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Putting It Together: examining new media arts and creative practice

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creative practice

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ABSTRACT

This Ph.D. by Published Work examines projects that have taken place over a period of ten years and that address new media practice. The projects include new media arts exhibitions and publications. The argument of the Exegesis is that taken together these works demonstrate how curatorial practice operates in an integrated way between practice and theory and that it is possible to trace how insights about new media are generated, evolve and contribute to discourse in different parts of the arts sector. The Exegesis argues that curatorial practice can be understood as demonstrating reflection-in-action and reflection-on-action. It presents a framework for understanding how knowledge is developed through curatorial projects, and thus constitutes practice-based research.

In particular the research addresses the role of the curator in new media arts: how the audience for new media is understood, how practitioners' knowledge, skills and expertise can be articulated and how cultural concepts around digital technology such as 'newness' and 'innovation' affect the way that new media practice is understood and experienced.

The study examines the curated three exhibitions: *Lyndal Jones, Demonstrations and Details from the Facts of Life (2001); Timeless: Time, Landscape and New Media (2006)* and *David Rokeby: Silicon Remembers Carbon (2007) / David Rokeby: Plotting Against Time (2008)*; a co-authored book *The New Media Handbook (2006);* and three articles and chapters, 'Enter the Gallery' (2011) & 'The Narrative of Technology' (2012) and 'Shiny and New' (2010)

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This Exegesis is also supported by an additional volume (Vol. 2) titled

'Commentaries on accompanying work submitted as publications'

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I owe a huge debt to the following people for their suggestion – and in some cases insistence – that I register for a PhD by Published Work, their enthusiasm, and their participation in the process as collaborators, critics and readers. This PhD would not have been undertaken without their support.

First, and overwhelmingly, to my partner Ian Rashid for his steadfast encouragement.

My thanks also go to all the artists with whom I have worked on the projects detailed in the research; to my frequent collaborator and colleague Prof Jane Prophet; Prof Andrew Dewdney, my collaborator on a number of projects; Prof Sandra Kemp who first recommended that I consider the 'By Publication' route; Dr Marq Smith, my supervisor and colleague. Lastly, to my parents. To my mother, Margaret Ride, for extracting from me a promise that I would undertake this; and to my father Prof David Ride whose example of academic excellence and clarity set the bar very high.

George (sings):
Bit by bit,
Putting it together...
Piece by Piece-
Only way to make a work of art.
Every moment makes a contribution,
Every little detail plays a part.
Having just a vision's no solution,
Everything depends on execution:
Putting it together-
That's what counts!

Harriet (spoken):
The Board of the Foundation is meeting next week...

George:
Ounce by ounce,
Putting it together...

Harriet (spoken):
You'll come to lunch.

George:
Small amounts,
Adding up to make a work of art.
First of all you need a good foundation,
Otherwise it's risky from the start.
Takes a little cocktail conversation,
But without the proper preparation,
Having just a vision's no solution,
Everything depends on execution.
The art of making art
Is putting it together
Bit by bit...
[...]
And that
Is the state
Of the
Art!

Stephen Sondheim, 'Putting it Together' from *Sunday in the Park with George,* 1984
(Sondheim 2011:41)

Exegesis

__Introduction__

When asked in an interview about the point of origin for his recent book *Bento's Sketchbook* (2011) John Berger stated "You never know how something begins when you're trying to create"[1]. Berger's statement seems like a paradox, but can be read on many levels: shifting expectations and ambitions, the self-awareness of the artist and the power of retrospective reflection. But it also alludes to the idea that the concepts of knowledge and creativity are relative and change over time and context.

Berger's point is a salient one and appropriate as a starting point for my PhD by Published Work. Often PhD research projects are progressive, forward-driven exercises, either formulated around a distinct research hypothesis or engaged with a concise set of questions. However, a PhD by Published Work is by its nature a retrospective exercise, so it starts with the provocation 'what *was* achieved?' rather than asking what *will* be done. Furthermore, when the research projects that are included in a PhD by Published Work were undertaken there might not have been any intention that they should become part of an argument for a doctoral degree.

However, the opportunity to undertake a PhD by Published Work gives a rare opportunity to reflect back upon the history of one's projects, to evaluate them and

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[1] John Berger in conversation with Laurie Taylor at Queen Elizabeth Hall. Taylor, L. (2011)

to examine them within an academic structure. This critical retrospective tests

whether they do indeed represent a consistent and cumulative intellectual

progression. I argue in this exegesis that, indeed this is the case, and although the

programme of work in this survey[2] is made up of a series of discrete projects it also

represents a consistent pathway towards the development of new knowledge and

that through this exercise new knowledge has been created.

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[2] I am using the term 'survey' (as a noun) in this exegesis to designate the body of work being presented for the PhD by Published Work – to avoid confusion with the term 'project' which I am using to describe the individual items, i.e. the 'publications'. I feel it is also an accurate term to use because it references the process of examination as well as the physical material.

1. The rationale for the PhD by Published Work

The focus of this work is my creative practice as a curator and new media producer as well as an academic writer. Within the research activities included in this PhD survey some are academic publications but all the work centres on creativity, in which the research activity, the intellectual engagement and the knowledge generated need to be seen within the context of creative practice.

For this reason I am using the term 'practice centred research' to describe this research.[3] The projects are in two categories, the first being research focused on curated exhibitions, the creation of the work, the critical context and reflections upon the events and activities. The second are scholarly articles that analyse creative projects and practices, which draw upon, and theorize from, my experience as a practitioner. As such they represent two forms of practice centred research: projects in which the research is generated from within the creative activity and those where the research is generated as a result of the activity: 'practice-based' and 'practice-led' research.

However, my contention in this exegesis is that a PhD that takes a 'by publication'

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[3] The terms 'practice-centred', 'practice-based' and 'practice-led' research are all used in the UK depending on the context, sometimes inter-changeably (Niedderer: 2007). I refer to Linda Candy's distinction (2011:36) for the terms 'practice-based' and 'practice-led' research, which I address in detail later. In this introduction I am occasionally using the broader (and now less frequently used) term 'practice centred research' to suggest an all-encompassing categorization of research that has an examination of the practices of art and design at its core, but allows for the fact that new knowledge does not necessarily involve the creation of an artefact. (Please note I am not trying to promote this term for anything outside this exegesis!)

route needs to be more than the sum of its parts if it examines a number of projects as 'publications' within a history of a practice as opposed to a single project. It must examine how the different forms of work and methodologies inter-relate. Therefore the unifying connections between the projects are as important as the individual projects themselves. Although each of the projects under consideration can be analysed on the basis of their autonomous research outcomes, the very process of bringing them together and contextualising them within ten years of progressive research requires an additional level of reflexive examination. John Berger's point can lead us to ruminate that creativity can have unforeseen consequences, and this is not only applicable to the way that professional practice evolves over time but it can also be a description of the outcome of an examination of the creativity itself.

The projects included in this PhD were not embarked upon as part of a unified programme of research, instead they were individual projects developed in response to specific organisational needs, funding opportunities and intellectual curiosity. Furthermore, several of these projects were structured around exhibitions where the research aims and approaches were not necessarily made explicit, either within the exhibitions themselves, or through accompanying documentation, since it was not always appropriate to the situation or desired the host organisations. For this reason, I have supplemented the contemporaneous written documentation to reveal the necessary contexts. However, the projects have a role that extends across time, therefore rather than presenting them as snapshots the projects are constantly readdressed within the ongoing research practice that is itself reflected upon and

referred to in later publications, events or submissions[4]. This reveals a series of thematic threads that bind the projects together and that is only fully articulated through the reflective examination of this PhD. Together, these also represent a sustained enquiry with a unified research goal and contribution to knowledge.

Therefore part of this PhD project is orthodox: it articulates how new knowledge was created through the works in question, and how that knowledge has been recognised by peers as making a contribution to the sector. A fundamental aspect of a PhD can be that it demonstrates frameworks for knowledge and advances in the way that knowledge is organised (Candy 2011: 55-56). This project contributes new knowledge by describing, with evidence, a conceptual framework that can be used to demonstrate how cultural knowledge about new media, through the practice of curating, is created through a triangulation of creativity, sites of practice and reception by audiences.

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[4] For example all the projects under consideration were included in the University of Westminster submission to the Art and Design panel for the RAE2001 and RAE2008 or will be included in the REF2014.

2. Research Questions

Delineating a research question for a PhD programme of this nature is a complex issue. A PhD by Published Work that is structured around a sole publication or linked series of outputs might easily have a single sustained research question. A PhD that is centred on practice is more likely to address a series of research questions that evolve over time and are expressed in different ways. Therefore it is useful to think of research of this nature in terms of 'emergence' as conceptualised in grounded theory (Strauss & Corbin 1998; Glaser & Strauss 1999; Charmaz 2006; Hesse-Biber & Leavy 2008; Myers 2008) which proposes that research need not be hypothesis or question driven from the outset. It proposes, instead, that a situation is created in which issues can emerge and research methods can be defined not by pre-planning but through the consistent gathering and examination of data, by the study of material that may change over time, and through the researcher's own reflective process of adaptation to the research environment (Strauss & Corbin 1998). Although Grounded Theory is not particularly common in Art and Design it is well established in Social Sciences and the Humanities, in particular in areas using qualitative research (Charmaz 2006). Furthermore, it also allows for a situation in which researchers may find themselves to be simultaneously operating from an 'insider' and an 'outsider' position (Hesse-Biber & Leavy 2008:4) which arguably I am doing so in a PhD by Published Work examining, on one hand, how I operated my own practice and its outcomes and, on the other, analysing how the combined activities represent a consistent development towards new knowledge. Although I am using the concepts of Grounded Theory loosely, not the way that it is used by most advocates, its approach is appropriate as a framing device for this study which

is largely retrospective. It provides a way of explaining how research questions and research methods can be constructed retrospectively through reflexive analysis.

The practice under inspection in this PhD programme is my work as a curator in the field of new media[5]. In April 2001, I organised a symposium titled *Momentum Forum*[6] and through the documentation of this activity we can show that the research goals of my practice were established at the commencement of the period covered by the PhD programme and how they can be identified through text and through practice. *Momentum* asked how the velocity of change affects new media practice:

> "how do the shifting roles of cultural producers and artists, the artistic and technological demands of changing technologies and a culture of rapid and impatient innovation impact on us?" (Ride 2001)

The event was designed as an opportunity to examine how contemporary issues around practice could be understood, by using examples of practice. Instead of formal symposium presentations, the content of each day was structured around case studies led by artists, curators and organisers who also proposed 'prompts' or provocations for discussion. [7]

Within this event the key 'problems' addressed by my research can be identified: the changing perception of new media as an arts practice; the necessity of recognising that the field of creative practitioners in new media included producers,

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[5] Conventions differ on whether or not to capitalize 'New Media' as fine arts practice as opposed to 'new media' as a generic technological description. I am following the lead of Graham and Cook (2009) in using lower case throughout.

[6] DA2 Digital Arts Development, *Momentum Forum*, Watershed Media Centre, April, 2001

[7] The programme for *Momentum Forum* is included as Appendix 1 to the Exegesis

administrators and developers as well as artists; the need to place creative projects at the heart of discussions, not only to use them to illustrate theoretical arguments; the need to understand audience engagement with new media arts. The *Momentum Forum* was itself an event which represented a climax of critical activity: it was the culminating event of a three-year arts programme by DA2 The Digital Arts Development Agency, funded by the National Lottery through the Arts Council England and was an exercise that aimed to draw knowledge from a large body of work and experience and to point the way for future programmes of work. Although the specific emphases have changed subsequently, from project to project, the foci articulated for *Momentum* have remained as core research questions of my work.

My PhD programme asks the question:

- ***Can we develop new insights about new media in the arts through the examination of creative practice?***

As such, this PhD programme, as an overall investigation, is concerned with the management and organisation of knowledge - it does not propose a paradigm shift or incremental change in arts theory. It demonstrates how the investigation of creative practice can take place across a number of different forms: curated exhibitions; studies of practitioners' methods of working; critical analysis of the presentation and audience reception of creative projects. It suggests that by examining the individual projects, and by investigating how the works operate as a whole (how they can bee seen as a coherent 'body of work') we can gain new understandings that contribute to the discourse of new media.

Professor Stephen Scrivener has described the considerations around creative

production in doctoral research:

> "...while the "problem" and "solution" may be inappropriate descriptors, the
>
> [art]work can be described as a response to a set of on-going issues, concerns
>
> and interests expressed through one or more artefacts. ... While these issues,
>
> *etc.*, may not be understood as framing a problem and although they may
>
> originate in a highly personalised way, they are usually rooted in the cultural
>
> context, i.e., they reflect culture. " (Scrivener 2000)

The points made by Scrivener are particularly appropriate to discussions of studio-

based work where the outcome is an artifact, but they can also be applied to the

broader field of practice-centred work that concerns me, with its emphasis on

curated projects. Scrivener's concerns are also useful in understanding how the

component projects (or publications) of this PhD are structured within the

investigation as a whole. The "set of on-going issues" are articulated in the

overarching research question; the individual projects each have a specific research

aim and method and are framed by a research problem. Each, in its own way,

answers an aspect of the main research question. But, in the form of emergent

practices suggested by Grounded Theory, each raises further problems and

possibilities. Consequently the research programme as a whole becomes an

interlocking chain of research questions.[8]

These sub-questions have driven the research at the level of the individual projects :

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[8] This can also be interpreted as a process of reflective practice, where the whole
programme can be seen as a reflective spiral. Although I do not use the 'spiral model'
the role of reflective practice discussed later in this exegeses particularly in
reference to the writings of Donald Schön.)

- *What is the role of the curator in facilitating the development of knowledge?*

- *How can an understanding of the role of the audience within new media projects contribute to the development of knowledge?*

- *In what ways can practitioners' knowledge skills and expertise be articulated as a significant part of creative practice?*

- *How do cultural concepts around digital technology, such as 'newness' and 'innovation', affect the way that new media practice is understood and experienced?[9]*

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[9] The main research question and sub-research questions contain key terms that required definitions which explain how they may have been used – and understood – at the time the projects took place. This set of definitions has been placed as Appendix 2 to this volume.

