a rupture with the known as they are involuntary and compulsive and because of this can be a means to break from habitual thinking and acting. He argues that an encounter operates with a double movement, the first, one of dislocation and disturbance followed by a second movement, which affirms the world differently. A consequence of this, O'Sullivan claims,

and analogous with Bateson's glimpses of underlying pattern, is that following an art encounter one may potentially see the world differently. It follows that arts practice, if organised as an encounter, might be used to break with the world we are accustomed to. O'Sullivan argues that the organisation of such affects could 'take us outside ourselves' (2006: 169) and as a consequence 'increase our capacity to act in the world' (2006: 42).

4.8.5 Speculating on how art may be a means to engage within the attitudes and approaches of the prevailing model of thinking

> The essence of life is to be found in the frustration of established order (Whitehead, 1938).

> Revolutionary art proposes the aesthetic event as the nucleus within which all aspects of the human situation – economic, social, political – are included and unified… It performs an action that truly transforms social structures; in other words it is a transforming art (Katzenstein, 2004: 319).

The insights in O'Sullivan (2006) and Bateson (2000) help us think about how arts practice might contribute to engaging within the approaches and attitudes of the prevailing model of thinking. This is important, as typically in the context of the measurable, rational, problem-solving attitudes of the prevailing model, arts role appears questionable and seemingly impotent. A widespread perception is that art without an explicit purpose is irredeemably flawed and a simple indulgency. Capra (1987) suggests that a change in values is needed to affect a change in thinking and acting, yet as described earlier, ones purposive consciousness works as a self-reinforcing system that edits and shuts out other parts of the processes of perception that might effect such a change in values.

Whilst it is possible that arts practice may result in a shift in how one thinks and acts in the world, I have concerns, particularly with Bateson's idea that art can work on an unconscious to reveal glimpses of connective pattern and underlying unities. I feel this might be self-serving and oddly linear in its approach. I am uncomfortable that one should expect art to have this crucial role of revealing a systemic world, and especially as this can only occur on a pre-cognitive register. Bateson, I believe, in his expectation that art will be revelatory, assumes and asks too much of art. Does all art have this capacity? How many artworks have this revelatory effect below their conscious intentions? If one follows Bateson's argument, are all artworks that do not reveal glimpses of connective patterns failures? If only a small selection of artworks offer such glimpses, and as a consequence other works can be overlooked, then would this not represent a narrowing of view based on conscious purpose?

My position is that one can speculate that a task for new arts practice might be the initiation of artworks that cause a 'fissure in representation' (O'Sullivan, 2006: 174), practices that generate places of breakdown and disturbance within existing attitudes and approaches. However, I argue, that to suggest that these fissures would produce revelatory insights on a systemic level would reduce arts possibility to be too linear, purposeful and narrow. Paraphrasing the above quote by Whitehead, the essence of art may be found in the frustration of established order. At these places one might experience the world differently, and be temporarily released from the constraints of our habitual subjectivity. Art, I argue, may work to simply frustrate the prevailing model and not always an embodiment of a systemic view.

Capra (1987) suggests a nuanced move towards a more ecological perspective by proposing a 'shift from expansion to conservation, from quantity to quality, from competition to cooperation...' (1987: 24). It follows that this nuanced approach might be practiced and embodied through art. Rather than explicitly and consciously seeking to change attitudes it might work subtlety to disturb mechanistic metaphors, to produce something towards a more systemic model. It might work to dissolve entitative forms such as taxonomies, hierarchies, structures, theses, chapters, paragraphs, margins, fonts, and footnotes and other means by which humans organise the world and move towards metaphors that are more fluid, dynamic and contingent upon context and environment. Art might in this context break from the metaphors of conscious purpose by being intentionally unaccountable, openly exploring the unknown, being inquisitively different, seemingly disordered, contingent, perhaps even to mischievously amplify perceptions of incompetence and non-achievement. Seeming creative disorder may well be a critical alternative to the predictability of the problem solving attitudes of the prevailing model. Such practice may be perceived as anarchic, a threat towards the prevailing models ideals of achievement and accomplishment or more than likely than not simply ignored by these. This is, however, at this stage, speculation, but imagining this type of role for arts practice does give one an idea of how art might be able to contribute to thinking differently than the approaches of the prevailing model. The following chapters will discuss, describe and test these ideas further.

4.9   Summary

> We may see the overall meaning of art change profoundly from being an end to being a means, from holding out a promise of perfection in some other realm to demonstrating a way of living meaningfully in this one (Kaprow, 1996: 243).

This chapter has shown how some of the attitudes and approaches of the prevailing model are the result of an epistemological error at the root of our thinking. It has described how this error distorts the way we come to think and act in the world and how the consequences of this permeate throughout our understanding of social, political, technological and ecological ecologies. It has shown how symptoms of this error are found in the mechanistic viewpoints on which we base much of our thinking, in views that perceive humans as separate from the environment, in attitudes that reduce the natural world to a substance that is inert and mindless, and in exploitative and dysfunctional attitudes towards humans, the environment and nature. The chapter described possibilities for an alternative way of thinking, derived from insights of Deep Ecology and Process Thought. It argued that from this alternative view, mechanistic metaphors of separation and stasis are replaced by ideas based on ceaseless change, interconnections, and relationships. The normative state of the world is perceived as in a constant state of flux and unfolding and in contrast to the mechanistic view humans are interwoven into this unfolding process and not kept separate from it. It described how as a consequence, many of the problems associated with the prevailing mechanistic view are addressed by this systemic conception of the world.

The challenge, the chapter has shown, is to find alternative ways of thinking and acting that might critically engage with, but not perpetuate the approaches

and attitudes of the prevailing model. It described how a process interpretation of the world, as ceaselessly unfolding and becoming, informs and inspires the current research and is used as the theoretical basis and guiding metaphors to inform the new arts practice that is discussed in the following chapters. However, the chapter argued that, although a process view appeared to overcome problems associated with prevalent approach, it was necessary to defer from proposing that it should substitute or replace prevailing view. To do this, it argued would result in the logic of the mechanistic view, which conceives of the world as composed of interchangeable entities, being perpetuated.

The chapter has shown that to encourage a way of thinking and acting differently there is a need to step outside of oneself, to find a way of breaking with ones habit and the known. It argued that arts practice could fulfil this need as it could be used to disturb and break with the world we are accustomed to. It identified that arts practice might be used to generate places of breakdown and disturbance within existing attitudes and approaches, to create places that frustrated the established order, and that this may be a means to an alternative way of thinking and acting than the prevailing model.

5. Reflecting on the characteristics of eco-art, its possibility to generate alternative approaches, attitudes and metaphors to the prevailing model of thinking, and how it may also perpetuate these

5.1. Introduction

The last chapter described how some of the attitudes, approaches and metaphors of the prevailing model were a result of an epistemological error at the root of our thinking. It described how the consequences of this error shape and influence ones understanding of social, political, technological and ecological ecologies, and lie at the root cause of many contemporary problems, in particular the continued dysfunctional relationships between humans and the environment. The previous chapter argued for the need to find strategies that might be used to critically engage with aspects of the prevailing model, but in doing so avoided approaches that might perpetuate the prevailing view. It identified how it was necessary to resist the problem solving approaches of the prevailing view, which were recognised as an embodiment of the epistemological error at the root of this model. The chapter drew upon insights from Deep Ecology and Process Thought to suggest alternatives perspectives that could generate new guiding metaphors to encourage ways of thinking and acting which might avoid problems associated with the prevailing view. The previous chapter proposed that characteristics found within arts practice, in particular its capacity to work, on a sensual and intuitive level, could be a

means of avoiding some of the issues recognised in the prevailing problem solving approach. In particular, the artwork as an encounter was described as capable of disturbing and disrupting the habitual and the known, and might be orchestrated so as to frustrate the approaches, attitudes and guiding metaphors of the prevailing model. The chapter proposed that a role for arts practice might be to work as a generator of places of breakdown and disturbance within existing attitudes and approaches. It suggested that it was at these places of breakdown, where the prevailing approaches and attitudes were disturbed, that art might set up the possibility to think about and act in the world differently.

This chapter further considers how arts practice might be able to break from the approaches, attitudes and metaphors of the prevailing model to inspire alternative ways of thinking and acting. It considers how art might be able to critically engage with aspects of the prevailing model, but do so without perpetuating its forms. It focuses upon a field of arts practices known collectively as eco-art, which are widely recognised as offering an alternative way of thinking and acting to the prevailing view and are understood as capable of addressing current environmental and social problems. The chapter argues that although eco-art seeks to encourage an alternative way of thinking and acting, there are approaches found within its practices that perpetuate and reinforce rather than disrupt the prevailing view, and by doing so, may unintentionally maintain the cause of the problems it seeks to address.

The chapter outlines some key approaches found in early eco-art and its discourses and considers the aims, and aspirations of these. It then draws upon thinking peripheral to the eco-art discourses to help evaluate and consider how some approaches may perpetuate rather than challenge the prevailing model of

thinking. It subsequently identifies recent eco-arts practices, which overcome many of the problems associated with the earlier work.

The first section of the chapter describes the field of arts practice known as eco-art. It draws upon ideas found in its discourses, including Lippard (1983), Gablik (1991), Carruthers (2006), Porritt (2009) and Rahmani (2009), which identifies that a shared aspiration of eco-art is for arts practice to be a means of finding an alternative way of thinking and acting and, in particular, one that promotes a harmonious co-existence of human beings with and within nature. Some key characteristics of this alternative are described including eco-arts shift from the production of objects towards an engagement with relationships, a desire to move from the idea of an artwork as a mode of individual expression towards an aesthetic which is participatory, communal and collaborative, and an aim to break from the mechanistic attitudes, approaches and metaphors of the prevailing view towards something akin to an integrated systemic model of thinking.

The following section identifies some characteristics of early eco-art and its use of restorative, reconnective, and systems approaches. It draws upon insights from notable exhibitions and accompanying writing that have theorised and contextualised these approaches. These include; *The Re-enchantment of Art* (1991) by Suzi Gablik, *Fragile Ecologies* (1992) by Barbara Matilsky, *Natural Reality* (1999) by Heike Strelow, *Ecovention* (2002) by Sue Spaid. It describes some common characteristics including how the approaches seek to produce a way of thinking about the world that foreground connections, relations and mutual inter-dependencies, especially between humans, the environment and nature. It outlines how a key aim of these approaches is to a produce a deeper

awareness and recognition of these relationships. The relevance of these early approaches in eco-art is that these core aims are still influential in more recent practices.

The following section draws upon ideas peripheral to the eco-art discourses, such as Lewis (1994), Miles (2000) and Morton (2007), Bourriaud (2009), Carlson (2009) and Demos (2009), and uses these to consider and evaluate aspects of these approaches. In particular, it identifies how traits within the restorative and reconnective approach may perpetuate rather than challenge the attitudes of the prevailing model of thinking. It outlines how desires described in the eco-art discourse of Gablik (1991) and Matilsky (1992), that seek to re-connect with origins and with earlier forms from pre-technological societies, can be understood to maintain the alienation and disenchantment it seeks to address. The section explores the depiction of the urban as bereft of nature and assumptions that propose that eco-art is a way of redeeming this. Such attitudes are described as promoting a narrow and partial viewpoint, one that is idealistic, objectifying and fetishising, and as a consequence denies rather than promotes a systemic comprehension of problems. These processes of objectification, the thesis argues, produce and maintain the very conditions that are recognised as lying at the root of exploitative and dysfunctional attitudes between humans, the environment and nature.

The following section draws upon insights found in Strelow (1999), Smith (2005), and Morton (2007), and artworks such as *Area* (1997-2009) by Lois Weinberger, *Island for Weeds* (2003) by Simon Starling, *Fallen Forest* (2006) by Henrik Håkansson, *Empty terrain,* and *Danshui River* (2008) by Lara Almarcegui, which now openly question, complicate and problematise artistic

interventions in nature. It discusses how such work has critically extended the eco-art discourse.

The following section describes how the eco-art discourse of Gablik (1991), Matilsky (1992), Strelow (1999) and Spaid (2002) unproblematically describe eco-art as capable of solving problems. It draws upon insights from thinking, including Keeney (1982), O'Callaghan (1982), Bateson (2000), Kester (2005) and Morton (2005) to argue that the use of problem solving approaches in eco-art are not unproblematic or natural but may be the embodiment of the prevailing view and a reinforcement of the epistemological error at the root of this model. It describes that to encourage an alternative way of thinking and acting, it may be essential to avoid approaches that perpetuate the prevailing view, and the section argues that because of this, the use of problem solving approaches in eco-art should be challenged and problematised.

The following section identifies a prominent trait found in eco-art discourses that depicts the eco-artist as a visionary, which the thesis argues works to maintain attitudes intrinsic to the prevailing view. It draws upon insights from writers including Bourriaud (1999), Protevi (2001) and Plumwood (2001) to describe how the idea of the visionary is now outmoded and unproductive. It outlines how at the core of this conception are hierarchical values that reinforce rather than challenge the prevailing view. In particular the notion of the visionary as an elite individual is described as contradicting the development of the integrative, participatory and collective aesthetic desired by eco-art.

This next section briefly considers the language of environmentalism, in particular the recent shift of its vocabulary from a peripheral dissenting voice to

that of the dominant mainstream. It draws upon ideas in Lewis (1994), Monbiot (2001), Nordhaus and Shellenberger (2007), and Klein (2008) to consider the implication of this for eco-art and its discourses and to question the viability of the continued use of terms and language which have become co-opted and instrumentalised. It speculates that for eco-art and its discourses to generate an alternative to the prevailing view it may now be necessary to reassess or at least problematise the use of its vocabulary and terms.

The final section draws upon ideas found in Bohm (1991), Lippard (1997), Miles (2000) and Kester (2005) to describe a turn towards dialogue and conversation as a means of generating new ways of thinking and acting. It describes how the emergence of a dialogic approach in eco-art may be a way of overcoming many of the problems associated with earlier approaches. The section describes how dialogic practices, unlike earlier approaches, are not instrumentalised as problem solving tools but rather act as catalysts to keep open discussions and channels normally foreclosed by a narrowing of purpose. As a consequence, the thesis argues, the dialogic approach breaks from earlier eco-art, which is locked into a pattern of problem solving, and supports and encourages collective and durational experiences that open up the possibility for new insights. It describes examples of recent arts practice that explore political, social and environmental terrains. The discourse from Kester's dialogic approach, and Bourriaud's relational aesthetic are identified as a theoretical and contextual basis for these practices. A feature of the artists in this section is that, although at the root of these practices is a desire to find sustainable models for thinking and acting, they do not describe or label themselves as eco-artists or sustainable artists. The section speculates how,

released from the defined role of eco-art, the artists are able to work laterally to playfully blend activism, art, design, and architecture. The work can, as a consequence, be more kept open, be more divergent and improvised.

5.2. Eco-art - some of its aims and essential features, its motivations past and present

Krug (2006), Carruthers (2006), Porritt (2009) and Strelow (1999a) describe eco-art as encompassing a dynamic body of arts practices, diverse opinions and broad philosophical positions that range from awareness raising, proposing solutions to problems, to celebrating a communities relations within nature, and developing sustainable visions within a community. Discourses, such as Lippard (1983), Gablik (1991), Matilsky (1992) and Strelow (1999a) describe a primary goal of eco-art as being to find a means to engage with problems associated with the prevailing model of thinking, in particular the idea that humans are separate from the environment, which they argue, is the cause of widespread disillusionment and feelings of isolation and alienation from life, community, and nature. A shared aim of eco-art, they claim, is to foster new approaches and attitudes that can generate a worldview that promotes a more harmonious co-existence of human beings with and within nature. Gablik (1995) proposes that an essential characteristic of eco-art is that it re-orientates art from an activity of individual expression towards a model based on a notion of participation and relationships. Gablik states that 'art will redefine itself in terms of social relatedness and ecological healing' (1991: 27). Eco-art, in contrast to the prevailing models focus on individual, discrete and separate

entities, promotes a systemic, holistic approach that encourages connections and relations.

Matilsky (1991) and Gablik (1995) propose that eco-art engenders an integrative approach that is socially and communally orientated, and that reintegrates art into the social fabric of a community. Watts (2003), Weintraub and Schuckmann (2004) and Wallen (2006) propose that eco-art reintegrates the social and the ecological; it aims to work for communities to support natural and social ecosystems. Watts states that 'ecoartists can be thought of as midwives for the earth, facilitators of environmental education, consultants for environmental restoration and visionaries for transforming ecological communities' (2003: 1).

Strelow (1999), Lipton (2002), Carruthers (2006), Collins (2008) and Rahmani (2009) describe how eco-art projects are predominantly site specific in that they frequently evolve in response to local issues and concerns such as polluted waterways, reclamation and restoration of damaged post-industrial sites. Within these local contexts eco-artists 'provoke discussions, raise questions, develop and propagate concrete solutions to environmental problems and strive for their realisation' (Strelow, 1999a: 161). They propose that eco-art is fundamentally interdisciplinary and integrating in that it reaches out across disciplines to establish opportunities and platforms for social engagement that would not be obtainable otherwise. These integrating processes lead the way, Lipton argues, towards 'a new paradigm of environmental consciousness and sensitivity' (2002: 178).

Strelow (1999a) and Carruthers (2006) suggest that the integrative approach of eco-art is fundamental since dealing with local environmental problems cannot be separated from wider global concerns. Local concerns, they argue, are globally linked meaning that intimate site-specific projects are part of an evolving body of global interventions. As a consequence eco-art is also likely to engage with wider universal global issues such as climate change and peak oil as well as community specific projects.

From the above information one can summarise that eco-art represents a philosophical move from the mechanistic attitudes, approaches and metaphors of the prevailing model of thinking towards something akin to an integrated systemic model of thinking. It embodies a shift from the production of objects to an engagement with relationships, and a move from the individual to a participatory aesthetic, which is communal and collaborative. The following section considers some approaches used by eco-art.

5.3. Some approaches in eco-art

5.3.1. Systems art

Many of eco-arts early exponents, such as Hans Haacke, Alan Sonfist, Helen Meyer Harrison and Newton Harrison were at the forefront of practices that emerged in the late 1960's known as systems art. According to Buchmann (2006), Halsall (2008) and De Salvo (2005) a characteristic of systems art is that the artist is not concerned with the production of discrete artefacts or art objects but, instead, focuses on processes of communication, exchange and

interactions across natural and man-made systems. An example of this

approach is *Rhinewater Purification Plant* (1972) by Hans Haacke.
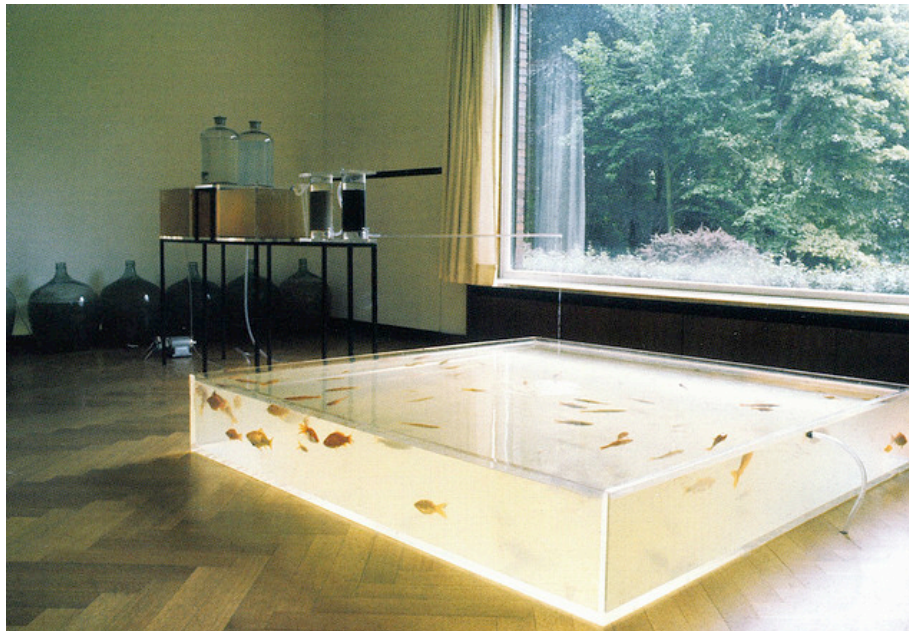
Fig. 2.   Hans Haacke. *Rhinewater Purification Plant* (1972)

Rhinewater Purification Plant (1972) is a laboratory-like installation, a system

which engages with the ecology of the water of the Rhine. Buchmann (2006)

and Demos (2009) argue that the work is an example of a shift in attitude in the

practices of the time away from the production of art objects towards the

exploration of interconnected processes across technological, social, political

and organic ecologies. For the work, Haacke collects and displays samples of

the river water, treats the water through a chemical filtering process, and then

uses this water to supply a tank containing goldfish, or returns the clean water

to the river. The work sets up a simple system that operates to clean the water,

support goldfish, and replenish the river in a token way. In setting up the

artwork as a system, De Salvo (2005) argues that Haacke explores and exposes

inter-relations between the contamination and restoration of the river and the

culpability of human behaviour in this. The work reveals, embodies and produces sets of linked interacting processes and exposes connections between the damage to the water and industrial and domestic pollution. On encountering the work one may become more aware of how individuals, corporations and manufacturing are contributing to the river's degradation. The work also employs practical remediative processes through performing a filtering process that restores the water so that it can support the goldfish. One becomes aware of the need to clean the polluted river but also of creatures that inhabit the river. The work is embedded within the institutional forms of the art world, itself a product of the prevailing model of thinking and, as a consequence, can be understood to support and maintain this model. However, the systemic nature of the work, its emphasis on relations and interconnected processes appears significantly different from objects and artefacts typically associated with galleries, and so can also be understood as likely to disturb and disrupt typical expectations. De Salvo (2005), Buchmann (2006), and Halsall (2008) argue that a systems approach conceives the world differently from the prevailing model and has the capacity to produce different relations and understandings of the world. This difference is recognised and explored in eco-art and its discourses and informs much of its thinking to date. The systems approach informs the reconnective and restorative approaches of eco-art, which are discussed below.

5.3.2. Reconnective and restorative approaches

A reoccurring theme within eco-art discourses is the idea that mechanistic views have resulted in the dysfunctional relations with the environment and nature. At the root of this discussion is an idea that a symptom of these dysfunctional relations is that contemporary life has become disenchanting and alienating. Gablik (1991) and Matilsky (1992) argue that a reason for this is that we have lost touch with earlier, more ecologically sound ways of thinking and acting, and as a consequence perceive a disconnection from nature and the environment. Strelow (1999) and Carruthers (2006) argue that this sense of disconnection is amplified by a perception of the urban as a place that has become bereft of nature. Matilsky (1992) suggests that a physical and psychological rift has developed between nature and the city, and states that 'the gap has widened…relationships between people and nature grow more distant' (1992: 4), and this has contributed to a widespread sense of detachment and disenchantment of the urban dweller. Strelow (1999) describes that a break between humans and nature has occurred, which has resulted in feelings of detachment from our urban environments, and states that cities 'feel ever more alien and foreign' (1999: 45). Strelow proposes that the consequences of this are dysfunctional and pathological attitudes which manifest themselves through 'environmental destruction, social problems, isolation and flight from civilisation' (1999b: 46). Gablik (1991), Matilsky (1992) and Strelow (1999) describe a means of addressing this sense of disenchantment, alienation and dysfunction as being found in reconnective and restorative approaches in eco-art. Matilsky (1992) defines a characteristic of the reconnective approach as being its desire to re-engage with earlier ways of knowing, such as found in the cultures of indigenous peoples, which she argues offer 'important lessons in

communication and psychological and social integration with nature' (1992: 5).
She argues that within these earlier cultures are 'models for a harmonious co-
existence of human beings and nature' (1992: 64) and by reconnecting with
these more ecologically coherent understandings of the world, one can access
ways of thinking often overlooked, denied, and suppressed in contemporary
culture. Gablik (1991) states that, as a consequence, formerly excluded forms
of ritual, ceremony, and dialogue become a ground for the emergence of, and
participation within, a reconnective aesthetic. This approach, she states, allows
one to 'reconnect with the spiritual, mystic, mythical and visionary, and with
ritual as a means of reintegrating and healing the [false] separation of the self
with the world' (Gablik, 1991: 114). Gablik (1991), Matilsky (1992) and
Strelow (1999) propose that a restorative approach is a means of bringing
damaged and sterile sites back to life and reconnecting the urban dweller with
nature. Such work, Matilsky states, aims to 'revitalize the city by introducing
nature into its infrastructure… and attempts to heal the physical and
psychological rift that has developed between nature and the city' (Matilsky,
1992: 55) and 'ameliorate the widening gulf between natural and urban
ecosystems' (Matilsky, 1992: 4).

5.3.3. Evaluating the reconnective and restorative approaches

At the core of these approaches is the belief that through reconnecting with
nature via engaging with forms from pre-technological societies, or by bringing
it back into the city, will be a means of addressing the problems of
contemporary life and potentially transforming society. Writers peripheral to

eco-art discourses, such as Lewis (1994), Miles (2000), Bennett (2001) and

Morton (2007), Bourriaud (2009) and Demos (2009), problematise such

aspirations. Bourriaud (2009) argues that the desire to reconnect with earlier

forms, origins, and roots, in an attempt to release us from the alienation of

contemporary life, is little more than a fantasy. Demos (2009) argues that the

desire to reconnect with earlier ideals is partial and divisive and is likely to

deny a holistic understanding informed by the interconnected political, social,

and technological ecologies of contemporary life. Miles (2000) questions

whether reconnecting with earlier modes of thinking and acting is either viable

or appealing, or if it could have any healing effect. Miles argues that the eco-

art discourse of Matilsky (1992) and Gablik (1991) is self-serving as it assumes

that a return to earlier, more spiritual roots will only be positive and cathartic.

Their discourse, he states, ignores the possibility that this might also work

unproductively in the hands of sceptics, fanatics and evangelists. Lewis (1994)

argues that a potential consequence of this discourse is the fetishising of the

primitive and pre-technological. This desire, he argues, objectifies the

primitive and pre-technological, as it turns it into a thing to be imported and

imposed back into contemporary life, or cherished from a distance. This

objectification, he argues, may produce and maintain the very conditions that

are recognised as lying at the root of exploitative and pathological attitudes to

the environment and other humans. Lewis (1994) argues that, as a

consequence, such approaches potentially perpetuate rather than counter a

discourse of disconnection and disenchantment.

Morton (2007) proposes that the desire to reconnect with the pre-technological,

with more authentic origins, encourages a limited and idealist conception,

which ignores the reality of political, social, and cultural attitudes found within the primitive, such as the subordination of women, and relations with fellow humans, that would today not be tolerated in contemporary life. This approach, he argues, promotes a narrow view which idealises and objectifies selected aspects of the pre-technological and primitive, but ignores other aspects. He argues that describing the urban as lacking the natural is likely to reinforce views of nature as distinct and distant from the urban. Nature, he argues, is turned into a thing which is depicted in the discourse as both distant and something from which one has become disconnected. This view, he argues, is itself disenchanting. Bennett (2001) argues that the discourse of disenchantment in eco-art potentially contributes to generating the very conditions that it describes. The discourse of the urban as bereft of nature can, she states, be understood to produce and reaffirm the very conceptions of separation that much eco-art seeks to dispel - the world 'partly becomes – comes to be - how it is imagined' (Bateson, 2000: 220).

5.3.4. Examples of reconnective and restorative approaches in eco-art

A well-known example of a reconnective approach is *Winter Solstice* (1985) by Fern Shaffer. The work was made at dawn on the solstice along the frozen edge of Lake Michigan. Shaffer dresses in a shamanic outfit and performs a trance-like empowerment ritual. Shaffer describes that 'The experience begins with a feeling, a sense of something that wants to materialize itself...If I am able to rediscover my own first experience of the basic spiritual existence with

nature, it might help others rediscover and honour the same things in themselves. It does not matter that I possess no expert training or special knowledge, only the ability to open up and channel the intuition of my own self...What the world lacks today is not so much knowledge of [things of the spirit] as experience of them. Experiencing the spirit is all' (Gablik, 1991: 44/45). Gablik (1991) argues, that this ritual, often suppressed in contemporary society, is transformative and a means of reconnecting with a deep awareness, and a way of remythologising our culture.

Fig. 3.   Fern Shaffer. *Winter Solstice* (1985)

Malcolm Miles (2000) questions whether the approach in Shaffer is viable or appealing, or how it might have any healing effect. Gablik assumes that Shaffer, through this performance, is able to access shamanism, and through doing this encourages 'psychic mobility' (Gablik, 1991: 47). However, dressing up as a shaman and performing a ritual by a lake is potentially an aberration of shamanism rather than a means of accessing shamanic insight. Shaffer's actions potentially fetishise shamanism, and render it exotic in a way that seems unnecessary.

An example of a reconnective approach is *Sun Tunnels* (1973-76) by Nancy

Holt. In this work, Holt installs four concrete drainage pipes at a site in the

Great Basin Desert, Lucin, Utah. These are arranged in an X configuration to

channel the sun's rays during sunrise and sunset and the annual celestial events

of the summer and winter solstice. Holt drills holes through the pipes so as

spots of sunlight are thrown onto their interior to produce patterns from the

constellations of Draco, Perseus, Columba and Capricorn. Matilsky (1992)

argues that *Sun Tunnels* works to 'reawaken our relationship to the source of

life' (1992: 86). It is, she states, an antidote to contemporary ignorance of the

way the sun energises the earth and acts to encourage a renewed spiritual

awareness.

Fig. 4.   Nancy Holt, *Sun Tunnels* (1973-76)

Insights in Demos (2009) recognise that Matilsky's reading of Holt's work may

be narrow and partial. Matilsky's claims for the work are based on the

assumption that we have all lost touch with the sun. As the work is placed in

the Utah desert, the assumption that locals from Lucin, and more broadly

people from Utah State, are unaware of the sun, and furthermore require some lengths of drainage pipe to act as a conduit to reawaken their spiritual awareness is potentially problematic. On encountering Holt's *Sun Tunnels* (1973-76) the work may well provoke an awareness of the sun, the land, and terrain. However, what Gablik (1991), Matilsky (1992) and Spaid (2002) choose to overlook is that in this work it is lengths of adjusted industrial piping that act as the conduit for a heightened perceptual experience of nature. Matilsky chooses to foreground transcendent references concerning primal, cosmic experiences, assuming these to be the works primacy, and ignores Holt's poetic transformation of industrially fabricated materials. She focuses upon spiritual and mystical connections provoked by the tunnels equating these with the 'great Goddess and the earth's womb' (1992: 86). Although this reading is valid, this type of description of the artwork encourages an unnecessarily narrow viewpoint.

A further example of a reconnective approach is *The Great Cleansing of the Rio Grande River* (1987 - 1994) by Dominic Mazeaud. This work involves walking along and cleaning a dry riverbed in Sante Fe. The aim of the project was initially to clean the river, however, it evolved into a personal dialogue between Mazeaud and the river.

Fig. 5.   Dominique Mazeaud, *The Great Cleansing of the Rio Grande River* (1987 - 1994)

Gablik (1991) states that as the work developed the artist's connection with the river deepened 'into that of friend and confidante, and even that of teacher, she reaches a point where her relationship with the river becomes even more important than her original ecological incentive to clean it' (1991:67). Gablik describes that the routine of walking and cleaning became akin to a cycle of rituals through which the artist began to realise the interconnectedness of everything and as a consequence the original intention of cleaning the river was transformed into a ritualistic redemptive healing process. A point of interest in this work is how the original narrative of collecting waste and walking the river is displaced as the function of the work transforms into something that is internalised and isolated. Miles (2000) asks if the motive for the artwork is no longer to clean the river, but is instead a devotional ritual, then what is it that is actually being healed? He (2000) argues that the potential of the artwork for participation and dialogue is passed over in order to concentrate on the artist's own subjective needs. Miles (2000) suggests that the healing applies to the artist and not to the river as the intention of the work is not to clean the river or

to engage passers-by in dialogues about it. The activity, he argues, is devotional and a personal expression and can be understood as embodying a turning away from rather than towards social reality. Miles (2000) argues, that as a consequence, the work becomes located in the territory of art for arts sake, and contradicts Gablik's expressed desire for art to produce an integrating mythology.

A well-known example of a restorative approach in eco-art is *Time Landscape* (1978) by Alan Sonfist.

Fig. 6.   Alan Sonfist, *Time Landscape* (1978)

Time Landscape was built in 1978. It was formerly an abandoned plot, twenty-five feet by forty feet, replanted with the three stages of forest growth indigenous to Manhattan, which had thrived before Western settlers. Matilsky (1992) states that Sonfist's aim is to return the area back to its natural state as a celebration of 'unspoiled landscapes existing before human intervention' (1992: 80). By replanting the site, as it existed before Western settlers, Sonfist

intends to retrieve its former identity, so as it may act as a means of 'bringing the urban dweller back into contact with nature' (Matilsky, 1992: 80). Wallis (2005) describes that the work seeks to reconnect with origins and primary states, to recreate residual references to a former time 'so that people would be able to experience what has been lost' (2005: 257).

Insights in Morton (2007) help suggest that one can interpret Sonfist's desire to reveal, restore, and preserve the natural world as potentially annexing and objectifying nature, and detaching one from what is revered. Matilsky (1992) describes that Sonfist's wish was not to create an idealised forest, yet his ideal historical moment is imported and imposed upon the context, and it can be read as this. Sonfist's ideal history avoids engagement with the contemporary social, economic, technological and ecological contexts immanent to the site. Although the work is described as an important contribution to ecological art, Sonfist's actions, Napier (1996) argues, are just as likely to interpreted as a 'pitiful gesture' (1996: 44) driven by nostalgia for earlier, supposedly more ideal times. Matilsky describes a function of *Time Landscape* (1978) as being a guide for the changing seasons, stating that for 'many visitors and residents the work signals the arrival of each changing season' (1992: 83). She states that it can help redefine 'our primal relationship to the earth' (1992: 54). A problem in Matilsky's discussion is the assumption that the artwork is needed to make nature visible, to reconnect urban dweller with nature. Carlson (2009) argues that it is an affront to presuppose that art is needed to comprehend and make nature visible. Like Morton (2009), Carlson states that a nature that requires art to make it visible is potentially annexed and objectified. Morton (2009) and Carlson (2009) provoke one to ask why should the discourse presuppose that

eco-art is needed to reveal nature, especially an idealised vision of nature such as Sonfist's?

5.3.5. Problematising and questioning artistic interventions in nature

In more recent eco-art discussions, such as Smith (2005), and Demos (2009) earlier ideals such as reconnecting with pre-technological approaches, or ideas of nature as being a thing that could be brought in to revive the urban, have been problematised and challenged. A reoccurring motif in some recent eco-art has been the ironic exploration of such ideas.

Fig. 7   Henrik Håkansson, *Fallen Forest* (2006)

Examples include *Island for Weeds* (2003) by Simon Starling, *Fallen Forest* (2006) by Henrik Håkansson, and *Empty terrain, Danshui River* (2008) by Lara Almarcegui. Strelow (1999) also identifies the development of this critical

approach in *Natural Reality, Artistic Positions between Nature and Culture*, which was a comprehensive survey eco-arts practice from the late 1960's to 1999. Strelow's discussion is often synchronous with Matilsky's discourse in *Fragile Ecologies,* as it centres on the consequences human alienation and separation from nature, and how eco-art can be a means of addressing this. Like Matilsky, Strelow discusses eco-art that use restorative and reconnective approaches, but importantly, she considers these in dialogue with other approaches that are more sceptical and critical of restorative eco-aesthetics. These more sceptical approaches problematise artistic interventions in nature, and as a consequence add criticality to the discussion and critically extend the discourse. An example, Strelow cites, as complicating the idea of intervening in nature, is a work by Lois Weinberger called *Area* (1998-2009). Weinberger, Strelow states, explores the idea of the garden as site and metaphor for dialogues on the relationship between nature and human intervention. Central to his approach is the use of ruderal plants, weeds, which are highly resistant to inhospitable conditions and to climatic changes. In *Area* (1998-2009), Weinberger adapts a 500m^2 garden plot that was formerly planted with forsythias and thujas, and replaces these with ruderal vegetation and weeds. He selects ruderal plants from various countries, long naturalised in the region, but clearly not native, to explore ideas about migration, immigration and socio-political narratives. Weinberger argues that plant migration has occurred continually in Europe, and there can, in reality, be no sense of foreign plant, yet ruderals are usually treated with disdain and removed. The work questions ideas about what is natural and native, and in this context the use of ruderals becomes a cipher for the issues and discourses of migrant peoples.

Fig. 8.   Lois Weinberger, *Area* (1998-2009)

A similar theme is picked up in Weinberger's contribution to Documenta X (1997) where he uses ruderals, typically found in European countries associated with problems related to immigration, and plants these on railway tracks at the Kassel Station. Strelow (1999b) describes how the work draws analogies between the nomadic character of weeds, which subvert any attempt at establishing fixed borders and the movement of peoples. Weinberger's work, she argues, produces poetic-political meanings where immigrant plants are found competing for survival with native plants, and acts as a metaphor for the problem of immigration in Europe.