3. Research Context

In my PhD by Published Work the 'research context' is different from the literature review that is an integral part of a conventional thesis. Often a literature review comprises a systematic search as an essential aspect of the 'rigor' of the research being undertaken (Biggs & Büchler 2007:62-69). However, the premise of this PhD by Published Work is that each of the research projects needs to be located in a specific context that includes its own theoretical concerns and examples of practice that shaped the situation in which the project took place, as demonstrated by the 'literature'. The unified programme of work needs to be seen in relation to emerging and overarching contexts that illuminate why the 'problems' were perceived to exist and why they were investigated.[10]

Practice and research

Firstly, the overall research context for this PhD programme is the debate around the relationship of practice and research. Within the UK, the contribution of practice to the research culture in art and design has been established with a framework of academic conventions and guidelines to help to evaluate research outputs and research degrees (Frayling 1993; Mallins & Gray 1999; Barrett 2007; Scrivener 2000; Smith & Dean 2010; Candy & Edmonds 2006, 2011)

As explained previously, in this exegesis I am emphasising 'practice-centred research' because the research explores the creative projects I have produced as a

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[10] It is not the purpose of this exegesis to present a literature review of the fields discussed. Within the accompanying explanation of each of the projects the specific research context is discussed in order to locate each project contemporaneously.

curator and the critical studies address curation as a form of practice. As such, I am addressing *professional practice* of curating within *creative practice.* This creates a distinction between my approach and that of most of the discussions about fine art practice as research, in which the context given is usually exhibitions, art events or studio practice. However, while curatorial practice is recognised as an arts practice it also needs to be seen as a professional practice as well as a creative one: operating within the frameworks of external structures and professional requirements.[11] This is an important distinction because the projects presented here do not operate as isolated entities but always in reference to arts organisations and institutions which are themselves a constituent part of the creative industries.

An important consideration in relation to this PhD project is the way that research outcomes are identified as being an aspect of practice and not separated or existing in parallel. James Elkins (2008) and others have asserted that creative practices need to be regarded on their own terms because of their complexity, not treated as a as a variant of research practices in other disciplines. As a result they are seen to have an 'authenticity' as research practices (Elkins 2008b:125). Unique to Art and Design, an artifact can be seen to 'embody' knowledge and reveal the product of research rather than 'reflect' knowledge (Emlyn Jones 2008:40). Estelle Barrett (2007), takes another approach by saying that practice should be regarded as 'process' which encapsulates activity and outcome - it should not be thought of as being represented by an object and demonstrated through the evaluation of a product or artifact (2007: 135).

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[11] James Elkins for example uses the term 'practice-based' as a description of studio work because it places such work within the context of professional practices, for example nursing (Elkins 2008: 123).

'Practice-based research' distinctions

Practice-centred research of the sort I am engaged in, therefore needs to be recognised as operating across many guises. This presents a very complex question of where the 'research' lies within practice-centred research, for, as Hazel Smith and Roger Dean (2010) argue, practice is not fixed and monolithic nor, as a result, is the knowledge it can generate, (2010:5). It also needs to be considered as something that it is ongoing and persistent (Haseman 2007:157). Graeme Sullivan (2008) conceptualises creative practice as operating across different but inter-related domains of inquiry: artist-practitioner, creative product, critical reflection (Sullivan 2008:47) which creates a different frames of reference as it emphasises how research can be thought of as process rather than outcome or product.

However, the problem remains of how to identify ways that research functions across the broad spectrum of creative activities that can be included in this notion of 'a process' or 'domains of enquiry'. This is necessary because we need terminology and conceptual tools to be able to evaluate where and how research is occurring. This is theorised by Linda Candy (2006; 2011) who divides research into two areas 'practice based' research and 'practice led' research. Candy uses the terminology 'practice-based' to describe research where the making of work is at the heart of the process. But Candy acknowledges that much of the discourse concentrates on the status of the art object and studio practice, and so extends the argument on practice by addressing how a further aspect of practice is demonstrated by the conceptualisation and theorisation that arises through the examination of practice. The term 'practice-led' is used to describe how the reflection and examination of the

making of artwork, exhibition, event or artifact constitutes research and that the way in which this contributes to discourse can be seen through further creative projects or through theorisation. Candy's approach is particularly important in relation to my PhD as she is rare amongst theorists in addressing curatorial work (2011:36) as practice. Her work is also pertinent to my research because her area of study includes technological and scientific projects in which she demonstrates how, in complex collaborations, multiple forms of research operate simultaneously (2011). Candy emphasises that professionalism within practice is an aspect of 'practice-led' research and that the examination of creative practices, like the art object itself, can demonstrate specialised knowledge and training (Candy 2011: 33-38).

Hazel Smith and Roger Dean make a distinction between 'practice-led research' and 'research-led practice' in studio and creative practice (Smith & Dean 2010). In the former, the making of work leads the research process and the knowledge comes from the reflection and subsequent engagement with the artifact or activity. In the latter, the process of making work is preceded by theoretical investigation. They argue that the processes are not mutually exclusive but that they can operate in an iterative or cyclical fashion such that a creative project can be seen to go through a series of research processes.

Candy's use of terminology should not be seen as operating in opposition with Smith and Dean's. Although the area that they are discussing is the same, and some of their concepts are overlapping, they are taking different approaches and contribute different methods that each aid analysis. In referring to my projects I use both sets

of terminology since different examples require different frameworks and approaches.[12]

Inter-related domains of inquiry

Candy, Smith and Dean emphasise that creative practice cannot be seen as operating from fixed positions or as being embedded in specific outcomes. Instead, creative practice is a dynamic set of relationships and activities. Importantly, as emphasised by Barrett (2007: 135), these represent a continual process in which there is an inevitable degree of fluidity in the way that this complex notion of creativity generates and represents knowledge. It can also be argued that such a lack of fixity is appropriate as it reflects a contemporary awareness that knowledge being fixed is problematic and instead it needs to be seen as unstable and ambiguous (Smith & Dean 2010: 3).

This approach is also in keeping with the direction taken by Visual Culture studies towards visual analysis, which has been hugely influential to my research. Visual analysis (Rose 2001) allows us to understand that exhibitions and similar cultural outputs can be addressed as 'events' rather than as fixed entities or 'texts' as their meaning is always in flux and contingent and because they are dependent upon the engagement of the audience or viewer (Mirzoeff 1999). Sullivan's identification of inter-related domains of inquiry: artist-practitioner, creative product, critical reflection (Sullivan 2007: 47) can also can be seen as a parallel to the articulation in Visual Culture studies of visual meaning (Smith 2009) operating through production,

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[12] I clarify on pp. 33-34 how I am using their terminologies

discourse and display.[13]

This PhD survey can be seen to operate in this way: that it is through the multiplicity of forms of research that are represented that knowledge is exchanged and that practice is placed at the centre of discourse.

Practice within the field of new media

These discussions are highly appropriate to new media in the context of practice-centred research. The development of new media as a recognised field is relatively new and there has been considerable epistemological debate over whether or not new media is distinct field around a new medium of representation (Manovich 2001; Lister et. al 2003; Chun & Keenan 2005; Graham & Cook 2010) or something less definable. However, no matter what approaches have been taken to the 'naming' of new media, the examination of creative practice has often been central to the way that new media discourse has evolved (Cubitt 1998; Manovich 2001; Ascott 2000, Gere 2002; Hansen 2006; Tribe & Jana 2007; Shanken 2009).

This PhD programme is not concerned with re-writing new media arts histories but in investigating how and why the examination of practice is significant. To do so it is important to contextualise the role that new media arts practice has played, and to emphasise that artists' projects and creative practice have not just been the subject of discussion but often the means through which new ideas have been propelled. It can be argued that works such as Jeffrey Shaw *Legible City* (1989-91)[14], Jodi's ascii

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[13] MA Visual Culture Course Handbook 2001-2012, University of Westminster
[14] http://www.jeffrey-shaw.net/html_main/show_work.php?record_id=83

artworks[15], or David Rokeby *Very Nervous System* (1986-90)[16] identified as

contributing to a 'canon' hold their place not just because they are significant

artworks but because they also demonstrate new ways of thinking about new media.

It should be stressed that while the establishment of a recognisable 'canon' has

started to occur within the sector and can be seen as an art historical strategy*[17]*,

work which has had a more local or limited impact has also been extremely

significant to the way that discourse operates through practice. For example, within

the UK, projects such Jake Tilson *The Cooker* (1994)[18], Jane Prophet and Gordon

Selley *Technosphere* (1995)[19], Nina Pope and Karen Guthrie *A Hypertext Journal*

(1996)[20], Richard Wright *Gridlock* (1996)[21] Susan Collins *In Conversation* (1998)[22]

or Soda *Soda Constructor* (2000)[23] had consequence and resonance at their time of

production. But sometimes projects such as these may cease to be cited in historical

studies due to the preference of publishers aiming for an international market, the

international profile of the artists, the relative power of the exhibiting organisations,

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[15] http://www.jodi.org <accessed 12 April 2013>; also
http://pixelispower.blogspot.ca/2007/04/jodiorg.html <accessed 12 April 2013>
[16] http://www.davidrokeby.com/vns.html <accessed 12 April 2013>
[17] The issues around the notion of a new media 'canon' have been well covered by
Edward Shanken: "…the canon of western art history has not placed sufficient
emphasis on the centrality of technology as an artistic medium … In the absence of
an established methodology and a comprehensive history this marginality will
persist … Moving to the problem of historicizing contemporary art involving
contemporary technology, one can see that the task is bound up in at least two other
issues: 1) the problem of defining a method for interpreting artworks on the basis of
technology and creating a comprehensive history of art and technology; and 2) the
problem of gaining canonical recognition that technology always has and always will
play an integral role in art-making." (Shanken, 2006a)
[18] http://www.thecooker.com <accessed 12 April 2013>
[19] http://www.janeprophet.com/old-website/technoweb.html <accessed 12 April
2013>
[20] http://www.somewhere.org.uk/projects/ahypertextjournal/ <accessed 12 April
2013>
[21] http://www.animateprojects.org/films/by_artist/w/r_wright <accessed 12 April
2013>
[22] http://www.susan-collins.net <accessed 12 April 2013>
[23] http://sodaplay.com/creators/soda/items/constructor <accessed 12 April 2013>

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public and academic taste or available documentation[24]. It is important to recognise that numerous creative projects contribute to the development of discourse as expressed through practice and that 'critical mass' of creative activity is attained through a spectrum of projects, not just highly acclaimed ones.

Within the context of this PhD programme, it should also be emphasised that while it is relatively easy to talk about the way that new media discourse has developed through an investigation and interpretation of artworks it is also important to think about the way that it has developed through the examination of different forms of practice, the modes in which creative agents operate, the behaviours they demonstrate and the nature of their interactions (Manovich 2001; Blais and Ippolito 2006; Graham and Cook 2010). One way that this has been achieved is by the many arenas through which practice as well as product is made pubic, reflected upon and documented. This is particularly apparent in the way that institutions have hosted production spaces for artists alongside exhibition opportunities, from the very limited scale of the provision of ICA, London (a studio in a former cleaners cupboard) to the well-endowed and prestigious studios and workshops of ZKM, Karlsruhe. The role of festivals, conferences which are coupled with exhibitions and other similar activities has been significant in the way that curators, artists, theorists and academics have gathered, not just for discussion, but to collectively experience artworks and events[25]. Furthermore, it should also be noted that an

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[24] Dealing with the omission of projects and practices which seemed to slip to the margins of new media art history was one of the goals when writing the *The New Media Handbook* (2006). This is dealt with in Chapter 7.

[25] For example ISEA bi-annual (and sometimes annual) conferences and exhibitions with an internationally variable location (1990-) Transmediale Berlin (1998-), DEAF Rotterdam (1994-); Ars Electronica, Linz (1979-). The compendium of essays produced by Ars Electronica to mark their 20th anniversary (Druckery 1999) gives a

important feature is the way that many new media practitioners operate as agents

moving across different professional fields within Art and Design: as a creator,

theorist and as educator[26]. Arguably this has created a culture that is highly attuned

to appraising new media art works as being reflections and embodiments of

knowledge, the gallery or arts organisation as a place where new media practice is

articulated and advanced, and dissemination of ideas and practices crossing

seamlessly into educational departments of art and design, media and visual culture

studies.

Breadth of practice and areas of activity

While this PhD project is mostly concerned with creative practice in Art and Design,

the breadth of what constitutes new media practice across sectors reveals the

complexity that is inherent in the term 'practice'. Obviously this includes work that

is defined by its makers as being fine arts practice, but it also includes work by

practitioners who are seen to contribute to creative discourse within new media,

but not define themselves as arts practitioners. They may operate in areas as widely

differentiated as robotics, artificial life, gaming, software, hardware design, data

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good indication of the way that discussions about theory, practice and artworks
occurred equally throughout the festival's existence and this can be seen to be
typical of the sector.
Links:
http://www.isea-web.org <accessed 12 April 2013>
http://www.transmediale.de   <accessed 12 April 2013>
http://deaf.nl   <accessed 12 April 2013>
http://www.aec.at/news/   <accessed 12 April 2013>
[26] For example: Tom Corby, Reader in Interdisciplinary Arts, University Of
Westminster; Simon Biggs, Research Professor in Art, Edinburgh College of Art,
Victoria Vesna, Professor of Design and Media Art, California Institute of the Arts;
Sara Diamond, President, Ontario College of Art and Design.

visualisation, image manipulation and web design[27]. This complexity is not only visible in areas of activity but demonstrated through the organisations and structures in which debate has been articulated. For example: festivals and conferences such as ISEA (The International Symposium for Electronic Arts), Next Five Minutes (Rotterdam) and FutureSonic/ FutureEverything (Manchester); online forums for discussion such as Empyre, Rhizome or CRUMB; or centres designated as creative and critical hubs such as Banff New Media Institute, Canada[28], or ANAT (The Australian Network for Art and Technology)[29]. The issues and contexts that frame new media arts also include those that arise from industrial and commercial practice, which distinguishes new media practice from many other areas of the arts[30]. This also means that the contexts in which new media practice occurs are various, and this creates an important context to this study. New media arts practice is often collaborative or operates in a dialogic relationship to the creative industries and other disciplines. This is demonstrated by many of the projects that are under consideration here and is an aspect of my studies of the way that practitioners operate[31].

Curation as practice

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[27] This is indicated by the breadth taken by the comprehensive study of technology based arts projects in Wilson, S. 2002 *Information Arts: Intersections of Art, Science, and Technology* although he avoids naming projects 'new media'.
[28] http://www.banffcentre.ca/bnmi/   <accessed 12 April 2013>
[29] http://www.anat.org.au   <accessed 12 April 2013>
[30] This point is not without contention. Writing in 2004, Lisa Haskell, former Arts Council Officer stated: "the difference in cultural and economic currencies attached to the 'pure' and the 'applied' has been a persistent problematic in European Culture. Where the form of creativity on computers is concerned the question is even more acute." And concluded that "distinctions such as 'art' and 'design' seem outdated and unpalatable" and so new system of values needed to be applied in which any productions could be seen as 'culturally driven'. (Haskell 2004:121, 125)
[31] This particularly relates to my section *The New Media Handbook* through which I included a breadth of practice from industry to arts.

This PhD programme is not a solely a study of curatorial practice, but curation lies at the heart of the way that the research problem is investigated. As practice-centred research, one of the practices being addressed is my own as a curator and it is through my interaction with artists and producers that the material being studied is produced. My argument for new knowledge comes about through my examination of the events, outcomes and activities that my practice has generated and from my reflections on the sector from an informed position as a curator. Therefore, while I will also contextualise my projects in relation to other curatorial initiatives and approaches it is important to reflect upon the role that curation plays within studies of new media and how it is articulated.

As explained above, creative practice has had a central role in the development of new media studies. Creative practitioners across the sectors have driven, and questioned, what is new or possible and technically or conceptually challenging. The importance of the curator, in the historically established role as exhibition selector and producer, was recognised early on as contributing to discourse through landmark exhibitions such as *Cybernetic Serendipity* (1968).[32] Organisations such as ISEA, founded in Netherlands in 1990 to facilitate the interdisciplinary exchange and dialogue between scholars, practitioners and other individuals and groups, gave voice to curators from its earliest events[33].

It could be argued that since then, discourse around curation in new media has developed as a micro area of study in its own right, with publications such as

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[32] *Cybernetic Serendipity* (1968) was curated at the ICA, London by Jasia Reichardt documented in Reichardt, J. (ed), 1968. *Cybernetic Serendipity, the computer and the arts*, Studio International Special Issue, London.
[33] http://www.isea-web.org/

Christiane Paul (2008) *New Media in the White Cube and Beyond: Curatorial Modes for Digital Art* and Beryl Graham and Sarah Cook (2010) *Rethinking Curating: Art after New Media.* Graham and Cook's work is especially important in this respect and deserves particular emphasis in the context of my practice. Not only can their book be seen as a formative work that surveys the contemporary landscape and draws together the threads from divergent territories, but the text operates in relation to their broader practice which comprises managing the online discussion site, CRUMB, which has been the site of continual debate around new media practices, including curation, since 2000[34]; operating as curators themselves and examining their own activities; teaching a postgraduate programme in Curatorial Studies and leading a PhD community in new media curatorial studies at the University of Sunderland. Their combined work demonstrates how knowledge is generated through inter-related positions: artist-practitioner, creative product, and critical reflection.

Graham and Cook commence their book with the statement:

> "As curator, Steve Dietz states so succinctly, new media art is like other
> contemporary art, but it also has particular characteristics that distinguish it
> from contemporary art and by extension from the systems involved in the
> production, exhibition, interpretation, and dissemination of contemporary art
> – the realm of curators." (Graham & Cook 2010: 1)

It is worth pausing to consider how Graham and Cook have nuanced this statement because it can be seen to be typical of the way that new media is presented. Firstly,

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[34] CRUMB Curatorial Resource for Upstart Media Bliss http://www.crumbweb.org. CRUMB currently (March 2012) states its purpose as being "CRUMB aims to help those who 'exhibit' new media art, including curators, technicians and artists."

they reference a critical commentator, Dietz, who is not a theorist operating from a distance, but instead is a colleague practitioner. This demonstrates how within new media, sharing and recognising expertise within an arguably small international community is an important aspect of the way that discourse is built up. Secondly, they assert that new media art shares a commonality with contemporary art practice while they simultaneously insist that there are different conditions which revolve around particularities of technology. These are phrased here as being activities - but could equally be phrased as opportunities, approaches and philosophies.

Graham and Cook go on to add:

> "The book is aimed at curators of contemporary art, but because curating is necessarily led by the art, it should also be of interest to artists and those engaged by the gnarly diversity of the field of new media art." (2010:1)

This statement has equally subtle layers of meaning, it indicates that new media practice is a field of activity that is moving from the margins towards the centre of contemporary practice. It also implies that the issues involved in curating are not just to do with the presentation and formulation of new media work but that they can help unravel the complexities of what it is and how it is being represented.

The assertion that new media practice and contemporary art practice are 'similar but different' could be said to underpin many of the discussions about new media curating. A considerable amount of discussion that takes place on discussion sites like CRUMB or in texts like *Rethinking Curating* (2010) or *New Media in the White Cube and Beyond* (2008) deal with the issues around changing practices: how the

institutions and systems of presentation and dissemination and procedures of

creation and production face new ways of working with new media. This might be

discussed in terms of a paradigm shift or as a gradual adaptation but it is generally

presented in terms of change and its consequences. [35]As indicated by my own work

this is very much the case and is certainly the language that is used in the

Momentum Forum which I referenced as the starting point for this program.

Momentum spoke of new practices acquiring a critical mass through the increased

amount of activity but also as a result of consistent exchange and evaluation of

projects.

The concept of change evidenced by discourse around new media curating is not

only limited to ideas of changed practices but also refers to changes to the

understanding of what makes art: how the reference points for what constitutes

creative activity have altered. As phrased by Andreas Broeckmann:

> "what does it mean to think through the machine in artistic practice?... In order
>
> to embrace (new) practices, we need to develop an aesthetic theory that is able
>
> to adequately approach recent works of contemporary art which deploy digital
>
> technologies and which expand the categories of art theoretical reflection."
>
> (Broekmann 2006: 194)

The subject of curating could therefore be said to be both ontological, dealing with

new ways of conceptualising practice, and epistemological, finding new ways of

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[35] As I revise this document prior to submission, in August 2012, The Crumb list has erupted with a discussion about these very issues. The catalyst for this is an article by the esteemed curator and art historian, Claire Bishop "the Digital Divide' in *Art Forum* (September 2012). The debate indicates how the perceived relationship between the digital arts sector and the fine arts sector is extremely complex and, more importantly, how they have different perceptions that indicate very different values.

naming it. Indeed, a considerable amount of curatorial energy has been expended on

trying to define, at various times, what new media practice should best be called[36].

This is not to trivialise the debate but to indicate how significant, but also variable,

the frames of reference can be. Within this, the complicated notion of what it means

to curate has also been explored through practice and reflection. Although Graham

and Cook assert that "curating is necessarily led by the art" maybe it is more

complicated that that. As the studies in the PhD survey indicate, this is not always

the way that practice operates and the distinctions between curator and maker,

instigator and developer or collaborator and participant, are not always clear.

Sometimes it is hard to pin down the place that curating has in its relationship to art

practice in a way that is any more specific than to say that *curating necessarily*

operates in the context of art and its processes.

Curatorial practice in contemporary arts

On the other hand one might observe that the debates around curating in the fine

arts sector sometimes have a different focus. The rise in prominence of the curator

as a leading contributor to contemporary practice has fuelled discussions that deal

with criticality, authority and agency: centering on 'the curatorial turn' (O'Neill

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[36] This debate, and the issues around terminology, is typified succinctly by Simon
Biggs and Patrick Lichty in a CRUMB posting (11 Dec 2004).

Lichty: In my current set of writing, I am making the argument that at best New
Media is at best a broad classification, and at worst becoming a museological term
for a movement

Biggs: I don't think the term new media art is very useful at all. It determines
difference according to means rather than intent or context ...New media will never
be recognised as a movement, because it isn't. It is not even an aesthetic. It is not a
coherent thing at all. It is simply artists being artists, of whatever kind, who happen
to be using new media."
http://www.crumbweb.org/discItemDetail.php?&useArch=1&archID=8&op=2&sub
link=1&fromSearch=1& <accessed 8 February 2012>

2009). They have, variously, explored how the curator provides a level of

intellectual engagement with the subject of the artwork and creates a critical

context around it that both communicates its purpose and extends its scope[37]. They

focus attention on the way that contemporary curatorial practice can be seen to

operate within a series of shifting power relationships in which the curator is in turn

empowered by relationships with institutions, artists and the public (O'Neill 2007,

Rogoff 2007, Hofmann 2008; Groys 2008).

There is much shared ground between discussions about criticality as an aspect of

curatorial discourse in the contemporary arts and the way that criticality concerns

many new media curators. But there are substantial differences in the way that

'criticality is discussed' that is illuminating. Often the discussion in curating

contemporary arts deals with issues around the way 'criticality' is framed and

through curating to explore the question 'what is contemporary art?' (Aranda, Wood

& Vidokle 2010). These discussions include: how it operates in relationship to the

institution ('new institutionalism') (Farquharson 2006, Doherty 2004), how it sits

alongside other positions that deal with the role of arts, such as relational aesthetics

(Downie 2007), marginalized practices (Sholette 2010), communities (Rugoff 2008)

or the relationship between curating and other disciplines such as education (O'Neill

& Wilson 2010). But these operate from the position that contemporary art practice

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[37] "The art of curating lies in the capacity to grasp the potentials inherent in the magic of social encounters and the power to activate these potentials in the act of facilitating collective cultural manifestations." (Verwoert 2010: 24)
"Thus the exhibition is to be understood here not merely in terms of its "surface" or design but as part of a complex of media in which all elements contribute consciously or unconsciously to the production of meaning. Today exhibition is considered a cultural practice which conveys values and norms and thus, implicitly, ideological concepts." (Richter 2008: 1)

is recognisable and has an acknowledged status. In comparison, discussions around new media curating might explore how criticality can be achieved but at the same time the discussions may also be dealing with cultural innovation and practices in areas that are not immediately discerned as being an artistic context[38]. For example, the substance of the work under consideration might be open source software, distributed networks, or geo-specific encounters. The 'work' at the heart of the practice might be instructional, evolving and totally dependent on situation or participation and therefore more closely related to process than artifact. It is no surprise therefore that new media curatorial discourse has tended to point to 'characteristics', 'categories' and 'modes' as a way of conceptualising new media rather than describing forms of technology, types of content or styles of interaction (Paul 2008; Cook 2008; Graham & Cook 2010; Muller 2011).

However, while questions of new forms of work and new modes of practice are a significant part of new media curatorial discourse, the more traditional topics of curatorial strategy and matters of operation are still as prominent as they are with contemporary arts curation. For example: dealing with the gallery or arts venue as a place to present work and a site of engagement; the ethical responsibilities of commissioning from living artists; exhibiting collections; community interactions; concepts behind display techniques; the role of the audience as participant, viewer and interactor with work. Therefore the contributions of contemporary art curators such as Mary Jane Jacob (2008), Paula Marincola (2008), Dorothee Richter (2010) and Jens Hoffmann (2007) about exhibition tactics have an important synergy with

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[38] As evident in CRUMB monthly discussion http://www.crumbweb.org

discussions in the new media field.

Curating in the museum sector

By stepping back from the arts sector and taking in a broader field of cultural practices, it can be seen that concerns voiced in the discourse around new media curating also have a synergy with discussions in museum curating. While new media practices are not always a subject of interest in the contemporary art world, the impact of digital technologies is a dominant subject in contemporary museum discourse. Common topics include the participatory museum, the audience engagement across platforms and media, both synchronous and asynchronous, experience of the virtual object and the online collection, the museum as an experimental space, museum going as a social networked experience or the museum's role in collecting digital experiences (Black 2005; Din & Hecht 2007; Falk 2009; Parry 2009; Simon 2010). Although it must be recognised that the position of 'museum curator' is often more clearly defined by institutional practice[39] than that of the new media or contemporary art curator, the concept of criticality and context-creating is no less valid in the museum environment.

The context of my work beyond the PhD survey

Lastly, the context of curatorial practice for this PhD programme is only complete if it references the context of my body of work. My work with DA2 Digital Arts Development Agency from 1998-2001 generated over 100 arts events including

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[39] This is best illustrated by a tweet from an American museum curator to me in August 2012 in response to a project I was running for the Museum of London to collect tweets in response to the Olympics, and where I argued that there was now a fluidity with the term 'digital curator'. She tweeted that "I understand it might be ok to have curators of social media in the arts but not in institutions where there are real curators".

exhibitions, performances and educational activities. Many of the collaborations

with arts groups and artists such as Blast Theory (*Desert Rain*, 2000), Mongrel

(*Linker* 2000) and Luke Jerram (*Tide*, 2001)[40], which continued as active networking

relationships after the completion of the projects, set in train a series of projects

looking at the experimental possibilities of digital technology. It also set in place a

number of collaborations with academic research institutions, such as CAiiA-STAR

at University of Plymouth, with Professor Mike Phillips, and the University Of

Westminster, with Professor Jane Prophet, which framed a component of my work

around problem-based enquiry in an inter-disciplinary context. Over the following

years, alongside the projects included in this programme, there has been a

consistent inquiry into new forms of collaboration, in particular, through long

running research projects that included many different stages and activities: for

example, *Cell* (2003-2007) which explored the visualisation of adult stem cell

research and cell theory, which resulted in multiple outcomes in the arts, medical

research and computer science in the form of exhibitions and peer reviewed

articles[41].

Positioning the question of curating as research

To conclude this examination of curating as a research context for this PhD

programme, we could say that contemporary new media curating itself

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[40] The DA2 documentation of these projects as DA2 commissions on the organisations website at http://www.da2.org.uk is no longer live on the web but is accessible through web archive website e.g. Wayback

[41] Collaborators: Prof. Jane Prophet, artist (University of Westminster), liver pathologist and stem cell researcher Dr Neil Theise, (New York University, NYC) Prof. Mark d'Inverno, computer scientist (University of Westminster); Rob Saunders, artificial agent programmer (University of Technology, Sydney). The resulting papers are listed in the bibliography: d'Inverno & Prophet 2004; d'Inverno & Prophet 2005; Prophet & d'Inverno 2006.

demonstrates a research problem that is actualised through practice: the need to

understand what new media art is and how it can most effectively and responsibly

be represented and reflected.