Weinberger's approach contrasts with the aesthetic found in earlier eco-art such as Sonfist's *Time Landscape* (1978). Whereas the desire in Sonfist is to use native indigenous plants to act as a reconnector with an idealist notion of origins, Weinberger's use of native plants acknowledges complex social, political and environmental questions about nature and the native. For Weinberger 'the occupation with plants beyond their economical usability is a socio-political statement' (Strelow, 1999a: 167). Strelow argues that artists such as Weinberger are no longer content 'with embellishing and recultivating

landscape' (1999a: 164). The aim of such work is no longer about restoring a landscape, but rather problematising it, raising questions about it to prompt a change in thinking, to cause 'a change in our understanding of nature and landscape' (Strelow, 1999a: 164).

Another example of an eco-art practice that acknowledges the complexity and interrogates the idea of intervening in nature is the work of Hermann Prigann. Strelow argues that Prigann's work 'turns away from the romantic transfiguration of nature as a beautiful phenomenon standing opposite man and culture' (Strelow, 1999a: 164). Strelow describes that for Prigann the world is conceived as something in continual flux and transformation, which we are in dialogue with. The landscape is the result of ecological, social, economic, technological, historical processes and Prigann does not seek to return or restore the a site towards an ideal, but aims at 'a cultural-ecological reintegration that accepts its cultural-historical reality' (Strelow, 1999a: 164). Strelow states that Prigann's work calls for 'a direct, sensuous experience of nature as reality and thus aims at a change in our consciousness: Nature does not need us to form it…he wants to liberate the look upon nature from conditioned worldviews and thus make reality (again) immediate and available for being experienced' (1999a: 167).

Strelow's discussion diversifies the eco-art discourse and complicates and extends ideas about land restoration and reclamation. It contrasts with the transcendent ideals and viewpoints found in Gablik (1991) and Matilsky's (1992) earlier discourse.

5.3.6. Problem solving approaches

Gablik (1991), Matilsky (1992), Strelow (1999) and Spaid (2002) argue that

eco-art is well suited to addressing current social and environmental problems.

For example, Gablik (2002) claims that eco-art 'challenges people to consider

problems and solutions that defy conventional thought and practice' (2002: 27).

Matilsky (1992) states that eco-art projects 'seek to find solutions for damaged

natural or urban ecosystems' (1992: 12). Strelow (1999) describes how eco-

artists 'provoke discussions, raise questions, develop and propagate concrete

solutions to environmental problems and strive for their realisation' (1999a:

161). A feature of eco-art, Spaid (2002) argues, is that it provides 'solutions to

the problems facing natural and urban ecosystems… where natures balance has

been breached by human interference' (2002: 6).

Throughout this eco-art discourse problem solving approaches appear

naturalised and are portrayed and used unproblematically. However,

alternative interpretations of problem solving are found in literature, such as

O'Callaghan (1982), Keeney (1982), Bateson (2000), Kester (2005), Morton

(2007), and Demos (2009), which acknowledge such approaches as complex

and problematic. At the core of this discourse is an argument that recognises

traits within problem solving approaches as perpetuating rather than addressing

the underlying problem at the cause of the ecological crises. This potential

contradiction of using a problem solving approach is not acknowledged in eco-

art discourses such as those of Matilsky (1992), Spaid (2002), and Lippard

(2006). Bateson (2000a), Keeney (1982), and O'Callaghan (1982) argue that

intrinsic to the problem solving approaches of the prevailing model of thinking

is a conscious narrowing of viewpoint that denies the possibility for a systemic comprehension of the world. This, they argue, maintains rather than corrects errors in our thinking and acting that lie at the root cause of dysfunctional and pathological attitudes towards the environment. An example of this, they argue, is that when one seeks to address a specific problem, such as an environmental concern, one proceeds by narrowing ones viewpoint towards finding a solution. This, they argue, may result in other connected and interrelated social, economic, and political problems being overlooked, and as a consequence of this, a perception of the problem is produced that is distorted, reductive, and detached from the wider context. They argue that although problem solving approaches may provide a solution to particular concerns, it stymies rather than fosters a systemic comprehension of the world, and thus maintains the distortion and error at the root of our thinking.

This identifies a possible contradiction at the core of eco-art. If it unproblematically employs a problem solving approach, implicit in which is a conscious narrowing of viewpoint, then will this not deny rather than foster the possibility of a systemic comprehension of the world?

Keeney (1982) and Bateson (2000) argue that when trying to find a way of addressing problems we need to acknowledge the implications of our limited perception of these. They propose that if one's understanding of a problem is limited, then, as we do not have a systemic view, it follows that we should be cautious about advocating any response based on the partial view that we have. They ask, given the partiality of ones own viewpoint, how can one be certain that one's own response and actions do not contain their own systemic errors or distortions? Whilst Bateson (2000) argues that one should hesitate to propose a

course of action to perceived problems, within eco-art discourses, such as Gablik (1991), Matilsky (1992), Strelow (1999) and Spaid (2002) the artist's role is unproblematically described as providing concrete solutions to problems. It follows, that if the insights in O'Callaghan (1982), Keeney (1982), Bateson (2000) are taken into consideration, then it is necessary to ask how can the eco-artists and their discourses be so sure they are not perpetuating their own systemic errors.

The earlier discussion outlined some of the problems embodied in the reconnective and restorative approaches used in eco-art. The annexing and objectifying of nature and the natural, and the fetishising of the pre-technological are evidence, I argue, of systemic error based on a narrowing of viewpoint. Based on the above information the position of this research project is affirm the need to question and acknowledge the complexity of problem-solving approaches whenever they appear unproblematically within eco-art and its discourses. The thesis argues that the presupposition that eco-art is finding solutions and addressing problems needs challenging within the eco-art discourse. Assumptions that presuppose that eco-artists are in possession of the *correct* model of knowing and, because of this, are in the position to affect change, also needs challenging. It is necessary within the eco-art discourse to more widely and openly acknowledge that problem solving approaches may produce a partial comprehension of the world that embodies the very distortions and dysfunctions identified as lying at the root of the ecological crisis.

5.3.7. The artist as a visionary

As discussed above, Gablik (1991), Matilsky (1992), Strelow (1999) and Spaid (2002) describe problem solving as a key characteristic of eco-art. The thesis argues that within the eco-art discourses, problem solving approaches need to be acknowledged as complex and difficult rather than assumed as unproblematic. To foster alternative approaches and attitudes that might break from those of the prevailing model of thinking, eco-art and its discourses need to acknowledge this. Embedded within eco-arts aspiration to think and act differently, is the idea of the eco-artist as a visionary, as someone who has the capacity to re-imagine the world. For example, Gablik (1991) describes the eco-artist as a seer-like, shamanic figure. Matilsky (1992) depicts the eco-artist as a healer of a split between nature and culture. Strelow (1999) states that eco-artists are 'visionaries and as creators within destroyed nature they advocate its resuscitation by man himself' (1999a: 161). Goto (2005) describes eco-artists as 'visionaries and creators of utopian ideals and realities' (2005: 92). Spaid (2002) describes eco-artists as having an innate ability to 'act above polluted mortal vision, and are capable of immortality, such is the magnitude of their innovation' (2002: 3).

The idea of the eco-artist as a visionary is used unproblematically throughout the discourse. However, writers such as Bourriaud (1999), Protevi (2001), Plumwood (2001) and Demos (2009) argue that the idea of the artist as a visionary figure, as a bearer of some kind of immutable truth, is both outmoded and unproductive. The idea of a visionary figure, Protevi (2001) states, maintains attitudes of elite individuals who are elevated above the masses, and

is the embodiment of the hierarchical attitudes of the prevailing model of thinking. Miles (2000) argues that the idea of the artist as a visionary reaffirms the idea of the artist as an autonomous subject. This, he states, contradicts and stymies the desire within the eco-art discourse to move from individual expression towards integrative, collective, and participatory approaches. Gablik (1991), for example, states that an aim of eco-art 'is to construct a very different type of integrating mythology' (1991: 119), and that collaboration, collectivity and participation form the basis of this integrating, interconnective aesthetic. Miles (2000) argues that Gablik contradicts her own view when she describes the eco-artist as a seer-type figure who is in possession of the vision to create new myths that break from the ordinary. Miles (2000) proposes that one might imagine an integrative aesthetic would diminish the individual to instead emphasise the collective. However, Gablik, he argues, persists in elevating the artist towards the visionary. Likewise Spaid (2002) chooses to elevate eco-artists above mere mortal vision and this appears to perpetuate rather than counter the attitudes of the prevailing model.

Gablik (1991) proposes 'the effectiveness of art needs to be judged by how well it overturns the perception of the world we have been taught, which has set our whole society on a course of biospheric destruction' (1991: 27). In doing this she identifies criteria that can be used to evaluate eco-arts practice. As a consequence, one can argue that works and discourses that foster ideals of the artist as a visionary, and those that promote a problem solving approach, do not overturn the prevailing model, but in fact perpetuate these. It is clear that eco-art and its discourses propose to find a way of thinking and acting differently from the approaches and attitudes of the prevailing model. However, its

unproblematic use of problem solving approaches and conceptions of the artist as a visionary reinforce rather than challenge characteristics associated with the prevailing model. Based on this information, the thesis argues that one should find ways to resist, challenge and problematise the language and ideals associated with the artist as a visionary figure.

5.3.8. The language of environmentalism

A feature of the contemporary context is that the language and vocabulary of environmentalism, terms at the core of the eco-art discourse, are no longer a provisional, minor, and dissenting voice but are an integral part of the dominant mainstream. Klein (2008) argues that a feature of the contemporary context is that the language, vocabulary and terms of environmentalism have now been completely co-opted and instrumentalised by the media, government and multi-nationals and is now a ubiquitous rhetoric of global capitalism. Demos (2009) argues, that as the vocabulary of environmentalism is now integral to media, governmental and corporate discussions, the mediation of environmental problems in the contemporary context has 'shifted the discourse on the environment' (Demos, 2009: 17), and this has problematised the continued use of such terms. Monbiot (2001) states that the more the language of environmentalism has become assimilated in dominant discourse the less potent it has become as a force. The irony, he argues, is that the waning of potency has occurred at a time when the ecological crisis has worsened.

Klein (2008) argues terms such as sustainability, responsibility, ethical, clean, green, conservation, sympathetic, and environmental are now just as likely to

be an accompaniment to a public relation sales pitch as they are an activist

rally. Guattari (2000) argues that a potential effect of the co-option and

subsequent mediation of this language is that its terms are emptied of any

potent critical meaning and become part of an ossified and homogenised voice.

Demos (2009) argues that, as a consequence, it is now necessary to re-evaluate

such terms, as these need to be de-naturalised and seen as a complex,

ideological and political. This situation represents a bind that we are caught in.

Although a shared desire in eco-art may be to set up the possibility for thinking

and acting differently, the continued use of its terms and language can be

understood to perpetuate and maintain the very mechanisms that it would like

to see transformed. Klein (2008) argues that the continued use of such terms

may well play into the hand of agencies of the prevailing view who may wish

for panic to arise about crisis. She states that throughout history the ruling

ideologies have instigated changes in society by firstly making the public

fearful, by using a shock doctrine (Klein, 2008).

> Some of the most infamous human rights violations of the past thirty-five years, which
> have tended to be view as sadistic acts carried out by anti-democratic regimes where
> in fact either carried out with the deliberate intent of terrorizing the public or actively
> harnessed to prepare the ground for the introduction of radical free-market reforms
> (Klein, 2008: 3).

Slavoj Zizek in *First As Tragedy, Then As Farce* (2009) suggests that Klein's

shock doctrine may be true for the effects of the ecological crisis. He argues

that rather than endangering and challenging the prevailing view, a widespread

ecological catastrophe may well reinforce and invigorate problem solving

approaches. It seems that a reassessment of the use of environmentalisms

terms is necessary as the continued unproblematic usage of these may only

work, as Zizek and Klein state, to reinforce rather than foster alternatives to the traits, approaches and ambitions of the dominant view.

5.3.9. Dialogic / conversational approaches

Lippard (1997) argues that if artists are to evolve alternative approaches that 'defy conventional thought' (1997: 290), then they have to find ways to break with the existing methods and search for forms and methods as yet not recognised. She writes, 'Ideas catch fire in dialogue, when we brainstorm or play with possibilities, and someone else's eyes light up. Art itself can be that spark, both catalyst and act of recognition' (Lippard, 1997: 290). Kester (2005) describes that whilst conventional problem solving approaches often close down dialogue, some eco-art provides an openness that allows for and encourages a sustained dialogue, and through this that new forms and new thinking can emerge. Kester describes this as a 'dialogic' approach, where art is not instrumentalised to solve problems, but rather acts as a catalyst that seeks to keep open dialogues normally foreclosed by purposeful or narrowed attitudes. An emphasis of the dialogic approach, he states, is how artists are embedded within a community and how they form relationships to stimulate dialogue about environmental and social concerns, in the 'coalitions between dialogues rather than being embodied in artefacts or restored sites' (Kester, 2005: 21). These dialogues and collaborations between artists and communities are foregrounded by Kester as the primary means towards recognising and change. Collins (2003) describes the dialogic approach as focusing on 'informed dialogue that intends from the outset to create change,

not artefacts' (2003: 111). Kester describes how aspects of the earlier restorative approach underpin the dialogic methods of more recent eco-art, but a distinction of these works, he argues, is that environmental problems are often used as the catalyst for discussions and there is less emphasis on restoring a damaged site.

An example of a dialogic approach is found in *Nine Mile Run Greenway project* (1997-2000), a collaborative project led by artists Bob Bingham, Tim Collins, & Reiko Goto. The Nine Mile Run Greenway, in Pittsburgh, Pennsylvania was a remnant stream adjacent to an abandoned ten-story slagheap.

Fig. 9.   Bingham, Collins & Goto, *Nine Mile Run Greenway project* (1997-2000)

The artist's goals were to reclaim for public use, the rivers, streams, and estuaries that had been inhabited and damaged by industry (Collins, 2002).

Describing the projects philosophy, Collins (2007) writes 'The primary goal is [was] to explore the potential for an issues-based public discussion that would produce a motivated and informed constituency prepared to participate in public decision-making about open space opportunities at Nine Mile Run' (2007: 159). The artists initiated workshops, tours of the site, lectures and exhibitions, and over three years engaged the community in conversations about the development of the site in a way that was a 'socially acceptable solution that was also economical, aesthetically rich, and ecologically sound' (Spaid, 2002: 114). Spaid (2002) describes the project as being about building an integrative community-led platform to stimulate and support dialogue concerning ecological systems. The ultimate goal was to effect a transformation in thinking and acting through this discourse. An interesting outcome from the *Nine Mile Run Greenway project* (1997-2000) was that through the processes of meetings, discussions and planning, the community decided not to restore the slag-heap, which had been a prominent focus of the site and project and instead devised and facilitated their own scheme and solutions.

A central aspect of the dialogic approach in eco-art is that the role of the artist shifts towards one of a catalyst for discourse. Kester (2005) states that as a consequence of this 'the work of art only comes into existence through a process of consultation and reciprocal exchange (both verbal and non-verbal) with collaborators' (2005: 5). The dialogic aspect is indicative of the ongoing evolution and realisation of many of the aims of the restorative approach, and as Bohm (1991) proposes, such dialogues are primarily about stimulating new ways of thinking. In contrast to earlier restorative projects, such as Sonfist's

Time Landscape (1978), which one can interpret as having predetermined ideals of how a habitat should be restored, in the recent dialogic works discussion and dialogue are now a primary method for evolving new responses to the world. One can recognise that Kester's discourse represents a shift in the way artworks are conceived, represented and discussed in earlier exhibitions such as *Fragile Ecologies* and *Natural Reality*. In *Fragile Ecologies* (1992) the artwork is still acknowledged as due to the vision of the artist. For example, in Matilsky's discussion of *Time Landscape* (1978), it is very clearly the result of Sonfist's vision, the artist and the object or event of their vision is foregrounded. Although many collaborations and communities are involved there is often little or no mention of these, and little reference to the dialogues. Similarly interdisciplinary practices are mentioned but not discussed. In contrast, in the exhibition *Groundworks* (2005) the descriptions of the dialogic artworks foreground processes of exchange and frame and draw attention to the discussions and dialogues taking place. The artwork, Kester (2005) argues, identifies that something different is going on, that something different may happen and announces a more open and fluid approach to the normative model. The artwork becomes the result of collective and durational experiences, new exchanges, and of new insights generated by the approach.

A recent example of a dialogic / conversational approach is found in *Greenhouse Britain, Losing Ground, Gaining Wisdom* (2007-2008) by Helen Mayer Harrison and Newton Harrison.[1] This project sets out to engage with

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[1] *Greenhouse Britain* was an artist-led project by Helen Mayer and Newton Harrison, principals of the Harrison Studio & Associates (Britain). David Haley, Research Fellow and Course Leader, Art as Environment, Manchester Metropolitan University was an Associate Artist. Gabriel Harrison, of Westergaard & Harrison Design, was the exhibition designer.

some of the environmental, political and economic implications of climate change and rising sea levels.

The core concept of the project is both a statement and a question, 'the oceans will rise gracefully, can we withdraw with equal grace?' (Harrison, 2007: 3). It explores how we might respond to, what they argue are inevitable changes that will affect the island of Britain.

Fig. 10. Helen Mayer Harrison and Newton Harrison, *Greenhouse Britain, Losing ground, gaining wisdom* (2007 - 08)

A motivation of the work is to engage with a perceived imbalance in the discourses about climate change, which the Harrison's argue, has been dominated by government, planners, scientists, insurance companies, and journalists. *Greenhouse Britain*, they argue, is an opportunity for art to participate in this discourse. The Harrisons (2007) write 'the Greenhouse phenomenon is so urgent, so compelling in the near term, so potentially catastrophic in the long term, and so obviously destabilizing to the environment, that we strongly believe the Greenhouse discourse is vital and

will benefit from the voice of culture, particularly the disciplines of visual, conceptual and ecological arts' (2007: 3). The project focuses on three river watersheds, the Avon, the Mersey and the Lee, and the work imagines the task of both defending the land, where possible, and withdrawing from the rising waters where necessary. The approach in *Greenhouse Britain* focuses on setting up matter of fact discussions about the future scenarios. It presents an alternative to discussions about climate change, which are often evangelistic and rely on narratives of apocalyptic consequences as a stimulus to change our ways. This matter of fact approach is evident in the affirmative nature of the discussion and its acknowledgement that we now need to prepare for the changes, which, they argue, are now inevitable. The way this contrasts with the psychologically dark reality of the situation is a compelling element of the work. The project is presented in the form of an installation of maps, diagrams, visual materials, and consists of a touring exhibition with an accompanying series of seminars and lectures, what the Harrisons describe as a 'meeting ground for discourse' (cited in Kester, 2004: 64). In this work, although the Harrisons can be seen to be presenting a pragmatic workable solution to a real problem, the aim is to stimulate dialogue, discussions and a conversation amongst the communities that they engage with. It is through these conversations, they argue, that public awareness of issues and possible scenarios for change might occur. They describe this process as a *Conversational Drift* which is meant to express the processes of interchange they believe occurs when eco-art sets up situations that encourage

conversations 'to open up, to change, and to drift toward innovative and creative solutions to real-world problems' (Harrisons in Adcock, 1992: 33).[2]

5.3.10. Exploring political, social, and environmental terrains

In the catalogue that accompanies the exhibition, *Beyond Green, Towards A Sustainable Art* (2005), Smith argues that the 'prior generation of more narrowly eco-centered or green approaches' (2005: 12) has given way to new arts practices that embody a holistic environmental, social, and economic aesthetic. She states that the context for this is a widespread desire to find socially and environmentally responsible, sustainable models for living. Contemporary artists, Smith states, are engaging with this desire, irrespective of 'whether or not they think this is actually possible' (2005: 12). Smith argues that whilst environmental concerns are an important part of their work, 'they have no desire to be labelled as eco or green, or even sustainable artists' (2005: 12). The reason for this, she argues is that artists engage within an 'expanded field, blending art, activism, and design' (2005: 12) and work across a range of forms and methods including objects, structures, processes and networks to explore today's political, social, and environmental terrains. Smith describes that the artists often explore environmental concerns to 'metaphoric, practical, speculative, ironic, and playful ends' (2005: 13). She states that the approach of the artists avoids 'a purely green approach, which considers environmental questions in isolation from other factors, as this is incomplete and ineffective'

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[2] A concrete example of the effect of the notion of conversational drift occurred when I spoke at a seminar at Lanternhouse, Cumbria. I began the talk by discussing this work by the Harrison's and asked the audience to consider how much of the town and surrounding land would be lost through the proposed changes in sea-level. The work acted as a catalyst for an engaged and prolonged conversation about the ecological crisis.

(Smith, 2005: 14). Examples of this kind of work are *Under Discussion* (2005)

& *Returning a Sound* (2004) by Allora & Calzadilla. The works explore the

inter-related contemporary context of political, economic, social and

environmental problems, in this instance, the struggles of the islanders of

Vieques, a small island off the coast of Puerto Rico. Both works are made for

video and depict a man travelling around Vieques on vehicles modified from

everyday objects. The terrain that the vehicle travels over, which is

documented in the videos, is highly contested.

Fig. 11.   Allora & Calzadilla, *Under Discussion* (2005)

In the work *Under Discussion* (2005) Allora & Calzadilla use a wooden

kitchen table flipped upside-down and convert this into a motorboat by

attaching an engine. The video depicts a man circumnavigating the contested

island. Smith (2005) suggests that the act of circumnavigation mirrors and

evokes the processes and discussions of problems and concerns of the island

and islanders. In *Returning a Sound* (2004), a man rides around Vieques on a

moped that Allora & Calzadilla have adapted by welding a trumpet to the

exhaust system. The journey around the island has an accompanying

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soundtrack produced by the trumpet which acts as a 'call to action, or perhaps an anthem' (2005: 35). A characteristic of this kind of work is that, unlike earlier eco-art, it engages with issues and concerns obliquely rather than explicitly. Allora & Calzadilla's work represents a nuanced approach, a more underhand strategy that Smith argues, brings 'a poetic sensibility to bear on the complex intersections of power, activism, and environmentalism' (Smith, 2005: 34).

Another artists group who see their work as political and critical, but not explicitly activist, are Platform, who initiate interdisciplinary projects that seek to find a means of promoting social and ecological justice and democracy.[3] They use art, design, and live art/performance methods, as well as the specialisms and skills of environmentalists, human rights campaigners, educationalists, community activists and other collaborative partners to initiate projects that seek to effect a change in public awareness and transform government policy. A specific focus has been to work to counter the effect of transnational companies on humans, society and the environment. Platform state 'From the polluting of the air that we breathe, to the altering of the earth's climate, from the destruction of indigenous cultures to the demise of our town centres, transnationals are shaping our lives with unprecedented power' (2010: 1). In 1993, Platform issued a manifesto which outlined their project, which stated that 'Platform provokes desire for a democratic and ecological society…we create an imagined reality which is different from the present reality …we use art as a catalyst…this art is not primarily about an aesthetic - it is creativity applied to real situations…our working method is grounded in

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[3] Platform participated in *Ecovention* (2002) and *Groundworks* (2005).

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bringing together individuals from different disciplines, who then work collectively, developing an open space for dialogue and ideas…this method of inter-disciplinary creativity encourages participatory audiences from equally diverse backgrounds, ranging from fishermen to commuters, environmental groups to schools' (Miles, 2000: 214).

An example of their work is *90% Crude* (1996-97), which was composed of several parts.

Fig. 12.   Platform, *Agitpod*, 90% Crude (1997)

The work included: *Agit-pod*, a mobile, solar-powered, quadri-cycle propelled video and slide-projection vehicle; *Carbon Generations* a series of performances by James Marriot on the issues of global warming; *Crude Operators* a two-day conference on the oil industry and a follow up paper/report; *Ignite*, three spoof newspapers distributed to commuters in London to engage with concerns such as atmospheric pollution in London, the oil industry and its global pattern of exploitation and destructiveness, and the effects of climate change*;* a seminar which proposed agit-ship on the Thames, *Vessel;* and seminars on the ethics of sponsorship, 'Funding for a Change'.

The aim of *Funding for a Change* was, Miles (2000) states, 'to use the issue of corporate investment in the arts, sciences and community projects to spark a debate on the potential for a mutually educative relationship between these sectors and corporations' (2000: 201). Platform's objectives are to identify chains of responsibility at varying scales from the individual to the corporate, from 'individual acts of consumption to the footprints of such acts in the extraction of oil in circumstances which are frequently disastrous for local people, and in their impact on pollution and climate change' (Miles, 2000: 206).

Over the last decade there has been an increasing engagement by eco-artists, arts organisations and institutions with the causes and implications and issues of climate change. Developing a response to the imperatives of climate change has become for many artists the unavoidable priority of the new millennium, and the organisation *Cape Farewell*, initiated by David Buckland in 2001, is one example of a contemporary response to this. An aim of Cape Farewell is to initiate a series of expeditions that bring together artists, scientists, educators, musicians, and writers to journey to areas such as the Arctic, which are primary indicators of the effects of climate change. The crews for each expedition are intentionally diverse and wide-ranging in background and specialism.[4] Through doing this, the objective is to set up the conditions for discussions, dialogues and collaborations and to provoke responses to the changes caused by climate change. The findings of the expeditions are disseminated through a

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[4] The crew for the 2008 expedition to Disko Bay, Greenland included musicians; Laurie Anderson, Vanessa Carlton, Jarvis Cocker, Ryuichi Sakamoto, composer Jonathan Dove, artists; Sophie Calle, Kathy Barber, David Buckland, Michèle Noach, Tracey Rowledge, Julian Stair, Chris Wainwright, Architects Francesca Galeazzi, Sunand Prasad, Senior Lecturer (Open University), Joe Smith, Activist David Noble, Media Executive Lori Majewski and Film Director Peter Gilbert join Oceanographers Simon Boxall, Emily Venables and Geoscientists Carol Cotterill and Dave Smith.

comprehensive programme of seminars, workshops, educational projects and

high profile international exhibitions such as *Unfold* (2010), *Earth: Art of a*

changing world (2009), and *Art & Climate Change* (2006-2008). Cape

Farewell is recognised as having made a significant contribution to raising the

profile of climate change. The expedition format used by Cape Farewell is,

however, not unproblematic as a tool to explore climate change. There are for

instance questions regarding what travelling to exotic, far off places, might

signify, particularly how it might contribute to the perception that nature and

thus the problems of climate change are a distant thing.[5]

5.4.   Summary

This chapter has shown some reoccurring ideas, themes and subject areas

within eco-practice and has described the range, scope and diversity of its field

of study and its literature. The aim of the study is to establish how arts practice

might be used to critically engage with and potentially break from approaches,

attitudes and guiding metaphors of the prevailing model of thinking. The

chapter has shown how complex this task is. It has shown the difficulty that

eco-art practices have from breaking from the approaches and attitudes of the

prevailing model, even though they explicitly set out to produce alternative

ways of thinking and acting. A consistent trait throughout eco-art and its

discourses is a search to address fundamental problems caused by the

prevailing model of thinking. It is collectively aware of the consequences of

dysfunctional attitudes produced by the prevailing model of thinking and works

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[5] The problem with such approaches is discussed later in this chapter

both as a form of critical address and also as a means of generating alternatives values and approaches, in particular to engender a more harmonious relationship between humans and nature.

The chapter described that, although seeking to produce alternative ways of thinking and acting, some eco-art perpetuates and maintains the approaches, attitudes and metaphors of the prevailing model. It identified how elements of early eco-art practices and their discourses fostered a separation between nature and the urban, and promoted ideals about origins, approaches and attitudes found in pre-technological societies in the belief that these would re-enchant a contemporary life that was perceived as alienated. The chapter identified that such ideas potentially perpetuated rather than challenged attitudes that were recognised as lying at the cause of problems and dysfunctional relations between humans, the environment and nature. The use of problem solving approaches in some eco-art was also shown to potentially maintain rather than challenge the methods of the prevailing model. The chapter described how within this discourse of problem solving were attitudes that conceived the eco-artist as a visionary. These were shown to contradict the desire within eco-art to foster relationships that were collaborative and collective, and perpetuated rather than broke away from the hierarchical attitudes of the prevailing model. The chapter described how the vocabulary of environmentalism, the language at the core of eco-art, had been co-opted and instrumentalised by governments, and multi-national corporations. It described that this had problematised the continued use of such terms, and had in particular reduced the languages potency as a dissenting voice to become a ubiquitous part of the prevailing model.

The chapter described more recent practices, in particular those guided by a dialogic approach, that overcame many of the problems associated with earlier eco-art. It described that an important characteristic of this work was its avoidance of the use of linear problem solving approaches. A distinctive feature of this work was that it proceeded by keeping open dialogues and discussions that would normally be foreclosed by approaches narrowed by conscious purpose. It did this based on the understanding that it was through dialogic processes that new ways of thinking and acting might emerge. The chapter argued that such artworks revealed an alternative approach that represented a break from those of the prevailing model of thinking.

The following chapter sets out to develop a response to the problems discussed above. The chapter establishes the theoretical and contextual basis for an experimental framework, which the thesis describes as a 'process aesthetic'. This framework is used to initiate and guide the production, dissemination and evaluation of a body of new arts practice. This new work seeks to critically engage with the approaches, attitudes and metaphors of the prevailing model of thinking but to do so without perpetuating these. The framework is used to consider how art might be able to set up the possibility for thinking and acting differently.

6. Developing a process aesthetic - generating places of breakdown, disturbance and new relations within the prevailing model of thinking

> What are the premises that we want to maintain? What are the fundamental and essential parts of our living, of our lives and our perception that we wish to keep intact? What are we willing to adjust and what do we want to keep as essential? (Bateson, 2010: 56)

6.1.   Introduction

The last chapter described some reoccurring ideas, themes and subject areas within eco-art, in particular its search for a means of addressing problems caused by the prevailing model of thinking. It described how an aim of eco-art was to be a means of generating alternative approaches that engendered a more harmonious relationship between humans and nature. It revealed how complex this task was and showed how some eco-art worked to perpetuate rather than challenge the approaches, attitudes and metaphors of the prevailing model. It identified how some eco-art maintained problem-solving approaches and the idea of the artist as a visionary, both recognised as integral to methods of the prevailing model. It identified tendencies within the eco-art discourse that objectified nature and as a result perpetuated attitudes recognised as the cause of dysfunctional relations between humans, the environment and nature. The chapter described the co-option and instrumentalism of the vocabulary of environmentalism, and argued that this had problematised the terms of eco-art since their continued use potentially reinforced the prevailing model. It identified a body of more recent eco-art, guided by a dialogic approach, that was recognised as a means of overcoming many of these problems. It

described how these practices fostered dialogue and discussion as a primary means of stimulating new ways of thinking and acting, and this, the chapter argued, represented a break from the approaches of the prevailing model of thinking.

This chapter seeks to develop the earlier discussion, to respond to the problems identified within eco-art and also to build upon the insights and approaches of the more recent, dialogic practices. The aim of this chapter is to establish the theoretical and contextual basis for an experimental framework, which for the purpose of the thesis is described as a 'process aesthetic'. The aim of developing the process aesthetic is so that it can be used to help initiate and guide the production, dissemination and evaluation of new arts practice. The process aesthetic will be designed so as new work may critically engage with traits from the approaches, attitudes and metaphors of the prevailing model of thinking but do so without perpetuating these. The application, testing and evaluation of the process aesthetic are described in the following chapters.

This first section of this chapter considers how new artworks might be organised in ways that are surprising, novel and unpredictable. It draws upon insights from Bateson (2000), Zepke (2005), and O'Sullivan (2006), to discuss the idea of the artwork as an encounter. It considers how such artworks might set up the possibility of producing a different way of thinking about and acting in the world.

The following section describes common approaches of a grouping of artists, alongside which the practice of the current research has been exhibited. It considers how these artists conceive of artworks, not as objects but as sets of

dynamic interconnected processes. The artists orchestrate their work in ways that can lead to new patterns, structures and events that are irreducible to earlier states and which cannot be predetermined, so that emergent events might occur. It describes how the outcomes of such artworks may be genuinely surprising, and because of this on encountering the work one may be disturbed by 'the emergence of the unknowable' (Zepke, 2005: 3). It speculates how, as a consequence, one might temporarily experience the world differently.

The following section draws upon insights from the field of cybernetics, specifically from the thinking of Ashby (1956) and Pask (1961) and considers why such works, although producing emergent phenomena, become predictable and unsurprising. It identifies that this is due to the top down nature of programming and the intentions/limitations of the programmer. Drawing from insights found in Ashby and Pask, a way to overcome this is described. It establishes the idea that for a work to be surprising and novel a requirement is that elements of the artwork have to be left open-ended and indeterminate and set up in ways so that feedback from the environment can contribute to its configuration.

The next section describes how adopting this open-ended approach may encourage alternative guiding metaphors to those of the prevailing view, and in particular produce a different attitude to engaging with problems. It establishes that finding a way to address a problem does not mean asserting more control but in fact may means the opposite – it seemingly requires less control. It considers how these findings may challenge prevailing approaches that encourage one to consciously narrow one's viewpoint and become more purposeful to solve the problem. It describes how Pask and Ashby's insights

have implications regarding the approaches used by the artist. It identifies some of the implications as the artist becomes aware that it is open-ended processes of interaction between elements of a work and its environment, rather than their intentions, that may generate the possibility for a work to be surprising and novel. It described that the role of the artist is altered, as they are no longer responsible for making the artwork as it appears. The artist does not impose or control the emergent behaviour but rather orchestrates the possibility and conditions for this to occur. Thus the unfolding artwork cannot be solely related to or attributed to the artist's hand or to his creativity. It follows that the artist may begin to recognise that to produce work that is genuinely surprising it appears necessary to develop strategies that diminish and loosen their control and intentions.

The final section of the chapter speculates upon the possibilities of setting up artworks in this way. It considers how this approach might be developed so that it can be used to guide new work which critically engages with aspects of the prevailing entitative model of thinking, but does so without perpetuating these. It draws upon insights from the author's earlier practice to describe how the use of existing forms, subjects, and traits from the prevailing view might be disrupted, dissolved and reconfigured using the open-ended approaches. It speculates upon how an approach of dissolution and reconfiguration may be used as a strategy to break from the known towards a way of thinking and acting that differs from and does not reinforce the approaches of the prevailing model. It draws upon the concept of the art encounter described in O'Sullivan (2006) and Deleuze and Guattari's (1986) idea of the '*minor*' to theorise this. O'Sullivan (2006) describes the disruption of an existing form as producing an

encounter which, he argues, has the potential to disturb existing values and beliefs to break from the known and habitual. Deleuze and Guattari (1986) argue that the production of a minor form, by disturbing and disrupting a dominant subject, is a fundamental critical, political act.

The chapter closes by considering the implication of the co-option and instrumentalisation of arts terms by the media, governments and multinational corporations. It describes how the co-option of the vocabulary and language of art has implications for the development of a process aesthetic. It describes how it both challenges and problematises assumptions about arts creative, and innovative possibilities yet also reveals and produces areas, subjects, which might be the focus of a critical or dissenting arts practice. The chapter concludes by summarising the experimental method, which the thesis describes as a 'process aesthetic' and speculates how this might produce different metaphors that break from those of the prevailing model and potentially produce a way of thinking differently about the world.

6.2. An approach to think differently about the world

There is recognition that epistemological errors at the root of our thinking, symptoms of which are current environmental and social problems, are maintained by the approaches and attitudes of the prevailing view. Writers such as Bateson (1991), Porritt (2009), Mathews (1991), Naess (1989) and Plumwood (2002) argue that a challenge is to find ways of breaking from the prevailing model and to encourage ways of thinking differently about the world. As discussed earlier, a bind that one faces is to find ways of challenging

the approaches of the prevailing view but do so without maintaining and perpetuating this view. This chapter aims to describe how arts practice can be a way of critically engaging with aspects of the prevailing model, how it can do this but avoid perpetuating its approaches and attitudes. The chapter argues that as a consequence such arts practices can be understood as producing the possibility for thinking and acting differently.

6.3.   Art as encounter - towards glimpses of underlying pattern

In chapter four, insights from the thinking of Bateson (2000) and O'Sullivan (2006) were used to speculate how arts practice might provoke a different perception of the world than the one we were normally accustomed to. Bateson describes that on first encountering an artwork, at a moment before consciousness has shaped our perception, one is able to perceive relations, connections and underlying pattern normally hidden by consciousness. Bateson argues that these glimpses of underlying pattern, although normally obscured by consciousness, are not a new way of seeing the world, but provide a view of what reality is actually like, albeit a temporary one. From the prevailing view, this conception may appear novel and different, but for theorists such as Bateson (2000), Whitehead (1998), and Capra (1992) this premise of reality is a basic ontological principle, and this understanding of reality informs the basis of the current study.