4. Research methods

As Scrivener (2000) and others argue, the demonstration of the way that knowledge has been generated is of paramount importance in practice based research (Wilson 2009). As argued previously, the creation of an artifact alone does not necessarily produce knowledge and in any research context it is necessary to demonstrate that the methodology chosen provides the appropriate means to elucidate the aims of the project or examine the problem under consideration.

As previously discussed each of the research projects conforms to practice-centred research methodology employing a practice-based or practice-led research approach. For each project, within each of the chapters of the accompanying volume, the specific research methods are discussed more fully. However, it is also important to consider the method that can be employed to address the value of the research programme as a whole and to consider how knowledge can be gained through the process of examining a sequence of projects as a consistent practice. This is of course a *practice-led* research activity by Candy's definition, in which creative practice (in the form of my curatorial endeavours) and previously existing projects are scrutinised to create new knowledge.

I have identified the fundamental question being addressed by my PhD programme as '*Can we develop new insights about new media in the arts through the examination creative practice?'* I have argued that the value of a PhD by Published Work is not that it rehearses already existing information but that new knowledge is produced by the action of bringing pre-existing data together and examining it, in this case by

seeing a specific programme of work in the context of new media discourse and curatorial practice.

However, in addition we need to reflect upon the methods that are employed for this meta-research. As the short introductions to the projects indicate they take place in different contexts and reveal different processes. The necessary question to ask is if we can learn more from seeing these projects as a practice rather than as single items. And therefore if the whole is greater than the sum of the parts.

A framework for Visual Arts Knowing

Graeme Sullivan, in *Art Practice as Research: Inquiry in the Visual Arts* (2005) uses a framework to describe what he calls 'Visual Arts Knowing', the means by which creative practitioners develop their understanding as a series of cognitive activities. Sullivan represents this as a triangulation: *thinking in a language*; *thinking in a medium*; *thinking in a context* (Sullivan 2005).

Thinking in a language is identified as artists' practices that are foregrounded by conceptual concerns, linguistic or narrative constructions and conventions. Thinking in a medium is identified as practices where working with the materiality of a substance or a process of production is the fundamental concern of the artist. Thinking in a context is identified as situated cognition, whereby the social interactions and cultural context in which an artist operates informs and shapes the nature of production. (Sullivan 2005: 115-131)

However, in his framework, Sullivan introduces an additional element, that of

transcognition. He argues that the three forms of thinking are "instances of alignment and emphasis, rather than distant and discrete domains"(2005:132). Transcognition is the recursive and purposeful process by which the artist moves and negotiates between the different elements[42]. In his framework this creates a fourth triangle located in the centre of the other three stacked triangles, thereby visualising the process of exchange and movement.[43]
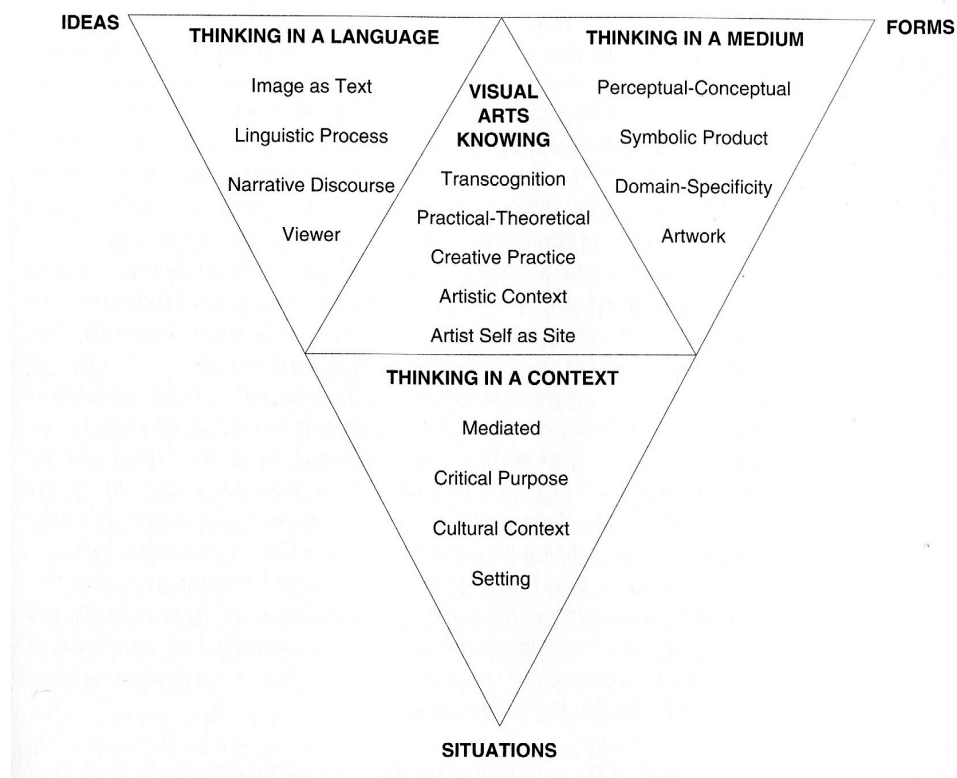
Figure 1. Graeme Sullivan (2005: 129) 'Framework for Visual Arts Knowing'

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[42] Sullivan further defines transcognition as: "I describe this transcognition because it captures the movement of the artistic mind. Transcognition is a process of visual knowing where the forms, ideas and situations are informing agents of mind that surround the artistic self during visual arts practice. these strategic interactions occur over time and involve iteration and negotiation as individual purpose is mediated by situational factors. " (2005: 130)

[43] Sullivan (2010) also proposes a variant of this framework to illustrate 'practice-led research: it includes 'dialectal practices', 'conceptual practices', 'contextual practices' and, at the centre, 'theoretical practices' (2010: 49).

Adapting and re-purposing Sullivan's framework

Sullivan's approach gives me pause for thought. It may have been evident that in my over-view of the research context relating to curatorial practice I emphasised the distinctions in the discourse between new media curating and fine art curating, in the way they are theorised and described. What I did not do was to describe how curating is understood to generate knowledge, not just to reflect it.

In part this is because there is a paucity of text that address what it means to develop knowledge through curating as a creative practice, although I would suggest that this is often discussed in classrooms and in break out sessions at conferences. It is more typical to find texts describing the pragmatic or practical knowledge that is developed through repeated activity (Marincola 2008; Storr 2008). Or to find discussions about the way that curatorial activity has particular attributes that place it amongst knowledge generated through the arts (Slager 2004; Holert, 2009). [44]

Typically then, studies reflect upon how projects come about and how they are realised, which is in part how this PhD by Published Work is structured. However, following Sullivan we might ask if there is another way to conceptualise the process by which knowledge is generated, and in doing so to deepen our awareness of what happens within the curatorial process. Is such a thing as *Curatorial Knowing* (to use the noun in an active sense as does Sullivan) that equates to Sullivan's description of *Visual Arts Knowing*?

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[44] There is of course also a wider and substantial discourse that considers what creative thinking consists of including: John Dewey (1934) *Art as Experience*, Henri Bergson (1946) *The Creative Mind*, John Dewey, and more recently, Mihaly Csikszentmihalyi (1996) *Creativity.*

As discussed earlier, it is not normally the intention for an exegesis for a PhD by Published Work (that is looking at pre-existing work) to advance a new thesis, but it serves my purpose to offer a framework to examine the work being surveyed. A framework that provides the means to conceptualise how knowledge is being created throughout my practice and to identify how it is different in the various case studies allows us to think about knowledge as an outcome of practice.

Therefore, I have adapted Sullivan's framework of *Visual Arts Knowing* for my study to demonstrate how knowledge is generated through different aspect of curatorial practice, through different activities carried out, and across different contexts. Adopting Sullivan's concept of transcognition, we can propose that *curatorial knowing* – or knowledge generated through curatorial activities - is arrived at through the relationships between the component parts and thinking across boundaries. It creates the possibility for a **Framework of Curatorial Knowing**. [Figure 2.]

Framework of Curatorial Knowing

CREATION

TRANSCOGNITION

RECEPTION   REALISATION
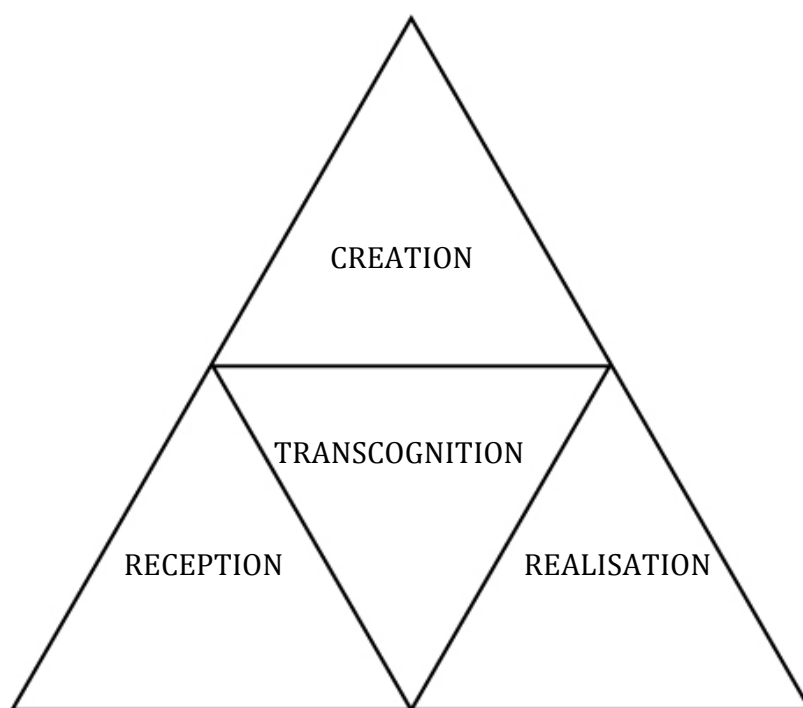
Figure 2. Ride, P. 'Framework of curatorial knowing' (2012)

The first triangle in the framework of curatorial knowledge consists of the domain of

creation: artists' projects and professional activities that result in the making of

work. The practices that are associated with this area are conceptual and theoretical

development, experimentation with media forms and design, creative research and

production. This area is also associated with skills: technical expertise and craft

skills; cognitive skills in articulation and understanding of complex ideas; and

theoretical skills in synthesising information.

The second triangle consists of the domain of *realisation* and actualisation of

projects and the siting of them within 'real world' spaces: the organisation of

exhibitions, social networks, productions and events. Because in new media practices the site of production may be more significant than the site of presentation (or there may be no formal presentation) the concept of 'site' has to be very broad. Practices that are associated with this area are management and organisation, but also networking and communication. Whereas the first triangle provides the space for agents (people) who are involved in conceptual and creative activities, this triangle is for agents who are involved in the presentation of the resulting work in the public domain and therefore contains all those who have an institutional or organisational involvement, from funding, managerial, promotional, interpretative to evaluative. (In 'real terms' these may of course be the same individuals performing different roles and functions.) This is also the space where context and criticality are of prime concern. It is also the space where accountability is of importance.

The third triangle is the area of ***reception***. Here, audience is the main concern, in the form of participant, viewer, user, consumer, sampler or data provider. This group of course includes the individuals present in the previous triangles. Key concepts in this area are qualitative and quantitative engagement; social and cultural value; impact and resonance; legacy and contribution of projects to sector and discourse. Skills in this area are analytical, theoretical and conceptual, which are necessary in interpreting, appreciating, consuming and evaluating the creative product. This is also the domain where concepts of public realm and public space are located, and additional concerns are those of ethics, inclusion and access.

Curatorial practice requires involvement within each of the three triangles, but it

also requires movement between them, while operating in them simultaneously, sometimes taking on divergent or seemingly oppositional approaches or roles.

However, as with Sullivan's visual knowing framework, the fourth internal triangle is of great significance as it is the space of ***transcognition***. This emphasises that curatorial practice is not static. Not only is it impossible for a curator to entirely operated in one domain (to think only about creativity or about presentation) but a curator moves between the different domains and therefore between the different value systems, urgencies and discourses that each domain has. (And there can be massive differences between decision making involved in the creative, realization and reception aspects of any given project.)

Sullivan refers to transcognition as the "recursive and purposeful process by which the artist moves and negotiates between the different elements" (Sullivan 2005: 130). This emphasises that it is not a resting place or a space of conclusion, but rather a space of cognition. It can also be seen as a space of constant 'exchanges', and therefore this is the linking space of dialectical practices and it is here that meaning is made though dialogue. One of the values of transcognition as a concept is also that it can embrace conflict and disparity. The difference between the priorities, interests and ways of operating can be instructive in allowing us to understand the way that project has a shape and how it comes into existence.

We can argue that when knowledge is generated through the curatorial process it is through the relationship of these component domains (triangles) which is also demonstrated in the framework as an integrated form. Together they create a single

triangle, that of curatorial knowledge as it relates to new media practices. They indicate that to develop new insights through creative practice we need to explore the different facets of practice to see how meaning is constructed. The beauty of the visualisation of the stacked triangle as a structure is that it also represents process: there is no 'right way' up but conceptually is it therefore always mobile and can be approached from any side. It therefore implies that what is visualised is process-based rather than something fixed and contained. [Figure 3.]

Framework of Curatorial Knowing

CREATION

Working with practitioners:

R&D and production; experimentation;

imagination; interpretation of concepts and data;

collaboration; craft skills; training; knowledge of media

TRANSCOGNITION

Understanding the audience; *conceptual movement*   Actualisation of projects;

participant; user; consumer;   *between*   management; 'siting' works;

data-provider; interpretation;   *domains*   communication; working with

impact; engagement; resonance; legacy   'real' space and institutional needs

quantitative & qualitative research;   public liabilities; interpretation;

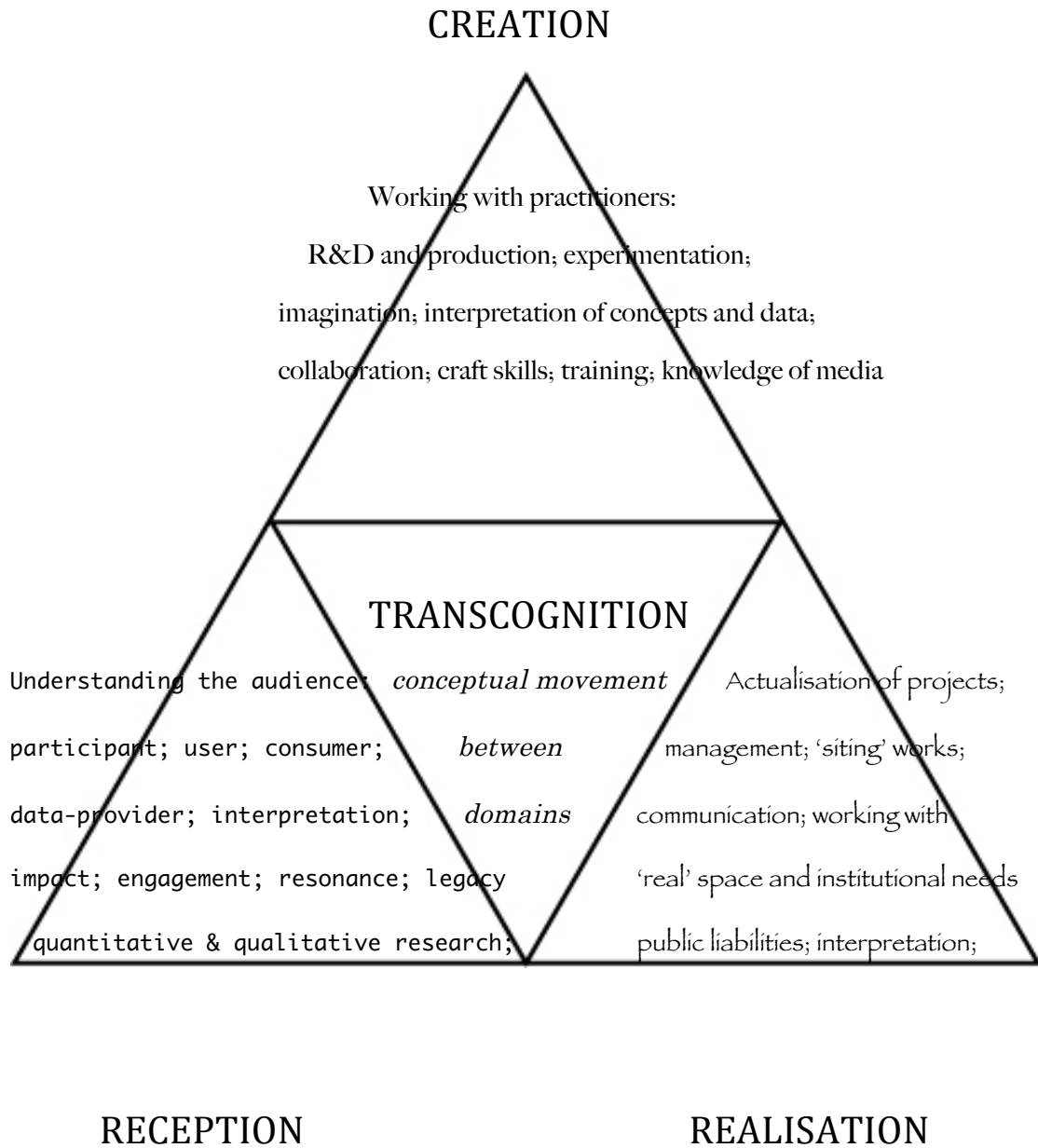**RECEPTION**   **REALISATION**

Figure 3. Ride, P. 'Framework of curatorial knowing': showing processes (2012)

The generation of knowledge as a process

However, while this framework is instructive in laying out the way that curatorial practice operates across areas and the process by which knowledge is developed, we need to look further to examine how the generation of knowledge becomes part of the process. This is especially the case since I am arguing that this process represents the way that knowledge is created through the continuum of my practice, not just via specific projects. This concern is summarised by Sullivan (2010) in a later publication:

> "...human understanding arises from a process of inquiry that involves creative action and critical reflection. There is an inherently transformative quality to the way we engage in art practice and this dynamic aspect is a unique quality of the changing systems of inquiry evident in the studio experience. The artist intuitively adopts the dual roles of the researcher and the researched and the process changes both perspectives because creative and critical inquiry is a reflexive process. Similarly, a viewer or reader is changed by an encounter with an art object or a research text as prior knowledge is brought into doubt by new possibilities." (2010:51)

Sullivan's position is key to understanding how the *framework of curatorial knowing* is being used to investigate my primary research question for this programme: *Can we develop new insights about new media in the arts through the examination of creative practice?* While Sullivan's emphasis is on studio work, the concept of an extended process being the outcome of creative work is just as viable. Much in the same way that he sees the artist moving between the role of the researcher and the researched, we could argue that this is even more intensely the case for the curator.

The emphasis on creating a critical context around work means that the practice of curating as well as the project itself is always a subject for investigation. But the most significant aspect of Sullivan's summary is the emphasis on reflexivity as the process by which activity and process is transformed into knowledge.

Reflection is generally used as a synonym for higher-order mental processes and can include making inferences, generalisations and evaluations as well as feeling, remembering, and solving problems but it needs additional analysis to differentiate reflection from thinking or learning. By examining the way that reflection plays a part in problem solving we can see how interpretation, analysis and decision making, when it is predicated on a critical assessment of assumptions, leads to reflective action (Mezirow 1990).

Theorising reflection: Kolb and Schön

Two theorists whose work needs to be addressed in this context are David A Kolb and Donald Schön. Kolb argues that ideas are not fixed and immutable elements of thought but are formed and re-formed through experience (Kolb 1984:26) and that learning is the process whereby knowledge is created by the transformation of experience (1984:38). In Kolb's 'learning cycle' individuals, when faced by a task, problem or decision, draw on their experience, reflect, generalise and test out their assumptions or choices, and then repeat the sequence. In this cycle the use of reflection propels the critical awareness of the individual.

Schön (1983), in contrast, concentrates on the relationship between reflection and action. Whereas Kolb's application of reflection is quite abstract, Schön is concerned

with the context of the professional, where there is situated or tacit knowledge

(1983: 49-54; 59; 165), and where tasks are performed with expected outcomes or

in specific situations, whether the individual is a teacher, sportsperson or a medic.

Schön identifies two important distinctions, *reflection-in-action* and *reflection-on-action*. In the former, reflection takes place in the midst of the activity, sometimes

unconsciously, and operates within a continuum since it requires thinking about the

activity and choices that have preceded it and anticipating those that are to come.

Reflection-on-action takes place following an activity or in interval periods within

an activity (Schön 1983).

Schön's approach has had a significant influence on the way that practice-based

research is theorised as it provides a means to analyse how the outcomes of

personal reflection can be generalised. It also enables practitioners to show how

they use tacit knowledge explicitly and systematically within their process of

reflection (Elkins 2009; Scrivener 2011; Candy 2011; Sullivan 2005, 2010).

Applying concepts of reflection to curatorial practice

Taken together, both Kolb and Schön provide a way of understanding how the space

of *transcognition* operates in the *framework of curatorial knowing*. The curator

makes choices, decisions and solves problems in the spaces represented by the

three outer triangles, *creation, realisation* and *reception*, and these are specific to the

matters at hand in those contexts, or to the needs at various points of a curatorial

project. Therefore the curator is employing both reflection-in-action *and* reflection-on-action in these spaces. But choices, decisions and problems also exist in the

central area, and these are less task focused but more to do with the way that

connections are being made, that projects are being placed within an extended set of contexts and that knowledge about curating itself is being developed. It is relatively easy to say that a curator 'moves across activities' or that 'dialectical practices take place', as I have, but these processes are complex and require subtle maneuvering and both conscious and unconscious planning. The area of *transcognition* therefore is a space that only works if reflexive practices are employed. This space therefore, is primarily a space of reflection-on-action.

CREATION

[reflection-on-action & reflection-in-action]

TRANSCOGNITION

[reflection-on-action]

RECEPTION

REALISATION

[reflection-on-action & reflection-in-action]
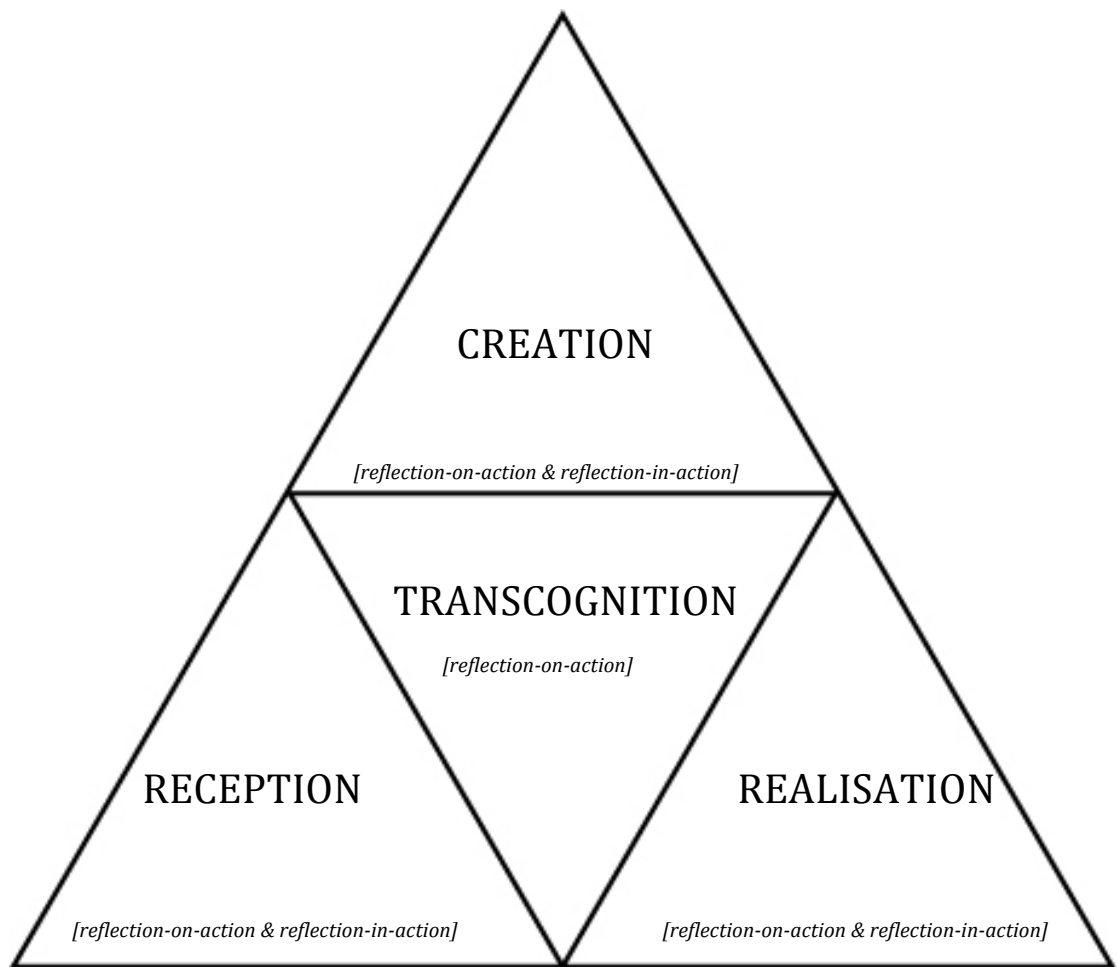
[reflection-on-action & reflection-in-action]

Figure 4. Ride, P. 'Framework of curatorial knowing' incorporating Schön's theories of reflection (2012)

Transactional relationships

Lizzie Muller, a curator who works primarily in new media also discusses the impact of Schön upon her practice, identifying Schön's emphasis on the transactional relationship between the practitioner and the situation (the professional context), in which the practitioner is an agent within the situation. Any changes, decisions or choices made by the practitioner reverberate and cause changes to the situation and to the practitioner (Muller: 2011). In this way the process is infinitely open-ended, but demonstrates how reflexivity operates consciously. Seen within the stacked triangles we can argue that changes and decisions made in the domain of *transcognition* affect the domains of the other three triangles, *creation, realisation* and *reception*.

Knowing in action

Another aspect of Schön's analysis that needs to be considered is one that receives less mention, namely, 'knowing in action'. This concept relates to tactic knowledge but is more complex in that it is linked to the area of professional expertise but it is demonstrated through practice, it could also be seen to create a contextual reference within which reflection takes place. "When a practitioner reflects in and on his practice, the possible objects of his reflection are as varied as the kinds of phenomena before him and the systems of knowing-in-practice which he brings to them" (Schön 1983: 62). Therefore the knowledge and understanding that is built up by the practitioner – a "repertoire of examples images, understandings and actions" (Schön 1983: 138) is also represented by the space of transcognition as this is a crucial part of the way that curators develop their practice. [45]

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[45] This is particularly demonstrated in the case study of David Rokeby, Chapter 6.

Schön elaborates that when a practitioner makes sense of a new situation he also maps it against his knowledge or repertoire which "includes the whole of his experience insofar as it is accessible to him for understanding and action" (Schön 1983: 138). Muller, in examining her own practice, articulates the consequence of this in curatorial practice as "the ideas of appreciative system and repertoire present a sense of accountability that is at the heart of curatorial-practice-based research... My process is accountable to the situation and to its own cumulative internal logic... it provides strategies for understanding how a personal practice defines possibilities for action but also how it can be challenged, enlarged and articulated through action" (Muller 2011: 102). Through this statement, Muller's understanding of her own practice further demonstrates how the *framework of curatorial knowing* is made possible by the existence of the space of transcognition.

The significance of continuous practice

It is possible for me to map the projects included in this PhD programme against the framework and thereby identify how each of them at different times has a particular emphasis in each of the domains. They all draw on the knowledge, skills and understanding that operates in each of the domains, and each of them has a particular emphasis on problem-solving and decision-making that is located in one or more domain. However, what is of equal importance is the way that the projects are seen as elements of a continuous practice. Themes and concerns that were secondary in early projects re-emerge with greater consequence in late projects as

issues are re-articulated and grow in consequence[46]. Projects, such as the exhibition of work by Lyndal Jones (chronologically the first project under consideration) is re-addressed as knowledge gained from it fuels later creative projects, and its impact upon practice is re-examined in later scholarly articles. In this example a creative project initially examined as practice-based-research in 2001 becomes part of practice-led research in 2010, as demonstrated in 'The Narrative of Technology' (2012). As emphasised by Schön, reflection-on action, and therefore the knowledge-in-action that accrues, can be an extended activity as it operates throughout a practice, not just in spurts. In my case, ten years of curatorial practice demonstrates how practice expands but is also self-conscious, self-referential, building a store of understanding and concurrently contributing to the discourse of the sector that frames it.