Insights found in O'Sullivan (2006), in particular the idea of art as encounter, help further describe arts capacity to reveal the world differently from the prevailing view. He suggests that within art is a potential for thinking and

experiencing the world differently, and he describes this as an encounter. The artwork as encounter, he argues, may disturb existing values and can challenge the way one thinks and acts in the world. He contrasts the idea of the encounter with the notion of the artwork as an object of recognition, which, he argues, maintains existing ideals, beliefs and values to reconfirm already existing understandings of the world and one's place in it. An encounter, he states, is troubling, jarring and disturbing, and because it is unknown this may destabilise existing assumptions and potentially begin to undo habit. O'Sullivan describes that objects of recognition work to reconfirm and perpetuate an existing understanding of the world and one's place in it. They form the basis of the representational systems that are embodied in the attitudes, approaches and guiding metaphors that maintain the prevailing model of thinking. We rely on the principles and premises of the prevailing model of thinking to give us the underlying metaphors, language and vocabulary to guide our perception.

> You might think that you are thinking your own thoughts, you're not, you are thinking your cultures thoughts (Krishnamurti, 1943: 65).

O'Sullivan argues that it becomes difficult to think and act beyond these representational systems, because 'we are caught... on a certain spatio-temporal register: and see only what we have already seen' (2006: 47). The grip of representation holds and shapes our understanding of the world and as a consequence 'we see only that which we are interested in' (O'Sullivan, 2006: 47). Bateson (2000) describes how an error at the basis of the prevailing model of thinking distorts how the relations between humans, society, and the larger

eco-system are understood and this shapes how we come to know and act in the world. It follows that the influence of representation may predetermine what we see but also may potentially perpetuate the error at the root of our thinking. The consequences of this permeate throughout our understanding of social, political, technological and ecological ecologies. The challenge is to find ways to break from this cycle. O' Sullivan (2005) argues that one might strive to organise artworks as an encounter so as to set up the possibility to disrupt our representational systems and to potentially challenge and break with the world we are so accustomed to. This may not, however, be straightforward since, if an encounter is not an object of recognition and is thus beyond representation, then how might one recognise an encounter to begin to orchestrate one? O'Sullivan (2006) describes that 'the destabilising, intense processes of an encounter are driven by arts affective capacity' (2006: 38), and as a consequence an encounter can only be sensed and intuited. Affects, he argues, are involuntary, sensual and physical responses to disorientating characteristics of art. O'Sullivan writes 'It is what art does, that is produce, affects... you cannot read affects... you can only experience them...affects are passages of intensity, which are prior to order... they cannot be reduced to symbol or representation...they are events that are irreducible to discourse' (2006: 169).

The idea in O'Sullivan (2005) that the artwork, at a pre-cognitive level, works to encourage glimpses of normally hidden underlying pattern and relations has clear affinity with insights in Bateson (2000). Both writers argue that this affect has the potential to encourage us to temporarily perceive the world differently, to 'take us outside ourselves' (O' Sullivan, 2006: 38) before consciousness orders our thinking and shapes our responses. Ingold (2000) in

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The Perception of the Environment, describes the potential of intuited and affective insights. He argues that these perceptual skills should form the basis of any scientific or ethical study, and writes, 'these skills, I maintain, provide a necessary grounding for any system of science or ethics that would treat the environment as an object of its concern. The sentient ecology is thus both pre-objective and pre-ethical' (Ingold, 2000: 22).

Following the insights in Bateson (2000), Ingold (2000), and O'Sullivan (2005) one can propose that, as a means of disturbing the attitudes and approaches of the prevailing view, arts practice might be organised so as to break with the world we are typically accustomed to. A challenge becomes the initiation of arts practices that might cause places of breakdown and disturbance within the attitudes, approaches and metaphors of the prevailing model. The following section describes approaches found within a grouping of artists, alongside which the practice of the current research has been exhibited. It discusses examples of artworks that are orchestrated in ways that set up the conditions for the emergence of surprising, novel and unpredictable processes, and it considers how such work may operate akin to O'Sullivan's notion of an encounter to set up the possibility for breaking with the world we are typically accustomed to.

6.4.   A grouping of artists, alongside which the practice of the current research has been exhibited

For the last decade the arts practice of the author has been exhibited and published alongside a grouping of artists, musicians, scientists, and writers,

brought together as a consequence of shared interests in ideas from art, systems thinking, cybernetics, Artificial Life (ALife), and through participation in international exhibitions, conferences, symposia and workshops. The artists, musicians, scientists, and writers from this grouping, and the author of this research have participated in numerous international exhibitions, events and publications including:

Second Iteration: Emergence (2001) Melbourne, Australia: This event was organised by Alan Dorin and Jon McCormack. The focus of Second Iteration was the concept of emergence and the relationship between generative processes, creativity and artistic practice. Artists / participants included Katherine Hayles, Maria Verstappen and Erwin Driessens, Rodney Berry, Rob Saunders, Paul Brown, Jon Bird and Andy Webster.

Blips (2002 to 2007) Brighton, UK: The events were organised by Jon Bird and Alice Eldridge and brought together a range of experimental artists, musicians and scientists whose practices explored the use of generative systems as a means of setting up artworks so as to produce emergent behaviour. Blip brought together practitioners including Ansuman Biswas, E.A.T. (Experiments in Art and Technology), Bill Latham, Tim Blackwell, Jane Prophet, Jon McCormack, Alan Dorin, Richard Brown, Maria Verstappen and Erwin Driessens, Rodney Berry, Ken Rinaldo, Maggie Bowden, Peter Cariani, Sam Woolf, Boredom Research, Paul Brown and Andy Webster.

Accidental Cinema – Chance Operations in Film and Digital Media (2005) Lighthouse, Brighton, UK: The exhibition was organised and curated by Sam Woolf and its focus was experimental artworks that explored the creative

possibilities offered by the use of chance operations and generative processes in film. It brought together artists including Semiconductor, Ian Helliwell, Guy Sherwin, Nick Hamlyn, David Gatten, Lev Manovich, Paul Brown, and Andy Webster.

Crystalpunk Workshop for Soft Architecture (2006) Utrecht, Holland: Crystalpunk was a series of events organised by Wilfried Hou Je Bek. The focus of the events was to explore thinking and concepts for a new soft architecture that, in contrast to traditional ideas of permanence and stability, is fluid, adaptive and responsive to interaction, interconnections and usage. Central to the discussions was the concept of architecture as a generative system that could produce emergent behaviour. It brought together practitioners including Usman Haque, Adam Somlai-Fischer, Saul Albert, Mary Harrington, Pete Gomes, Paul Prudence, Inga Zimprich, Matthew Fuller, Jon Bird and Andy Webster.

Living Architecture Laboratory (2006-2007) Girona, Spain, and Las Palmas, Gran Canaria: This show was organised and curated by Lluis Sabadell Artiga. It included Tomas Saraceno, Henrik Håkansson, Vito Acconci, Jurgen Mayer, Mathieu Lehanneur, Bettina Bachan, Jon Bird and Andy Webster. At the focus of the exhibition were ideas concerning a living evolvable architecture that had the capacity to respond to, adapt and transform through use and interaction with the environment. Central to the discussion was a conception of architecture, not as a fixed and defined form, but as an emergent generative system that could be reconfigured in ways that were unforeseen and unexpected.

Maverick Machines (2007), Mathew Gallery, Edinburgh, UK: This show was organised by Richard Brown and Jon Bird, and curated by Richard Brown. The exhibition focused on works that were inspired by the research of British cyberneticist Gordon Pask, specifically his experiments with chemical computers. The focus of the show was the creation of artworks that could evolve and show adaptive and emergent behaviour due to use, interaction and connection to the environment. The participants in the exhibition included Usman Haque, Peter Cariani, Roma Kirschner, Ruairi Glynn, Jon Bird and Andy Webster.

Emergência (2008), Itau Cultural, Sao Paulo, Brazil: This show was part of the Sao Paulo Biennale in 2008 and was curated by Guilherme Kujawski. The rationale for the event was to reflect on the concept of emergence in the field of cybernetic art. The specific focus was on how art projects could be set up in ways such that the interaction of elements within the artwork could lead to complex emergent events unforeseen by the artist. It brought together practitioners including Boredom Research, Roman Kirschner, Bacterial Orchestra, Leonel Moura, Martin Lubcke, Ruairi Glynn, Jon Bird and Andy Webster.

6.5. A shared interest in emergence

A shared interest of the artists in this grouping is to use arts practice to explore ideas related to the concept of emergence, in particular processes that can produce spontaneous organisation and ordering. Writers such as Cariani (1991), Penny (1996) and Delanda (2006) describe the idea of emergence as

referring to how a variety of interactions between processes can lead to the production of new structures, functions, and patterns that cannot be reduced to the properties of pre-existing ones. Commonly known examples of emergent structures include ripple patterns found in sand dunes, weather phenomena such as hurricanes and tornados, the production of termite mounds by a termite colony, the swarming patterns of bees, shoals of fish, flocks of birds, and in herding and pack formations of mammals. The concept of emergence can also, Delanda (2006) argues, account for the development of social, economic, and technological systems, as well as natural phenomena.

An aim for artists in this grouping is to set up artworks in ways that might produce emergent behaviour. A characteristic of the approach of artists in this grouping is that they conceive of artworks not as objects but as sets of dynamic relationships. They conceive of the artwork in terms of interconnected processes that may lead to new patterns, structures and events that cannot be predetermined and which are irreducible to earlier states. This conception of the artwork provides the fundamental theoretical basis for the experimental framework which is developed to guide the new work, and which is discussed in later chapters. The group draws upon insights from an area of research known as Artificial Life (ALife) to help develop techniques that model emergent phenomena, such as insect swarming, the flocking of birds and the evolution of ecological systems. Penny (1996) describes the basis of ALife systems as consisting of a large population of elementary units which interact with each other in an environment with no central control, and these interactions give rise to emergent phenomena. A well-known work from this

field is *Boids* (1986) by Mark Reynolds, which is recognised as an exemplar of the basic composition of an ALife system.
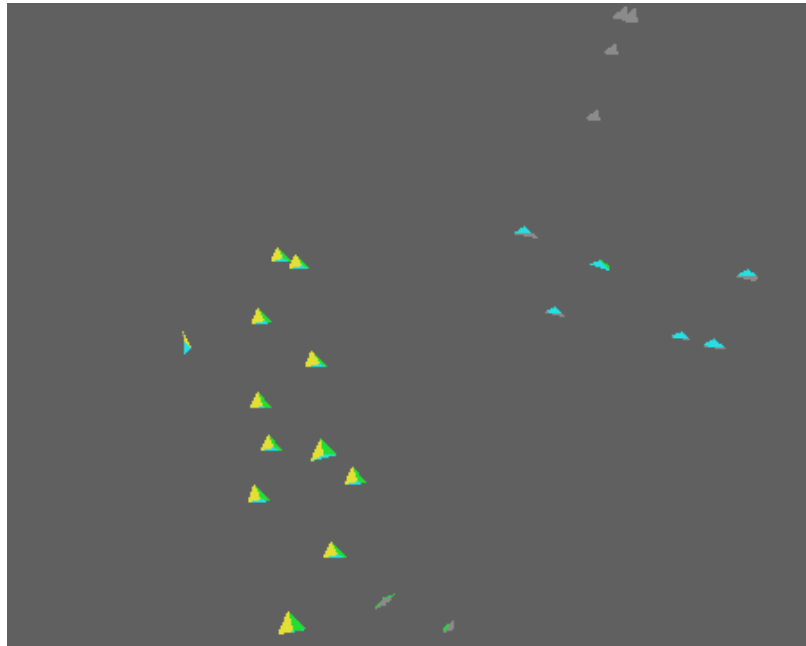
Fig. 13   Mark Reynolds, *Boids* (1986), still image

In the work *Boids* (1986) Reynolds seeks to set up the conditions to explore the emergent phenomena associated with the flocking behaviour of birds. He uses a computer programme to set constraints to guide but not to predetermine the behaviour of a population of birdlike forms. These forms (Boids) used to represent the birds are simplistic, a kind of irregular triangle motif. The work is not concerned with representing what a bird looks like, but rather focuses on the relations between birds, how they move and interact. What is compelling about encountering the work is that the relentless movement and ceaselessly changing position of the Boids, which model the flocking patterns of birds, is not a representation of this process but an actual, real example of emergent phenomena. If obstacles are present the Boids spontaneously avoid these by separating into new groups and then autonomously reform into a larger flock,

and as a consequence the Boids are perceived as flying as a coherent group. All of these processes, Sipper (1995) states, occur according to a set of basic rules but without central control. On encountering the work one glimpses sets of dynamic relations and irreducible connections unfolding in real-time. This acts akin to O'Sullivan's idea of the encounter, and it is disturbing and sensational. It is difficult to come to terms with what is happening and as a consequence there is a sense that during this encounter one is genuinely experiencing the world differently as the work reveals a systemic view, which is quite different from what we are typically accustomed to.

Another example of applying the principles from ALife research towards the generation of new artworks is *Ima Traveller* (1996) by Maria Verstappen and Erwin Driessens.

Fig. 14.　　　　　Maria Verstappen and Erwin Driessens, *Ima Traveller* (1996)

Ima Traveller (1996) is an interactive work designed for the viewer to experience and participate in a journey through a colour space that is created and travelled through in real time. The viewer uses a computer mouse to position the cursor above a field of coloured pixels, and the position of the cursor sets in motion the generation of new pixels, which interact with other pixels to generate further constellations of pixels. The experience of the unfolding work is akin to travelling forwards through a deep colour space. Unlike *Boids* (1986) there are no representational forms; the unfolding of the work and generation of the fields of colour are entirely reliant on interaction to generate new pixels that create the unforeseen territories and constellations of colours.
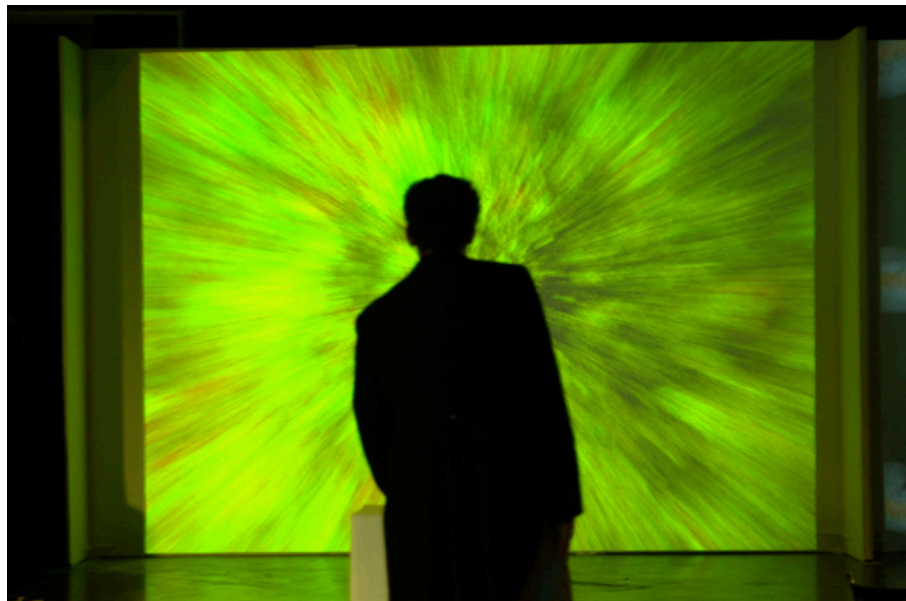
Fig. 15.   Maria Verstappen and Erwin Driessens, *Ima Traveller* (1996)[1]

Verstappen and Driessens stress the importance of creating immersive and interactive works that foreground kinaesthetic experience. The effect on the

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[1] Still from the exhibition, *Blip,* University of Brighton, 2004. Photograph by James Fry.

viewer is one of encountering a ceaselessly unfolding and infinite universe; it is a process of constant unpredictable becoming. On encountering the work one becomes aware that constant movement and perpetual change are the norm; there is no stasis, and no return, as the colour constellations are ceaselessly shaped and transformed by new events. *Ima Traveller* (1996) creates unfolding relational processes that can be understood as akin to the unpredictable and ceaseless reality of life.

A further example of applying the principles from ALife research is *Sky Ear* (2004) by Usman Haque. Haque's artwork is orchestrated so that interactions and relations between a range of technologies, software, programming and the environment result in the unfolding of the work. The work investigates electromagnetic fields that are usually imperceptible in our surrounding environment. Haque's aim is to use the work to make the phenomena visible and audible. Sky Ear consists of one thousand helium balloons held in a flexible carbon fibre membrane.

Fig. 16.   Usman Haque, *Sky Ear* (2004)

The ear, thirty metres in length, floats up to one hundred metres in the sky. Each balloon contains a sensor circuit that is responsive to electromagnetic fields. When the ear encounters electromagnetic activity, such as that which is present naturally or caused by mobile phone calls, the circuit causes LEDs to illuminate. Consequently, as the ear floats in the sky it is seen to flicker and pulse in response to the electromagnetic phenomena it encounters. Viewers are also able to use mobile phones to call in to the ear and listen to the sounds produced by the electromagnetic fields. The phone calls themselves act as new disturbances to the existing fields thus causing changes in the illumination of the balloons. Haque's work interacts with its surroundings, incorporates feedback from the participation of the viewers, to act as a relational mapping system that makes visible unseen natural phenomena.

6.6. Some implications of this approach

The exploration of the kind of processes found in these works is a shared concern of the artists in the grouping and of the current research. In *Boids* (1986) and *Ima Traveller* (1996) the emergent phenomena, although computed, is actual and unfolds in real-time. The work consists of large population of elementary units, such as the *Boids*, which interact with each other and these interactions give rise to emergent phenomena. Such works produce insights into how interacting relational processes generate forms that are not reducible to the characteristics of the individual parts. Encountering the emergent unfolding processes is genuinely surprising, and such work can provide something akin to the glimpses of relations and pattern that Bateson describes,

that momentarily makes us aware of the unity of things. As Bateson argues
these glimpses have the capacity to work as a bridge between 'branches of the
world of experience – intellectual, emotional, observational, theoretical, verbal
and non-verbal' (2002: 9). Encountering such work may be a means of
temporarily bypassing thinking shaped by conscious purpose and thus avoiding
views derived from mechanistic viewpoints. There is an irony in the work, that
it is through the simulation and artifice of the computer generated modelling
that one encounters a systemic view. This aspect, I believe, amplifies the effect
of the work as one is aware of the artifice of the work, but is not prepared for
the impact of the reality of the phenomena that one encounters. Delanda (2006)
and Penny (1996) argue that such work presents a challenge to reductive
principles, found in the prevailing model of thinking, that assume a complex
system can be understood by studying its separate parts. Such work is, they
argue, a concrete example of how it is not possible to produce an adequate
comprehension of a complex system by using linear approach.

6.7.   Some limitations found within the works and ways of overcoming these

An observation when encountering such work is that, although initially
captivating, the unfolding processes after a short time begin to appear
predictable and unsurprising.[2] One reason for this is perhaps that the initial
affect of the work acts before consciousness comes in to order our thinking and

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[2] These ideas are discussed in detail in Bird, J. and Webster, A. (2001) The Blurring of Art and ALife. In
A.Dorin (Editor) *Proceedings of Second Iteration, CEMA, Melbourne 2001, 38 – 46.*

to shape our responses. After a short while we may begin to rationalise rather than intuit what we are seeing and as a consequence the affect of the work may be diminished. Bird (2001) identifies a further reason for this is that such works can only explore processes, events and spaces that have been predefined by the constraints set by the ALife programmer and, as a consequence, may be no longer surprising after a few iterations. The programmer, Bird argues, is responsible for choosing and coding the work, and pre-specifies what kind of interactions and relations might occur and what will happen as a result of these. A paradox of this is that although the aim in such work is to explore the creative potential of emergence, the approach of the programmers and the limitations of the method of coding ultimately stymie the possibility for this. The artists in this grouping are aware of these limitations and often build in feedback from users as a means of influencing the unfolding of the work. However, the artists (programmers) are responsible for selecting the initial building blocks, known as primitives, and this ultimately predefines what interactions can take place within the work, irrespective of user interaction and this forecloses the possibility of genuinely surprising findings.

6.8. Insights from the field of cybernetics

Insights from the field of cybernetics, specifically ideas found in Ashby (1956) and Pask (1961) also suggest why such works, although producing emergent phenomena, may become predictable and unsurprising. Ashby's research into the conditions for innovation and novelty in a system can help think about this problem and may suggest a means of overcoming this. He argues that in order

for a system to produce novel and emergent behaviour it is necessary to leave some elements open and underdetermined. These open, indeterminate elements, he argues, need to be linked to feedback from the environment so that interaction between these contribute to the system's configuration. Ashby argues that it is these processes of interaction between the open indeterminate elements and the environment, rather than the intentions of a designer (programmer) that generate the potential for surprise and novelty in a system. One can adapt Ashby's notion of a system to think about the production of novelty in an artwork. It follows that the conditions for novelty and surprise in an artwork may be generated, not by the artist's actions or intentions, but through the relations and interaction of its constituent parts and the environment. This conception of the artwork contributes to the theoretical basis for the experimental framework, which is developed to guide the new work that is discussed in later chapters.

Ideas found in the writing of cyberneticist Gordon Pask (1961), in particular his notion of a fabric, help to think further about this problem. Cariani (2007) and Bird (2008) describe that a focus of Pask's research is the search for what he calls a 'rich fabric'. A rich fabric refers to indeterminate, heterogeneous, and adaptive materials, substrates that have the potential to form unforeseen relations and interactions with their environment. Pask (1961) suggests that finding a fabric is the prerequisite for fostering the conditions for a system to behave in surprising and novel ways. One can speculate from this that Pask's fabric and Ashby's (1956) parts of a system that are left open and indeterminate are one and the same thing. Cariani (2007) and Bird (2008) describe that a concrete example of a fabric can be found in Pask's electrochemical

experiments. Pask found that an electrochemical system was able show an elementary form of learning by responding to sonic input, and as a consequence was able to grow a sensor akin to an ear. Bird (2008) identifies three key properties of the materials used in the electrochemical system, known as Pask's Ear, that contributed to the production of a fabric: the materials were situated in the physical world, and were thus subjected to a large array of inputs and feedback; they were sensitive and responsive to a wide range of environmental stimuli, and they were open without fixed or predetermined functional roles. Bird argues that as a consequence of these properties, the ear was able to act as an autonomous system to construct it own sensors independently of a human designer. Pask did not predetermine how the chemical system should act or pre-specify how or what it should react with. It follows that one can speculate that, to produce an artwork that might act akin to the fabric of Pask's ear, three properties in the artwork might be as follows:- the materials should be situated in the physical world, and subjected to a diverse array of input and feedback; the materials should be sensitive and responsive to environmental stimuli; the materials should be open and indeterminate without fixed or predetermined functional roles.

If an artwork is orchestrated in this way this may set up the possibility for the production of a fabric, and as a consequence it may well unfold in ways that are both unexpected and surprising. This idea of the artwork being orchestrated to produce something akin to a fabric is used to help develop the experimental framework that guides the new practice described in later chapters. When using this approach Pask and Ashby's insights have an implication when conceiving of the role of the artist. Rather than describing artists as creative

makers, the role of the artists appears altered, as they are no longer responsible for making the artwork as it appears; they not impose or control the emergent behaviour but rather seek to orchestrate the possibility and conditions for this to occur. Thus, the unfolding artwork cannot be solely related to or attributed to the artist's hand, or creativity. The shift in the role of the artist is evident if one acknowledges that it is the open-ended processes of interaction between elements of a work and its environment rather than the intentions of the artist that generate the possibility for a work to be surprising and novel. It follows that one may begin to recognise that to produce work that is genuinely surprising, it appears necessary to develop strategies that diminish and loosen the control and intentions of the artist.

The ideas described above can be used to encourage a different approach to thinking about and engaging with problems. Ashby and Pask's insights suggests that finding a way to address limitations or problems, such as questions about the production of novelty in a system, does not mean asserting more control but perhaps the opposite – it seemingly requires less control, less defined purpose, more openness and indeterminacy. The emphasis is about materials, their responsiveness and relations within a diverse range of environmental feedback and stimuli. In examples, such as Pask's electrochemical ear there can be no linear approach to problem solving. This goes against the grain and represents a challenge to the attitudes and approaches of the prevailing view.

6.9.   An outline for an experimental framework – a process aesthetic

This section of the chapter draws together the ideas discussed above, and speculates upon the possibility of setting up artworks that employ some of the characteristics as found in Ashby and Pask. It considers how this approach might be used to critically engage with aspects of the prevailing entitative model of thinking.

Some key threads that have emerged from the discussion that may help establish the theoretical basis of the framework are that:

- Artworks are conceived not as objects but as sets of dynamic relationships, as interconnected processes that may lead to new patterns, structures and events that cannot be predetermined and which are irreducible to earlier states.

- The conditions for novelty and surprise in an artwork may be generated, not by the artist's actions or intentions, but through the open-ended relations and interaction of its constituent parts and feedback from the environment.

- Three properties of the artwork are: that the materials should be situated in the physical world, and be subjected to a diverse array of input and feedback; that the materials need to be sensitive and responsive to environmental stimuli; and that the materials should be open and indeterminate without fixed or predetermined functional roles.

These threads help establish a conception of the artwork and provide the fundamental theoretical basis for experimental framework which is developed

to guide the new work that is discussed in the following chapters. Following insights from Pask and Ashby, a working premise for an experimental framework begins by proposing that the new artwork and its materials should be situated in the physical world. Unspecified elements of the work should be left open-ended and indeterminate without fixed or predetermined functions. Feedback, dialogue and interactions between these open elements and their environment should be encouraged, but not pre-specified. It is this process that might set up the possibility for the configuration of the work in unforeseen ways. Within this premise, the artist's role is conceived as one of choreographing openings, setting up spaces for things to occur, and encouraging unforeseen events to take place. An important activity of the artist is to find ways of leaving elements of the work to open and to orchestrate materials in ways so as they might interact with each other and the environment. This process is akin to Pask's search for a fabric. How a fabric might be produced or encountered in practice is not straightforward or even known and it is entirely reliant on heuristic processes of test and see.

An analogous approach is found in the methods of composition used by John Cage and insights from his practice illuminate some of the implications of employing an open-ended method. In *Experimental music* (1973) Cage describes how his compositions are structured in ways so as to let in ambient accidental sounds that are neither scored nor predetermined. He advocates and composes with specific formal ambitions that intentionally build in the opportunity for feedback from the environment. Cage describes one consequence of this as being that the approach seems initially like 'giving up music, giving up humanity' (1973: 8). Within the constraints and contexts of

the prevailing attitudes this approach, Cage states, disturbs all of what we have learnt to value. Cage argues, that the approach, however, reveals that 'nothing is lost and everything is gained as it leads to the world of nature, where, gradually or suddenly, one sees that humanity and nature, not separate, are in this world together' (Cage, 1973: 8). Waiting, listening, and accepting, he argues, become fundamental qualities of composition and performance; the role of the artist (composer) is 'shifted from that of the prosecutor of meaning to that of the witness of phenomena' (Cage, 1973: xxiv). Cage's insights are useful to think about the experimental framework that is being developed, as when seen through the lens of the approaches and attitudes of the prevailing model, in particular its preoccupation with problem solving, may be perceived as futile and purposeless. Cage's insights suggests that open-endedness is neither a flaw nor a failure of method, but an integral part of a working process, which necessarily needs to disturb and break from the accepted existing ways of thinking and acting.

6.10. Disrupting existing forms as a critical tool

To initiate a new work, a challenge for the artists from the above grouping is that they typically have to set up every aspect of the artwork. The use of various media technology, software, and the coding of the programmers might be understood as an attempt to produce a fabric, a substrate that encourages connections and interaction. However, as described above, searching for or producing a rich material to work with, akin to Pask's fabric, is not straightforward. The programmer-defined spaces of many of the works from

the artists in this grouping predetermine what interactions might occur and what will happen as a result of these; the fabric can be understood as pre-specified and limited in variety and, as a consequence, the interactions may well be predictable rather than novel. Ashby and Pask's insights indicate that it is inevitable that works, such as *Boids* (1986), *Ima Traveller* (1996) and *Sky Ear* (2004) will become predictable, as they are, in their terms, predetermined and closed to feedback from the environment that might configure the work in unexpected ways.[3]

A method used from my earlier practice may be a means of overcoming this problem. In my earlier work an approach was to use existing artworks as a starting point for new creative work. The existing artworks were treated as a material to work with, as a resource that could be disrupted, loosened and reconfigured. In contrast to the artists from the grouping who were faced with programming the new work from scratch, I was not faced with having to generate the materials but rather worked with and within pre-existing forms and subjects. This early approach might be adapted so that the existing forms it uses are chosen because they embody the approaches, attitudes and guiding metaphors of the prevailing model of thinking and it may be applied critically to disrupt, disturb and break from these. This approach of dissolving and disturbing the existing might be understood as the means of producing a pool of indeterminate materials and processes, which may set up the possibility to be reconfigured by feedback and interactions with the environment.

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[3] This is an important observation that will be discussed throughout the thesis especially with regards to the pre-determined intention of much eco-art, which often forecloses the development of the work in unexpected ways. I will argue that producing the unexpected is crucial in thinking and acting differently and without this we have the predictable and known.

6.11. Some thoughts that problematise the language of creativity, innovation and novelty

The last chapter described how the terms, vocabulary and language of environmentalism and eco-arts had been co-opted and instrumentalised by the prevailing model of thinking. It argued that the vocabulary and language of eco-art, once a form of dissent, had been politicised and turned into rhetoric and had become a ubiquitous part of the prevailing discourse. This, the chapter argued, had problematised the continued usage of such language as this potentially reinforced the prevailing view. Whilst the discussion throughout the last chapter focused on practices known as eco-art, the same processes of co-option and instrumentalism of the language, forms and terms of mainstream art has also taken place. This chapter has sought to develop an approach that can produce new insights and inspire different ways of thinking and acting. The co-option of the vocabulary and language of art has implications for the development of this approach as it challenges and problematises assumptions about arts creative, and innovative possibilities. It also identifies areas, subjects, which might be the focus of a critical or dissenting arts practice. The following section explores some of the implications of arts co-option and speculates upon strategies that might be developed so that art might be able to act critically within this contemporary context.

Toscano (2009), Zepke (2008) and Osbourne (2003) argue that the vocabulary and language traditionally associated with art, such as creativity, innovation and invention have been co-opted and instrumentalised by the industry, multi-

national corporations and governments – arts creative vocabulary have 'become ubiquitous terms of global capitalism' (Toscano, 2009:58). They argue that the language of creativity and innovation is now an ever-present ingredient of capitalist rhetoric, 'today the exploitation of human potential for innovation is what capitalism excels at' (Zepke, 2008:2). A task for art, Osbourne (2003), Zepke (2008) and Toscano (2009) argue, is to find ways of working against or within this rhetoric, to develop and maintain some form of resistance to the co-option of the terms and vocabulary of art. Beech (Beech, 2003) argues that a strategy of new art might be to actively negate notions of creativity, and to work to cultivate something akin to a philistine approach as a critical tool of dissent. He argues that throughout history art has employed strategies to exploit the provocative potential of the philistine and within the contemporary context such strategies may again be necessary.[4] Toscano (2009) argues that an approach might be developed that avoids the language of creativity by not seeking to innovate, by appearing to be uncreative. The dissenting artist, Zepke (2008) argues, may be seen 'to contemplate everything but appear to do nothing' (2008: 34), and as a consequence deny and stymie any sort of production. An implication of this approach might be that notions of the artist as a visionary figure, prevalent through arts discourses, and a trait of the hierarchical attitudes of the prevailing model are denied. Zepke (2008) argues that such a strategy would set up the conditions where it would no longer be possible to be perceived as creative in the ubiquitous sense. This might work, he states, as a form of resistance to the compulsive desires to create and

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[4] Examples of works employing this approach include; Duchamp's submission of the ready-mades at the American Society of Independent Artists, 1917; *Artist's shit*, (1961) Piero Manzoni; and the Jubilee footage of the Sex Pistols on a Thames ferry, playing '*God Save the Queen*', 1977.

innovate, and frustrate the imperatives of capitalist rhetoric. Early examples of
this kind of approach in arts practice might include works such as *4'33'* (1952)
by John Cage; *Erased de Kooning Drawing* (1953) by Robert Rauschenberg;
Telepathic Piece (1969) by Robert Barry; *The world is full of objects, more or
less interesting; I do not wish to add any more* (1969) by Douglas Huebler;
Gorillas (1967), by the Bonzo Dog Doo-Dah Band; and *Fluids* (1967); Allan
Kaprow.
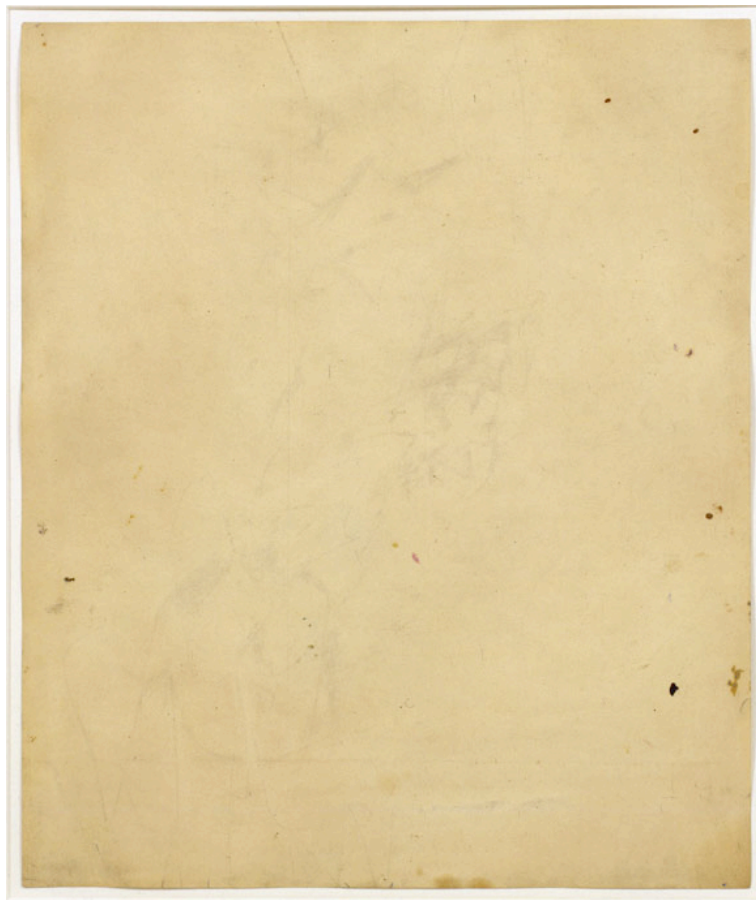
Fig. 17.   Robert Rauschenberg, *Erased de Kooning Drawing* (1953)

More recent examples might include, *The Lights Going On and Off* (2001) by
Martin Creed; *Salle Techno* (1994) by Wolfgang Tillmans; *Emmanuel Perrotin*
(1994) by Maurizio Cattelan, *My Bed* (1999) Tracey Emin, and *Shedboatshed*
(2005) by Simon Starling.

An approach new art might employ is to be purposefully purposeless. To withdraw from having any explicit purpose, to be purposely purposeless, could act as refusal to the prevalence of problem solving approaches. It might produce a break from the calculated, instrumentalised forms of capitalism, and act as a foil against the consciousness changing assertions and desires of the prevailing model of thinking. In this context, for example, environmental thinking would not be put at the service of anything – it would neither be a veil for a product, as a means of solving problems nor be used as a means of validation for arts practice. Cage (1973) describes his compositions as 'purposeless play', but states that 'this play is an affirmation of life—not an attempt to bring order out of chaos, nor to suggest improvements in creation, but simply to wake up to the very life we are living, which is so excellent once one gets one's mind and desires out the way and lets it act of its own accord' (1973: 32). Esche (2005) argues that approaches that appear purposely purposeless are not as trite or frivolous as they might sound. He argues that dissenting forms that begin by challenging issues head on, rarely work in the contemporary context. The failings of explicit forms of dissent, he states, are in part due to the fact that people have become immune to overt attempts to change consciousness. Artworks that proceed with the explicit purpose to affect change, Esche argues, 'feel like advertising, are didactic, and only speaks to those already persuaded, if anybody at all' (2005: 3). Appleton (2007) argues that the explicit response to a problem is now not only commonplace, but has become a counterproductive stereotype and a clichéd mode of acting and thinking. Traditional forms of resistance, she states, are understood to be not only idealistic and utopian, but also fundamentally impotent in the

contemporary context. Esche (2005) argues that working in an under-hand and subversive way, appearing purposely purposeless rather than confrontational, can still be a potent form of dissent. As a consequence of appearing purposeless arts practices will be deemed irrelevant, impotent, of little use and will as a result be overlooked or ignored and pushed to the peripheries, to the margins. This marginal positioning, arts seeming irrelevance, Esche (2005) argues, may well be its very possibility, it's liberating potential to encourage a means of thinking and acting differently. An effect of working on the margins, Esche (2005) argues is that art can break away from the shackles of representing the interests of other regimes. Art can, for example, be dissenting, not via representing the concerns of other forms, but through its own terms. Beech (2003) argues that an approach of the dissenting new art might be to avoid and deny the professionalisation of arts activities. The potency of the amateur figure, Beech argues is that they represent a lack of ability, incompetence, and maverick enthusiasms, and this, he states, denies the kind of competencies that can be used to endorse notions of quality, standards, proficiency, which the prevailing model expect and nurture.