The considerations that were first articulated at the *Momentum Forum* in 2001 as a research project can therefore be seen to emerge repeatedly. Just as the projects can be mapped onto the framework, so can the secondary research questions, which are all articulated, with varying degrees of emphasis in all the projects, and which run like a thread, through the entire practice.

- What is the role of the curator in facilitating the development of knowledge?
- How does an understanding of the audience for new media practice contribute to the development of knowledge?
- In what ways can practitioners' knowledge skills and expertise be articulated as a significant part of creative practice?

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[46] I did attempt to create a graphic to represent the all projects within one framework but it requires an animation to make sense of development over time, or word cloud to give a sense of concepts moving in and out of focus. Instead I have created an aggregated framework which is in the Conclusion.

- How do cultural concepts around digital technology, such as 'newness' and 'innovation', affect the way that new media practice is understood and experienced?

The *framework of curatorial knowing* itself demonstrates how the primary research question is conceptualised, explored and justified. It is both a method for analysis and an outcome. In asking *can we develop new insights about new media in the arts through the examination of creative practice?* we are pointing to the practice of media artists and other creative practitioners but also to curatorial practice. As argued previously, a fundamental aspect of a PhD can be that it demonstrates frameworks for knowledge and advances in the way that knowledge is organised. Through the remaining chapters of this exegesis, which present the documentation of the projects under consideration, I hope that it is evident that the framework I propose is matched by the content that has been 'published' in the public domain to the scrutiny of my peers in the new media sector, academics and the public.

Lastly, I suggest that a further outcome of this PhD programme is that it adds to the critical mass of evidence that argues for greater the consideration of the PhD by Published Work. I have not found in my literature trawl a similar PhD that takes a 'By Publication' route and which in which the publications under examination are the product of practice based research let alone curatorial practice. The growing importance of this within doctoral level studies means that an outcome such as this can assist the development of academic practice in higher education.

5. Submitted 'published works'

The following is a short description of each research project that forms part of this PhD programme with a brief introduction to the key aims of each project and the theoretical positions that underlie the work. To identify the methods of practice-centred research that were employed I am using the definitions of Smith & Dean (2010) and Candy (2006, 2011). The subtle distinctions that these authors articulate are important to the examination of my projects, but because of the problem of over-lapping terminologies I am having to modify - with apologies - the terms used. Therefore I am using as primary categorisations, Candy's definitions of *practice-based* research (to designate when the creation of an art project is the *basis* of the contribution to knowledge) and *practice-led* (to designate when the research *leads* primarily to new understandings about practice and may be conceptually driven or come out of reflections upon an existing art project).

I am further subdividing the elements of practice-based research that conform to Smith and Dean's descriptions of *practice-led-research* (where the research process only exists through the *making* of art project) and *research-led-practice* (where the making of art project is preceded by a *theoretical* or conceptual investigation). To do this I am therefore fusing together Smith and Dean's terminologies with Candy's to categorise practice-based work as *[practice based]practice-led-research* and *[practice based]research-led-practice*

Each project is given a more detailed description in the chapters that accompany the documentation and publications. These detailed descriptions are structured as

personal narratives intended to contextualise the projects but also to frame them as examples of process, not just artefacts. In the case of the exhibitions the descriptions are expanded commentaries, since the existing published textual material and documentation is minimal due to the nature of the exhibitions and the economy of the subsidised arts sector in which they were presented. This is also necessary because the curatorial method and aims are not always explicit in the contemporaneous textual material.

Project 1

- **Lyndal Jones *Demonstrations and Details from the Facts of Life* (2001)**

This curated project was a new commission and exhibition by a solo artist, first shown at the Ikon Gallery (2000) and culminating in a re-worked exhibition at the Newlyn Art Gallery (2001)[47].

This exhibition project aimed to develop a new approach for interactivity in new media arts exhibitions that drew on ideas of the viewer's body as the interface that controlled the visual experience. However, it is significant not just because of its outcome, which was initially flawed, but because of the manner in which the project was developed, and therefore provides a study in curatorial method. The project demonstrates how knowledge gained as an emergent outcome of research can nevertheless be important and profound and have lasting implications for curatorial practice.

The project was primarily practice-based. As a project which is conceptually and theoretically driven it demonstrates *[practice based]research- led-practice*. But it also shows how this is integrated with [practice based]practice-led-research in which the creation of the work leads to the development of knowledge. Furthermore,

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[47] The Regulations for the Award of a PhD by Published Work state that the publications under consideration should not include any material produced more than ten years before the date of submission. It was agreed at the interview for my application to register for a PhD by Published Work in October 2010 that because of the unusual nature of the 'publications' being considered that this exhibition could be considered to be part of the continuous body of curatorial work and was therefore eligible for inclusion.

because the outcomes of the project, negative as well as positive, had lasting impact

beyond the exhibition itself, with continued examination of the events that took

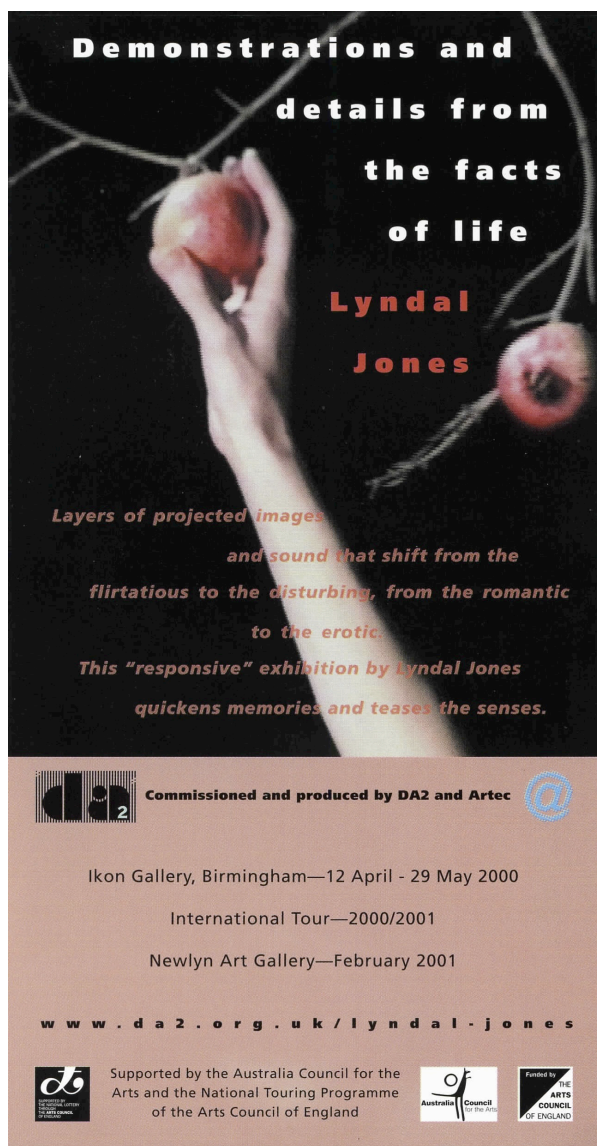place and which lead to new research subjects, it demonstrates *practice-led research*.

The exhibition was accompanied by a catalogue and essay.
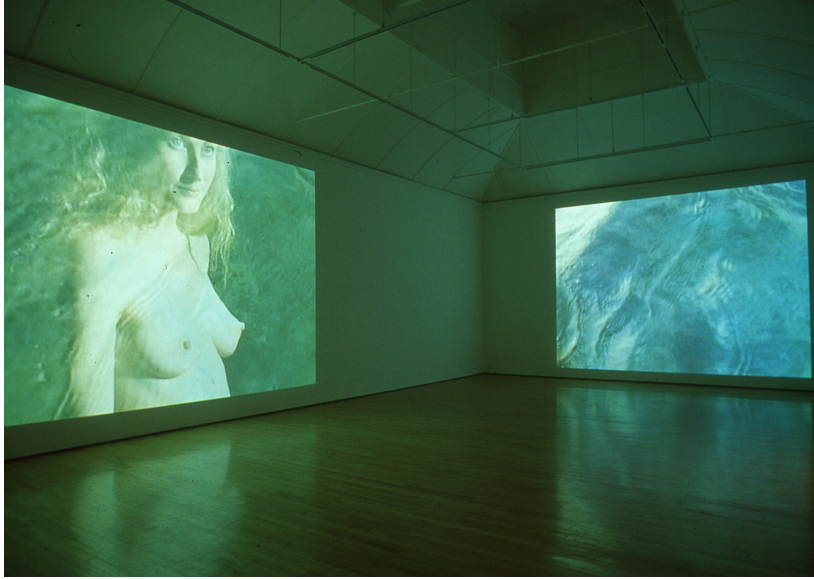
Figures 5 *Demonstrations and Details* installation at Newlyn Art Gallery in 2001

Figures 6. *Demonstrations and Details* installation at Newlyn Art Gallery in 2001

Figure 7. DA2 promotion card for *Demonstrations and Details* and Ikon gallery leaflet (2000)

Project 2

- *Timeless: time, landscape and new media* **(2006)**

This curated group exhibition was a concept driven project, combining the work of photography, video and new media artists who used a range of approaches. The exhibition was presented at *Images Festival* Toronto (2006). *Timeless* was devised thematically to explore how artists' work demonstrate how representations of landscape are often irrevocably bound up with the way that photo-based media has developed a language of time. It posited that new media gives us new ways to conceptualise and represent time – and therefore new ways of visualising landscape. The exhibition also had an additional curatorial strategy which was to present new media work in a context that emphasises the subject content of the work rather than focusing on the applications of technology and the computing platforms being used.

This project was *practice based* research. It is primarily *[practice based]research-led-practice* but some of the research outcomes are also derived from *[practice based]practice-led-research.*

The exhibition was accompanied by a curator's essay.

Figure 8. Susan Collins, *Glenlandia* (2005) image included in *Timeless: Time, Landscape and New Media* 2006

Figure 9. Suky Best 'Marsh Dagger Moth' from *Return of the Native* (2005) included in

Timeless: Time, Landscape and New Media 2006

Figure 10. Rebecca Cummins *Another Light* (2006) included in *Timeless: Time, Landscape and New Media* 2006

Figure 11. Jane Prophet still from *Decoy* included in *Timeless: Time, Landscape and New Media* 2006

Figure 12. Chris Welsby, still from 'Trees in Winter' (2006) included in *Timeless: Time, Landscape and New Media* 2006

Figure 13. Simon Faithfull, stills from *30km* (2003) included in *Timeless: Time, Landscape and New Media* 2006
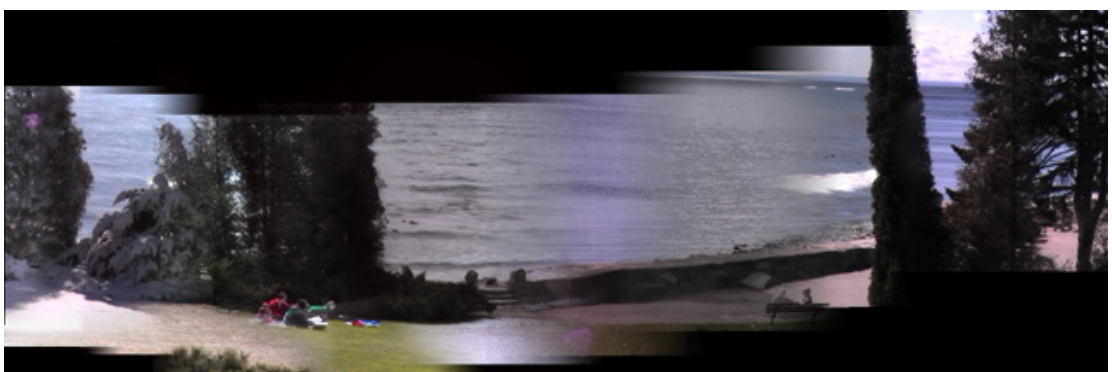

Figure 14. David Rokeby detail from *Machine for Taking Time* included in *Timeless: Time, Landscape and New Media* 2006

Figure 15. Harbourfront Gallery announcement for *Timeless: Time, Landscape and New Media* 2006

Project 3

- **David Rokeby *Silicon Remembers Carbon* (2007) and *Plotting Against Time* (2008)**

An exhibition at FACT Liverpool (2007) CCA, Glasgow (2007) and Windsor Art Gallery, Canada (2008).

This exhibition aimed to explore how a retrospective exhibition of a solo artist could be used to address many major concerns which were then current, specifically documentation, archiving and memory of new media work, and to provide the opportunity for a significant exhibition for a leading international artist. An additional significant outcome was that it led to the use of action research methods (MacIntyre 2009; MacIntosh 2010) to develop the critical content of the exhibition in response to audience feedback. This research was then developed within an academic setting for later projects.

The project demonstrates the complexity of practice-centred research processes. The research was both *practice-based* and *practice-led*. One aspect of the research conforms to Smith and Dean's definition of *[practice based] research-led-practice* in which the curatorial intentions were theoretically driven, but it also demonstrates the iterative way in which this is linked to *[practice based] practice-led research*. It also shows how the examination of a curated project leads to the development of knowledge about curatorial method and is therefore *practice-led* research by Candy's definition.

The exhibition was accompanied by a website with a curator's essay plus a commissioned essay by Sarah Cook.

Figure 16. *David Rokeby: Silicon Remembers Carbon* (2007) index page to project website

http://www.rokebyshow.org.uk [48]

Figure 17. *Very Nervous System* (1986-2004) at FACT (photo by Brian Slater)

Figure 18. Entrance to exhibition at FACT showing *Watch* (1995) (photo by Brian Slater)

Figure 19. *n-Cha(n)t* (2001)at FACT (photo by Brian Slater)

Figures 20. David Rokeby, *Machine for Taking Time (Boul. Saint-Laurent) (2006-2007)*

screenshots of the video exhibited at Windsor

Project 4

- ***The New Media Handbook** (2006)*

This publication was written in collaboration with Professor Andrew Dewdney (South Bank University) and published by Routledge in 2006. It presented the theoretical and cultural context around new media and explored what it meant to be a professional practitioner in new media. The publication also aimed to enable its readers locate practice within academic theory and media arts history and see how critical knowledge is interpreted through artistic and commercial practice.