6.12. Disrupting the prevailing view to produce a minor narrative

In *Kafka: Towards A Minor Literature* (1986) Deleuze and Guattari argue that the disruption and dissolution of an existing form is a fundamental critical act. They argue that a crucial method of dissention is to seek ways of corrupting the forms, narratives and languages of authorities, legislators and the state, to produce what they describe as the 'minor.' A strategy of resistance can, they

claim, occur through disturbing the dominant language, and countering the rhetoric, by betraying its original terms, vocabulary, and imagery and producing a minor narrative from these. The minor is produced, they argue, when the attitudes, approaches and languages of the prevailing view are made strange, are 'made to stutter and stammer' (1986: 43). Central to the conception of the minor is the understanding that it does not emerge from a minor form, or from an external or exterior position, but from within a dominant form, such as a colonial voice, or an authority language. The minor emerges 'through a deterritorisation of a dominant authority form' (1986:23). The minor, they state, acts only as a critical disruptive form and, they argue, the motivation to produce the minor is not driven by a desire to replace the dominant form with this. This insight can inform the method of this research project. It follows that the disruption of the prevailing model has no desire to produce a new model of thinking or to replace this. Its purpose is to disrupt, disturb and break from the known, from existing habits.

New art might use the approaches of the minor-narrative to create, or open up, fluid spatial and temporal locations which resist the coherence of a dominant, authority language. Such incoherence, Toscano (2009) argues, might act as a kind of rambling speechlessness, and practice a 'methodical breakdown of creativity' (2009: 62). As a resistance to the stereotypical capitalist imperatives to create, enjoy and express, Toscano argues that we should think about art as a kind of 'imperceptible un-speech, as sets of ill-creative processes' (2009: 62). Carter (2004) argues that arts dissenting possibilities arise when a materials conventional meaning or function is shifted, as this results in new forms, an excessive supplement that may be more than expected and quite unwanted.

The emergence of a minor narrative from an authority language can be understood, in Carter's terms, as unwanted excess. The clarity of the language of the prevailing model may be interrupted and made strange and through this process produces 'a supplement of matter that haunts communication' (Carter, 2004: 31). Toscano (2009) argues that the emergence of such incoherent forms, liberated from the control of the prevailing model, may represent genuine freedoms of speech. Carter (2004) proposes that it is through the production of such excesses that genuine innovation can take place. Such innovation, found in these forms, can, he argues, be understood to stand in contrast to the generic and ubiquitous use of the terms by the creative industries. Here is evidence, he argues, that innovation can still be used without reinforcing the co-opted usage of the term.

6.13. Summary

The chapter has described the development of an experimental framework, which for the purposes of this thesis is called a process aesthetic. The framework has been developed as a guide for new arts practice. This aim is to use the framework so that new work may critically engage with traits from the prevailing view, but do so without perpetuating these. It may break from the approaches and attitudes of the prevailing view and through doing sets up the possibility for alternative and different ways of thinking and acting. In order to develop the framework, ideas from Systems Art, Artificial life, Cybernetics, Process Thought, and arts practice have been brought together to form something akin to Pask's fabric.

Some key threads have emerged from the discussion that establishes the theoretical basis of the framework. These include:

- Artworks are conceived not as objects but as sets of dynamic relationships, as interconnected processes that may lead to new patterns, structures and events that cannot be predetermined and are irreducible to earlier states.

- The conditions for novelty and surprise in an artwork may be generated, not by the artist's actions or intentions, but through the open-ended relations and interaction of its constituent parts and feedback from the environment.

- Three properties of the artwork are:- the materials are situated in the physical world, and subjected to a diverse array of input and feedback; the materials need to be sensitive and responsive to environmental stimuli; the materials should be are open and indeterminate without fixed or predetermined functional roles.

- The starting point for new works may be the existing approaches, attitudes, forms, and metaphors which embody traits and characteristics of the prevailing view. The selection of these may be because they have become fixed and entrenched in particular functions, uses and meanings. They might, for example, be understood to maintain and perpetuate traits, which are recognised as dysfunctional or mechanistic.

- The new work will proceed by seeking to generate places of breakdown and disturbance within these existing forms, to generate new materials

that are looser, more fluid, and contingent upon context and environment.

- The new practice will not proceed by explicitly critiquing or dismissing the forms of the prevailing model but through being immersed within and inhabiting them; also by reconfiguring them in ways which might provoke a minor narrative. This minor narrative may be, in comparison to the prevailing view, incoherent and excessive.

- It will be through the frustration of established order and by breaking from the habitual that the new arts practice may help produce a shift in how one thinks and acts in the world.

The composition of the experimental framework, the process aesthetic, has been conceived as akin to Pask's fabric. Its constituent parts, namely the various elements, processes and ideas, have been brought together to form an indeterminate substrate. How these may combine and interact, how they might connect and respond to feedback, will not known until these processes are set in motion through undertaking new practice. The material testing of the process aesthetic is at the core of the creative practice that is described in the following chapters (7, 8 and 9).

7.   Testing the experimental framework – Preliminary practice

7.1.   Introduction

The previous chapter drew upon insights from the cybernetic thinking of Ashby (1956) and Pask (1961) to suggest that ideas concerning the production of novelty and innovation in a system could be adapted towards a method to guide arts practice. It referred to the Artificial Life research of Cariani (1998) and Bird (2008), in particular their ideas on emergence in evolutionary systems, and brought these together to establish an experimental framework, which the thesis describes as a process aesthetic. Pask (1961) uses the metaphor of a *fabric* to describe a relational substrate that may be formed between the open, indeterminate materials of a work and the feedback from the environment. It is a *fabric,* the open-ended interactions between materials and feedback, which was recognised as fundamental for a work to unfold in unexpected and surprising ways. The experimental framework called a process aesthetic has been conceived as akin to Pask's fabric.

The initial outline for the framework proposes that:

- The artwork should be situated in the physical world.

- Elements of the work should be left open and indeterminate.

- Dialogue, interactions and feedback between the open elements and the environment should be encouraged, but not pre-specified.

- It is the interactions and feedback that set up the possibility for the reconfiguration of the open materials in ways that are novel and surprising.

The last chapter also drew upon thinking from discourses in contemporary art, including O'Sullivan (2006), Toscano (2009), Cage (1995) and Zepke (2008) to consider how using an approach that sought to produce something akin to a fabric had implications for the role of the artist. It identified that it was the open-ended interactions between the materials and their environment, rather than the intentions of the artist that produced the conditions for surprise and novelty in a work. It described how in an open-ended work the artist could not control or prescribe the processes that might happen and as a consequence can only work to set up the conditions so that events might occur. It established that by using this approach artists could not predetermine the work and shape materials towards this end; they could not impose their intentions onto a material, and because of this they were no longer responsible for making the artwork as it appeared. The chapter argued that this was significant since it changed the relationship between artist, materials and the artwork. As the unfolding artwork could no longer be solely related to or attributed to the artist's intention or individual creativity this approach challenged notions of artists as creative visionaries, as found in Gablik (1991), and Matilsky (1992). The chapter speculated how this approach might also be used to express strategies proposed by Beech (2003) and Toscano (2009) that called for artistic approaches that might disrupt prevailing notions about creativity and innovation.

The chapter described how an approach from my earlier practice might be adapted so as to become a critical tool for engaging with the existing forms, materials, and subjects of the prevailing view. The approach of the process aesthetic

- begins by selecting an existing form, subject, or trait from the prevailing model of thinking, which becomes the materials and starting point for the new work.

- aims to set up processes that might disrupt, dissolve, and loosen the existing form so as these become indeterminate, fluid and open to adaption.

- seeks to set up dialogue, interactions and feedback between the open elements and the environment so as these processes might reconfigure the materials in ways that is not prescribed, but unexpected and novel.

The processes of dissolution and disruption of existing forms and the recombination of these in new configurations underpins the basis of a process aesthetic. The dissolution of existing form and its connection with feedback from the environment may work to produce a substrate analogous to Pask's metaphor of a *fabric* (Pask, 1961). It may result in an assemblage of materials that are indeterminate and malleable which through interactions and feedback may be reconfigured in ways that are unexpected and novel. The processes of reconfiguration can be understood as a critical method that seeks to disturb and

loosen, and break from aspects of the world that have become in some way fixed, habitual and recognisable.

The last chapter suggested that art might be set up to break from the expected and habitual to challenge existing objects of recognition. This, O'Sullivan (2006) argues, might work to disrupt and disorientate the viewer, and act as an *art encounter*. O'Sullivan (2006) suggests that art encounters work primarily on an affective register, at a pre-cognitive, and sensual level, and the organisation of these might be a means of resisting and breaking from the approaches and attitudes of the prevailing view. The last chapter described that the disruption and dissolution of the known, to produce an art encounter, might also be understood, as Zepke (2008) argues, as a form of political resistance. It might disturb an existing form by betraying its original terms, vocabulary, and imagery to produce some thing akin to Deleuze and Guattari's idea of a minor narrative (1986). Through generating places of breakdown within the prevailing view this may result in works that are unforeseen and surprising that are 'liberated from the control of the prevailing model' (Toscano, 2009: 54).

This chapter describes how the framework is used to guide the initiation, production, dissemination and evaluation of a preliminary body of work. It discusses how the new work seeks to critically engage with traits of the approaches, attitudes and metaphors found within the prevailing view, and considers how it avoids perpetuating some of the problems associated with this model of thinking. The specific focus of the new work is to find ways to engage with traits of the prevailing view as embodied in existing arts practice. In particular it seeks to engage with attitudes in existing work that conceives of materials as inert and passive, resources that are subordinate to the artist's

intentions. In the existing artworks artists are seen to shape and control materials in accordance with their vision. As a consequence the materials appear to have little say in the unfolding work as they are treated as a passive resource to meet the artists needs. Such attitudes to materials are prevalent throughout arts practice and as Bateson argues are so acculturated that 'it is difficult to recognise any issue with it' (2000c: 446). However, as discussed in Chapter two such attitudes are understood to produce the conditions for an exploitative attitude towards the world. For example, Bateson (2000) describes that the treatment of materials as an inert and passive resource that are subordinate to human needs as symptomatic of widespread dysfunctional relations between the humans and the environment. This, Protevi (2001) argues not only sets up the conditions for the exploitation of the environment but also produces a hierarchy which elevates humans and relegates materials as mindless and without purpose.

The new work seeks to challenge assumptions that describe materials as inert and passive, and aims to set up the possibility for alternatives to come to the fore. It sets out to explore how an artist can have relations with materials which, rather than being treated as subordinate, are more reciprocal, collaborative and dialogical. It aims to encourage a view of materials as having inherent tendencies that are dynamic and responsive, which can play a key role in the unfolding of the work. The new works are orchestrated so that the materials can talk back and guide the unfolding work. The following projects set up the artwork so that the control and authorship of the artist is diminished and the voice of the materials is amplified. In this way the work begins to establish different relations between artist and materials, to develop an

approach that produces alternative guiding metaphors that might be extended more widely to influence the way one thinks and acts in the world.

7.2.   Preliminary practice

This section describes how the process aesthetic is used to guide the initiation, production, dissemination and evaluation of the preliminary practice, and is comprised of four new projects.

7.3.   51 Aqueous dispersals (2006)

An existing artwork work by Andy Goldsworthy, *Rowan Leaves and Hole* (1987) is the starting point for *51 Aqueous Dispersals* (2006). Goldsworthy's work is an example of the kind of artwork cited in Gablik (1991) as embodying a deep re-connection with and reaffirmation of nature and its natural processes. I am interested in Goldsworthy's work, in what it says about nature and natural processes, how it speaks about his relationship with the materials he chooses and what these relations signify.

7.3.1. The existing work

Rowan Leaves and Hole (1987) is a photograph of a sculpture made by Andy Goldsworthy. To produce the sculpture Goldsworthy collects and arranges Rowan leaves to form a concave, shallow skin above a hole. The leaves are

ordered tonally from light in the centre to dark at the edge and are carefully

positioned so as to act as a structural support for each other. A photograph

taken from directly above the sculpture documents the end state of the work.

The framing of the sculpture in the photograph crops out anything beyond the

edge of the work and as such denies any clues to the context of the sculpture.

The combination of the cropping technique, and the aerial plan shot of the

photograph, work to flatten the sculpture to become an image. The artwork is

the result of the artist's shaping natural materials. It appears to be the sole

result of the artist's hand and as a consequence the materials appear subordinate

to the artist's intentions. The materials have little or no say in the work, and

appear to have been brought together to meet his predetermined aesthetic.

Fig. 18. Andy Goldsworthy. *Rowan Leaves and Hole* (1987)

I am interested in what Goldsworthy's approach and the work says about nature

and the natural. There is a strong sense that the nature that Goldsworthy

reveals is one that has been shaped, controlled and ordered by the artist. Goldsworthy shapes an ideal of the natural, one that is devoid of any external context or feedback that might disturb and disrupt this. As a consequence, in relation to ideas in Morton (2007), the work fetishises and objectifies a partial view of nature and the natural. Within Goldsworthy is a reverie of the natural that, Lewis (1994) argues, is understood as the embodiment of attitudes, which lie at the root cause of dysfunctional relationship between humans and their environment. In the context of ideas in Protevi (2001) and Delanda (1999) the work potentially perpetuates approaches which consider materials as subordinate, passive and chaotic and awaiting human intervention to organise and give it order. The work exemplifies a kind of proficiency and artistry that embodies notions of creativity that Toscano (2009) and Zepke (2008) argue embodies the attitudes of the prevailing view. The handling and orchestration of materials embodies a trait of the prevailing model associated with the notion of the artist as a visionary creator, a view Bourriaud (2009) describes as outmoded and unproductive. Miles (2000) argues that such work reinforces the idea of the artist as an autonomous figure and as a consequence stymies the generation of collective, participatory and communal relationships that eco-art proposes.

7.3.2. The initiation and production of a new work

This work consists of a sculptural prop, a replica of a *Hele-Shaw cell,*[1] a solution of coloured glycerine sandwiched between two sheets of Perspex, a

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[1] A device used to explore and test problems in the field of fluid mechanics

plastic tube attached to the centre of the upper sheet, and a repetitive cycle of interventions performed by the artist with these. The artist blows air into the prop and this results in the dispersal of the liquid solution and the temporary emergence of structure and pattern within the solution. Within seconds the structure of the pattern collapses and dissipates back into the solution. The device is cleaned and recalibrated in readiness for the next iteration. The artist blows air into the device, once more resulting in the creation of a temporary pattern. During 51 successive iterations, the artist attempts to tease out more complex forms from within the solution by modulating the airflow, adjusting the viscosity of the solution and by roughening the surface of the Perspex.

Fig. 19. Andy Webster, *51 Aqueous Dispersals* (2006). Still image taken from video

The aim of *51 Aqueous Dispersals* (2006) is to find a response to Goldsworthy's work. It seeks to avoid the festishing of natural materials as found in Goldsworthy and aims to challenge approaches that conceive of materials as inert, passive and subordinate and awaiting ordering by human intervention. The new work attempts to think differently about the relations

one might have with materials and seeks to set up the opportunity for the materials to talk back, to fully participate in a two-way conversation. In Goldsworthy, his intention is to shape and order the materials to conform to his aesthetic sensibility and as a consequence the work is clearly the result of the artist's actions. In the new work I seek to explore and reveal pattern, not through my aesthetic intentions being imposed on a material, but by foregrounding the inherent qualities of the materials as the generator of the pattern. One of my roles in the new work is that of coaxing out and encouraging richer and more complex pattern to materialise by adjusting the air blown into the device, sensitively orchestrating the conditions for pattern to emerge. In contrast to Goldsworthy, the pattern in the new work is a consequence of the inherent capacity of materials to organise autonomously under given conditions. I have little control over this and simply orchestrate the possibility for the pattern to occur.
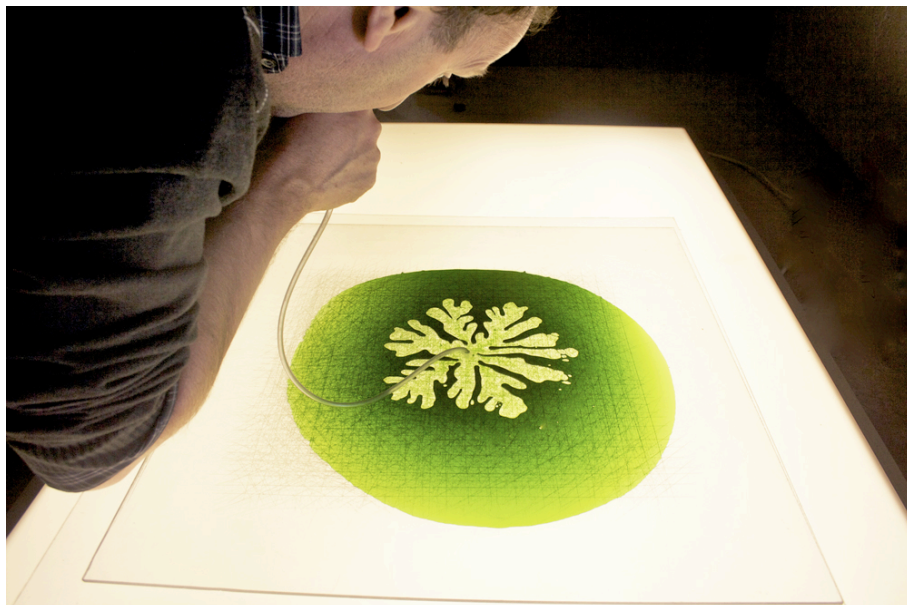
Fig. 20. Andy Webster. *51 Aqueous Dispersals* (2006), image taken from video

The momentary emergence of self-organising pattern contrasts strongly with the imposed design found in Goldsworthy. The pattern that emerges within the new work is not an idealised or constructed representation of nature but is an actual, unstoppable process immanent to the materials. The new work seeks to foreground relations between artist and materials that are collaborative and reciprocal rather than hierarchical, and in doing so diminishes ideals of the artist as a creative visionary. Implicit in the Goldsworthy is an aura of creativity, of artistry and serious craft. In contrast the new work seemingly engages in something akin to purposeless play (Cage, 1973), and it lacks the artistry in Goldsworthy such that it appears somewhat futile and unnecessary.

7.3.3. Documentation, dissemination and evaluation

The performance of the work and its dissemination took several forms. Its main, most permanent form, is its documentation through video. The work has been shown in this format at exhibitions,[2] seminars[3] and at a conference[4]. The performance of the work, namely the artist blowing air into the solution, the response of the materials and the fluid finding temporary form, is captured and communicated through the video. However, the exhibited video can be understood to narrow the possibility of the work. A critique of Goldsworthy is that he crops the photo to isolate and decontextualise his sculpture. Although the new work is aware of the implications of Goldsworthy's actions, the video

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[2] *Artful Ecologies,* University College Falmouth, Falmouth, UK, and *Finding Fluid Form,* Sallis Benney Theatre, University of Brighton, Brighton, UK.

[3] *Finding Fluid Form* (symposium), Faculty of Art, University of Brighton, UK; *Crystalpunk workshop for soft architecture,* Oudenoord 275, Utrecht, Netherlands; *RNUAL Research Presentations,* Central St. Martins, UAL, London, UK, and *Emoção Art.ficial – Emergência!* Itaú Cultural, São Paulo, Brazil. *The Good Life,* Lanternhouse, Ulverston, Cumbria.

[4] *Artful Ecologies 1*, University College Falmouth, Cornwall, UK

does something similar by editing out the artist and his performance to focus in on the patterns that are produced. It also edits out the dialogue that it has had with the existing work, and as a consequence, a festishisation of natural form as found in Goldsworthy, is potentially repeated in the new work.

Fig. 21. *51 Aqueous Dispersals* (2006) Installation shot, Artful Ecologies, University College Falmouth

Unlike Goldsworthy, the new work does not construct an ideal, but does potentially objectify the processes it seeks to engage with and reveal. Acknowledging this is important since, although the initial task of thinking differently about the relations between materials an artist is successful, the documentation of the work seemingly falls back into expected attitudes and approaches. The installation of the work for exhibition, usually shown on monitor or projected, also conforms to orthodox accepted norms and can be understood to reinforce rather than critically engage with the existing work. The exhibition of the work is problematic as it highlights the pattern production rather than communicating the critical narrative that informs the work's production. This renders the disruption of the existing work mute and on

encountering the work one is not aware of slippage and disturbance that has

taken place. As a consequence this diminishes the possibility for the work to

act akin to O'Sullivan's idea of an encounter. This problem was alleviated to

an extent when presenting the work at seminars[5] and conferences as it allowed

for the back-story behind the work to be communicated.

7.4.   2 litres of soap solution inflated 129 times (2007)

The starting point for *2 Litres Of Soap Solution Inflated 129 Times* (2007) is

Hazel Stick Throw (1980) by Andy Goldsworthy. In the photograph *Hazel*

Stick Throw (1980) Goldsworthy is captured throwing several hazel sticks into

the air to temporarily reveal patterns reminiscent of his other practice. The

action/gesture is performed for photographic documentation and it seems clear

that in this work the materials are subordinate to the artist's actions and the

aesthetic he wishes to impose on them. Goldsworthy appears to have little

interest in entering into any dialogue with the materials. It is likely that the

work, which depicts the sticks frozen against the sky, is an attempt to create an

airborne refrain of Goldsworthy's other sculptural work. The artist's use of

materials appears to be a means of orchestrating and reiterating his own

signature style. They are used for predetermined purposes, to generate an

image akin to his signature works and to reaffirm and depict Goldsworthy in

the image of a creator. The image fetishises the action and amplifies

Goldsworthy's command over the materials; even materials thrown into the

air, which for many would be a random gesture, seem to conform to and shape

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[5] An example of this was a talk given by the artist at Lanternhouse, Ulverston on 8/9/11 where a prolonged discussion of the critical context that informed the work took place.

towards Goldsworthy's own aesthetic. There is nothing particularly unusual about this as a large range of contemporary artistic production can be read as vanity exercises.

Fig. 22.   Andy Goldsworthy. *Hazel Stick Throw* (1980)

The photograph depicts the artist caught in mid gesture at the moment of creation, and is resonant of earlier portrayals of artists such as Pollock spilling paint or Serra scattering molten lead. Such photographs reveal moments of an artist's visionary process and, as such, may be seen to add to the myth of the mercurial actions of the artist.

7.4.1. The initiation and production of a new work

2 Litres Of Soap Solution Inflated 129 Times (2007) aims to engage with this narrative and to displace and disrupt the idea of the artist as a visionary controller of materials. The intention is to perform a temporary action in the

landscape but unlike Goldsworthy, to carry out actions that are led by and steered by the inherent tendencies of the materials used.

Fig. 23.   Andy Webster. *2 Litres Of Soap Solution Inflated 129 Times* (2007)

This new work is a performance by the artist. It consists of a child's toy, a plastic bucket, soap detergent, 2 litres of water and a repetitive cycle of actions by the artist with these. The aim is to use the materials to create soap bubbles and to release these into the air. The child's toy is loaded with soap solution and successive attempts are made to try and coax a bubble out of the device. To produce a reliable bubble and for it to have a chance of being released, the artist's behaviour has to keep altering and adapting, both to the materials and the prevailing environmental conditions such as breeze and humidity. To do this, the artist's whole body has to be continually adjusted. The process involves watching the surface of the soap solution, looking for and responding to changes in its shape. As a bubble emerges from the toy the artist attempts to

release this into the air, 'it is not a question of imposing a form upon matter but of elaborating an increasingly rich and consistent material' (Delanda, 1999, p.243). The artist's actions are an integral part of the process but other feedback from the environment also generates changes in the solution. This activity is performed one hundred and twenty nine times until the solution runs out. The project aims to critically engage with the Goldsworthy's image as a visionary creator. In the new work the artist is still seen a central figure but is shown as seeking to support the materials. The action is iterative and communicates the desire to coax bubble out of the solution. The performance is seemingly banal and repetitive, however, through performing the work the artist, and audience are made aware of the complexity of the systems that are in operation. The soap solution literally responds to input, and to feedback and connections with the environment. The dialogue with the materials in the new work, and the interplay of these within the varying environmental conditions contrasts with Goldsworthy's assertive actions on his selected materials. In the resulting film the artist appears not as a controller of the materials, but rather as a collaborator and participant within unfolding material processes, thus reversing the relationship between artist and material found in *Hazel Stick Throw* (1980). Whereas Goldsworthy is seen to act upon the materials in an attempt to impose a signature or image of his work, in the new work the material and its connections and responses to the environment dictate and steer the unfolding work.

7.4.2. Documentation, dissemination and evaluation

The performance of the work and its dissemination took several forms. As with the earlier work its main form of documentation was through video. The performance of the work, the reciprocal relations and interactions of the artist with the soap solution, is captured and communicated through the video. The work was shown in this form at exhibitions,[6] seminars[7] and at a conference[8]. As with the previous work the exhibition of the work took place in orthodox gallery contexts and this conformed to rather than disturbed the accepted norms of display and dissemination of artworks. The exhibition of the work obscures the critical narrative that had informed the work's production and as a consequence it was possible that the video work would be interpreted as whimsical, banal and self-indulgent rather than critical. However, ideas in Toscano (2009) and Beech (2003) identify that this is not necessarily negative and the works apparent purposeless can be understood as part of a dissenting strategy.

Fig. 24. Composite image of Goldsworthy's *Hazel Stick Throw* (1980) and Webster's *2 litres of Soap Solution* (2007)

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[6] *Artful Ecologies,* University College Falmouth, Falmouth, UK, and *Finding Fluid Form,* Sallis Benney Theatre, University of Brighton, Brighton, UK.

[7] *Finding Fluid Form* (symposium), Faculty of Art, University of Brighton, UK; *Crystalpunk workshop for soft architecture,* Oudenoord 275, Utrecht, Netherlands; *RNUAL Research Presentations,* Central St. Martins, UAL, London, UK, and *Emoção Art.ficial – Emergência!* Itaú Cultural, São Paulo, Brazil

[8] *Artful Ecologies 1*, University College Falmouth, Cornwall, UK

For the purposes of presentations at seminar and conferences the new work has been shown as a composite image alongside the existing work. This allowed for the critical dialogue with Goldsworthy and the making processes of the new work to be communicated discursively and through comparative analysis. The format of the conference / seminar presentation, and the conscious attempts to describe the critical narratives of the work did not, however, set up the conditions for the disturbing and disrupting affect of an art encounter.

7.5.   From Splashing to Solar Stacking (2007)

The starting point for *From Splashing to Solar Stacking* (2007) is an existing work by Richard Serra, *Splashing* (1969). *Splashing* (1969) is the outcome of actions performed with materials by artist Richard Serra. He poured molten lead along a gulley between floor and wall and this cooled to form a residual trace of his actions. My interest in the work is because it is perhaps Serra's loosest, slightest and most open sculptural work. I found his use of liquid lead poured along a gulley to form a sculpture a disturbing and unnerving proposition. It seemed that through his method, the art object had disappeared and all that was left was a trace of sets of processes enacted with materials. These processes used by Serra result in the dissolution of the artist's hand in the work and this is a potent quality of the sculpture which begins to challenge ideas of authorship and craft. The work seems to open up the possibilities for what a sculpture might be rather than what it might represent, and I found this interesting in terms of the research problem of how arts practice might

encourage one to think and act differently. I became interested in how one might develop upon and further some of the processes in this work.

Fig. 25.   Richard Serra. *Splashing* (1968)

Throughout the majority of Serra's practice his attitude to materials is to use them as a resource. In *Splashing* (1969) there is a clear sense that the materials are subordinate to Serra's intentions and gestures, however, the inherent nature of the molten lead is influential in steering Serra as it refuses to be controlled and ordered. Due to the nature of the liquid lead Serra is unable to impose a pre-determined form on the materials and instead has to respond to and collaborate with its inherent qualities. It finds its new form due to responding to the surfaces of the wall and floor onto which it is poured. As a consequence the work's environment and context is influential for the works unfolding and for its display. I became interested in how one could continue the dialogue with the material qualities found in *Splashing* (1969) and also extend the importance of the immediate environment so that this could act as feedback to steer the unfolding of a new work. In *From Splashing to Solar Stacking* (2007)

the aim of the project is to work with open processes that distribute materials as a result of feedback from the environment as well as the artist's gesture. The qualities of the material have a strong bearing on the production of Serra's work and the aim of the new work is to further encourage the material voice to be influential in unfolding of the work.

7.5.1. The initiation and production of a new work

The project uses water, copper sulphate crystals, copper wire, and a solar panel to construct an elementary electrochemical device. Solar energy is fed across the solution and this stimulates the production, distribution and deposition of metal particles along the edge of a copper shelf. The solar panel produces more or less energy according to the weather conditions and the time of the day and the distribution of metal generated by the solar energy is dependent on feedback from both the environment and its local conditions. In bright sunshine the device is highly active and deposits metal furiously.

Fig. 26.   Andy Webster. *From Splashing to Solar Stacking – day 1* (2007)

Like Serra, the new work is produced by the distribution of metal along a surface. However, the distribution of metal in the new work is also subject to processes of dissolution where the metal dissolves back into the solution. This process occurs as a durational real-time system, evolving and dissolving over time through daily cycles. The artist's role in the production of the work is one of orchestrating the conditions for the processes to occur. Once the device is set up it begins to respond to energy which sets in motion the processes of distribution and dissolution, and these do not stop until the artist intervenes.
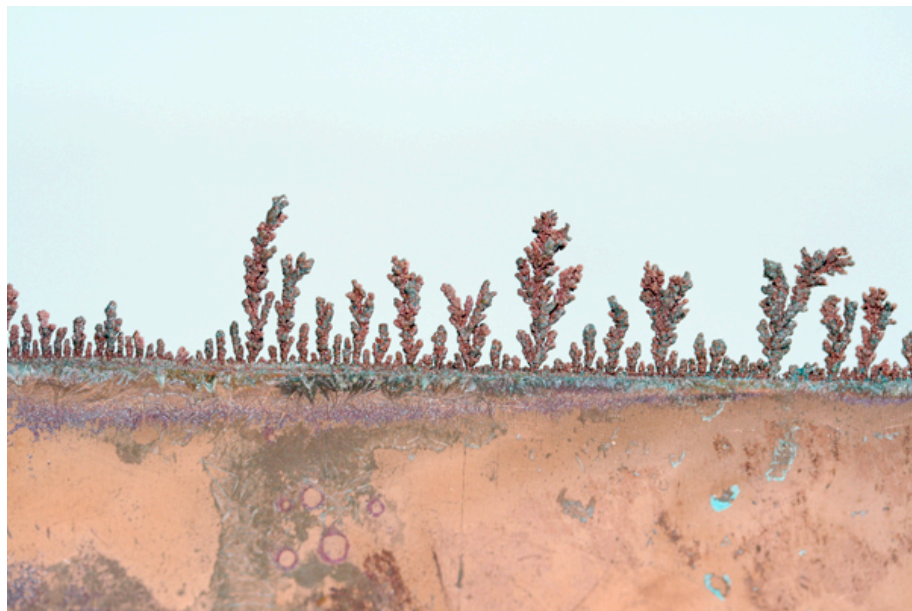
Fig. 27.   Andy Webster. *From Splashing to Solar Stacking – day 4* (2007)

The liquid solution also warms and further stimulates the production of metallic threads. At certain points the solar energy causes the threads to collapse and dissolve back into the solution. Following this, new processes of depositing and dissolution begin. In cloudy conditions there is far less action and only modest deposits are generated. At night with no input the thread deposits begin to dissolve back into the acidic solution. At daybreak the cycle starts again producing new deposits and new dissolutions. The new work emerges from a

liquid which is neither poured or spilt but is instead contained and connected to feedback from the environment so that this acts as the main determinant for the unfolding of the work. The new work generates something analogous to the actions performed and the material processes found in Serra, but differs as the metal deposits are not a consequence of an artist's actions, but are due to semi-autonomous processes that are driven by and irreducibly linked to interactions with the environment.

Fig. 28.   Andy Webster. *From Splashing to Solar Stacking – day 8* (2007)

The new work challenges the assumption that materials are benign and passive and awaiting the intervention of humans to give them form. It reveals that under certain conditions such materials are capable of acting dynamically to generate form as a consequence of the connections, interactions and feedback from the environment.

7.5.2. Documentation, dissemination and evaluation

The production of the work and its dissemination took several forms. As with the earlier work its main form was through its documentation by video and photography, although the sculptures generated by the metal deposits were also exhibited. The work was shown in this form at exhibitions,[9] seminars[10] and at a conference[11]. The unfolding cycles of processes of distribution and dissolution are captured in the video documentation. For exhibition and presentation purposes the videos were edited to foreground these processes. However, the effect of this was counter-productive as by speeding up the unfolding reduced the interest in the event and made it feel artificial and theatrical. As with the previous work, the display of the video work took place in orthodox gallery contexts and this conformed to the accepted norms of display and dissemination of artworks. The critical narrative that had motivated the work was, like the earlier projects, hidden through the exhibition of the work. An opportunity emerged to address some of these problems when it became possible to set up the work as a real-time system in an exhibition called *Maverick Machines* (2007) at the Mathew Gallery, Edinburgh. The next section briefly describes the work produced for this exhibition.

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[9] *Artful Ecologies,* University College Falmouth, Falmouth, UK, and *Finding Fluid Form,* Sallis Benney Theatre, University of Brighton, Brighton, UK; *Living Architectures Laboratory*, Demarcació de Girona del COAC, Girona, Spain; *Maverick Machines,* Matthew Gallery, Edinburgh University School of Architecture, Edinburgh

[10] *Finding Fluid Form* (symposium), Faculty of Art, University of Brighton, UK; *Crystalpunk workshop for soft architecture,* Oudenoord 275, Utrecht, Netherlands; *RNUAL Research Presentations,* Central St. Martins, UAL, London, UK, and *Emoção Art.ficial – Emergência!* Itaú Cultural, São Paulo, Brazil; *PhD Research Presentations,* University College Falmouth, Cornwall, UK;

[11] *Artful Ecologies 1*, University College Falmouth, Cornwall, UK; *Artful Ecologies 2*, University College Falmouth, Falmouth, Cornwall, UK.

7.6. Thread system generated by the sound of its own making (2007)

Thread system generated by the sound of its own making (2007) is a work made specifically for an exhibition called *Maverick Machines* (2007) at the Mathew Gallery, Edinburgh, which was curated by Richard Brown.[12] It was made in response to the critical evaluation of *From Splashing to Solar Stacking* (2007). It aimed to exhibit the work as a real time system and sought to extend the feedback mechanisms that steered the unfolding work to include the sound of its own generation. The new work used as a starting point *Box with Sound of its own making* (1969) by Robert Morris.
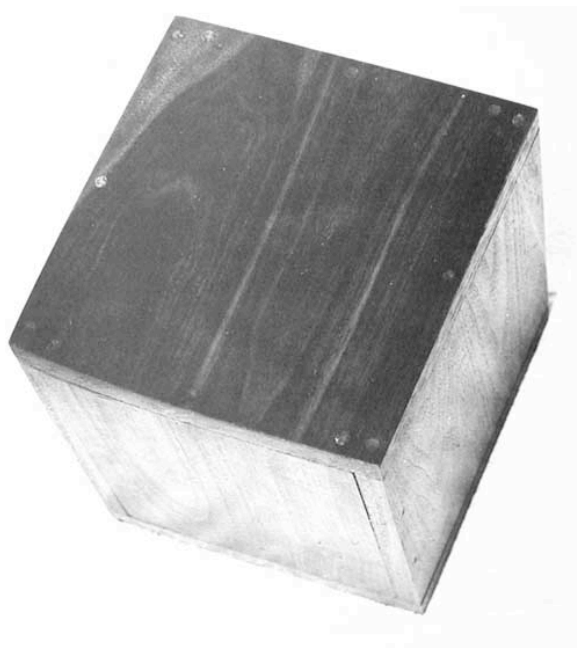
Fig. 29. Robert Morris*, Box with the Sound of its Own Making* (1961). Walnut box, speaker, and three-and-one-half-hour recorded tape

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[12] Although the dissemination of this work took place in an orthodox exhibition space, Brown's curation of the exhibition was atypical and challenged many conventions approaches to exhibition display. For more details of the exhibition, please see http://maverickmachines.com/WordPress/

The aim was to reconfigure the conceptual premise of Morris's work and as such it acted as an open, autonomous, real time system. For *Box with the Sound of its Own Making* (1961) Morris had recorded the sound of making a wooden box, and when he exhibited the work, he placed a tape player inside of the box and played back a recording of the sounds of the boxes construction.

7.6.1. The initiation and production of a new work

The aim of *Thread system generated by the sound of its own making* (2007) was to substitute the recording with a real-time sound generated by the making of the system and to use this sound as feedback to steer the development of the system. Sound from the generation of the metallic threads is captured using a hydrophone, amplified and used as both a sonic and electrical input for the electrochemical system.

Fig. 30. Andy Webster, *Thread system generated by the sound of its own making* (2007)

The work operates through setting up a simple self-generating positive feedback loop, where the sound produced by the making of the system is fed back into as input into the system.

7.6.2. Documentation, dissemination and evaluation

The installation of the work at *Maverick Machines* fed sound into the device not only of its own making but also ambient sound from other exhibits in the show including wine glass tones from *Tuning Pask's Ear* (2002, Bird & Webster) and the pulsing sounds of *Dendrite* (2003, Kirschner). Richard Brown, the exhibition curator set the work up such that the glass vessel holding the electrodes and Copper Sulphate solution was positioned on top of the upturned loudspeaker. This meant that sound vibrations were fed through the dendrites, adding a feedback loop that possibly encouraged the dendrites to physically resonate with particular tones and to shake themselves to pieces. For Serra, the unfolding actions performed with and on a material become the subject and meaning of the work. To make sense of the work one has to perceive and re-imagine the processes that have occurred between artist and material. One may become aware of the relations between human agency and the inherent tendencies of the materials, and the degree of reciprocal dialogue between them. On encountering *From Splashing to Solar Stacking* (2007) one may become aware that the forms that have been generated have not been predetermined or specified or imposed by a designer/maker. Encountering *Thread system generated by the sound of its own making* (2007) it is possible that the viewer may recognise that the emergence of the metallic deposits and

the sound are being generated by interactions between the materials, technological apparatus, and feedback and they are 'inextricably linked to the environment' (Burnham, 1969: 45).
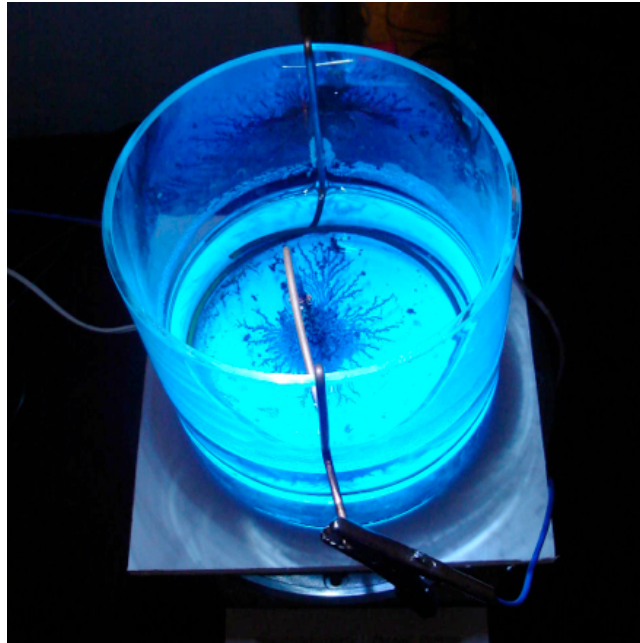
Fig. 31. Installation shot, Mathew Gallery, *Thread system generated by the sound of its own making* (2007)[13]

As a consequence there is the possibility that the viewer might be provoked to think differently about material processes, about the artists role in the work. Such work may assist in a break from prevailing attitudes that conceive of materials as being inert and awaiting the imposition of form. The work might work to disrupt and disturb this towards an understanding of materials as not being passive but rather being active interconnected processes.

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[13] Richard Brown, the curator of the exhibition set up the work and looked after the system for the duration of the show. The image in the photograph is related more to Richard's aesthetic as my own as he lit the work with leds lights.

7.7. Summary

This chapter has described the first iteration of practice guided by the experimental framework called a process aesthetic. This new work focused on engaging with traits in existing artworks that were recognised as perpetuating characteristics of the prevailing model of thinking. A particular focus of the work was to critically engage with attitudes and approaches that treated materials as inert and subordinate to the artist's intentions. It also sought to disturb the notion of the artist as a visionary figure. The aim was to produce a body of work that broke from the above traits and potentially set up a different approach, an alternative way of thinking and acting differently.

The chapter has shown that the outcomes of this initial work were successful since the work set up quite different relations with materials and making processes. The new artworks were shown to have engaged with attitudes that conceived of materials as being chaotic, inert and without order, awaiting organisation from an external source. The works critically engaged with notions that materials are subordinate to the artist's intentions and visions. The new works were seen to translate the relations between artist and materials to produce a different vocabulary than the prevailing model. In the new works, materials were no longer seen as passive but dynamic; they were no longer chaotic and without order, but were generative processes capable of self-organisation. Rather than subordinate, the materials in the new works were active processes in the unfolding of the artwork.

The chapter has shown that there are aspects of this body of work that conform to rather than critique the prevailing model of thinking. The project's focus on

using natural processes is a case in example. A critical aim is to break from tendencies found in existing eco-art that objectify and fetishise the natural. However, the new works with their emphasis on natural processes could be understood to reproduce and thus maintain this objectification. The chapter has shown how the dissemination of the works was predictable and conformed to accepted forms of exhibition and as a consequence could be understood to maintain rather than translate traits found in the prevailing model. Although the process aesthetic was successfully applied to guide and steer the production of new artwork, it was not used, until the later work, to critically engage with the conventions of exhibition and the display of these works. An important critique of the work to date is to acknowledge the necessity to apply the method to all aspects of arts development, production and dissemination. The display systems of the artworld are just as predictably entrenched in their own habitual value systems, and the lack of critical engagement with these is acknowledged here. The chapter has shown that the final work of this early stage of practice, *Thread system generated by the sound of its own making* (2007) responded to a recognised problem in documenting and displaying the earlier works. Although the work was made for an orthodox gallery location, it set up the work as a real time physical system that the viewer encountered in situ and thus avoided some of the problems that video and photographic documentation had produced.

The chapter has shown that the first iteration of practice helped test, develop and evaluate the process aesthetic. It has described an approach for new practice that proceeds by engaging with existing forms and subjects. It has shown that this approach sets out to dissolve and disrupt the existing forms so

that these might then be recombined into new configurations. The dissolution of an existing form is understood as a means for breaking from aspects of the prevailing view and for producing looser, more fluid and open forms that may link with, and be responsive to feedback from the environment. It has demonstrated that this approach seeks to dissolve selected forms not to impose existing values and beliefs but only to set up the possibility for these to be reconfigured in ways that are unforeseen and unexpected. The chapter has shown that materially testing this double operation of dissolution and reconfiguration, through instigating new practice, is the core method of the research project.

The next chapter describes the second iteration of the process aesthetic to engage with aspects of the prevailing model of thinking. It responds to the practice discussed in this chapter and adapts and develops the process aesthetic to guide not only the production of the work but also its dissemination.

8.0   Refining the process aesthetic - Developmental practice

8.1   Introduction

A key question of this study has been to ask how might arts practice be able to set up the possibility for a different way of thinking and acting? In response to this question the study has developed an experimental framework that can be used to help guide the initiation, production, dissemination and evaluation of new arts practice. By using the framework, which is called a process aesthetic, the aim has been to make new work that sets up possibilities for alternative ways of thinking and acting and brings these to the fore.

The last chapter described a strand of preliminary practice, four new works that were made to critically engage with traits associated with approaches, attitudes and metaphors of the prevailing model of thinking. These new works sought to engage with approaches within existing arts practice that conceived of materials as a passive, subordinate and chaotic resource, awaiting organisation and ordering by the artist. The work also aimed to disrupt the related conception of the artist as a visionary creator. Both of these traits are understood as symptomatic of the dysfunctional attitudes and approaches of the prevailing view, which have resulted in today's environmental, and social problems. The chapter discussed how this preliminary practice was set up to encourage the possibility for an alternative way of thinking and acting to the prevailing view. The alternative approach that was produced was evident in that the artist's influence on the unfolding of work was reduced, the artist did not impose form

upon a material, and the inherent qualities of the materials used were foregrounded so that these might talk back during the making of the work.

The chapter identified some aspects of the new work which potentially maintained rather than challenged the approaches of the prevailing view. It identified that the framework had been used successfully to initiate work that might disturb attitudes and approaches found within existing art, but had not been applied to challenge some of my own assumptions as an artist. The consequences of this were evident in aspects of the works' documentation and through the form of its dissemination that, on reflection were analogous with rather than critical of the approaches of the prevailing model of thinking. The use of video to document the performance work was recognised as an example of this, as was the dissemination through exhibition in typical gallery contexts, which conformed to rather than critiqued existing methods for the display of artworks. The chapter described how the use of video had unintentionally muted the critical narratives that had under-pinned the work. The context of the gallery-based exhibition conformed to expectations, to the usual modes of display, and the works' exhibition, without its critical context, worked in ways that potentially objectified the processes and materials that I was using, and as a consequence possibly fostered the very traits I was seeking to break from. The loss of critical context highlighted how the new works needed to be encountered in close proximity to the existing work that had been reconfigured. An unanticipated finding of the preliminary work was that during the presentation of the work at symposia and conferences, the critical context became the focal point of discussions. The format of symposia / conference / presentation became an important platform for the works' dissemination, and it

also represented an existing, context that itself might be disrupted and disturbed. These considerations influenced and helped adapt the framework.

This chapter describes four new projects made concurrently which form the second strand of developmental practice. For this body of work, the framework is adapted so that the selection of existing forms is no longer limited to reconfiguring existing artworks but is expanded to explore attitudes and approaches embodied in wider cultural forms, including literature, music, and mediated events. The intention during this strand of developmental practice is to seek to use the process aesthetic to guide all stages of the working method, in particular in response to the problems encountered during the works documentation and dissemination. The new work also seeks to fully acknowledge the possibilities of presentations at conferences, workshops and symposia.

The new work described in this chapter is consistent with the focus and intention of the earlier practice and seeks to engage with aspects from the prevailing model of thinking that appear to embody the attitudes, approaches and metaphors of the prevailing view. The new projects seek to work within existing forms so that these might be loosened, opened and made more fluid and flexible, towards something akin to Pask's fabric. The new work seeks to encourage processes of feedback and interaction with the environment so that this might reconfigure the materials towards something unforeseen and unexpected. An important aspect of the methodology used for this research is that the practice-led, emergent design of the study supports an heuristic, experienced based approach that is flexible and adaptive to the specificity, complexity and unpredictability of making art. This chapter established the

importance of this reciprocal dialogue between the making of the work and the experimental framework. It describes how the framework guides the production and dissemination of the work, but also how the insights gained during the making of the work develop and shape the design of the process aesthetic. This is appropriate as the framework encourages the open-ended processes of making by allowing the work to unfold in different ways from those anticipated. As a consequence the findings often disturb and cause the adaption of the experimental framework.

8.2   Forty-Part Motet for Karaoke (2007)

At the outset of the study, I became interested in the emergence of social media sites, such as Facebook (2004), Youtube (2004), and Twitter (2006), in particular how they encouraged the creation and exchange of user-generated content, such as songs and music performances. An aspect of these sites, and related to the experimental framework devised for this study, is the way these sites encourage feedback, usually via a system of user commenting, to shape and configure the type of materials uploaded. The type of feedback related to music usually emphasises a certain kind of competency, to endorse notions of quality, standards, and proficiency. As a consequence much of the material on these sites, even though uploaded by enthusiasts, tends to lean towards the competencies of the professional musician.

My interests were not in the uploads that were competent and professional but in songs that were performed by amateurs and hobbyists, which were often fleeting, contingent and rudimentary, stripped back to raw vocals, with no

postproduction. Each time I encounter such materials, which is infrequent, something analogous to the affect of O'Sullivan's art encounter occurs. Such materials have a potency to disturb, disrupt, and break with my own expectations, and the affect of encountering these is instantaneous, sensual, and before thought. I am interested in how such materials, perhaps due to the context of the professionalisation of such activities, appear lacking and insubstantial, without purpose or intention. I find that this sense of lacking, the seemingly purposelessness of these uploads is compelling, and work as an antidote to the proficiencies and standards of the more professional materials.

8.2.1 The initiation and production of a new work

I began collecting recordings of amateur performances of songs and these materials formed the starting point for *Forty-Part Motet for Karaoke* (2007). I began this with no specific idea of how I might use the materials. My initial response to the materials was to think of ways to reframe them, possibly as a collective activity, and I sought ways to bring the materials together to foreground this. I recognised that the uploaded songs had a possibility to be used as a material for a critical and dissenting work. Zepke (2008) argues that, as a consequence of the co-option and instrumentalisation of the language and terms of creativity and innovation, expressions of these have become an ever-present ingredient of the contemporary context. The rapid expansion of such materials posted online can be understood as an example of an outpouring of creativity and the growing ubiquity of this. Toscano (2009) describes that such expressions of innovation and creativity are synonymous with, and an

embodiment of the prevailing view and he argues that an imperative is to find ways to develop a resistance to this. I believed that the type of materials produced by the amateur hobbyist might work as a foil against the professionalism and competency of the prevailing view. Beech (2003) argues that an approach one might use is to negate notions of creativity, to avoid the professionalisation of such activities and to cultivate something akin to a philistine approach as a critical tool of dissent. These materials, their seeming incompetence, lack of ability, and maverick enthusiasms were forms that the prevailing view found difficult to use and co-opt. Toscano (2009) suggests that an approach might be developed that avoids the language of creativity by not seeking to innovate, by being purposefully uncreative. Such a strategy, he argues, would set up the conditions where it would not be possible to be perceived as creative in the ubiquitous sense, and this would work to resist the compulsive desires to create and innovate, to frustrate the imperatives of the prevailing view. I was interested in how these materials might be reconfigured so as to foreground the qualities of the amateur performances and also for this to critically engage with attitudes and approaches of the prevailing view. I wanted to explore how the individual amateur performances might form a collective of sorts, one that had not been called for, legislated or expected but had emerged anonymously and had seeped into existence rather than being forced or imposed. There appeared to be a critical possibility by framing the performances as a collective act, and I was interested in how they might contrast with authorised publications, attitudes and approaches of the dominant, prevailing model.

Fig. 32.   Andy Webster. *10 mic karaoke*, Falmouth Sports Club, 2007

The first iteration of the project was to set up events where individuals could come together to form an improvised collective scratch choir. To do this, I set up choral Karaoke nights where up to ten participants could simultaneously perform and sing together[1]. The live events were a kind of physical testing, a making real of how I imagined the recordings might be pulled together to create a collective choir of sorts. The live events were informal, unchoreographed and spontaneous and formed a temporary collective of individuals singing popular songs. The events suggested that the recorded materials might be pulled together to produce choral renditions of popular song. As a consequence I began multi-tracking the recordings to build up a collective work. However, although this formed a choral work, a consequence of the multi-tracking was that through the processes of layering the songs many of the qualities of the individual recordings were muted or lost. I sought to find a way of pulling the recordings together to form a choir, yet retain and foreground the

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[1] The reality was that at any one time twenty or more people would be singing.

characteristics of the individual voices. Reconfiguring Janet Cardiff's artwork *Forty-Part Motet* (2001) became the starting point for doing this.

Fig. 33.   Janet Cardiff. *Forty-Part Motet* (2001)

Cardiff's work is a looped 40 channel sound installation, where each channel plays an individual chorister performing one part from Thomas Tallis's composition, *Spem in Alium* (1575). The original composition was written for 40 voices, and was arranged for eight groups of five choristers and Cardiff's work maintains this structure. Cardiff commissioned choristers from Salisbury Cathedral Choir to perform the piece, recording each individual part and then bringing these together to recreate the 40 part choral work. I considered how Cardiff's work could be adapted so that the popular songs performed by amateur singers could be used to replace the original choral performances. Cardiff's work offered a structure for the solo performances to be brought together in a way that formed a choir yet allowed for the integrity of the individual voice to be maintained. Cardiff's remake of Tallis's composition is considered compelling and enchanting, but it is undertaken, not as a critical tool, but as a means to celebrate the original composition. The remake does not

question the values of the original composition, and as a consequence maintains and perpetuates the values that are embodied in the original composition. Tallis was the most influential English composer of his generation and wrote the work to mark the fortieth birthday of Queen Elizabeth I. The original work is redolent in its history of elite patronage, as indeed is Cardiff's remake. Tallis's composition was the result of royal patronage. It also benefitted from the censorship of compositions written by his contemporaries. Queen Elizabeth granted a monopoly on printing the music of Tallis which subsequently inhibited the development of music publishing in England for several decades. A reason for the prominence of the work is potentially as a consequence of the royal patronage and the oppression of the music of his peers. This history of Tallis's work is not unproblematic, and Cardiff, in using the composition uncritically, contributes to the unquestioned maintenance of this history. The history of royal patronage, church commissions and elite organisation of the arts is a dominant historical narrative that Cardiff's work conforms to and perpetuates.

The substitution of the professional vocal parts of the choristers with the performances of the amateur singers set up the possibility to break from the content of the existing artwork. The content of Cardiff's work embodied traits of the prevailing model of thinking and its reconfiguration had the possibility to dissolve and disturb this. It set up the opportunity to displace the original composition and some of its associations, in particular the narratives of elites and hierarchies maintained in Cardiff. It set up the possibility to produce a different type of collective enunciation than those of choristers performing royal commissions.

Fig. 34.   Andy Webster. *Forty-Part Motet for Karaoke* (2007)

8.2.2 Dissemination, documentation and evaluation

The new work uses the original configuration of the forty channel sound work
arranged in eight groups of five singers but replaces the original recording of
the choristers with popular songs performed by amateur singers. In Cardiff's
work, Tallis's composition is the sole score performed, whilst in the new work
a playlist of popular songs is used, and includes; *Fly me to the Moon*, by Frank
Sinatra; *Let it be*, by The Beatles; *Angels*, by Robbie Williams; and *Bohemian
Rhapsody*, by Queen. The new work brings together contingent, individual
performances to form a collective choir. The new content of the work is a
result of private and amateur acts rather than the professional excellence of the
chorister. This breaks from the dominant narratives found in Cardiff as it forms
a temporary community which, in contrast to the original, is not legislated or
recognised. It potentially disrupts the elite forms embodied in Cardiff to

produce a different kind of collective, something akin to what Deleuze and Guattari describe as 'other than composition of the masters' (1986: 17).

The exhibition and dissemination of the *Forty-Part Motet for Karaoke* (2007) took several forms including live performances, sculptural installation, online postings, an edition of CD's, and presentation of the project at symposia and conferences. The original recordings were edited into multitrack sequences to form choral collective renditions of the songs. These recordings were posted online, folded back amongst the context of the original uploads.[2] These multitrack sequences and the project overview were also presented at symposia and conferences and were produced as an edition of CD's.[3] The 40 channel sound work was exhibited during *Sound, Noise, Silence* (2008); a show of arts projects that foregrounded the use of sound in contemporary arts practice. The sites chosen for this event were typical of artist led exhibition rather than those usually associated with commercial gallery system. *Sound, Noise, Silence* (2008) took place at various sites including an old mill, a church, a recording studio, online postings, community-radio broadcasts, a railway carriage, a disused shop, and a disused commercial garage. *Forty-Part Motet for Karaoke* (2007) was installed in an industrial unit on a boat yard.[4]

Evaluating the new work revealed that foregrounding the performances of the online singers had successfully reconfigured aspects of Cardiff's artwork but had also perpetuated and maintained some of the attitudes and approaches of

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[2] See http://www.andywebster.info

[3] See www.andywebster.info

[4] The work had also been previously installed as a live event at a sailing club and a sports club. In September 2011, it will be installed in an old telecommunications centre as part of Happidrome 5.

the prevailing model. A critique of the first iteration of works was that the dissemination of the work conformed to typical and accepted methods of exhibition and display. The installation of *Forty-Part Motet for Karaoke* (2007) conformed to approaches associated with orthodox exhibition display, and this possibly stymied the potential for the work breaking from the approaches and attitudes of the prevailing model. A further problem was that the new work set about using the same structure as Cardiff's work, recreating the 40 channel sound installation, and this over-determined and prescribed the new works structure, format and means of display. As a consequence this narrowed the scope of the project and reduced the possibility for the unexpected. At the base of the process aesthetic is the operation of working within an existing form that has become fixed and entrenched, and seeking ways that this can be loosened and re-animated. In the new work the content was neither dissolved nor reconfigured but replaced by a new set of forms; the existing materials were not reconfigured but substituted. This action is not unproblematic as it embodies attitudes of the prevailing approach where materials are regarded as a resource that can be isolated, and then removed and replaced by a more appropriate form. The use of the amateur singer to replace the chorister also embodies a linear attitude to the problem, and it both predetermines the nature of the unfolding work and denies any potential for unforeseen and unexpected outcomes. A motivation in the work was to find ways to produce the dissolution of the elite of royal choral work towards a collective that was more temporary, heterogeneous and amateur. However, the substitution of material sets up an unnecessary simplistic binary between what is considered good and bad and because of this can be seen to reinforce

attitudes of the prevailing model of thinking. Following the evaluation of
Forty-Part Motet for Karaoke (2007) I decided to break from using art as a
starting point for new work. This aspect of my own approach had itself
seemingly become fixed, habitual and recognisable and as a consequence
unproductive. Working with existing artworks was something that I had
become very comfortable with; it was reassuring and affirmed my own
aesthetic. As a consequence the following work still begins with existing forms
but from wider cultural forms and subjects.

8.3   Score for an Incomplete Uncertainty (2008)

At the outset of this research project I had become aware that wide sweeping
consciousness-raising of the issues related to global warming and climate
change was occurring through media, film, and books such as Al Gore's *An
Inconvenient Truth* (2007), James Lovelock's *The Revenge of Gaia: Earth's
Climate Crisis & The Fate of Humanity* (2006), Bill McKibben's *The End of
Nature* (2006), and Elizabeth Kolbert's *Field Notes on a Catastrophe* (2006).
These texts had become best sellers and were becoming influential reference
points for discussion about the causes and consequences of climate change.
The starting point for *Score for an Incomplete Uncertainty* (2008) is Al Gore's
book, *An Inconvenient Truth* (2007). Gore's basic proposition is that, in order
to avert and respond the dangers of global warming and climate change, we
have to make significant changes in the way we conduct our lives. Throughout
the text, Gore presents seemingly irrefutable evidence as to the man-made
causes of climate change. I found Gore's argument compelling as it is

presented as a moral imperative, and gives us no option but to respond to the crisis. Although the text contained a wide range of valuable and thought provoking ideas, my perception of the essay was that it became didactic and evangelistic and often departed from argument to sound like rhetoric. Writers such as Demos (2009) and Klein (2008) argue that an effect of such language is that it appears to be politicised and cynical and as a consequence may be divisive and alienating. Klein (2008) and Gray (2007) argue that such writing that speaks in terms of pending apocalypse and catastrophe, has become a conscious strategy employed by Governments, States and multi-nationals to shock, subdue and alienate people in advance of trying to effect change. Likewise, Kovel (2007) argues that such rhetoric is often little more than a veil for new opportunistic economics.

I became interested in Gore's use of language, its imperative and effects on the reader, in particular the potential alienating effect of such rhetoric. There were contradictions at the heart of Gore's argument for the necessity of change. I took issue with the form and content of argument presented by Gore, which I felt was manipulative and evangelical. Gore presented his argument by contrasting bleak forecasts about the future with depictions of idyllic earlier times. Gore attempts to manipulate the reader by portraying the contemporary as broken and by appealing to conservative sensibilities and desires to return to earlier more natural states. His argument appeals to a sense of belonging, to an earlier era that is depicted as enchanted and harmonious. Gore refers to his own upbringing on a country farmstead with its own land and river as an example of what one has to lose in the current crisis. The narrative that Gore establishes promotes a set of values and ideals related to an idyllic past, an

ideal is something many readers have little affinity with. Bennett (2001), Morton (2007) and Gray (2007) argue that such depictions of earlier ideals and the lost naturalness of the contemporary contributes to the very condition that it seeks to address and has a capacity to alienate and disenchant.

8.3.1 Initiation and production of a new work

The aim of the new work *Score for an Incomplete Uncertainty* (2008) is to engage with this narrative in Gore's book, to translate and adapt the original text in a way that breaks from and denies the rhetoric of his prose. The evolution of the project and the emergence of the outcomes of the work were not anticipated at the outset of the project. The description below of the project's development sounds somewhat contrived and convoluted but does express the nature of the unfolding of the work.

As I read through each page, black gouache paint was used to obscure everything on each page except the terms, which embodied or perpetuated the rhetoric of environmental crisis. As I proceeded through each chapter, some pages were completely painted out, some were left with one or two words visible, and others were saturated by such terms. Through the processes of reading through the book and painting out the pages, the words that were left visible began to resemble something akin to a musical score.[5] Visually, the adjusted pages looked like segments of a Pianola roll used to drive old player pianos. During the process of reading and adjusting the pages, I began to think

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[5] Whilst describing the work at a symposium a member of the audience said that the pages looked like DNA. This set up an interesting metaphor the DNA of eco-crisis.

of this in terms of producing a Pianola score and this became a means of breaking from the rhetoric and original function of the language on each page.
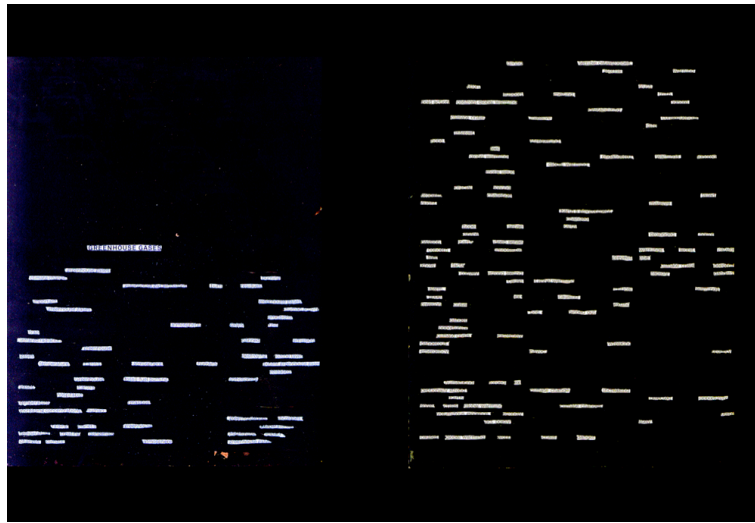
Fig. 35. Andy Webster. *Score for an Incomplete Uncertainty* (2008) Page 29 & 30

I scanned the adjusted pages and pasted these together to form something analogous to a single Pianola roll. The aim became to produce a score, an abstraction from Gore's text, but something which was in ways indexical and resonant to the original. The intention was to produce an artist's book, but whilst browsing for software to edit the scans into concertina pages I found an application that would convert these into midi files and a musical score. This shifted the direction of the project towards something that might be performed. It also meant that the midi file could be converted into an mp3 file and played. This resulted in the translation of Gore's text to become a soundwork. All of these findings occurred through the process of making the work.

Fig. 36. Andy Webster. *Score for an Incomplete Uncertainty* (2008) Page 29 & 30

8.3.2 Dissemination, documentation and evaluation

The new work aimed to engage with Gore's language, which appeared fixed, static and predictable, and functioned to reaffirm rather than challenge existing values and beliefs. It sought to loosen and open up the language, and to translate it into a process that was more fluid and released from its original function. The dissolution of the original text produced a material which was then translated into a musical score. The new work dissolves Gore's original text and yet is also entirely generated by this process. It is not separate from Gore's narrative, but can be understood to seep from within it. It renders the original narrative insensible, making it 'stutter and stammer' (Deleuze & Guattari, 1986: 29) in ways that betray its original terms, vocabulary, and imagery to produce something akin to a minor narrative.

From the perspective of the prevailing problem solving approach, the work looks and sounds futile and pointless. The outcomes are quite different from what one might have imagined or anticipated and this is a genuine strength in the work. The trajectory of how the work developed was liberated by not

trying to produce anything in particular. Unlike the earlier projects, the unfolding of this work was guided by a much more open approach and as a consequence it evolved intuitively and was more responsive to feedback encountered whilst in the making process. As a consequence of this there are several outcomes for the work; a midi-file, a Pianola score, an adapted book, sheet music, a vinyl record. Outcomes such as the midi-file / vinyl record may be seen as jarring, rupturing and incomprehensible, but they are also strangely composed, sensitive, and melodic. The adapted bookwork, with its pages adjusted and painted out is a compelling artefact. The dissemination and display of the work has taken several forms; the vinyl record has been broadcast on local community radio[6]; the score has been performed live[7]; the bookwork has been displayed in a group exhibition[8] and the project has also been presented at symposia[9]. An aim of this project was to break from the problems associated with earlier works in terms of the predictability of their exhibition and dissemination. A way of overcoming this was to encourage the work to be displayed across various platforms so that it could be accessed and encountered in multiple and different ways. All of the forms used for the work's dissemination - exhibition, broadcast, symposia & performance - can be understood as consistent with the approaches of the prevailing model. However, the dissemination across multiple forms is consistent with the aims of the process aesthetic, which conceives the artwork as perpetually unfolding and changing processes. By using a variety of means to exhibit and disseminate the

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[6] Original broadcast on Source FM, 98.1FM, 10.45am, 11/2/10.

[7] Performed on piano by Lena Needham, Antares Space, Falmouth Wharves, 14/5/11

[8] Staff show, University College Falmouth, Poly Gallery, Falmouth, October 2008

[9] Presented at *Emergência*, Itau Cultural, Sao Paulo, July 2008

work no one aspect of the project could be said to constitute the main result. Thus unlike the earlier projects, it deferred from solidifying into any one object outcome.

8.4   Riffs and Variations on the theme of Ecocrisis (2007)

The starting point for *Riffs and Variations on the theme of Ecocrisis* (2007) was the televised event *Live Earth* (2007). *Live Earth* (2007) was a series of pop concerts held globally to raise consciousness about the effects of global warming and climate change. The 8 hour long UK concert was broadcast live on television and mirrored the format of earlier music events such as *Live Aid* (1985), *Mandela Day* (1988), and the *Freddie Mercury concert* (1992) that had been used to raise awareness of problems. The format of the broadcast was live performances by a range of well-known artists, followed by interviews and studio discussions between sets. Most of the performers engaged with the subject of the event, and typically warned the audience of the dangers associated with climate change. I became interested in the contradictions and incongruity of using a rock concert as a means of raising consciousness. The concert compelled me to consider the environmental ethics of producing such an event, as it seemed to embody approaches and attitudes of the prevailing model of thinking. I began to question the logic that had informed the selection of popstars as the means of highlighting and addressing such problems, in particular as such performers were often the embodiment of the kind of excesses that many equate as lying at the root of current social and environmental problems. Another inconsistency of this event was how it

expended vast amounts of resources to publicise what was effectively a call for the use of fewer resources. It became evident that events such as *Live Earth* (2007) were part of an industry of cultural response to contemporary problems; part of the same sanctioned, official response that Gore's essay *An Inconvenient Truth* (2007) contributes to. Like Gore, a moral and evangelical rhetoric seeped into the discussion in between the music sets, which was didactic, manipulative and problematic. The event elevated pop-stars to a sort of visionary position where they were given the platform and power to influence huge numbers of people. However, having various celebrities and pop stars asserting a kind of moral imperative to act and save the planet felt both cynical and was deeply alienating. A consequence of the approach and attitudes embodied in this event was that the ecological problems were turned into empty rhetoric and, as in Gore's essay, this evangelising had led to a waning of the credibility of the arguments.

8.4.1 Initiation and production of a new work

In *Three Ecologies* (2000) Felix Guattari describes the affect of such mass mediated commentaries as ossifying and homogenising problems, which he argues, flattens and deadens one's response to the situation. He argues that this has the affect of subduing and controlling people rather than liberating their individual sensibilities. My own response to the *Live Earth* (2007) event was one of alienation. The message being communicated was akin to an official press release, and felt hollow and manipulative. I began to think how one might be able to respond to the alienating nature of the event. I sought to find a

means of moving beyond the ossifying official rhetoric and master narratives of the event, to find a means of reclaiming a personal subjective response to the ecological crisis. I drew upon a collection of recordings that I had made whilst making *40 Part Motet for Karaoke* (2007), which had been uploaded onto popular social media sites. They depicted people playing the drums in various settings such as the middle of fields, forests, and riversides. I had collected these with no particular purpose or idea as to how or why I might use them. I had a sense that they might act as some kind of response to the *Live Earth* (2007) event. The recordings signified a meditation on and within the landscape, not in an apocalyptic or didactic way, but in a way that was felt, subjective and personal. I recognised that performing within the landscape might act as a counter to the mediated, ossifying rhetoric of events such as *Live Earth* (2007), and Gore's *An Inconvenient Truth* (2007) and this could become a vehicle for my own subjective meditation on the ecological crisis. An aim of the new work was to displace the forms and subjects of the official, sanctioned event and feed off the amateur, improvised performances of the drummers.

Fig. 37. Andy Webster, *Riffs and Variations on the theme of Ecocrisis* (2007 - ongoing)

The aim was, like the original event, to use music as a vehicle for meditating on the ecological crisis but to use performance in ways that would allow a more subjective meditation on the issues. I used my own music collection as a source material to perform to. I collated playlists, so as the individual tracks spelt out e.c.o.c.r.i.s.i.s. For example, the first playlist was: *Easier* by Grizzly Bear, *C'n'C* by The Fall, *O'Malley's Bar* by Nick Cave, *California* by Joni Mitchell, *Racing like a Pro* by the National, *I believe in You* by Cat Power, *Safeway* by Shearwater, *I Can't forget* by Leonard Cohen, and *Saffron Revolution* by Fennesz.
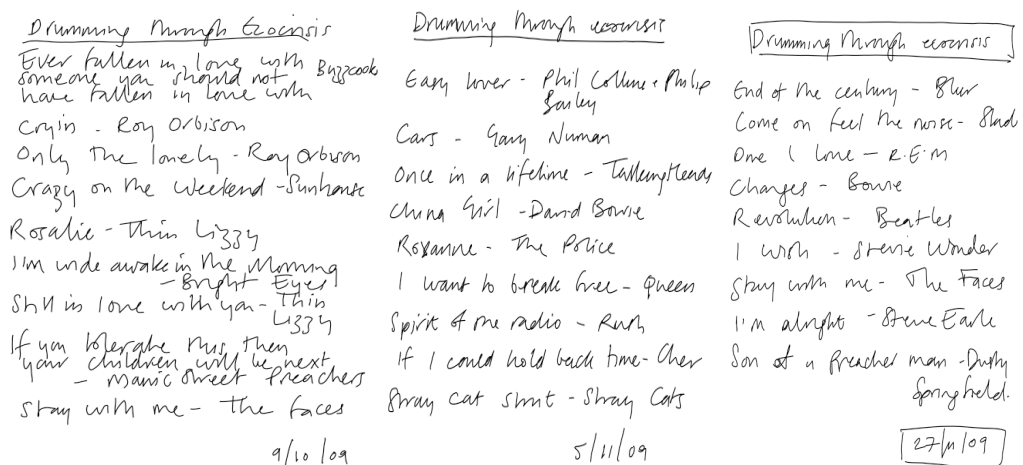
Fig. 38. Playlists for *Riffs and Variations on the theme of Ecocrisis* (2007 - ongoing)

The initial work consisted of thirty playlists. I made several visits to remote sites in the landscape to play through an e.c.o.c.r.i.s.i.s. playlist. I also began to drum through each playlist on a practice kit in my studio and recorded the rhythm of the stick work on the pads. The recordings did not capture the actual track being played but only the percussive accompaniment to it. Each recording captured an entire performance of drumming through e.c.o.c.r.i.s.i.s.

playlist. Playing through each playlist became a meditation on the ecocrisis and generated a percussive material that became part of a multi-track recording.

8.4.2 Dissemination, documentation and evaluation

An aim of *Riffs and Variations on the theme of Ecocrisis* (2007) was to engage with the dominant language of ecological crisis as used in *Earth Aid* (2007) which had become manipulative rhetoric. It sought to translate the ossifying nature of this dominant narrative into a more subjective vocabulary that broke from and disrupted the rhetoric.

The resulting multi-track work is difficult to listen to as the layers of rhythms interrupt, disturb and seep into each other. I had imagined that the layered multi-track would in someway fuse to produce a work akin to a rhythmic collective of drummers, and that this would be a refrain of subjectivity against the homogenising and ossifying discourse of the mediated eco-crisis. The result, however, is more akin to a group of amateur drummers constantly dropping their sticks, and incessantly loosing their timing. The patterns produced act as disturbance and interference and this is jarring.

However, this does not signify the work's failure but identifies its very difference from the coherencies of the prevailing model. By being seemingly incoherent and incomprehensible the new work can be understood to have disrupted the clarity and homogeneity of the voice of the *Live Earth* (2007) event, and that of the authorised prevailing view. In contrast to the clarity of the dominant narrative of the *Live Earth* (2007) event, the quality of the work,

its unruly out-of-timeness, appears insensible, unlegislated and out of line. Ranciére in *Malaise dans l'esthétique* (2007) argues that this is an important gesture, since democratic politics, he states, occurs properly when someone makes a claim or intervention that they are not sanctioned, authorised or qualified to do so.

In engaging with the approaches as found in *Live Earth* (2007), and Gore's *An Inconvenient Truth* (2007) it is not necessary to produce a response which is coherent or even legible; it does not have to make sense or appear valuable; its primary role is to break with the homogenising consensus evoked in the official narratives. The ambition is to appear incoherent and chaotic from the perspective of the prevailing model of thinking. This approach is analogous to Deleuze and Guattari's idea of the strategies of the minor-narrative (1986), which seeks to disrupt and disturb a dominant narrative. This aim to break from the clarity and distinctiveness of the prevailing model is consistent across all of the projects guided by the process aesthetic.