This project demonstrates *practice-led* research by Linda Candy's definition, as it does not involve the making of work but examines creative practices and their consequence. In particular, the research concentrated on the way that creative practitioners approached and developed their work, the choices and strategies they used, rather than employing the conventional art historical method of content analysis and conceptual critique. By this method it focused on the situated knowledge and high-level critical skills that practitioners use, rather than taking a theoretical approach. It also addressed the breadth of practice across sectors by encompassing new media workers and graduates in various areas, from education, gaming, design and other commercial fields as well as arts and curating. The research was presented through case study method and the interview format was used as a strategic choice to distance the authorial voice and to privilege instead the sense of 'real experience'.

The publication was designed as a half-and-half split between the examination of practice which I researched and wrote, and the historical and theoretical analysis and overview written by Prof Dewdney. The authorial and editorial process was shared throughout with constant cross-referencing and involvement in the structure and shaping of each other's sections.
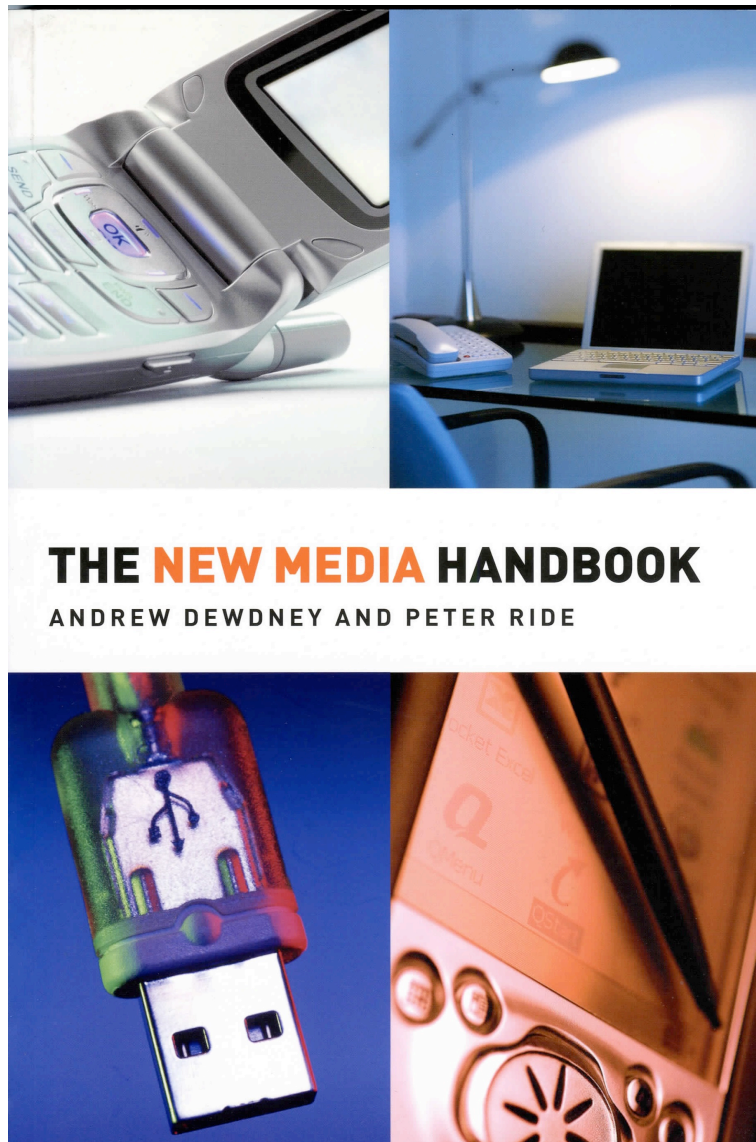
Figure 21. Cover of: Dewdney, A. & Ride, P. 2006 *The New Media Handbook*, London:

Routledge.

Project 5 & 6

- '**Enter the Gallery' (2011)** in Peggy Gale (ed) *Public: Experimental Media*, Vol 44, Nov 2011

- '**The Narrative of Technology: Understanding the Effect of New Media Artwork in the Museum' (2012)** published in Suzanne MacLeod, Laura Horston Hanks and Jonathan Hale (eds) *Museum Making: Narratives, Architecture, Exhibitions*, London: Routledge 2012.

These two articles are inter-related and connect my earlier curatorial practice with theoretical investigation. As such they are examples of Candy's definition of *practice-led research*: they explore my own curatorial practice and specific exhibitions and examine them within a broader context of curatorial work. Both articles argue that the engagement of the audience is not explored enough within new media arts practice. 'Enter the Gallery' specifically uses case studies of the Lyndal Jones and David Rokeby exhibitions and addresses why curators need to develop methodologies that allow them to gain a greater understanding of the audience's experience. 'The Narrative of Technology' considers additional aspects of this and postulates that overarching cultural narratives around technology effect how audiences experience new media work. The chapter used ethnographic observation analysis methods to make small-scale evaluation case studies of other museum new media art projects and suggested how audience evaluation can be used by organisations.

Figure 22. covers of: (upper) Public, No 44 and (lower) MacLeod, S., Hanks, L. H. and Hale, J.

(eds.) *Museum Making: Narratives, Architectures, Exhibitions*, London: Routledge, 2012

Project 7

- **'Shiny and New' (2010)** in Victoria Walsh (ed) *Tate Encounters Edition 5*, July

  2010 published online at

  http://www.tate.org.uk/research/tateresearch/majorprojects/tate-

  encounters/edition-5/

'Shiny and New' is an example of scholarly research that draws on practice as an

area of expertise. Commissioned by Tate Britain for the publications that formed

part of the *Tate Encounters* research project, the article explores the concept of

'newness' and how it impacts the public perception of technology.

The article is primarily practice-led research as it draws on creative practices as its

subject and develops conclusions that are designed to contribute to the discourse on

practice. However, it is also in part practice-based as it draws its content from a

series of discussions around new media and the museum that I was commissioned

by Tate to organise from my perspective a curator. Therefore the article has a direct

relationship to my curatorial practice and expertise.
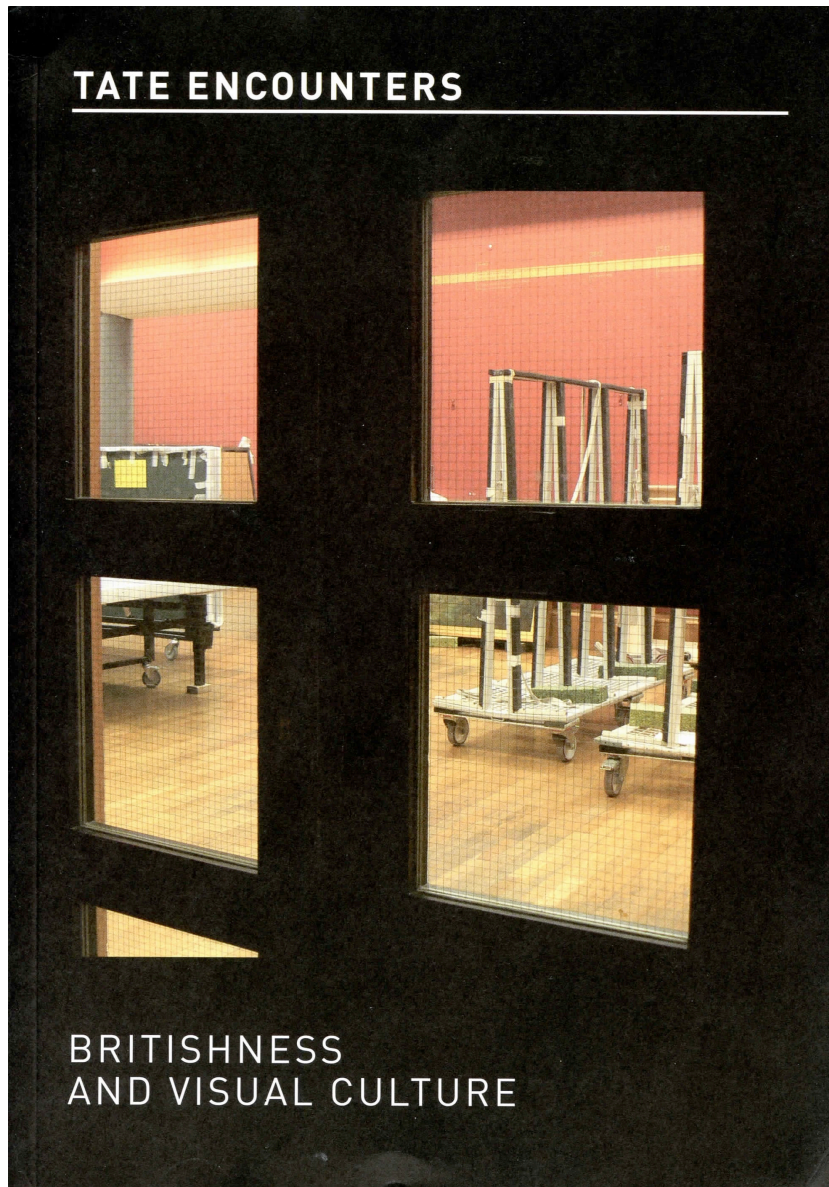
Figure 23. Cover of: report of *Tate Encounters* (2011)

6. Addressing the Research Questions through the 'published works' (table)

(i) Research Question

The following is a brief synopsis of the arguments within the submitted published works (the projects) and the supporting commentaries that details how they address the main research question "***Can we develop new insights about new media in the arts through the examination of creative practice?***"

Project 1. *Lyndal Jones*: shows how the examination of the development of exhibitions provides knowledge about curatorial process and how it is developed through decision making; also shows why it is important to questions how audiences respond to new media artworks.
Project 2. *Timeless*: shows how new media artworks can be used to explore the representation of subjects which are not in themselves technological (such as landscape); also shows how new media provides a way of critiquing the way that 'older media' such as film and photography have dominated visual representation in the 20th century.
Project 3. *David Rokeby*: shows how audience perceptions of new media projects can be examined through qualitative research methods and how they can shape how an exhibition is constructed and contextualized.
Project 4. *New Media Handbook*: shows how examining practitioners skills and expertise as well as their projects provides the opportunity to locate practice within theory.
Project 5. *Press Enter* & *The Narrative of Technology*: shows how the examination of new media arts within the institution of the museum as well

as the art gallery provides a new way of understanding how it shapes audience perceptions.
Project 6. *Shiny and New:* shows how museum and art sector curators deal with new media as a catalyst for institutional change.

(ii) Research Sub-questions

The following is a brief synopsis of the arguments within the projects and the supporting commentaries that details which projects address the research sub-questions and how they address them.

What is the role of the curator in facilitating the development of knowledge?

Project 1. *Lyndal Jones*: shows how curators develop expertise around exhibition processes through conflict and resolution; how collaborations are constructed.
Project 2. *Timeless*: shows how curators develop thesis based projects and how art works can be used to create discourse through the contextualization of works and their selection.
Project 3. *David Rokeby*: shows how curatorial practice can include the qualitative research into audiences and how this can be developed iteratively through a project.
Project 5. *Press Enter* & *The Narrative of Technology:* shows how curators can act as ethnographers and theorists to investigate and contextualize the context for new media art in the gallery and museum.

How can an understanding of the role of the audience within new media projects contribute to the development of knowledge?

Project 1. *Lyndal Jones*: shows how audience response and feedback can shape the development of an artwork.
Project 3. *David Rokeby*: shows how Action Research methodologies can be used to analyse audiences iteratively.
Project 6. *Shiny and New* shows how professionals in the museum and gallery sectors are required to address how audiences are using new platforms to experience the offerings of cultural institutions.

In what ways can practitioners' knowledge skills and expertise be articulated as a significant part of creative practice?

Project 1. *Lyndal Jones*: shows how knowledge, skills and expertise includes teamwork, collaboration and response to failure.
Project 3. *David Rokeby*: shows how artists skills are built over extended periods of time and can be evidenced through the historical development of art projects – and that this can be contextualized in an exhibition.
Project 4. *New Media Handbook:* shows how the knowledge, skills and expertise in creative practice is an important aspect of making artwork, and also to products in the professional sector, and offers an important way of articulating how new media theory can be evidenced.

How do cultural concepts around digital technology, such as 'newness' and 'innovation', affect the way that new media practice is understood and experienced?

Project 1. *Lyndal Jones*: shows how gallery audiences respond to exhibitions that are contextualized by technological innovation.
Project 2. *Timeless*: shows how key concepts such as innovation and newness offer a critical framework to reflect upon representation of the natural world and human perception of subjects such as landscape and time.
Project 3. *David Rokeby*: shows (following on from Lyndal Jones) how gallery audiences respond to exhibitions that are contextualized by technological innovation and how this in turn can be examined and moderated through textual contextualization and the organization of exhibitions.
Project 5. *Press Enter* & *The Narrative of Technology*: shows how key concepts shape the way that audiences behave in galleries and how this contributes to the narrative of their experience.
Project 6. *Shiny and New*: shows how professionals in the museum and gallery sectors conceptualise innovation in different ways and how addressing 'newness' is a driver for change in institutions.

7. Rationale for the extended commentaries

These extended commentaries (in Vol. 2) on the projects are designed as narratives. They are deliberately in a 'personal voice' to show how reflection-in-action was structured throughout the research projects. They also illustrate how reflection-on-action was an integral part of the process of each project as well as how it has been used since the conclusion of the various activities. Reflection-on-action leads one research project into the next and its significance as a research method has continued and amplified.

Two issues need to be addressed before continuing with the commentaries. Firstly, there is the problem of presenting curatorial activity for scrutiny as it is a little like describing a shadow. Most of the material evidence of an exhibition, and what is traditionally used as documentation of a project, shows the artists' work. This is not necessarily what the curator was responsible for. Therefore it is unrepresentative to present it as the evidence of a curators' work. As established in the introduction, the essence of the curatorial practice is a process, not product.