The work was performed on location at various sites in the UK and the dissemination of these took the place at various conferences and symposia. In response to the evaluation of the earlier preliminary practice, I chose not to exhibit this work in typical gallery contexts. Footage of the performances of the work was posted online back amongst the context of the recordings of drummers performing in the landscape. This kind of intervention, almost indiscernible, brought up several questions in discussions. A primary concern was that for the work to act critically it was necessary that it was situated within the context and coherencies of the official narrative. However, disseminating

the work, by folding it back into context of the original source material, diminished the possibility for it being recognised as a dissenting practice.

8.5   Lost Tape Jukebox (2005 - Ongoing)

The process aesthetic was developed as a guide to help new arts practice engage with traits, attitudes and approaches of the prevailing model of thinking. Evaluation of the early work had suggested the need to break from the use of existing artworks as the starting point and to engage with wider cultural processes and materials. A significant adaption to the framework was to include the possibility of starting, not with fixed and entrenched forms, but with materials that were already potent and laden with possibilities for thinking differently. The work *40 Part Motet for Karaoke* (2007) applied this so that the starting materials for the work were recordings of amateur performances posted online. This represented an important development of the framework. The initial approach was to find an existing form that had become fixed and entrenched, an embodiment of the prevailing model. This was then to be disrupted and disturbed, reconfigured in ways that were looser and more open. However, *40 Part Motet for Karaoke* (2007) broke with this as the starting materials were not an embodiment of the prevailing model, but something different. The songs uploaded by amateur singers could be understood as already a minor form – more loose, fragile and precarious than the coherent and competent works of a professional. They represented a fluid form, something already analogous to Pask's fabric, a substrate that was potentially emergent, different and potent. Likewise the starting point for *Riffs and Variations on the*

theme of Ecocrisis (2007) was recordings of drummers performing in the landscape. Like the materials from *40 Part Motet for Karaoke* (2007) these were brittle, flawed and unsanctioned.

8.5.1 Initiation and production of a new work

The starting point for *Lost Tape Jukebox* (2005 - ongoing) builds upon this and finds and explores the rich and diverse qualities of a collection of homemade tape recordings found in a second-hand shop. By chance, whilst browsing in a second-hand shop, I came across a box that contained 43 cassettes made for various purposes and by different people. Many of the tapes had cases and sleeves cataloguing the playlist, titling the selection, and denoting its purpose. These included titles such as; *Love Songs, Drivin, Erotic Selection, Hannah's mix, African headcharge, Groovin, Work Songs, Waltzes and Reels,* and *Slammin*. Subsequent visits to junkshops in Brighton, Falmouth, and London expanded the collection of tapes to over 100, and today the collection is 243 tapes. I was interested in the homemade tapes, in how they represented individual and subjective desires, but also could be understood as forming a collective body of shared practice. I was interested in the attention to detail and the hours of investment spent tailoring the compilations, and how each tape resonated with the poetic sensibility of the person who had made the tape. Some of the tapes were crafted nuanced artefacts that were remarkable containers of a now anonymous individual's subjectivity.

Fig. 39.   Andy Webster, *Lost Tape Jukebox* (2005 – ongoing) detail

The fact that the homemade tapes had been discarded added to the sense of
precariousness, vulnerability and temporality of the artefacts. My chance
encounter with the tapes had occurred as they were in the process of
disappearing, of slipping from view, of being erased. I began to consider how a
new work might be made that might retrieve them and halt this process of
slippage. My motivation became to retrieve and reconfigure them in a way that
was productive, that framed and foregrounded the poetics of these disappearing
artefacts.

8.5.2 Dissemination, documentation and evaluation

It was important that my intervention with the materials was sensitive enough
to not detract or deaden the possibilities of the tapes. The work *40 Part-Motet
for Karaoke* (2007) had unintentionally used approaches that were consistent
with the prevailing model, which had resulted in the loss of the fragility and
precariousness of the original materials. In the new work, I aimed to privilege

the raw materials, to use the tapes but not to change, edit or these. The

homemade compilations were transferred to CD to become part of a new

jukebox collection, but were otherwise left unchanged. The cover notes were

scanned and became title cards on the jukebox. Each tape became part of a

collection of one hundred CD's.

Fig. 40.　　Andy Webster. *Lost Tape Jukebox* (2005 - ongoing)

The aim of Lost Tape Jukebox was to attempt to temporarily revise and arrest

the disappearance of the individual and collective acts of making and

distributing homemade tapes. The work aimed to reframe and reassert the

potency and crafting of these artefacts, and the sensitivity and nuance that went

into their making. The new work pulled together these disparate forms into a

collection but did so without categorisation or hierarchy. There were no types

or taxonomies; the collection was not driven by tastes, but was formed only

through the materials encountered. There was no privileging, no good and no bad. All tapes found were converted to CD and become part of the collection. The jukebox has been exhibited at various locations. In February 2007, and October 2008 it was installed in the college bar at University College Falmouth. It has also been installed in the social space in the MA studios at UCF, most recently in the Fine Art café, 2010 – to date. The project, its recordings and sleeve notes are also posted online. Copies of the homemade tapes are available for free download and as CD's. The new work successfully reframes and foregrounds a series of disappearing activities. It forms a platform for individual and idiosyncratic yet collective shared activities. It does this without explicitly targeting any particular approach or attitude of the prevailing model of thinking. The dominant narrative, which the work tangentially engages with, is a widespread tendency of contemporary life to homogenise, to make generic, and to conform. An image of the conformity of the contemporary is of a playlist, set on shuffle, uniformly listened to on an iPod or iPad, and the homemade tapes provide a counter to this. Reframing the discarded homemade tapes produces a temporary gesture of collectivity, of solidarity, of heterogeneity and difference. The new work sought to frame the tapes as ephemeral and precarious acts, as a symptom or an analogy to contemporary life.

A critique of the work is that it easily falls into a territory of nostalgia and reverie of earlier forms and activities. Recent books such as *Mix Tape: The Art of Cassette Culture* (Moore, 2004), *Love is a Mix Tape* (Sheffield, 2007), and *Sonata for a Jukebox* (O'Brien, 2004), are evidence of a growing nostalgia for mixtapes. As a consequence promoting the poetry of the hand-made

compilation might be interpreted as analogous with desires found in eco-art that argue for a return to origins, to earlier ideals as being somehow more authentic, and more valuable.

8.6   Summary

This chapter has described the second strand of work, the developmental practice made to engage with aspects of the prevailing entitative model of thinking. It has shown how this work has sought to explore attitudes and approaches embodied in cultural forms, including literature, music, and cultural events. It has described how in each of the projects the intention has been to work with an aspect from the prevailing model of thinking and to adjust this so it is loosened, opened and made more fluid. The chapter has described how this new practice has led to the adaption and development of the framework and its approach. The approach was initially adapted so that the selection of existing forms was not limited to artworks. It described how the starting point for a new work may be to use materials such as those uploaded by amateur singers and the homemade tape recordings. These materials are already rich with possibilities; they are disparate and heterogeneous, and stutter and stammer in comparison to the clarity and coherence of professional songs. Thus they already appear to be at various states of dissolution from the forms of the prevailing view. Because of this the new artworks have sought to act as a support for these diverse materials, which has led towards a temporary collective which might itself be considered as something akin to Pask's fabric.

The following chapter describes the third strand of work, the application of the framework for new practice.

9.0 Further testing a process aesthetic – the application of practice

9.1 Introduction

The previous chapter described a group of new works made in response to traits, approaches and attitudes of the prevailing view. A particular focus of this work was to foster a response to the homogenising and flattening effect of the mediation of environmental problems, encountered in materials such as *Live Earth* (2007), and *An Inconvenient Truth* (2006) by Al Gore. The last chapter argued that the language, approaches and attitudes encouraged by *Live Earth* (2007) and *An Inconvenient Truth* (2006) appeared to embody rather than challenge the prevailing view. The paradox of this is that both *Live Earth* (2007), and *An Inconvenient Truth* (2006) set out to challenge that prevailing view but succumb to a homogenous politicised rhetoric that supports and fosters its approaches and attitudes. The language, attitudes, and impulses found in *Live Earth* (2007) and *An Inconvenient Truth* (2006) are frequently evangelical and apocalyptic, and as a consequence their discussion was alienating and ossifying. The new work sought to open up a space so that alternatives might be brought to the fore. A characteristic of the work was that it sought to break away from the flattening, and homogenising effect of the prevailing view to encourage more diverse, subjective responses and personal voices. The new works *40 Part Motet for Karaoke* (2007) and *Lost-tape Jukebox* (2005-ongoing), sought to foreground the alternative subjectivities found within recorded materials made at home by amateur enthusiasts.

Throughout the study the process of reconfiguring existing materials has been conceived as holding the potential for producing something akin to a *fabric* (Pask, 1961). Fabrics are comprised of a variety of materials, media, processes and events, substrates that set up the possibility for relational and connective processes to occur. The study has argued that it is through the production of such relational and connective processes that surprising configurations potentially occur, and it is whilst encountering such unexpected formations that one may be provoked to think and act differently. A central question of this study has been to explore how arts practice might be understood as a producer of such fabrics, as a catalyst for such potentialities.

As described earlier, the constituents of a fabric are often not an easily identifiable object or a substance. It follows that if arts practice is akin to a fabric, then it is likely that artworks will be indeterminate, fluid and adaptive processes rather than resolved, coherent object outcomes. The developmental practices described in the previous chapter were shown to be caught somewhere between conceiving the work as indeterminate, fluid and adaptive processes and singular object outcomes. For example *Lost-Tape Jukebox* (2005 - ongoing) reconfigures homemade tapes to produce a new jukebox collection, and *40 Part-Motet* (2007) draws together recordings to create a collective installation. In *Riffs and Variations on a Theme of Ecocrisis* (2007 - ongoing) and *An Incomplete Uncertainty* (2008) these works do not produce a singular object outcome but set up the possibility for several different processes to emerge and unfold during their evolution.

This chapter describes a third strand of work, the application of practice, which seeks to encourage multiple processes rather than singular object outcomes to

emerge during the production of new work. The third strand of practice consists of three projects undertaken simultaneously. A focus of the new work is upon traits and assumptions found within institutional thinking and acting and, more widely, in prevailing cultural narratives. It uses a process aesthetic to engage with aspects of institutional narratives, existing approaches and attitude that appear static, bureaucratic and closed and sets out to explore how these might be loosened and opened up, so as to offer new interpretations to possibly extend these. A particular focus that emerges through the new work is an engagement with the flattening effect of bureaucratic approaches, prevalent across institutions and institutional thinking. Bureaucracy is understood here as a means of stymieing and constraining alternative ways of thinking and acting. It often promotes itself as a model of rationality and efficiency yet it embodies a deadening kind of compromise and consensus that stifles desires for expressions of difference. What emerges through the new practice is a desire for the new work to break from such forms and to act as an alternative voice to the prevailing authorised attitudes and approaches.

9.2   Radio Tours (2009 – Ongoing)

The starting point for *Radio Tours* (2009 – ongoing) was the popular novel and film *The Road* (2007) by Cormac McCarthy. I had read the novel and later seen the film and felt compelled to find a response to McCarthy's post-apocalyptic narrative. I interpreted *The Road* (McCarthy, 2007) as a fictional realisation of the apocalyptic narratives found throughout much recent environmental literature such as *Heat* (Monbiot, 2006), *High Tide* (Lynas,

2005), and *The Revenge of Gaia* (Lovelock, 2006). Gray (2007) argues that reoccurring themes throughout this kind of literature are morality tales - age-old narratives that express doomsday scenarios and pending apocalypse. McCarthy's text evoked the suffocating bleak consequences of life after one such imagined, yet not disclosed catastrophe. Lewis (1994) argues that this kind of apocalyptic discourse, of an entirely alienated and disenchanted contemporary life, is an influential narrative of the prevailing model of thinking and an accompaniment to the contemporary context. Bennett (2001), and Morton (2007) argue that the kind of discourse found in McCarthy's text perpetuates rather alleviates perceptions of the world as being disenchanted and alienated. Gray (2007) describes that from within the contemporary context, which is perceived as a shifting, precarious and unstable environment, humans seek the comfort of these kinds of universal morality tales, and he argues that the threat of ecological crisis provides one such narrative. The narrative in McCarthy's essay presents us with a stark warning and it has little or no salvation, only seemingly relentless misery. The salvation only comes when we close the book or leave the cinema where reality acts a kind of redemption and release to show us that there has been no catastrophe. It is a future vision that potentially compels one to think anew about how one should prevent such an apocalypse becoming realty. I became interested in how one might engage with such future narratives, imagining scenarios that might occur in the near future, and how one might respond to these, but doing so in ways that did not perpetuate the morality tales found in much of the environmental writing.

9.2.1 The initiation and production of a new work

The starting point for *Radio Tours* (2009) was to conceive of an imaginary narrative, a potentially real scenario where, like the main protagonists in McCarthy*'s Road* (2007), the character in the new work was alone, and isolated. In this imaginary scenario, due to events such as fuel shortages or natural catastrophes, there would be no possibility of travelling to foreign countries. I imagined that this context would produce the need for a kind of endotic travel, where one no longer had any option but to look more closely within one's own back yard. Like the imprisoned figure, in De Maistre's *A Journey Around My Room* (2004), the scenario caused me to speculate upon how one might travel across continents without leaving the confines of one's room.

The initial stages of the new work began by imagining a narrative of a character who was alone on a boat, in a cabin below deck. Inside the cabin were only a few personal artefacts, which included a box of old Andy Kershaw recordings[1], an old Readers Digest atlas, a cassette player and a ship radio. To pass time, the character reads the atlas whilst playing through the tapes. The music he plays becomes a catalyst for imaginary travel from continent to continent. The character begins to plan imaginary musical journeys. He wishes to travel down east Africa, beginning in Kenya, and so searches for music from Kenya and finds a song by *Oriango & Kipchamba*. He plays this to begin his journey; then music by *Chako Ni Chako II - Special Buruti International* becomes the soundtrack to the next part of the journey down the coast. *Orchestra Star de*

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[1] Andy Kershaw is a radio journalist known for his programmes on world music

Mozambique is played as he arrives in Mozambique. This imaginary scenario

is repeated for a series of imaginary journeys and the narrative develops as the

character begins to undertake journeys he remembers from famous stories. He

follows the journey taken in Kerouac's *On the Road* (1983). The character sets

off from New York by playing Ginsberg singing *Dharma Blues*, then plays

music from Denver, Chicago, Wyoming, Nebraska, and Texas to recreate the

road trip. The next day he comes across an Argentinean tango by Chango

Spasjuk and begins to recreate Che Guevara's *The Motorcycle Diaries*. A

recording of Kershaw's field trip to Tanzania begins the *Ukimwi Road* by

Murphy. The narrative extends as the character begins to broadcast these

imaginary musical journeys using the boats radio system. There is no specific

audience, only a contingent collective of people possibly making their own

imagined journeys. Imagining this narrative was the initial response to the

graveness and alienating affect of the morality tales such as McCarthy's. I

began to see the collection of Kershaw tapes as a fabric, as a material for

making connections, for travelling, and undertaking journeys. The tapes were

no longer a collection of world music but instead became a material to move

from place to place.

9.2.2 Documentation, dissemination and evaluation

I began to consider how these initial narratives could be developed and

performed to run a series of live broadcasts on local radio. I began to put

together playlists to recreate the journeys, but I became aware that whilst

compiling the playlists, the materials I was selecting were entirely reliant on my

own aesthetic decisions. The aim of the project was to undertake imaginary travel using music as the method and material. I did not want to go on a musical tour guided by the predictability of my own aesthetic tastes. I found that my own selections produced a playlist which was entirely predictable and unsurprising. The work needed to be connected with and responsive to feedback from outside of my own tastes and values. I needed to find a constraint that would prevent the imposition of my own taste, and would somehow generate the material to travel with. The method of using clips uploaded by users of social networking sites, used in earlier works such as *40 Part Motet for Karaoke* (2008) and *Riffs and Variations on a theme of Ecocrisis* (2007), offered a means of resolving this problem. I began a search for online materials that users had uploaded about specific places that I wished to visit. Whilst searching for the songs I found that users had uploaded filmed journeys between various locations and then added accompanying soundtracks to these. The uploaded footage meant that I could travel between places, and by editing sequences together I could undertake extensive journeys using these materials. The content posted online became a readymade existing resource to undertake the journey, a means of travelling. By using this material, it broke from the imposition of my own aesthetic tastes in selecting and curating the music. It allowed me to travel from place to place guided by other people's filming and playlists, and not just by my own tastes.

Fig. 41. Andy Webster. *Radio Tours* (2009) Video still from The Motorcycle Diaries

To date *Radio Tours* (2009 – ongoing) consists of twelve imaginary journeys

made for radio broadcast. Each narrative takes a musical journey following

and recreating an existing travel story. These include *On the Road, The*

Ukimwi Road, The Motorcycle Diaries, and The Pan-American Highway. All

of the content for each journey is found online. This generates a diverse and

heterogeneous playlist of music for the journey, one that is rich and complex

with changes in genre that are completely unexpected and surprising. The

unfolding of the musical journey is akin to that of hitch-hikers who know

where they want to go but cannot absolutely dictate the route that will be taken.

As a consequence the travel often unfolds in ways that are unexpected and

surprising. The journeys taken in these works are not guided or predetermined

by my own tastes and aesthetic. Although I have a desired journey to make it

often goes off route, takes unexpected detours, and starts and ends in different

places than anticipated. This open-ended approach and attitude, released from

the constraints of my own aesthetic, encourages movement, change and travel and this is a sought after quality at the core of the process aesthetic. The exhibition and dissemination of the work took several forms. The *Radio Tours* (2009 - ongoing) were broadcast as a series on a local community radio station and more recently on a second station.[2] The tours were uploaded back onto the social media websites within the context where the original footage was found. A screening of four of the Radio Tours was shown as part of an open studios event at Antares, Falmouth Wharves. The radio broadcasts offered a format that broke with predictability of the gallery based dissemination of the earlier work. This was serendipitous rather than intentional since creating a new work guided by the idea of a radio broadcast was not something I had anticipated doing. I arrived at this through engaging with the narratives of McCarthy, and then the imaginary scenarios, and being led by the method of the process aesthetic. An unanticipated element was the video content of the new work. These, and the accompanying soundtracks were displayed online and in a more orthodox gallery context. In this instance, exhibiting the video work did not contradict the project's aim of thinking and acting differently as the points of dissemination of the project were open and varied enough so as not to reinforce any one particular type of display. The work could be encountered and accessed in various ways and from multiple vantage points, and the display of the video in the exhibition context became only one aspect of the works dissemination. Conceiving the artwork as something that is itself reconfigurable according to its presentation and context is an important aspect

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[2] Radio Tours went out on The Source, 98.1 FM nightly between 16th & 20th May, 2011. The programmes where scheduled for late night slots starting at 10.30pm. For more details see: http://www.thesourcefm.co.uk/update?page=1

of the process aesthetic as this may both deny the idea of art as a timeless and unchangeable entity and also open up the possibilities and perspectives of the visitor in experiencing art.

9.3   Social Cycles (2008 – Ongoing)

Throughout 2006 and 2007, I became aware of a growing dispute between residents in the town of Penryn and students and staff from University College Falmouth. A number of factors had caused tension between the communities, in particular the development and rapid expansion of the Tremough campus. A symptom of this had been an exponential increase in traffic and parking congestion in and around the campus. Car parking at the campus was limited and expensive, and had caused the surrounding streets to become congested, which subsequently generated anxiety and anger amongst the local residents towards the commuters. The campus had expanded due to a large increase in student numbers. The expansion was guided by an overriding masterplan, which contained a sustainability statement for the development of the campus, running to eighty pages in length. The planning stage, and the sustainability statement appeared to be evidence of a comprehensive approach, which would foreground a sustainable development of the campus. However, there was a strong sense that these plans were simply a front for attitudes that sought expansion at any cost. The plans were designed to foster efficiency and promote confidence, but instead embodied a rhetoric of sustainability which in reality would be, when tested, unresponsive and bureaucratic. It became clear that the thinking behind the development of the campus was being led by a

linear problem-solving approach, which lacked or ignored a holistic understanding of the total effects of the expansion.[3] The approach by the University was indicative of the preference for conceiving of events in terms of linear causality. The problem facing the University was that it needed to expand to accommodate more students and had done this successfully and so, from a linear viewpoint, had thus solved the problem. However, this linear problem-solving approach embodied poor intuitions about the total circular effect of the expansion and thus had produced environmental and social problems.

I became interested in the attitude and approaches that the University maintained and embodied. A number of concrete responses from the University had taken place to address the problem such as funding out-of-town parking and providing subsidised bus travel. This was again a linear response to alleviating the immediate problem of congestion in Penryn. It did not engage with the cause of the problem but only provided a temporary relief from its symptoms. Part of the official response to addressing the problem was a public relations campaign that represented a blueprint, a sustainable vision to address the root of the issues. The aspirational language of public relations bulletins, and the promotion of masterplans and sustainable visions, appeared entirely at odds with and divorced from the reality of the congestion, anger, and resentment. There was a clear gap between the vision of the institutional

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[3] A simple example of this can be seen when humans introduce new species into a habitat, such as rabbits as a source of food. Although this provides a solution to a problem of food supply, it shows little comprehension of the impact on the larger eco-system, and the possible negative consequences through habitat damage and species disease. A contemporary problem is found in the production of bio fuels which, although understood as a measure to help reduce global warming and also to provide jobs, requires implementation that seems to ignore the larger environmental problems such as those caused by deforestation and land clearance.

masterplan and the reality of the situation. The institution appeared locked into and totally reliant on the masterplan, and responses to the reality of the environmental and social problems appeared to be hollow rhetoric, distant, exclusive and separated from the actual reality of the problem. I became interested in the concept of the masterplan as it seemed to be a model of inertia and fixidity, an embodiment of attitudes of the prevailing model of thinking. Bourriaud (2009) argues that in today's contexts, which are unstable, precarious and fluctuating, the idea of a fixed masterplan as a blueprint for thinking and acting, as something that emphasises order and stability is an outmoded conception. In *The Happy Face of Globalization* (2001) Obrist argues that in place of the masterplan, planning should be orchestrated as a dynamic learning system that expresses evolutional and connective possibilities rather than embodying the closed logic of the master. To achieve this, he argues, there is a need for building incertitude, unpredictability and contingency into organisational thinking. The actions and approach of the University were the opposite of this. It was fixed, controlled, ordered and stable.

9.3.1 The initiation and production of a new work

In *Social Cycles* (2008 - ongoing) my aim was to make a response which embodied Obrist's call for incertitude, unpredictability and contingency. The project aimed to open up a space for an alternative approach to the seeming inertia of the bureaucratic attitudes of prevailing institutional approach. I sought to use the process aesthetic to engage with aspects of linear problem-

solving approaches and the attitudes and language found in the University's institutional thinking. In particular, I was interested in engaging with the institutional attitudes that had resulted in the environmental and social problems, along with the corporate response issued to address these.

41 hybrid bicycles were made available for students and staff from the University to use for the duration of their studies and employment. The project was set up and ran without permission, authorisation, planning or sanction from the University. A key aim of the design of the project was to try to avoid typical approaches and the bureaucracy associated with the institutional model. The project sought to avoid the use of language typically associated with cycle schemes, public relations in particular the rhetoric of sustainability and well being that surrounds these. As a consequence word of mouth is used for students and staff to access the bike scheme. Participants can take the bikes wherever they like, they can share the bikes and there is no obligation to use them. The participants can return the bikes whenever they wish and also can bring them to my studio to be serviced. There are few rules or expectations surrounding the project.

Fig. 42.   Andy Webster. *Social Cycles* (2008 – Ongoing)

9.3.2 Documentation, dissemination and evaluation

The project was conceived not to provide a solution to the problems caused by
institutional thinking but as a way of not accepting and breaking from the stasis
and impotence engendered by institutional mentality. The project's aim was to
embody a shift from the seeming inertia and stasis of the official planning
processes. It was conceived to act in ways akin to Deleuze and Guattari's
(1986) minor form, to be insensible and stuttering in comparison to the rhetoric
and masterplans of the institutional. It employed a loose, intuitive approach
that set the project in motion, which was then reliant on the participation of
students and staff to work as feedback to configure the unfolding of the project.
The lack of rules for the use of the bicycles encouraged the participants to share
the bikes whenever they wished; there was no right or wrong user. The actions
of the participants, such as the sharing of bikes, could be seen to be producing a
rich fabric that extended and further shaped the unfolding of the project. As the
project was free of institutional regulations, there were no constraints set

against potential users and the project evolved across institutions with participants coming from a variety of colleges. A hope of the project was that it might open up spaces where temporary, alternative communities or collectives might emerge. The initial participants were from University College Falmouth, but as knowledge of the scheme spread by word of mouth, students and staff from Exeter University and Camborne School of Mines became involved. The lateral spread of the project between institutions added an interesting dimension to the project.

The participants understood that the project was an art project. I spent time with each participant discussing the motivations behind the project and this was an important element in the project and its dissemination. I have been asked several times what or where the art is within the project. I believe that it is in the discussion and dialogues with participants, as well as in the performing of the project through riding the bikes. It is found through its changing participants and in how the project unfolds through time. The project has unfolded at a level that has not been recognised by the institution. This is partly because it has been diminutive in scale, and has sought no publicity, but also because it has been something the institution could not accept or acknowledge. An example of this is how on two occasions when I approached the University to discuss the scheme, how it worked and how it might be expanded, on both occasions the response was that it wasn't the type of scheme they could support. Although the project was very successful, self-organising, with very low overheads and clearly able to be scaled up it was inaccessible to the corporate mentality of the institution. Part of the projects success might be because it cannot be grasped by the bureaucratic rationale that needs a detailed

masterplan to act. The aim was not to criticise the institution explicitly but to break from the consensual malaise of its bureaucratic thinking. A crucial part of the project is in many ways its invisibility to the institution. It does not represent a detached independent, or distanced critique of the flaws in the institutional model but rather works from within, unnoticed, akin to what Irit Rogoff (2006) describes as an act of 'smuggling'. *Social Cycles* (2008-ongoing) is embedded within and is inextricably part of and affecting the system that is being studied. Rogoff (2006) states that this works to produce a 'criticality', something that does not solve problems but rather produces different ways of inhabiting problems, different ways of thinking and acting. At the level of the participant, the work, by presenting an alternative mode of inhabiting the problem, disrupts the institutional approach and acts to disturb the prevailing institutional language and its forms. It does not, however, work towards changing the institution. A frustration of this mode of critically inhabiting problems, Rogoff states, is that the 'knowledge and insights we have amassed do very little to alleviate the conditions we live through' (2006: 4).

The project's dissemination has been diverse and without the tangible, recognisable artefacts and exhibitions associated with earlier projects. There have been some attempts to produce outcomes more typically associated with arts practice. At the start of the project participants were given GPS trackers to record their cycling routes to and from home. Each time the participant cycled to and from college they used their GPS to map the route taken, and the data was collated to generate a composite mapping of the project over several months. As the project evolved this aspect appeared inappropriate. Initially it seemed to be a good and necessary idea, an emerging visualisation of the

project. The emerging composite was imagined as being akin to some kind of diagram for an emerging fabric. It was imagined that the routes taken would produce a kind of counter-visualisation to the masterplan, one generated by non-hierarchical participation rather than by the production of an elite. However, the activity of collecting data and mapping journeys imposed and asserted constraints on the project participants that contradicted ideas of under-determination and open-endedness.

Fig. 43.   Andy Webster. *Social Cycles* (2008 – ongoing)

An exhibition of the project took place at University College Falmouth in July 2008. The format of the exhibition was curated so as to work as a functional bicycle workshop. I had recalled all of the bikes for an annual service and proceeded to work on and repair the bikes for the duration of the show. The show was timed to coincide and interact with a conference *Artful Ecologies* (2008). The delegates at the conference became the significant community that visited the show and one evening I took twelve of the delegates for a communal cycle to Trebah Gardens. Over the duration of the conference delegates were

able to use the bikes. The informal visits to the show by delegates, their requests to borrow bikes and the collective evening cycle-ride were ways of discussing and disseminating the project. The project has been presented at a range of conferences and symposia.

9.4   Crazy tourist (2009)

Crazy tourist (2009) was the result of participating in an expedition led by artist Nick Edwards and the organisation Cape Farewell to find the source of Dollis Brook, London. Cape Farewell is a high profile organisation that organises expeditions, exhibitions, and discussions with the overarching aim of raising awareness about climate change. I was interested in Cape Farewell as their projects raise many questions about the complexity of finding an appropriate response to the question of raising awareness about ecological issues. A key approach of Cape Farewell project is to undertake expeditions. The background to conducting expeditions in the contemporary context is not unproblematic. In popular writing, such as Gore (2007), Monbiot (2006) and Lynas (2005) the necessity of reducing one's travel and one's carbon footprint on the world is common knowledge. However, such insights had not prevented Cape Farewell from holding expeditions to exotic locations to view melting icecaps and disappearing rainforests. I was interested in the Cape Farewell decision to ignore such insights and how such activities appeared to compromise ethical decisions called for in the literature. I was interested in how the expeditions set up a strange paradox whereby they conducted extensive travel to fragile ecologies in order to report artistically and

scientifically on these but, in doing so, knowingly contributed to the problems that put such places at risk. I sensed this operation was analogous to the way some eco-art reaffirmed the approach and attitudes of the prevailing model of thinking which was itself at the root cause of the problem. The eco-artist's role in such expeditions was also complex, since to participate in and then produce the eco-artwork in response to the expedition became itself part of an ecological problem. I was intrigued by the seeming hypocrisy of the participants who felt positioned to make warnings about climate change, yet were clearly perpetuating and literally contributing the problem by undertaking such expeditions. In many ways the activities of Cape Farewell were similar to the popstars who flew into London for the *Live Earth* (2007) event, and government agencies, multi-national corporations who propose the necessity of change to the masses but then ignore this message to carry on their own lives as normal.

Another further problem produced by Cape Farewell's need for exotic travel was that it reinforced ideas that nature was elsewhere, that nature is something that is distant and exotic and requires an expedition to encounter. It also simultaneously promoted the idea that climate change was distant and somewhere else. Both of these fostered rather than dissolved the dysfunctional attitudes understood to be at the root cause of environmental problems.

Fig. 44.   Andy Webster. *Crazy tourist* (2009), video still

9.4.1 The initiation and production of a new work

The Dollis Brook expedition organised by Nick Edwards proposed the

possibility of travelling differently, of undertaking a form of endotic rather than

exotic travel. De Maistre (2004) and De Certeau (1998) describe that endotic

travel is a careful exploration of places that are literally in one's back yard,

which one often believes are familiar and well known.[4] The idea of

undertaking endotic travel, of provoking an endotic way of looking, felt

appropriate and a potential means of accessing insights suppressed by large-

scale exotic adventures.[5] Journeys to the wilderness suggest breathtaking

views, encounters with enormous icebergs and traversals across huge mountain

ranges. This stimulates a kind of looking that sweeps and scans the enormity of

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[4] I was particularly interested in the expedition as the basis for the walk is thoroughly urban. It presumes the urban is the norm and the known.

[5] Xavier de Maisstre's *Voyage autour de ma chambre* (1794) provided a reference for the possibilities of endotic travel. Whilst on house arrest, De Maistre treated his bedroom as if it were a huge, unfamiliar and dangerous territory where moving from his chair to a window was akin to a voyage on the high seas.

the scenery, and an effect of this may be to subdue other kinds of looking, such as observation of smallness, of things at one's fingertips. The main objective of the first expedition was to explore the idea of endotic travel, of looking close by. The organisers of the expedition asked the participants to make an aesthetic response to the journey and I became interested in the motives that lay behind this. I was interested in whether art production in this kind of situation was used as a means to validate the expedition format; whether there was a particular type of art production that the organisers were looking for, and whether there was a type of work that they did not desire. I found it difficult to pre-empt how or what I might respond to, but decided that I was more likely of being guided by an endotic way of looking by being alone and separating myself from the group. To do this I decided to make field recordings along the route of the expedition. At certain moments I would break off from the group and stand alone to record the sounds in the field. The recordings were not made with any artistic outcome in mind. However, the form of travel produced by making the field recordings was endotic as it slowed down my expedition and gave me the opportunity to recognise materials that were barely noticeable when walking at normal pace. I became aware of the debris and materials that had been distributed by the river into its basin, in particular plastic balls that seemed to be everywhere. Each time I paused to make field recordings, I was overtaken by the delight in finding new balls distributed beneath my feet. At the end of the expedition we met for a de-briefing with the head of Cape Farewell. During the discussion, whilst recounting the journey, I was asked what my experiences had to do with responding climate change.[6] I was quite

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[6] The exact question was "What the fuck has this got to do with climate change?" I was surprised by his response, but also delighted as it was concrete evidence of the narrowness of approach I suspected lay at the basis of his project.

taken aback by the realisation that the subtext in the request for an aesthetic response implied that it should discuss climate change. I now realised that the expedition and the required aesthetic response was an instrument for raising consciousness of the issues. The experience of the first expedition informed the work *Crazy Tourist* (2009) which was made as a result of revisiting the expedition route. The expedition was repeated, but this time was guided by the search for and collection of balls. Rather than following a predetermined route towards the source, the direction of travel was steered by the search for balls. As a consequence the nature of the journey changed entirely as the direction of travel looped forwards and backwards, often sloped and slid sideways, moving through undergrowth, hedges and across streams.

The activity of collecting the balls steered the journey, it slowed the pace, guided the route taken, and determined the nature of the encounter with the environment. The search for balls produced a very different encounter with the place since much of the time was spent crouching, scanning, and foraging through undergrowth. Walking became a kind of scanning activity, looking for moments or pockets in the environment punctuated by encountering the balls. The new work had purpose but no meaning or intention beyond the immediate goal of performing the activity of collecting materials. It was not undertaken to prove the fallibility of the approach used by Cape Farewell or to question the ethical dilemmas faced by the expedition format. It was made, not as a way of correcting these or suggesting an alternative but as a way of inhabiting the expedition format differently, of producing a different way of thinking and acting.

Fig. 45.   Andy Webster. *Crazy tourist* (2009) Installation

In contrast to more overt environmental responses, such as *The Great Cleansing of the Rio Grande River* (1987) by Mazeaud, making a work that deals with the collection and reverie of plastic balls found on the river basin does not appear to deal with climate change. However, the work is a consequence of endotic travel, of looking closely at what is at hand and this has to have significance and relevance in discussions about an ecological mode of thinking and acting. The original expedition was, I believe, caught in a mode of thinking that embodied traits of the prevailing model, in particular a linear problem solving approach. The overriding purpose of the expedition was to produce a creative response that would raise awareness of climate change. As I found out, thinking outside of this was quickly dismissed. The expedition, its direction, its route were planned and predetermined and this foreclosed any possibility that one could break from or deviate from the plan. In contrast *Crazy tourist* (2009) was about deviation and flexibility; there was only a notional destination, which did not inhibit the unfolding of the work. In

contrast with the starting point of many Cape Farewell expeditions, which begins by foregrounding the big issues, an aspect that is interesting is that the source of encountering and inhabiting the landscape in a different way is something as trivial as the collection of lost plastic balls. One can speculate that starting with the seemingly banal and trivial, as does *Crazy tourist* (2009), produces the criticality to act within such overarching discourses as Cape Farewells.

9.4.2 Documentation, dissemination and evaluation

The dissemination of the project has taken several forms. Both expeditions generated lengthy discussions including the negative debriefing at the end of the first journey and these were an important part of the project's dissemination. The second expedition was documented through video and this and the critical context for its production were presented at a Cape Farewell symposium at the University Arts London. The video has since been shown at further symposia and research workshops and was also shown as part of a Cape Farewell event at the Eden Project.

9.5 Summary

This chapter has shown how the work of the third strand of practice seeks to open up spaces for alternative approaches to come to the fore. A reoccurring action throughout this strand of practice has been to locate the new work within an existing form, attitude, or approach that appears to be static, predictable and

entrenched. It then seeks to set up the possibility to loosen, dissolve, and reconfigure these existing forms so that they are more open and fluid, to perhaps find new ways of thinking and acting. The chapter has shown how the experimental framework, developed during this study, has guided the initiation, production, dissemination and evaluation of the new work. It has shown how the framework has evolved so as to encourage new works to be conceived as multiple processes rather than as object outcomes. The chapter has shown how, through applying the framework, the new work has been able to critically engage with aspects of the bureaucratic attitudes prevalent across institutions and institutional thinking, and as a consequence has been able to set up alternative approaches. The following chapter describes how the experimental framework might be applied to re-consider and regroup a body of existing artworks.

10.0 Towards a new grouping for arts practice

10.1 Introduction

The previous chapters (7, 8 & 9) described the preliminary testing, development and application of practice. Each of these strands of new work were guided by the experimental framework which, for the purposes of the thesis, has been described as a process aesthetic. The previous chapters have established how a process aesthetic can be used to initiate and guide the production, dissemination and evaluation of new work. They have demonstrated how the framework can help new work to critically engage within the approaches, attitudes and metaphors of the prevailing entitative model of thinking, and importantly do so without perpetuating these. The framework has been shown to provide and generate a set of guiding metaphors, in particular that conceive of artworks and arts practice as akin to a fluid. Art as a fluid finding form has been described as a method of organising new practice in ways so as to set up the possibility for thinking and acting differently, and to open up spaces where alternatives can be brought to the fore.

This chapter describes how the framework can be used to help interpret, re-evaluate, and regroup a range of existing artworks. It explores how the vocabulary of the process aesthetic can be used to conceive of the artworks as unfolding interactive processes of dissolution and reconfiguration, and considers how as a consequence can act in ways that disrupt the traits, attitudes and approaches of the prevailing model of thinking. The chapter describes how

using the process aesthetic, diverse artworks can be imagined as a provisional

grouping of practices, which each open up a space for alternative and different

ways of thinking and acting.

The chapter resists the idea of suggesting that these artworks might be brought

together and might form a new category of practice, since the idea of a forming

a category expresses the wrong image. Thinking in terms of categories would

be to perpetuate a form intrinsic to the approaches and attitudes of the

prevailing view. The image of art used throughout the study, as akin to a fluid

fabric, encourages a way of thinking about the existing artworks, not as an

ordered category but as something more akin to a constellation of wake

generated patterns. The provisional grouping of artworks is conceived as

indeterminate and contingent and the chapter has no intention of proposing that

it should be anything but temporary. In this instance, thinking in terms of a

grouping of practice generated by wakes encountering each other produces a

messy image perhaps akin to the islands of floating debris that collect and fuse

together on the sea. This image, perhaps, presents an opportunity to break from

the coherence and logic of categories produced by thinking in terms of subject

areas and disciplines. It allows a grouping between an array of diverse

practices, which might normally be excluded by discourses defined and

delineated by existing fields of study. As a consequence this might be

understood as opening up a space for a different approach, for an alternative to

come to the fore. It may be understood as potentially expanding the scope of

artworks associated with discourses that seek to find a means of addressing the

current ecological crises. This grouping of works, which occurred concurrently

with other strands of the study, also forms an important context for understanding and interpreting the creative practice of the current project.

10.2   Re-grouping six existing artworks

In this chapter, six artworks are described that can be understood to embody and perform aspects of a process aesthetic. The process aesthetic is used to frame and evaluate the artworks and provides a conceptual framework for considering the unfolding of the work, the dissolution of existing forms, the production of something akin to a fabric, and the reconfigurative processes driven by interaction. Each of the artworks is identified as breaking with the prevailing approach to produce a different way of thinking about the world. Each work is seen to dissolve or disrupt an existing dominant narrative, to produce something akin to a minor tale. This dissolution is seen to produce new connections and interactions that configure the work in unexpected and unforeseen ways.

10.3   Robert Smithson - *Hotel Palenque* (1972)

Robert Smithson's work, *Hotel Palenque* (1972) exists in multiple forms. One is a photo documentary of a hotel the artist stayed at during a visit to Mexico. One is a form of presentation through a slide talk given to students at the University of Utah. Another form is the talk displayed as a film installation. Another form is as a publication where the photos act as sculptural scenarios. Smithson had been invited to present an academic lecture on Palenque's ancient

Mayan ruins, as a site of architectural distinction, to students at the University

of Utah. The motivation to commission a talk on this site embodied aspects of

prevailing attitudes. The commission was made to reaffirm what was already

known, and to perpetuate existing values and beliefs. However, rather than

reaffirming the Mayan ruins as a site of architectural distinction, Smithson gave

a talk about Hotel Palenque and as a consequence disrupted the reaffirmation

desired by the academics. Smithson's work produces a new or overlooked

reading of the processes of dissolution and reconfiguration that are in flux at the

site of the Hotel. The ancient Mayan ruins become peripheral to his discussion,

as the hotel built for tourists becomes the territory on which he attempts to

retrace and evoke Palenque's architectural history. Smithson's description of

the hotel and the language and imagery he evokes, foregrounds the ceaseless

processes and transformations of the site. He becomes aware of the site as

being in a perpetual state of change and movement, one of lapsing in and out of

organisation and disorganisation.

Smithson's work encourages and potentially produces a different way of

thinking about the world. This is done through the dissolution of the existing

talk, commission, and pre-specified motivations to reaffirm certain values and

beliefs. At the talk to the architecture students, the work may have acted, not as

an object of recognition, but as an encounter that disrupted the expected and the

known, provoking new thought. One can apply the process aesthetic to think

about and unpack how the work was generated. Smithson has travelled to

Palenque to visit the Mayan ruins and is staying at the hotel built especially for

tourists on such excursions. However, encountering the hotel produces a

rupturing event within Smithson's own sensibility. He is overcome by the site,

a place caught somewhere between its ruination and restoration, and this forces the dissolution of the original aims of his visit. He writes 'the ancient ruins are not to be found out there in the jungle, but here in the Hotel Palenque, crumbled, instamatic, and nondescript' (Wakefield, 1995).

Fig. 46.   Robert Smithson. *Hotel Palenque* (1972)

The hotel, which is in a constant state of perishing and reconstituting, can be understood as indeterminate and open-ended, as a rich fabric that generates unforeseen connections and interactions. In contrast to the well-known ruins of the Mayan site and the expectations of the commissioners, the fabric of the hotel produces an entirely unpredictable and involuntary response. The

involuntary aspect of this is potentially significant as Smithson does not contrive this response, but is overcome by the new thought; thinking it differently. This kind of thinking differently is synonymous with emergent phenomena as it is unexpected, unforeseen, and dislocates from the known. Thinking about the encounter and the unconscious rupturing effect the hotel had on Smithson may offer a glimpse into how one might be provoked to think differently. Bateson proposes that it is this type of thinking that is usually inhibited by the narrowing of perception by consciousness (Bateson, 2000). Aspects of the prevailing model of thinking are acculturated so as to inhibit the involuntary processes that disturbed Smithson. Thinking and acting guided by conscious purpose would have potentially overlooked the hotel and followed the commissioned request. Smithson was, however, receptive to the encounter and could not avoid responding to this rather than reaffirming the already known.

Bateson suggests that *art* has the capacity to work at a precognitive, aesthetic and sensual level and, in doing so, acts as a means of bypassing the constraints of conscious purpose (2000: 452). Smithson's work potentially dissolves the purpose of the expected dominant narrative and through doing so accesses a glimpse of normally overlooked patterns, processes and durations that reveal the interactions and connections of the Hotel with the Mayan ruins.

10.4 Francis Alÿs - *Zócalo* (1999)

Zócalo is a documentary by Francis Alÿs, which charts the movement of the shadow of the flagpole in the Zócalo (Mexico City) across the course of one day. Alÿs' film records the unfolding of seemingly arbitrary social encounters and re-imagines these as sculptural situations. The film revolves around the alignment of pedestrians and visitors in the shadow of the flagpole that acts as a shield from the sun and also as a sundial. This work is consistent with much of Alÿs's practice, which often involves walking around urban centres as a means of encountering events, processes and behaviours. The city, for Alÿs, acts, in ways analogous to Pask's fabric, as complex, rich and various forms that work as a substrate for connections and interactions that result in unforeseen and unexpected processes. In this instance the spontaneous groupings of visitors steered by the shadow produce the unexpected processes as they act akin to a real-time unfolding material tide or wake.

In *Hotel Palenque* (1972) Smithson is overcome by the fabric he encounters and as a consequence his response to the hotel is involuntary; it is such involuntary encounters that Alÿs seeks out. By walking through the city Alÿs seems to be looking for processes, moments and places where a fabric occurs. Alÿs looks for events and processes, for encounters that are out of the ordinary that reveal glimpses of underlying patterns which are normally over-looked or not recognised. In Zocalo, Alÿs comes across a set of processes, a fabric from which spontaneous organisation and ordering arises. The actions of the visitors are entirely the result of their interactions with the square and the environment. There is no central control over the visitors, yet they become grouped and

aligned in the square to act in particular ways and, because of this, the behaviour of the tourists can be understood as emergent.

Fig. 47.   Francis Alÿs. *Zócalo* (1999)

What becomes most disturbing and potentially works as an 'encounter' (O'Sullivan, 2006) is that the actions of the visitors represent a kind of indifferent or unintentional misuse of the square. The visitors' actions were not the ones anticipated or intended by the planners of the square, and their actions disturb, albeit unwittingly, the authorised narratives to produce something akin to Deleuze and Guattari's minor story. The pattern of dissent for the production of a minor has not been orchestrated, but emerges spontaneously through its own dynamics and logic, and because of this is perhaps even more disturbing. The context and the dominant historical narratives of the Zocalo inform Alÿs's work. The site was designed to celebrate the Spanish king, Carlos IV, and then Santa Ana's propaganda rallies. The designated functions of the square have

been replaced by more indeterminate activities, a counter use, and an improvisation of response to the place. These new actions, however slight and unspecified, challenge and dislocate what is intended to occur at this place, and break with the imposed function and use of the square. Although the site was intended for political rallies, the act of sheltering from the sun may be a form of unlegislated behaviour that could be considered as an almost indiscernible method of political defiance. On encountering the work one is initially struck by the slowness of the anodyne footage, yet one becomes aware that something disturbing is happening that is almost comic. It acts as a kind of parallel eroding activity to the celebration and triumphalism that the authorities wanted. Zocalo reveals a series of uncoordinated acts that disturb the imposed purpose of the place. The fact that the monument was never made is a narrative, and this evidences how the ambitions of the architects are undone by a seeming failure to impose the architect's vision. The consequence is that the square becomes known by the base of the missing monument. So rather than the consideration of purpose, it is a kind of lacking that seizes the imagination. Zocalo can be seen as a kind of site where incompleteness and inaction rather than intention and purpose become the catalyst for change. Although there have been various attempts to impose and choreograph the types of events that occur at the site its connection to the environment, by being incomplete and under-determined, produces unexpected and novel uses. The potency of this work is that we find that it is indeterminacy and incompleteness, and the connection of these to the environment, that becomes the catalyst for configuring the site in novel and unexpected ways. If one were wishing to devise strategies to provoke a break from the expected and to inspire a change

in perspective, the clues in this work point not to intention and purpose, but towards a kind of lacking, an indeterminacy and interaction between these with the environment.

10.5   Aleksandra Mir - *Life is Sweet in Sweden, Guest Bureau* (1995)

Life is Sweet in Sweden, Guest Bureau (1995), was a work made by Mir to coincide with the World Athletic Championships in Gothenburg, Sweden in 1995. The work took the form of a fictional tourist office located in a renovated, but old, theatre complex. The space was furnished with wickerwork furniture typically found in Scandinavia, a lobby aquarium, dimmed lighting, background musak, electric footbaths, juice machines, TV, lavatory, and plastic greenery. The guest bureau was freely available for anyone who wished to use it. Visitors were invited to relax, read magazines, have a head and foot massage, and also to role-play and become hosts themselves and could, if they wished, choose to wear hostess uniforms. At any one time up to twelve visitors could become hosts. The project lasted for the ten-day duration of the championships. The project was Mir's response to the prevailing attitudes and corporate approaches that were shaping the development of the city's preparation for the Championships. Some of the consequences of this where that the air became charged with 'entrepreneurial excitement' (Mir, 2003: 100). The council and corporate sponsors had orchestrated a clean up of the city; the inner city had been repainted and reappointed and all eyesores had been removed. The clean streets embodied an image of safety, care, and respect. A

re-branding had taken place with signage changed. Advertising spaces now appeared at every possible juncture. The championships had produced an inflated market for accommodation rental and as a consequence prices had boomed. The authorities were producing the city as an object of recognition, to meet with and reaffirm known and accepted values. A need arose for young, traditional looking Swedish blondes to staff restaurants and the sponsored events. The desire for using young blond women acted as an affirmation of the stereotypical image of an ideal Scandinavian. The prevailing model of thinking underlies the management of the event by imposing a set, formulaic recipe based on cliché and stereotype, to meet with business and corporate ideals. Mir's intention was to reconfigure these to provide an alternative experience and space in the city for the duration of the games.

Fig. 48.   Aleksandra Mir. *Life is Sweet in Sweden, Guest Bureau* (1995)

Mir's objective was to provide a space that countered this, that acted as a foil to the forced, self-conscious activities of public relations organisations and the games' organisers. A space of free exchange provided a simple means that disrupted the dominant narratives across the rest of the city. Mir explored the idea of hosts to intentionally feed upon the roles and prevalence of the official hostesses of the major event. Offering any visitor the opportunity to become a temporary host set up a playful structure that contrasted with the authority and predetermined roles of the official hosts. Role-players, unlike their official counterparts, simply lolled about, read, and drank juice like any other visitor to the Guest Bureau. They subverted, and reinterpreted their newly found status as hosts. Mir's intervention potentially produces a minor form by disrupting the dominant narrative (Deleuze & Guattari, 1986). The work could be understood as producing something akin to a fabric that acted as a means of forming connections and fostering interactions that would normally not occur. One unexpected turn was provoked through local prostitutes who began to frequent and participate with the bureau. This led to unforeseen and unexpected interactions between the clientele, with prostitutes keeping company with more conservative visitors. Wearing the uniforms acted as a conduit for role playing and relaxing. The self-appointed hosts began touring the city in the evening, visiting bars that were sponsoring the event and tapping these for drinks. The hosts found that their surrogate role became an unlikely way of accessing the major narrative from which they would normally be excluded. The role of host was not limited to any particular profession and, according to Mir, included 'school teachers, rock stars, hairy men, Somalian immigrants, and Swedish skinheads roaming round the town together' (2003:

100). Freed from the organising structure of the major event the recruitment process of hosts for Mir's work fostered a flat, non-hierarchical and under-determined system. The contrast of the formation of surrogate hosts with the official hosts was interesting. Mir's hosts were generated by various conditions peripheral to the event and resulted in the formation of unlikely surprising combinations, whereas the official hosts were cherry picked and sampled to meet and maintain a pre-determined stereotypical Swedish blonde caricature. Even though the hosts were an unlegislated and unofficial community, they became highly visible, celebrated, and began to be included in the event, receiving invites to parties and openings. Mir's work exemplifies a characteristic of the *minor* narrative that calls forth hitherto unforeseen collectives and communities (Deleuze & Guattari, 1986). Within this minor narrative, there is no elite, only the privileging of a collective enunciation. Mir's work represents an example of thinking and acting differently in the world.

10.6   Bob & Roberta Smith, *Off Voice Fly Tip* (2009)

Off Voice Fly Tip (2009) is a series of works made by Bob & Roberta Smith over the duration of the Triennial exhibition, *Altermodern*, at the Tate Britain (2009). Each week, Smith made a new work in response to the *Altermodern* exhibition, and weekly discussions between himself and the exhibition curator, Nicolas Bourriaud. Each new work was displayed at various locations in the main body of the exhibition, whilst the previous work was accumulated in the Duveen Galleries, and styled as a 'discarded pile of ideas, a fly-tip' (Bourriaud,

2009, p. 222). Smith described the projected end point of three months of interventions as being akin to a physical conversation. Smith's work can be understood, in the context of the major exhibition as a peripheral event, akin to something that is found in the appendices or footnotes of the main narrative. It is, Smith writes, being 'inside the curatorial ambition of the Triennial but also outside it' (cited in Bourriaud, 2009: 222).[1]
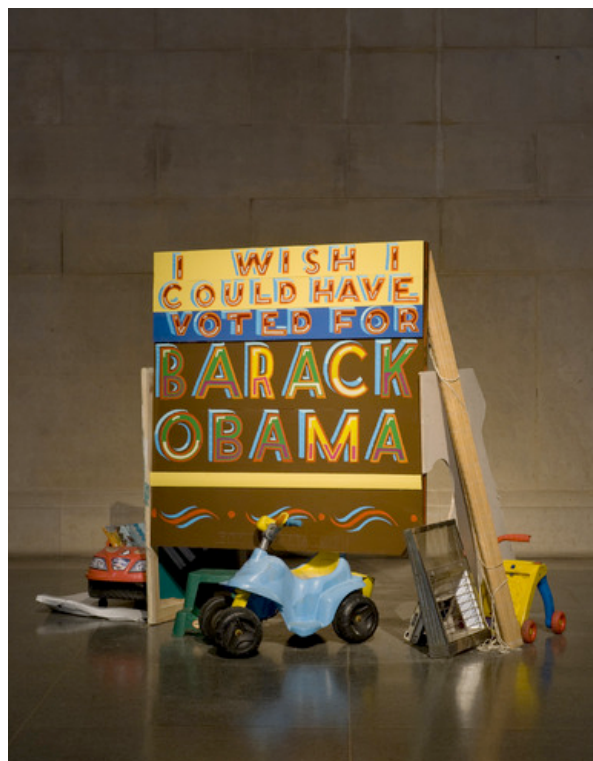
Fig. 49. Bob & Roberta Smith. *Off Voice Fly Tip* (2009)

Smith's artwork appears akin to a fabric that mediates between various states of scattering and slippage and subsequent recombination. Its structure and unfolding, born out of a weekly dialogue with Bourriaud, can be understood to be perhaps the most attuned to the curatorial ambition of the exhibition. Although the content of the work occasionally acknowledges or responds to his

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1 It is in fact in the catalogue appendices

dialogue with Bourriaud, there is, however, little evidence of Smith taking part in Bourriaud's over-arching mission. The materials which Smith use as a support and surface for his slogans and commentaries are bits of old tables, fridge doors, shop signs, and discarded toys, all collected from street corner fly-tips. These artefacts are themselves in free-fall states from their former uses, and by retrieving these Smith stops their descent. These items are adjusted and refinished with narratives born from conversations and observations. The artefacts become a support for the distillation of conversations with Bourriaud, and produce a contingent union of discarded objects with language born out of art criticism. The elements of the work, namely discarded materials, intellectual discussion and an over-arching curatorial concept, seem to be at odds with each other. The work breaks from the rhetoric of the show, which argues for a new era described as '*Altermodern*' (Bourriaud, 2009) and, instead, personalises Smith's relationship with Bourriaud through anecdote. This could be understood as a minor tale being evoked to destabilise the grand narratives of the Triennial (see, 4.3.2). The form of the work, its method of production, its display and self-deprecation, its composition as a fly-tip, contrasts with other works displayed in the exhibition, which appear significant and serious. The work is open and unfixed, and relations are continuous and transient, and in a perpetual state of becoming and perishing (see, 2.2.1). Smith's disruption of the exhibition's master narrative reduces the artwork so that it appears trivial and somewhat inconsequential. It operates as a kind of mute curatorial project in the context of the larger conceit of the major narrative. Its simple unfolding contrasts with the seemingly arch and imposed nature of the main event.

10.7 Raivo Puusemp - *Beyond Art: Dissolution of Rosendale, New York* (1980)

In 1975 artist Raivo Puusemp stood for mayor of Rosendale, New York, and was elected. Across Rosendale there were multiple problems. Rosendale village, a satellite community from the main town of Rosendale, was in financial trouble, and was unable to govern itself. The only possibility for its survival was through its dissolution into the larger township. However, for the people of Rosendale Village, this had been the cause of major emotional problems and, without any alternatives, had lead to a 'paralysing of human initiative' (Kaprow, 1996) that had resulted in the mismanagement of the village, which had led to the non-payment of bills, sewerage problems that had polluted the local river. Puusemp believed that by standing for mayor he would be able to respond in ways that might help address the cause of the problems. He was elected on a promise to guide Rosendale through and beyond the processes of dissolution. He orchestrated a series of events that changed the orientation of the village from mismanagement and apathy towards a positive and inclusive, model of self-governance. Puusemp did not offer solutions to the village's problems but instead helped set up infrastructures so that the townspeople and villagers could begin to see what needed to be done to survive. This involved bringing the villagers together to participate in the processes of developing the village and to make the crucial decisions. Having completed one successful term as mayor, Puusemp stood down and left Rosendale. It was not until three years later that a small pamphlet was published which accounted for the nature of Puusemp's project as an artwork. The project identified a series of connected problems across a village

community. These had more than likely emerged from a lack of communication, faceless bureaucracies of local government, and a growing apathy by residents unable to participate in their current and future affairs. The existing form here is not any one thing but a series of interlocked and inter-twined procedures, protocols and lifestyles effected by varying transcendent hierarchies of incompetencies, abuses of power and neglecting of responsibilities. Puusemp's project can be understood as having worked amongst the various incompetencies of the dominant official regime. It set about dismantling the bureaucratic hierarchies of power within the village and town by inclusively bringing the local people into all discussions and developments of policies in order to address the issues. The problems became tangible and immanent to participants rather than existing as some external transcendent that was above and detached from them. Puusemp's actions worked in complete contrast to the narratives and procedures of the official regime. Giving people responsibilities for decision making at every level would be completely incomprehensible to the dominant bureaucratic methodologies usually employed in such contexts. Puusemp removed the protocols and hubris of bureaucracy through breaking from its controlling methodologies. The village and the town were in a mess. There was no sense of community, except for hostility to outsiders. There were major problems that had been caused by a history of mismanagement, and there were hierarchical abuses of power and privilege. The project took the shards of this history and recombined them so that the methodology of the dominant regime was undone, deterritorialised, and rendered strange. Puusemp did not import or impose external solutions to provoke change but 'reconfigured the existing

official procedures' (Deleuze & Guattari, 1986: 27). Puusemp's project was not undertaken to develop a new major or official language. It operated as a means of destabilising and uprooting the transcendent fixed values and beliefs, of causing these to stutter and stammer, of rendering them unintelligible. It was fundamentally a political act that sought to break from the fixidity and dehabilitating protocols of government, and to liberate new communities and collectives. Puusemp's project can also be understood as embodying a process aesthetic through its under-determination and its need to be configured by environmental feedback. His task was to set up the conditions for change and innovation. The directives of local government had resulted in a general malaise and apathy and a complete disempowerment of the villagers. Puusemp devised the project so that its structure was under-determined so as to be able to be driven and configured by feedback and interaction from the environment. To generate novel means of addressing the problems of the community he understood that his composition of the work had to be purposely under-determined. The configuration of the means to address the broad range of issues was driven by dialogue, engagement, empowerment, and the emergence of a new collective community.

10.8 Gabriel Orozco, *Recordings* (1997)

Orozco's work uses film to document varying phenomena encountered whilst walking around an urban context over the period of several days. A basic generative structure defines the nature of his filming. He films interesting incidents encountered in the city, holding the shot for as long as necessary,

guided by the mis en scene. There is no postproduction, re-ordering or re-editing, and there is no intended narrative. The focus of the work is to explore how things, processes and phenomena interact together; to consider their relations and connections, visually, physically and sensually.

Fig. 50.   Gabriel Orozco. *Recordings* (1997)

According to Nieuwenhuyzen (2001), the basis of Orozco's method is akin to performing a 'flaneuristic stream of consciousness,' which mirrors the ceaseless, wandering flows of the city, and, in doing so, temporarily grasps fleeting phenomena, fusing, framing and making visible vibrant patterns that underlie the seemingly chaotic city. Nesbit seeks to identify the underlying aim in Orozco's method, and concludes that it proceeds by addressing a guiding question that asks 'what does a totality of unities look like?' (Nesbit, 2002: 148). Any answer, she states, will not make an appearance in an image but will rather lie somehow between the flow of things, 'in the movement in and out of appearance'(Nesbit, 2002: 163). She argues that a means of conceiving the city

as a totality of unities is to be found in the simplicities of Orozco's wandering, in simple movements, through perceiving that 'things come and go… things and people leave a wake behind them, a wake as a track, as trash, as a space'(Nesbit, 2002: 163). Orozco's work embodies his encounter with these. Each encounter disturbs Orozco, momentarily gripping him to see and think the city in a different way (see, 4.4.1). A succession of encounters is filmed and these interconnect and interact to produce something akin to Pask's fabric (see, 4.2.10). The films sway to and forth, between dullness and unexpected configurations, from apparent meaningless to ephemeral glimpses of a world of resonant relations, of normally unforeseen pattern. The work is fluid, and indeterminate, and has no point of climax, no purpose beyond compiling a body of encounters. It is a 'specific way of looking…the ability to discern connections and meanings in visible reality' (Nieuwenhuyzen, 2001: 7) that finds form in the fragments that seep together to become the film. Orozco speaks of intention and concentration as guiding principles in the work (Nieuwenhuyzen, 2001). A fundamental characteristic, according to most recent accounts, is an inherent dimension found in its structure, which is under-determined in ways that allow the work to be configured by serendipitous, chance encounters made whilst walking through the urban context. The work's realisation is a the result of a concentrated, sensual, visual dialogue with phenomena that seep in and out, shaping the works form, pattern and composition.

10.9   Summary

This chapter has brought together a group of artworks that can be understood to embody aspects of a process aesthetic. The works that have been considered are *Hotel Palenque* (1972) by Robert Smithson, *Zócalo* (1999) by Francis Alÿs, *Life is Sweet in Sweden Guest Bureau* (1995) by Aleksandra Mir, *Off Voice Fly Tip* (2009) by Bob & Roberta Smith, *Beyond Art: Dissolution of Rosendale, New York* (1980) by Raivo Puusemp, and *Recordings* (1997) by Gabriel Orozco. These works, I argue, embody the core approach of a process aesthetic, one of dissolution and reconfiguration and as a consequence are evidence of the capacity of arts to think in ways that do not perpetuate traits associated with the entitative model of thinking. Indeed these artworks, I argue, emerge as a critical tool for disturbing the cycles of established entitative thinking. The artworks embody an approach that may be useful to eco-art and its discourses. They form a context for understanding and interpreting the creative practice of the current project and begin to identify a formerly unrecognised grouping for artworks. The chapter proposes that such work can form the basis for a future regrouping of arts practice, defined by methodology rather than subject matter; this, I argue, can expand the scope and possibility of the category of practice known as eco-art. The process aesthetic encourages the possibility for seeing connections between artworks normally inhibited by genre and category and, because of this, conceives this new grouping as fluid and indeterminate; as a fabric. The chapter does not propose that this grouping should be anything but loose, open and contingent. However, it may produce glimpses of an underlying pattern of artworks, normally excluded by discourses orientated and defined by subject matter, to reveal a different way of thinking and acting than that of the prevailing entitative model. This can be understood

as potentially expanding the scope of artworks associated with eco-art and its

discourses.

11.0 Summary and discussion

11.1   Introduction

Throughout the research two interrelated questions guided the study:

1. How might arts practice work critically to engage with the
   approaches, attitudes and guiding metaphors of the prevailing view
   to set up the possibility of alternative ways of thinking and acting to
   emerge?

2. How might an experimental framework be developed which can be
   used to help guide new arts practice to open up the possibility for
   alternative ways of thinking and acting?

This final chapter describes how these have been addressed. It restates the
research problem and reviews the major methods used to conduct the study.
The chapter summarises the results and discusses some of the implications of
the findings of the thesis.

11.2   Statement of the problem

The contemporary context of ecological crisis has established an imperative to
reconsider and re-evaluate the principles on which we base our comprehension
of the world. Growing awareness of the consequences of climate change and

recognition of the human contribution to the escalation of the ecological crisis has necessitated an urgent reassessment of the principles we use to think about and act in the world.

The guiding principles of the prevailing model of thinking are founded on a conception that understands the world as being composed of static, separate and discrete entities, which for the purposes of this thesis is described as an 'entitative' view. Informing this conception are epistemological errors widely recognised to be the cause of dysfunctional attitudes and relations between humans and the environment that have led to current social and environmental problems. There is a clear imperative to find a way of overcoming this epistemological error, and a growing urgency to establish a means of addressing the dysfunctional attitudes, approaches and principles of the prevailing view.

A process model of thinking provides an alternative to the prevailing entitative interpretation of the world. Rather than thinking of the world in terms of static, separate entities, a process view describes the world as ceaselessly changing interconnected processes. This process conception of the world is recognised as a means of overcoming the epistemological error associated with the entitative view.

Drawing together ideas from diverse fields of study, including Artificial Life research, Arts Practice and Theory, Cybernetics, Deep Ecology, Process Thought, and Systems Thinking, this thesis seeks to develop an experimental framework which can be used to help guide arts practice so that it may critically engage with dysfunctional traits related to the prevailing entitative view.

Through doing this, the arts practice seeks to open up the possibility for alternative ways of thinking and acting, such as is suggested by a process model. For the purposes of the thesis this experimental framework is called a *process aesthetic*.

The research problem is to define, develop, and explore the possibilities and potential of the process aesthetic in relation to the dysfunctional traits of the prevailing entitative model and alternatives such as those suggested by a process model. The research seeks to define and explore how arts practice may work to critically engage with the approaches, attitudes and guiding metaphors of the prevailing view, and through doing so, consider how this might set up the possibility of alternative ways of thinking and acting to emerge, such as those embodied in the process view. The research engages with this problem and explores how the experimental framework can be used to guide the initiation, production, dissemination, and evaluation of new arts practice.

The thesis explores approaches found within the field of eco-art and considers these in relation to those of the entitative model. The research identifies formerly under-acknowledged problems in the field and considers how the experimental framework can be used to develop approaches which overcome these. The research identifies how some approaches in eco-art, whilst seeking to critically engage with the dysfunctional traits of the prevailing view, unintentionally reinforces rather than challenges the entitative and thus perpetuates the underlying cause of the problems. The thesis establishes that the approach encouraged by the framework can be used as a guide for future eco-art as it is shown to critically engage with traits of the approaches, attitudes

and metaphors of the prevailing model of thinking, but do so without perpetuating these.

The thesis demonstrates that the experimental framework can be used to re-evaluate existing arts practices, typically overlooked by eco-art and its discourses, and can regroup these towards a new body of arts practice that opens up the possibility for alternative ways of thinking and acting. The research establishes that regrouping existing works in this way may productively extend and contribute to discussions within eco-art and its discourses.

The aims of the thesis are:

1. To produce an experimental framework for a practice-led approach that can critically engage with traits, approaches, attitudes of the prevailing entitative model of thinking.

2. To develop a body of practical artwork that explores, tests and develops the experimental framework.

3. To consider and evaluate how arts practice might critically engage with traits of the prevailing entitative view and through doing so set up the possibility for alternatives to emerge.

4. To consider how this framework might be applied as a means of overcoming problems recognised in existing eco-arts practices and discourses, and how this might guide future artworks within this field.

5. To consider how this approach might help re-evaluate and regroup existing arts practices to expand the scope, possibility and discourses of eco-art.

11.3 Review of the methodology

The rationale and principles underpinning the development and use of the methodology were described in chapter three (see Chapter 3, p.42). A primary research problem was to develop an experimental framework to guide new practice so that it might set up the possibility for alternative ways of thinking and acting. It was appropriate that the open-ended, evolutionary nature of the experimental framework was mirrored and embodied by the design of the methodology. From the outset of the research my approach was not to predetermine or prescribe the methodology but to allow it to evolve as an open-ended process. To facilitate this process an *Emergent Methodology* was chosen to design the research, as this allowed the study to unfold in ways different from those initially anticipated and encouraged the findings to influence the design of the research. The selection of the emergent methodology was appropriate since:

- It helped establish strategies to address the problems revealed through the strands of the literature review.

- It fostered a practice-led, heuristic approach that was flexible and adaptive to the specificity and complexity of the research aims.

- It positioned practice-led inquiry as a crucial strand within the thesis

- It was appropriate for this kind of research project, which sought to engage in and encourage experimental open-ended processes.

- It could be shaped through the processes of engaging with the aims of the research and of responding to the findings of the study as it unfolded.

The methodology established the strategies to be used and identified three principal strands of the inquiry to be undertaken in the research. These were firstly the search for and the development of the constituents of the experimental framework (see section, 3.1.3), secondly the testing, development and application of this framework through the iterative making processes of arts practice (see section 3.1.4), and thirdly the re-grouping of existing arts practice using the framework (see section, 3.1.9).

The first strand of the inquiry, the literature review, was devised with the aim of establishing an experimental framework to be used to guide future practice. The literature review was organised in three related sections. The first section established an overview of the dysfunctional traits of the prevailing model of thinking; the second section identified alternative ways of thinking and acting to the prevailing view; the third section suggested alternatives produced through arts practice. The findings of these three sections were brought together to propose the characteristics of an experimental framework, the process aesthetic.

The second strand of the inquiry was organised to test, develop and evaluate the experimental framework through undertaking new arts practice. The new

arts practice sought to address the primary question of the study which asked how might art critically engage with traits of the prevailing view and through doing so set up the possibility for alternative ways of thinking to come to the fore?

The third strand of the inquiry used the framework to review and re-group a body of existing arts practices. An aim of this strand was to consider how the experimental framework might be used to re-evaluate existing arts practices, typically overlooked by eco-art and its discourses, and regroup these towards a new body of arts practice that embodied alternative ways of thinking and acting.

The three strands of inquiry were brought together to collate the findings of the study, to establish the usefulness of the framework, and to review the thesis that had been arrived at. Each of the individual strands of the study became points of reflection where the experiences and findings were evaluated and substantiated by cross-comparative analyses from insights gained through the other strands of the inquiry. It drew on Gordon Pask's metaphor of a 'fabric', and Carter's idea of a 'wake generated weave of thought', to conceive of the principal strands of the inquiry (the methodology) as elements of a fluid, and as a ceaselessly unfolding substrate of materials, processes and events. Pask argued that the constituents of a fabric could not be prescribed or predetermined and as a consequence one had to proceed heuristically through processes of trial and error to recognise or produce a fabric. Pask's experimental method of searching for a fabric was an important guiding metaphor for the research process. The metaphor of fabric and wake-generated weaves established how

the separate strands of the inquiry converged to produce substrates, akin to patterns of thought. The summaries of the findings are presented below.

11.4   Summarising the findings

The first strand of the inquiry established the context and conceptual overview upon which the thesis was developed. This was organised into four separate chapters which formed an extensive review of the literature and context (chapters 2, 4, 5 & 6). This review drew upon a wide range of insights from diverse fields including Artificial-Life research, Arts Practice, Art Theory, Cybernetics, Deep Ecology, Evolutionary Biology, and Process Philosophy. The literature review was organised into three related sections:

a. The first section (Chapter 4) outlined some of the attitudes, approaches and guiding metaphors of the prevailing model; it re-imagined the world as process; and then considered arts possibility for thinking and acting differently (see Chapter 4, p.60).

b. The second section (Chapter 5) reflected on the characteristics of eco-art. It considered its possibility for generating alternative approaches, attitudes and metaphors to the prevailing model of thinking, but also how it might perpetuate these (see Chapter 5. p.91).

c. The third section (Chapter 6) developed an experimental framework, a process aesthetic, and proposed this as a means of generating places of breakdown and new relations within the metaphors, attitudes and approaches of the prevailing model of thinking (see Chapter 6, p.129).

The first section of the review (Chapter 4) established how some of the attitudes, approaches and guiding metaphors of the prevailing model of thinking contributed to the dysfunctional attitudes at the root of the causes of the current ecological crises (see Chapter 4, p.60). It demonstrated how the prevalent view conceived of reality as being comprised of separate entities that occupied distinct places in space and time. It described how this view was widely understood as a fundamental epistemological error that distorted the way one came to think and act in the world. It identified how the repercussions of this error had manifested itself across every aspect of our emotional, intellectual, verbal and non-verbal, or theoretical domains. Chapter 4 drew on well-known ideas from Deep Ecology and Process Philosophies to propose how one might begin to shift the principles on which we base our comprehension of the world. The chapter identified how conceiving the world from a process view, as ceaselessly interconnected relational processes, had the capacity to significantly alter the way one felt and acted in the world. Finding a means of breaking from the conceptions of prevailing view to encourage alternative ways of thinking to emerge was established as a goal of the thesis. Chapter 4 discussed how arts capacity to work at a pre-cognitive, sensual, and sentient level might be a means of breaking from the approaches of the prevailing view. It drew upon insights from Bateson (2000), O'Sullivan (2005), and Ingold (2000) to establish how art might work at a pre-cognitive level to bypass perceptions of the world shaped by the prevailing view, and how this might open up the possibility for imagining alternative approaches, attitudes and guiding metaphors. Chapter 4 also acknowledged the equal

likelihood that art may potentially work at a pre-cognitive level to reinforce existing values and beliefs. It speculated upon strategies that might be developed to orchestrate artworks so as to break with the known and habitual, and this included the possibility that art might work at a pre-cognitive level to achieve this, but mainly considered how art might be composed so as to consciously break with and interrupt the traits of the prevailing view. These speculative strategies informed the basis of the process aesthetic, the experimental framework employed to guide arts projects, such as *51 Aqueous Dispersals* (2005, Chapter 7, p.162), *An Incomplete Uncertainty* (2007, Chapter 8, p.194), and *Social Cycles* (2008, Chapter 9, p.218). This aspect fulfilled Aim 1 (see section 1.2, p.2) and demonstrated how arts practice might work within traits of the prevailing view to set up the possibility for alternative approaches, attitudes and guiding metaphors to emerge.

Considering further how art might work to engage with traits from the prevailing view and how it might produce alternative approaches, attitudes and metaphors was the focus on the second section of the literature review (see Chapter 5, p.91). Chapter 5 described how arts practices known collectively as eco-art were recognised as embodying an alternative way of thinking and acting to the prevailing view and as a consequence were understood as capable of addressing current environmental and social problems. Chapter 5 described that, although eco-art sought to encourage an alternative way of thinking and acting, there were ideas and approaches found within its practices and discourses that perpetuated and reinforced rather than disrupted the prevailing view. It drew upon discourses peripheral to eco-art, such as Lewis (1994), Miles (2000) and Morton (2007), Bourriaud (2009), Carlson (2009) and Demos

(2009), to consider and evaluate aspects of these approaches. Chapter 5 established that aspects of the approaches and methods used in eco-art, including problem-solving approaches, ideas of the eco-artist as a visionary, conceptions of the urban as separate from nature, ideas of restoring environments, seeking to re-enchant a disenchanted world, desires to reconnect with earlier states and origins, and the vocabulary of environmentalism, were not unproblematic. It identified that such methods perpetuated the very same attitudes that were recognised as lying at the cause of problems and dysfunctional relations between humans, the environment and nature, and as a consequence of this unintentionally amplified the very cause of the problems it sought to address. Chapter 5 argued that more recent eco-art practices, guided by a dialogic, conversational approach, overcame many of these problems. It described that a distinctive feature of this work was that it proceeded by keeping open dialogues and discussions that would normally be foreclosed by approaches narrowed by conscious purpose, and thus avoided the use of narrow and linear problem solving approaches. Chapter 5 argued that these recent eco-art practices understood that it was through dialogic processes that new ways of thinking and acting might emerge. It argued that this demonstrated a break from and an alternative to the problem solving approaches of the prevailing model of thinking. An aim of the research was to establish how arts practice might be used to critically engage with and potentially break from the approaches, attitudes and guiding metaphors of the prevailing model of thinking. The chapter established how complex and difficult the task was for eco-art practices to break from the approaches and attitudes of the prevailing model and produce alternative ways of thinking and acting. The chapter

established a critical discussion which had been previously overlooked within eco-art discourses and necessarily questioned traits and characteristics of approaches that were often used or cited unproblematically in the eco-art discourse. Chapter 5 also identified practices within eco-art that demonstrated a critical dialogue with its methods and approaches, and it established that it was these which fostered alternatives that might genuinely break from rather than reinforce the prevailing view. This chapter addressed Aim 4, (see section, 2.1, p.3) as it established an approach that avoided problems recognised in earlier eco-arts practices and discourses and could be used to guide future artworks within this field.

The third section of the literature review Chapter 6 (see Chapter 6, p.129) established an experimental framework, a process aesthetic, that was used as a guide for new arts practice and thus addressed Aim 3, (see section, 2.1, p.2). Chapter 6 established that in order for art to break from the traits and approaches of the prevailing view, it was necessary to organise artworks in ways that were surprising, novel and unpredictable, so that they might act as an encounter and not as an object of recognition. It drew together ideas from cybernetics, artificial-life research and evolutionary biology to demonstrate examples of artworks that were orchestrated to produce emergent phenomena. This established how, on encountering these artworks, one may be genuinely surprised and disturbed by 'the emergence of the unknowable' (Zepke, 2005: 3). Chapter 6 argued that such work demonstrated how art might provoke one to temporarily experience the world differently. It discussed problems found within these artworks which contradicted and stymied the possibility of the work being genuinely surprising and novel. Drawing on insights found in Pask

(1961), Ashby (1956), Cariani (2007) and Bird (2008), the chapter established ways of overcoming these problems and then adapted these to form the outline basis of an experimental framework to guide future practice.

At the core of this working model for my framework were dimensions that proposed that:

- Artworks within my framework should be conceived not as objects but as sets of dynamic relationships, as interconnected processes that may lead to new patterns, structures and events that cannot be predetermined and are irreducible to earlier states.

- The conditions for novelty and surprise in such artworks may be generated, not by the artist's actions or intentions, but through the open-ended relations and interaction of its constituent parts and feedback from the environment.

- Three properties of artwork within my framework are as follows: the materials are situated in the physical world, and subjected to a diverse array of input and feedback; the materials need to be sensitive and responsive to environmental stimuli; and the materials should be are open and indeterminate without fixed or predetermined functional roles.

- The starting point for new artworks guided by my framework may be the existing approaches, attitudes, forms, metaphors, which embody traits and characteristics of the prevailing view. The selection of these may be because they have become fixed and entrenched in particular functions, uses and meanings. They might, for example, be understood

to maintain and perpetuate traits which are recognised as dysfunctional or mechanistic.

- My new artwork guided by the framework will proceed by seeking to generate places of breakdown and disturbance within these existing forms, to generate new materials that are looser, more fluid, and contingent upon context and environment.

- My new practice will not proceed by explicitly critiquing or dismissing the forms of the prevailing model but through being immersed within and inhabiting them, by reconfiguring these in ways which might provoke a minor narrative. This minor narrative may, in comparison to the prevailing view, be incoherent and excessive.

- It will be through the frustration of established order and by breaking from the habitual that my new artwork may help produce a shift in how one thinks and acts in the world.

Chapters 4, 5 & 6 directly addressed the key question of the research which asked how might an experimental framework be developed which could be used to help guide future arts practice? At the core of the second strand of the thesis were the material testing, development, and evaluation of this experimental framework through undertaking new creative practice. A summary of the findings of this strand of the thesis is presented below.

11.5   Summarising the findings through practice

The second strand of the inquiry was formed of three iterations of new practice, eleven projects that were undertaken to test, develop, evaluate and adapt the emerging experimental framework. These were described in the thesis as the preliminary, developmental, and application stages of practice and were organised as individual but related chapters (7, 8 & 9).

11.5.1 Preliminary practice

Chapter 7 described how the framework was used to guide the first iteration and preliminary strand of new practice (see Chapter 7, p. 156). It included four new artworks; *51 Aqueous Dispersals* (2006); *1 Litre Of Soap Solution Inflated 129 Times* (2006); *From Splashing To Solar Stacking* (2006); and *Thread System Generated By The Sound Of Its Own Making* (2007). These preliminary artworks established how the framework could be used so that new practice could critically engage with and disrupt notions related to the prevailing view, and through doing this open up possibilities for alternative ways of thinking and acting. A specific aim of the preliminary work was to disrupt and disturb attitudes that conceived of materials as subordinate to the artist's intentions and visions. The new artworks successfully demonstrated a change in the relationship between artist, the materials, and the making processes. The materials were no longer seen as passive and subordinate to an artist's actions but became an active participant, collaborator in the unfolding of the artwork. These projects demonstrated how the framework could be used to guide new practice so that it might critically engage with traits and attitudes

of the prevailing view, but do so without perpetuating these. This was an important finding as it demonstrated a concrete means of overcoming problems in some eco-art which was recognised as perpetuating rather than challenging the approaches and attitudes of the prevailing view.

11.5.2 Developmental practice

Chapter 8 described how the process aesthetic was used to guide the second iteration and developmental strand of new practice (see Chapter 8, p. 184). The preliminary practice had revealed aspects which contradicted the aim of producing alternative ways of thinking and acting. Although the process aesthetic had been successfully applied to guide the production of the new artworks, the display, documentation, and dissemination of these works had conformed to rather than challenged the approaches of the prevailing view. As a consequence the experimental framework was adapted so that it could be applied to all stages of the production and dissemination of the second iteration of practice. It included four new artworks; *40 Part-Motet For Karaoke* (2007); *An Incomplete Uncertainty* (2008); *Riffs And Variations On A Theme Of Ecocrisis* (2007); and *Lost-Tape Jukebox* (2005 – Present). These developmental projects further established the use of the framework as a means to help critically engage with aspects of the prevailing model of thinking. In this body of work, the aim was to engage with attitudes and approaches found in dominant cultural narratives that appeared fixed and entrenched. In particular the new work sought to find an alternative response to the homogenising and flattening effect of the mediation of environmental

problems, encountered in materials such as *Live Earth* (2007), and *An Inconvenient Truth* (2006) by Al Gore. The resulting artworks established how the framework could be used to loosen and reconfigure existing forms and encourage more diverse, subjective responses and personal voices to emerge. The developmental projects demonstrated how the framework could be used to guide new practice so that it could critically engage with traits and attitudes of the prevailing view, but do so without perpetuating these. It established how a process of disrupting and reconfiguring existing forms (approaches, attitudes of the prevailing view) could work to produce something akin to a fabric which set up the possibility for alternatives to come to the fore.

The developmental practices, guided by the process aesthetic, marked a turning point in the nature and unfolding of the resulting artwork. In the preliminary work the process had led to the production of singular objects. As a consequence the display, documentation, and dissemination of these had conformed to typical and expected exhibition formats. However, through the developmental practice, works such as *Riffs And Variations On A Theme Of Ecocrisis* (2007- Ongoing) and *An Incomplete Uncertainty* (2008) demonstrated a shift from the production of singular works to multiple outcomes and processes. This established the possibility for a more diverse and unconventional dissemination of the unfolding of the work. The framework was used to help new artworks critically engage with traits of the prevailing view but it also actively set up open-ended possibilities for alternatives to emerge. This was embodied in the diversity of the outcomes of the developmental practices which demonstrated the impact of the open-ended processes set in motion by the experimental framework.

11.5.3 Application of practice

Chapter 9 described how the process aesthetic was used to guide the third iteration of practice; the application of the process aesthetic (see Chapter 9, p. 211). It included three new artworks; *Radio Tours* (2009 – ongoing); *Social Cycles* (2008 – ongoing); and *Crazy Tourist* (2009). This third iteration of practices demonstrated how the process aesthetic could be applied to help new work critically to engage with traits found within institutional thinking and to extend prevailing cultural narratives related to the current ecological crisis. The new work, guided by the framework, engaged with aspects of narratives and institutional thinking that appeared over-determined and closed, and through doing this opened up the possibility for new interpretations to extend these. The projects made during the third iteration demonstrated that the process aesthetic could be applied at varying scales, including a participatory social sculpture (*Social Cycles*, 2008), to guide an individual journey through a landscape as part of an expedition (*Crazy Tourist*, 2009), and to produce the content for a series of imaginary narratives for radio broadcast (*Radio Tours*, 2009).

The second strand of the inquiry was organised into three chapters (7, 8, and 9), which was described three iterations of new practice, eleven projects in total. These chapters addressed Aim 1, which sought to consider how arts practice might critically engage with approaches, attitudes and metaphors of the prevailing entitative view and through doing so set up the possibility alternatives to emerge. Chapters, 7, 8 & 9 fulfilled Aim 3, which was to

develop a body of work that explored, tested and demonstrated the capabilities

of the process aesthetic. Through this testing process emerged concrete

examples of how arts practice could critically engage with traits of the

prevailing view but in doing so could avoid perpetuating these. This addressed

Aim 4, which was to consider how a process aesthetic might be used to

overcome problems recognised in existing eco-arts practices. As a

consequence, this strand of the research demonstrated that the approaches

encouraged by the framework could be used as a guide for future artworks

within the field of eco-art.

11.6   Regrouping existing arts practice

Within eco-art and its discourses there is a tendency to overlook approaches in

art that are perceived as outside of its interests, which do not explicitly deal

with the subjects and problems associated with its own field. The third strand

of inquiry, described in chapter 10, sought to address this, and brought together

a group of artworks that could be understood to embody aspects of a process

aesthetic (see Chapter 10, p. 233). The works that were considered were *Hotel

Palenque* (1972) by Robert Smithson, *Zócalo* (1999) by Francis Alÿs, *Life is

Sweet in Sweden Guest Bureau* (1995) by Aleksandra Mir, *Off Voice Fly Tip*

(2009) by Bob & Roberta Smith, *Beyond Art: Dissolution of Rosendale, New

York* (1980) by Raivo Puusemp, and *Recordings* (1997) by Gabriel Orozco.

Chapter 10 established that these works embodied the core approach of a

process aesthetic, one of dissolution and reconfiguration. These works

demonstrated arts possibility to produce alternative ways of thinking and

acting, and were concrete examples of how art might work to disturb the cycles of established entitative thinking. Chapter 10 established that such artworks were evidence of how the framework could be used to organise a grouping of arts practice, defined by methodology and approach rather than subject matter. This opened up the possibility to produce new groupings of artworks that would normally be inhibited by narrow approaches of the prevailing view and its preference for categories defined by genre, subjects and disciplines. It potentially expanded the scope and possibility of the category of practice known as eco-art since, by using a process aesthetic, it might recognise different works as contributing to their own discourses.

11.7   The meaning of the study – making sense of the experimental framework

This final section considers what the thesis might mean. It reflects upon the nature of the framework that was developed. It reflects upon the working method and speculates how it might be applied further.

The thesis establishes an understanding that I have arrived at through undertaking the inquiry that art can critically engage with traits of the prevailing view to challenge and disturb these, and through doing so can open up the possibility of alternatives to emerge.

This results in a contribution that can broaden eco-art discourses since the prevailing tendency in eco-art discussions such as Gablik (1991), Matilsky (1992) and Spaid (2002) is to dismiss arts practice as impotent or navel gazing

self-indulgencies unless it explicitly seeks to address issues or problems. As described in Chapter one, (see section 1.14.2, p.15) such dismissive attitudes overlook the critical potential of the nuanced, more underhand approaches that have formed a substantial body of art through the 20th century. Such dismissive attitudes can be understood to embody the very same narrowing of perception that is understood to lie at the cause of dysfunctional attitudes of the prevailing view.

The thesis problematised assumptions in literature such as Gablik (1991), Matilsky (1992), Strelow (1999), and Spaid (2002) that presupposed that eco-art and its discourses, irrespective of its approach, were capable of addressing the current crises. By drawing upon insights from thinking peripheral to eco-art discourses the thesis identifies problems within the approaches of early eco-art, which contradicted the aim to challenge the approaches and attitudes of the prevailing view. This thesis contributes to the discourses in the field of eco-art as these problems have to date been under-acknowledged and not adequately theorised.

Through undertaking the research I became aware that critically analysing and interrogating problematic approaches within existing eco-art was not a widespread activity within its own discourses. My ambition to critically analyse and evaluate approaches in eco-art was not an attempt to describe its inadequacy, or to be negative or counter-productive. Rather, the process sought to establish the difficulty for any arts practice to break from the approaches and attitudes of the prevailing view, even if, in the case of eco-art, those were the focus of ones critique. The fact that some eco-art was recognised as perpetuating rather than challenging the prevailing view established the value

and need for developing a method that could be used to critically engage with, but not perpetuate its approaches and attitudes. A contribution of this thesis is that it brings together aspects from Systems Thinking, Cybernetics, Artificial Life research, Deep Ecology and Process Thinking to develop an experimental framework that can guide the initiation, production, dissemination and evaluation of arts practice. Arts practice led by this framework has been shown to critically engage with the approaches and attitudes of the prevailing view, but not to perpetuate these. A contribution is that this demonstrates an approach that can be used to overcome problems recognised within existing eco-art, which maintain rather than challenge traits from the prevailing model of thinking. The thesis establishes that the process aesthetic can be used as a guide for future eco-arts practice.

The thesis demonstrates that the process aesthetic can be a means of regrouping existing artworks, which would normally be excluded from discussions defined by genre, subject or assumptions such as those which dismiss work that does not explicitly engage with problems. It brings practices together through their common methodologies rather than the typical categories of the prevailing view and as a consequence opens up the possibility for alternative, unexpected groupings to emerge. This potentially extends the diversity of the field of practices within existing eco-art and its discourses.

11.7.1 Implications for future practice

The thesis demonstrates that art has the capacity to set up the possibility to think and act differently, to produce alternatives to the approaches, attitudes,

and metaphors of the prevailing view. The thesis establishes that the
experimental framework can be used to guide new practice to critically engage
with traits from the prevailing view, in ways that do not perpetuate these. In
doing this the framework opens up possibilities for alternatives to emerge. The
thesis has implications for future practice and this final section briefly
speculates on the nature and possibilities of new artworks.

11.7.2 Art as a fluid finding form

Throughout the entire period of the research, an image used to help guide and
conceive of the unfolding of the study was that of wake-generated weaves of
pattern. I was aware of the potential cliché of using this image of thought,
however, the thesis demonstrates that the implication of this, its usefulness, far
exceeds the worries about this cliché. Thinking of arts practice as a fluid
process that both generates and dissolves pattern, helps visualise how making
work is a form of tacit experience that both grounds thinking but also perhaps
simultaneously erases it.

Thinking of artworks in terms of fluids finding form has implications for future
practice. Art as a fluid can be understood to find its temporary form in
response to the contexts that it encounters. The shape of the artwork emerges
as it flows in and around existing forms, seeping into or spilling over these to
saturate some, and to erase and dissolve others. Arts practice might temporarily
envelop existing forms and then recede and ebb away. This image of the tidal
ebb and flow of practice expresses how artworks might work to erode, dissolve,
and shape the existing contexts. Art in this sense might be understood as

leaking and spilling into being, finding form through pouring and seeping across and through a context.

11.7.3 Open-ended processes

Encouraging open-ended processes is a key factor of the experimental framework. Conceiving future artworks as something that spills into being in relation to the context it encounters encourages one to imagine that the artwork will unfold in an open-ended way. Being open-ended means that pre-determined or prescribed responses to contexts are stymied, as one cannot impose ones values, beliefs, blueprints or masterplans using this approach.

Future artworks will unfold in an open-ended way and emerge as a consequence of dialogue, connections, and interactions within the location. Such artworks will foreground chance configurations, mixtures, and assemblages, and will encourage movement, change, contingency, transience, and randomness. Open-endedness may encourage types of communication other than those that are imposed on us. It may be a means to create locations of unlegislation, creating freer conditions and openings for alternative ways of thinking and acting to come to the fore. Open-ended strategies might be used as a release from purposive acts and as a consequence the future work may appear purposefully purposeless. In this context seemingly purposeless art might appear to be a catalyst for or a provoker of the seemingly insensible, the incoherent. Open-endedness might be expressed both as a fault, a fissure, ill-restrained, and disordered but also as a break from the habitual, as potential to provoke rupture, and as a seeding of a new order, a new organisation.

From the perspective of the categories and genres of the prevailing view, in particular in the context of the conscious problem-solving attitudes of eco-art, the open-ended work may appear to be treacherous and a betrayal, as such work will not appear to support the cause. However, from the perspective of the process aesthetic the open-ended work contributes to and extends the discussion in eco-art and its discourses.

11.7.4   The role of the artist and the artwork

The experimental framework has implications for way one thinks about the role of the artist. The artist might be conceived as an instigator of interesting spills, pourings, seepings, washes, splashes, ebbings, wakes, and tides. The artist may then reflect on the wake-generated weave, considering the connections and relations that are occurring. This reflective activity may lead to and generate further strands of thought, potentially resulting in new spills, new blotches of a different kind, at a different level. It is through instigating and investigating such processes that arts practice may set up the possibility for alternative to emerge.

The title of the thesis is '*Finding fluid form*'. However, a question one might ask is how can one recognise the potential in fluid and chance configurations? On recognising a fluid form what might one do with it? How might one hold onto transient, unfolding forms for long enough to reveal something about them, to act with them? It may be that art is ideally suited to and able to reveal unseen, dissipating events. Art may allow us to encounter fluid forms that would be otherwise indiscernible, to allow glimpses of usually unforeseen

patterns. Provoking, finding, accessing, and utilising such patterns might be the modus operandi of art as fluid finding form. Art might reveal things that have been purposely or unconsciously overlooked, marginalised, and hidden may be brought back, made visible or audible again. The thesis demonstrates new possibilities for future art which can now be tested further and applied to open up potential alternatives to the dysfunctional attitudes and approaches of the prevailing model of thinking.

Bibliography

(GEO-4), G. E. O. (2007) *Global Environment Outlook (Geo-4), Environment for Development* United Nations Environment Programme, (xviii). .

ADCOCK, C. (1992) Conversational Drift: Helen Mayer Harrison and Newton Harrison. *Art Journal,* 51**,** pp. 35-45.

APPLETON, J. (2007) Good Politics, Bad Art, London, accessed online at: http://www.jjcharlesworth.com/thefuture/essays.html.

BATESON, G. (2000a) Conscious Purpose Versus Nature. *Steps to an Ecology of Mind.* Chicago, The University of Chicago Press.

BATESON, G. (2000b) Ecology and Flexibility in Urban Civilization. *Steps to an Ecology of Mind.* Chicago, University of Chicago Press.

BATESON, G. (2000c) Effects of Conscious Purpose on Human Adaption. *Steps to an Ecology of Mind.* Chicago, The University of Chicago Press.

BATESON, G. (2000d) Pathologies of Epistemology. *Steps to an Ecology of Mind.* Chicago, The University of Chicago Press.

BATESON, G. (2000e) *Steps to an Ecology of Mind,* Chicago, The University of Chicago Press.

BATESON, G. (2000f) Substance and Difference. *Steps to an Ecology of Mind.* Chicago, The University of Chicago Press.

BATESON, G. (2000g) The Roots of the Ecological Crisis. *Steps to an Ecology of Mind.* Chicago, University of Chicago Press.

BATESON, G., DONALDSON, RODNEY E. (1991) *A Sacred Unity: Further Steps to an Ecology of Mind,* London, Harper Collins.

BEECH, D., ROBERTS, J. (2003) *The Philistine Controversy,* London, Verso.

BENNETT, J. (2001) *The Enchantment of Modern Life : Attachments, Crossings, and Ethics,* Princeton, New Jersey, Princeton University Press.

BERRY, T. (1987) The Viable Human. *ReVision,* 9.

BIRCH, C. (1988) The Postmodern Challenge to Biology. IN RAY GRIFFIN, D. (Ed.) *The Reenchantment of Science.* New York, SUNY Press.

BIRD, D. P. (2008) Gordon Pask and His Maverick Machines. IN HUSBANDS, P. (Ed.) *The Mechanical Mind in History.* New York, MIT Press.

BIRD, J. & WEBSTER, A. (2001) The Blurring of Art and Alife. IN DORIN, A. (Ed.) *Second Iteration.* CEMA, Melbourne, AUS.

BOHM, D. (1991) Dialogue: A Proposal'. 1991 ed.

BOOTH FOWLER, R. (1995) *The Greening of Protestant Thought* Chapel Hill, North Carolina, The University of North Carolina Press.

BOURRIAUD, N. (2009a) *Altermodern: Tate Triennial 2009,* London, Tate Publishing.

BOURRIAUD, N. (2009b) *The Radicant,* New York, Sternberg Press.

BOWERS, C. (1992) *Education, Cultural Myths and the Ecological Crisis: Toward Deep Changes* New York, State University Press New York.

BUCHMANN, S. (2006) From System-Orientated Art to Biopolitical Art Practice. IN VISHMIDT, M. (Ed.) *Media Mutandis: a NODE.London Reader.* London, Node.London.

BURNHAM, J. (1969) Real Time Systems. *Great Western Salt Works: Essays On The Meaning Of Post-Formalist Art.* New York, George Braziller.

CAGE, J. (1973) *Silence: Lectures and Writings* New York, Marion Boyars Publishers Ltd.

CAPRA, F. (1987) Deep Ecology, A New Paradigm. *Earth Island Journal,* 2.

CAPRA, F. (2002) *The Hidden Connections,* London, Flamingo, Harper Collins Publishers.

CARIANI, P. (1991) Emergence and Artificial Life. IN C. G. LANGTON, C. T., J.D. FARMER AND S. RASMUSSEN (Ed.) *Artificial Life II, Santa Fe Studies in the Sciences of Complexity, Proceedings, 10, .* Addison-Wesley.

CARIANI, P. (2007) To Evolve An Ear. Epistemological Implications of Gordon Pask's Electrochemical Devices. *Systems Research and Behavioral Science,* 10**,** 19-33.

CARLSON, A. (2009) *Nature and Landscape: An Introduction to Environmental Aesthetics,* New York, Columbia University Press.

CARRUTHERS, B. (2006) *Mapping the Terrain of Contemporary EcoART Practice,* Vancouver, RSA, London, UK.

CARTER, P. (2004) *Material Thinking: The Theory and Practice of Creative Research,* Melbourne Melbourne University Press.

CHARLTON, N. G. (2008) *Understanding Gregory Bateson,* Albany, State University of New York Press.

CHIA & KING (1998) The Organizational Structuring of Novelty. *Organization,* Vol.5**,** 461-478

CODE, L. (2006) *Ecological thinking:the politics of epistemic location,* Oxford, Oxford University Press.

COLLINS, T. (2002) *Conversations in the Rust Belt, From Virgin Land to Disney World: Nature and Its Discontents in the America of Yesterday and Today* Rodopi.

COLLINS, T. (2007) Art, Ecology, Planning. *Art & Design.* Plymouth, Univeristy of Plymouth.

COLLINS, T. (2008) Visionary Aesthetics, Post Industrial Ecologies and Practical Art. Paris, France, visited on 24th October 2009, http://halshs.archives-ouvertes.fr/docs/00/33/52/50/PDF/5.Collins.pdf.

COLLINS, T., GOTO, REIKO (2003) Landscape, Ecology, Art and Change. IN MILES, M. (Ed.) *Urban futures: critical commentaries on shaping the city* London, Routledge.

DE MAISTRE, X. (2004) *A Journey Around My Room,* London, Hesperus Press Ltd.

DELANDA (1999) Deleuze, Diagrams and the Open-Ended Becoming of

the World. IN GROSZ, E. (Ed.) *Becomings: Explorations in Time, Memory and Futures.* New York Cornel University Press, .

DELANDA, M. (2005) *Intensive Science and Virtual Philosophy* London, Continuum International Publishing Group Ltd.

DELANDA, M. (2006) *A New Philosophy of Society: Assemblage Theory and Social Complexity,* London, Continuum International Publishing Group Ltd.

DELEUZE & GUATTARI (1986) *Kafka Toward a Minor Literature,* Minnesota, University of Minnesota Press

DELEUZE, G. (1994) *Difference and Repetition,* New York, Columbia University Press.

DEMOS, T. J. (2009) The Politics of Sustainability: Art & Ecology. IN PORRITT, J. M., F. DEMOS, T.J. (Ed.) *Radical Nature: Art and Architecture for a Changing Planet, 1969 - 2009.* London, Buchhandlung Walther Konig

ESCHE, C. (2005) Collectivity, Modest Proposals and Foolish Optimism. NEME - accessed online at: http://www.neme.org/main/183/Collectivity.

FLAXMAN, G. (2008) Sci Phi: Gilles Deleuze and the Future of Philosophy. IN
    ZEPKE, O. S. A. (Ed.) *deleuze, Guattari and the production of the new.*
    London, Continuum.

FOX, W. (1995) *Towards a Transpersonal Ecology; developing New Foundations for
    Environmentalism,* Totnes, A Resurgence Book, Green Books.

GABLIK, S. (1991) *The Re-enchantment of Art,* London, Thames & Hudson.

GABLIK, S. (1995) Connective Aesthetics: Art After Individualism. IN LACY, S.
    (Ed.) *Mapping the Terrain: New Genre Public Art.* Seattle Bay Press.

GALLOIS, C. (2009) An Archipelago of Local Responses: Nicolas Bourriaud on the
    Altermodern. *Metropolis.* Paris.

GORE, A. (2007) *An Inconvenient Truth,* London, Phaidon.

GOTO, R., COLLINS, TIM (2005) Eco-art Practices. IN MILES, M. (Ed.) *New
    Practices, New Pedagogies: A Reader.* London, Routledge.

GRAY, J. (2007) *Black Mass: Apocalyptic religion and the Death of Utopia,* London,
    Allen Lane, an imprint of Penguin Books.

GREIG, S., PIKE, G., & SELBY, D. (1989) *Greenprints for Changing Schools*
    London,

Kogan Page/World Wide Fund for Nature, UK.

GUATTARI, F. (2000) *Three Ecologies,* London, Continuum, Athlone Press.

HAACKE, H. (1972) Rhinewater Purification Plant in Spaid (2002), *Ecovention,
    current art to transform ecologies,* Greenmuseum.org, The Contemporary Arts
    Center, ecoartspace.

HARRIES-JONES, P. (2002) *A Recursive Vision: Ecological Understanding and
    Gregory Bateson,* Toronto, University of Toronto Press.

HARRISON, N., HARRISON, HELEN MEYER. (2007) Greenhouse Britain, Losing
    Ground Gaining Wisdom.

HOLT, N. (1973-76) Sun Tunnels Lucin, Utah, USA, in Matilsky, B. (1992), *Fragile
    Ecologies: Contemporary Artists' Interpretations and Solutions*, New York,
    Rizzoli International Publications, Inc. p.87.

HOPE, M. (1994) *A Prophetic Voice: Thomas Berry*, Canadian Journal of Ecosophy.

HUCKLE & MARTIN (2001) *Environments in a Changing World,* Harlow, Essex,
    Pearson Education Limited.

INGOLD, T. (2000) *The Perception of the Environment,* London, Routledge.

IPCC, I. P. O. C. C. (2007) *Climate Change 2007: Synthesis Report*

KAPROW, A. (1996) Real Life. IN KELLEY, J. (Ed.) *Essays on the Blurring of Art and Life: Allan Kaprow.* Los Angeles, University of California Press.

KESTER, G. (2004) *Conversation Pieces: Community and Communication in Modern Art,* Berkerley, University of California Press.

KESTER, G. (2005) Groundworks: Environmental Collaboration in Contemporary Art. IN UNIVERSITY, C. M. (Ed.). Pittsburgh, Pennsylvania, Regina Gouger Miller Gallery.

KIRKMAN, R. (2002) *Skeptical Environmentalism: The Limits of Philosophy and Science,* Bloomington, Indiana, Indiana University Press.

KLEIN, N. (2008) *The Shock Doctrine: The Rise of Disaster Capitalism,* London, Penguin.

KOLBERT, E. (2006) *Field notes on a catastrophe,* London, Bloomsbury.

KOVEL, J. (2007) *The Enemy of Nature: The End of Capitalism or the End of the World?,* London, Zed Books Ltd.

LIPPARD, L. (1997) *The Lure of the Local: senses of place in a multicentred society,* New York, The New Press.

LOVELOCK, J. (2006) *The Revenge of Gaia,* London, Allen Lane, Penguin.

LYNAS, M. (2005) *High Tide,* London, Harper Perennial.

MANACORDA, F. (2009) *Radical Nature, Art and Architecture for a Changing Planet 1969-2009,* London, Barbican Gallery.

MATHEWS, F. (1991) *The Ecological Self,* London, Routledge.

MATILSKY, B. C. (1992) *Fragile Ecologies: Contemporary Artists' Interpretations and Solutions,* New York, Rizzoli International Publications, Inc.

MCCARTHY, C. (2007) *The Road,* London, Picador.

MCINNIS, N. (1982) *A Decade of Environmental Education.*

MCKIBBEN, B. (2006) *The End of Nature,* London, Random House.

MERCHANT, C. (1989) *The Death of Nature: Women, Ecology, and the Scientific Revolution,* San Francisco, Harper & Row.

MESLE, C. R. (2008) *Process-relational Philosophy: An Introduction to Alfred North Whitehead* West Conshohocken, Pennsylvania, Templeton Foundation Press.

MEYER, J. (2001) *Political nature: environmentalism and the interpretation of Western thought,* New York, MIT Press.

MILES, M. (2000) Art & Social Transformation: Theories And Practices In
Contemporary Art For Radical Social Change c.1967-99. *Art & Design.*
Oxford, Oxford Brookes University.

MIR, A., & KELSEY, J (2003) *Corporate Mentality,* New York, Lukas and Sternberg
Inc.

MONBIOT, G. (2001) *Captive State: The Corporate Takeover of Britain,* London, Pan
Books.

MONBIOT, G. (2006) *Heat,* London, Penguin.

MORTON, T. (2007) *Ecology Without Nature: Rethinking Environmental Aesthetics,*
Massachusetts, Harvard University Press.

NAESS, A. (1989) *Ecology, Community, and Lifestyle,* Cambridge, Cambridge
University Press.

NAPIER, A. D. (1996) *Foreign Bodies; Performance, Art, and Symbolic
Anthropology,* Berkely and Los Angeles, University of California Press.

NESBIT, M. (2002) Gabriel Orozco. *Gabriel Orozco.* Los Angeles, The Museum of
Contemporary Art, Los Angeles

NIEUWENHUYZEN, M. V. (2001) *Gabriel Orozco: From Green Glass to Airplane
Recordings,* Amsterdam, Artimo Foundation Breda.

NORDHAUS, T. A. S., M. (2007) *Break Through: From the Death of
Environmentalism to the Politics of Possibility,* New York, Houghton Mifflin
Harcourt.

O'SULLIVAN, S. (2006) *Art Encounters Deleuze and Guattari: thought beyond
representation,* New York, Palgrave Macmillan.

O'SULLIVAN, S. Z., S (2008) *Deleuze, Guattari and the Production of the New,*
London, Continuum International Publishing Group Ltd.

OBRIST, H. U. (2001) The Happy Face of Globalization. *Biennale of Ceramics in
Contemporary Art.* Albisola, Liguria http://www.attese.it/attese1/article13/.

ORR, D. (1992) *Ecological Literacy: Education and the Transition to a Postmodern
World,* Albany, New York: State University of New York Press.

ORR, D. (1994) *Earth in Mind: On Education, Environment, and the Human
Prospect,* Washington, D.C, Island Press.

OSBORNE, T. (2003) Against 'Creativity': A Philistine Rant. *Economy and Society*
Volume 32 507–525.

PASK, G. (1961) *An Approach to Cybernetics. ,* London, Hutchinson.

PENNY, S. (1996) The Darwin Machine: Artificial Life and Interactive Art. *New Formations, "Technoscience".*

PLATORM (2010) about Platform. London, Platform.

PLUMWOOD, V. (1993) *Feminism and the Mastery of Nature,* London, New York, Routledge.

PLUMWOOD, V. (2001) *Environmental Culture: The Ecological Crisis of Reason,* London, Routledge.

PLUMWOOD, V. (2002) *Environmental Culture: the Ecological Crisis of Reason,* London, Routledge.

PORRITT, J. (2009) Foreword. IN MANACORDA, F. (Ed.) *Radical Nature - Art and Architecure for a Changing Planet 1969-2009.* London, Koenig Books.

PRATT, V. (2000) *Environment and Philosophy,* London, New York, Routledge.

RAHMANI, A. (2009) Aviva Rahmani Ecological Artist.

SESSIONS, G. (1995) *Deep Ecology for the 21st Century,* Massachusetts, Shambala.

SHAFFER, F. (1985) Winter Solstice. Lake Michigan, in The Reenchantment of Art: Reflections On The Two Postmodernisms, Suzi Gablik, .

SIPPER, M. (1995) An Introduction to Artificial Life. *AI Expert,* 4-8.

SMITH, B. R. (2009) Off Voice Fly Tip. London, Altermodern, Bourriaud, N. (Curator), Tate Britain.

SMITH, G. (1992) *Education and the Environment: Learning to Live With Limits,* Albany, State University of New York Press.

SMITH, S. (2005) Beyond Green: Toward a Sustainable Art. IN SMART MUSEUM OF ART, U. O. C., INDEPENDENT CURATORS INTERNATIONAL (Ed.). New York, Independent Curators International.

SONFIST, A. (1978) Time Landscape: Greenwich Village. New York, in Matilsky, B. (1992), *Fragile Ecologies: Contemporary Artists' Interpretations and Solutions*, New York, Rizzoli International Publications, Inc. p.82.

SPAID, S. (2002) *Ecovention, current art to transform ecologies,* Cincinnati, Greenmuseum.org, The Contemporary Arts Center, ecoartspace.

STRELOW, H. (1999a) Nature in a Social Context. IN LUDWIG FORUM FOR INTERNATIONAL ART, A. (Ed.) *Natural Reality, Artistic Positions between nature and Culture.* Aachen, Daco Verlag.

STRELOW, H. (1999b) The Unity of Man and Nature: Between Desire and Reality. IN STRELOW, H. (Ed.) *Natural Reality: Artistic Positions between Nature and Culture.* Aachen, Daco Verlag.

THIELE, L. P. (1999) *Environmentalism for a New Millennium: The Challenge of Coevolution,* New York, Oxford University Press.

TOSCANO, A. (2009) In Praise of Negativism. IN O'SULLIVAN, S., ZEPKE, S. (Ed.) *Deleuze, Guattari and the Production of the New.* LOndon, Continuum.

WAKEFIELD, N. (1995) Yucatan is Elsewhere - On Robert Smithson's Hotel Palneque. *Parkett,* 43**,** p.133.

WALLEN, R. (2006) Toward a Definition of Ecoart.

WALLIS, B., KASTER, J. (2005) *Land and Environmental Art,* London, Phaidon.

WATTS, P. (2003) Ecoartists: Engaging Communities in a New Metaphor. Landviews: a journal of landscape, art & design.

WHITEHEAD, A. N. (1938) *Modes of Thought,* Cambridge, MA, Harvard University Press.

WRIGHT, H. (2009) Using an emergent design to study adult education. *Educate~ Special Issue***,** pp 62-73.

ZEPKE, S. (2005) *Art as Abstract Machine: Ontology and Aesthetics in Deleuze and Guattari,* New York, Routledge.