The process involved in curating exhibitions would be best demonstrated through the full archive of a project as it includes the project plans, outlines, discussions with artists, funding applications, proposals to venues, budgeting, and then the reframing, restructuring and re-planning of what had occurred previously as the project comes to fruition. A complete picture of the curatorial process needs to represent the strategies and the contingencies that were involved on the journey to make projects

progress from concept to gallery space as these are not usually reflected in the final outcome.

However, to give the full amount of material that could be assembled from the archive would be an unwieldy amount of evidence to present for academic scrutiny and would itself need an edited trail. As an alternative strategy I have included a range of this material in the appendices to each chapter on the exhibition projects. I have used this as 'indicative' material, rather than offering it as a comprehensive archive. Between the different projects these give an overall indication of the curatorial activities taking place and the paper trail they leave behind. But I have linked these to the discussions in the commentaries, rather than basing the commentaries around them.

For this reason I have designed the personal narrative to incorporate as much as possible of the substance of these processes and relationships and to give the flavour of what went on, as well as to document the activities. Therefore, the images of installations in the galleries and details of artists work are intended to be seen as illustrations of the projects rather than to be seen to "prove" the curatorial activity.

Each chapter is supplemented by an appendix. These contain copies of the key texts that I am presenting as 'evidence' for consideration (as required by the regulations for the PhD by Published Work) when these were published online, and when the websites are no longer operating so cannot be presented as 'evidence'. The appendices also contain other supporting material that relates in particular to the issues I have been discussing in the commentary and these are noted in the texts.

Relationship of texts to examples of practice

Secondly, is the issue of how best to present evidence of practice-centred research (in all its forms). In nearly all circumstances for a higher degree in art and design, when practice based work is submitted for scrutiny it is expected to be accompanied by a written text (Scrivener 2000, Candy 2006, Barrett 2007, Biggs 2007). The status and significance of the text differs between institutions and advocates of the process but it is generally held that the exegesis should position or contextualise the work within its field, explain the research process and/or clarify the contribution and significance of the project (Dally 2004). However, at the same time the text should be demonstrative of the intellectuality of making, which is not the same as the intellectuality of writing (MacLeod 2000). But as argued by Bolt (2005) the exegesis plays a critical and complementary role in the work of art:

> "The exegesis provides a vehicle through which the work of art can find a discursive form... it is ...concerned with articulating what has emerged or what has been realised through the process of handling materials and ideas and what this emergent knowledge brings to bear on the discipline." (Bolt 2005: 14)

Using 'extended commentaries'

The difficulty with my PhD programme, as previously discussed, is that in taking a 'by publication' route I am presenting work which was not designed with academic inspection in mind, and therefore no contemporaneous exegesis exists for these

projects. However, as components of a practice-based research they require the existence of a text. As Dally expresses it, while the creative project is expected to 'speak for itself' the accompanying text is also expected to continue the conversation (Dally 2004).

Therefore, I have created 'extended commentaries' for the first three projects, which are practice-based projects: the exhibitions Lyndal Jones, *Demonstrations and Details from the Facts of Life* (2001), *Timeless* (2006) and David Rokeby *Silicon Remembers Carbon* (2007). These are designed to play the role of the accompanying text for practice-based submissions, but I have structured them so that they also relate to the overall research aims of the PhD programmes.

The remaining three submissions are a co-authored book and essays written as chapters for books and journal articles. I have also written an extended commentary for the *New Media Handbook* since the research process is not necessarily evident from a reading of the text alone. I felt that its structure and style required greater explanation in relation to the overall research objectives of the programme.

The remaining essays and articles, 'Enter the Gallery', 'The Narrative of Technology' and 'Shiny and New' are more conventional texts. Therefore these have short commentaries as their purpose and form is more transparent.

8. Exegesis: Conclusion

Throughout this Exegesis I argue that I have achieved the following:

- I have subjected a programme of work that has taken place over 10 years to scrutiny.
- I have shown how practice and theory are integrated.
- I have demonstrated how the value in an investigation of this nature is cumulative and emerges through reflection upon the body of work as a whole.
- I have shown that the value in research can be seen in relation to its original aims but also with a contemporary perspective, and accordingly the research questions or provocations can be understood as being emergent and not posed from the outset as a hypothesis which drives the research.
- I have shown how the nature of the work requires a broad concept of 'publication ' which is best explored through written commentaries to each project as a form of 'sub-exegesis' to each, as a means of recapturing and revealing the processes that took place in those projects.

The central research question asked in this exegesis has been "*Can we develop new insights about new media in the arts through the examination of creative practice?"* In reflecting back upon the exegesis, particularly in the latter part of my journey through this process, I had sometimes asked myself if the question would have been better had it been constructed as "*how* can we develop new insights…?" But upon consideration I have always realised that the framing of the question is appropriate – for this is exactly what has been asked throughout the process. This Ph.D. project

shows that the concerns are' live' issues, and it insists that the research is seen as having a contemporaneous aspect i.e. that of active reflection upon historical subjects. It asserts that over a ten-year period a singular idea threads through practice and theoretical writing. It also implies that there is a collective knowledge and experience that is included in the word "we": that plurality operates across communities of curators, academics producers and artists.

Therefore, the conclusion to the exegesis is not arguing what the "insights about new media practice in the arts" were because they are dealt with within each individual project, and the arguments were submitted to contemporaneous peer review scrutiny through practice or publication at the time. But it has been arguing that in addition, by examining the insights additional new knowledge has been created.

Through this examination I have shown that two things happen. Firstly I have shown that practice develops as a continuum and that there is the consistency of thought that can be shown in the way that practitioners operate through different platforms. This is expressed in the way products are framed and how outcomes and conclusions from one can contribute to those that follow. This is especially evident in my interest in audience engagement and how this can be understood and measured and how it operates at the level of curated projects and organisational administration (from the exhibitions *Lyndal Jones*, *Timeless* and *David Rokeby* to the chapter *The Narrative of Technology*). We also see how the insights are then shared

in different contexts and take part in other levels of discourse (in *The New Media Handbook, Enter the Gallery* and *Shiny and New*).

Secondly I show that the "examination of creative practice" is a self-reflexive exercise. It takes place where reflection occurs during the process of making work and reflection upon its conclusion, and that these contextualise work within a broader cultural and academic context. The very nature of creative practice is therefore explored and examined by this process. By implication the research has considered what can be defined as being 'curatorial practice', demonstrating the relationship in intellectual thought and endeavor between commissioning new work, presenting and producing exhibitions, applying ethnographic analysis methods, interviewing practitioners about working processes and navigating management concerns with museum and gallery officials.

In this way the outcome of this Ph.D. publication can be seen as a response to the question phrased concisely by Maria Lind as:

> "… can we speak of the curatorial" beyond "curating the expanded field": as a multi-dimensional role that includes critique, editing, education and fundraising?" (Lind 2009 in Smith 2012:49)

It demonstrates that not only is there a connection between the different activities and how knowledge generated in one project extends to another but it shows how there is an interdependency between the projects. Therefore the knowledge can be said to have an aggregating factor and that the insights developed within the

projects are shared in different contexts and contribute to different levels of discourse amongst different groups of practitioners and professionals.

The sub research questions addressed by the individual projects were:

- *What is the role of the curator in facilitating the development of knowledge?*
- *How can an understanding of the role of the audience within new media projects contribute to the development of knowledge?*
- *In what ways can practitioners' knowledge skills and expertise be articulated as a significant part of creative practice?*
- *How do cultural concepts around digital technology, such as 'newness' and 'innovation', affect the way that new media practice is understood and experienced?*

The research sub-questions can be represented as a set of concerns that thread through the projects, being approached in a different way with each project and revealing how new knowledge was demonstrated by each activity. The following diagram shows how the questions can be seen as a way of considering the subject matter of all the six projects presented for scrutiny. It also shows that they enable projects to be addressed from different angles, so that what is the most relevant question to one project is of lesser relevance to another. But it also confirms that all questions involve the majority of the projects, and that all the projects deal with at least two of the questions.
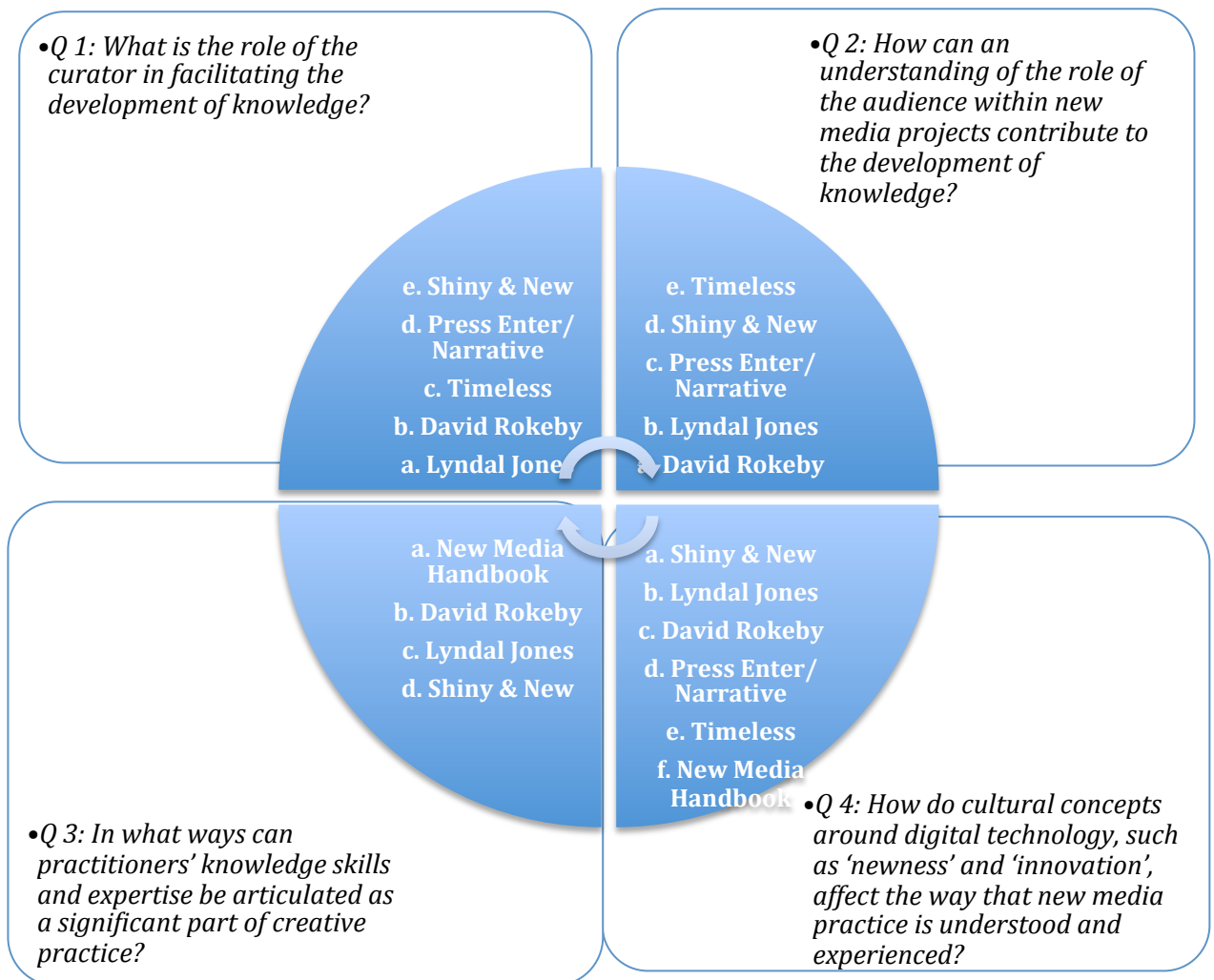
Figure 24. Framework for the Sub-Research Questions.

This diagram shows how the questions were asked at the level of the individual projects. The circle represents areas of overlap with the central point of the diagram being the point at which the questions are the most important. Therefore in Quadrant 1 which contains the question "*What is the role of the curator in facilitating the development of knowledge?*" the projects which were concerned with that question most intensely were the exhibitions *Lyndal Jones* and *David Rokeby*, followed by *Timeless,* then the publications *Press Enter* and *Narrative of Technology* and lastly *Shiny and New.*

In bringing the Conclusion to an end, I will details the way in which the outcomes of the projects can be seen in relation to the research questions and indicates the manner and degree to which the central research question and sub-questions have been answered.[49]

- Project 1: **Lyndal Jones *Demonstrations and Details from the Facts of Life* (2001)**

This project addressed the central research question *Can we develop new insights about new media in the arts through the examination of creative practice?* by demonstrating how the examination of the development of exhibitions provides knowledge about curatorial process and how it is developed through decision making; also it showed why it is important to question how audiences respond to new media artworks. It addressed the first sub-question *What is the role of the curator in facilitating the development of knowledge?* by demonstrating how curators develop expertise around exhibition processes through conflict and resolution; and also by showing how collaborations are constructed. In addressing the second sub-question *How can an understanding of the role of the audience within new media projects contribute to the development of knowledge?* this project showed how audience response and feedback can shape the development of an artwork. In addressing the third sub-question *In what ways can practitioners' knowledge skills and expertise be articulated as a significant part of creative practice?* this project showed how knowledge, skills and expertise includes teamwork, collaboration and

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[49] This section can be cross-referenced to the information given in the table 'Addressing the Research Questions through the 'published works' ' (pp.80-83) which also summaries the outputs of the projects but with a focus upon the research questions.

response to failure. In addressing the fourth and final sub-question *How do cultural concepts around digital technology, such as 'newness' and 'innovation', affect the way that new media practice is understood and experienced?* the project showed how gallery audiences respond to exhibitions that are contextualized by technological innovation.

- Project 2: ***Timeless: time, landscape and new media* (2006)**

This project addressed the central research question *Can we develop new insights about new media in the arts through the examination of creative practice?* by demonstrating how new media artworks can be used to explore the representation of subjects which are not in themselves technological (such as landscape). It also showed how new media provides a way of critiquing how 'older media' such as film and photography have dominated visual representation in the 20th century. This project addressed two of the sub-questions. In addressing the first sub-question *What is the role of the curator in facilitating the development of knowledge?* the project showed how curators develop thesis based projects and how art works can be used to create discourse through the contextualization of works and their selection. In addressing the fourth sub-question *How do cultural concepts around digital technology, such as 'newness' and 'innovation', affect the way that new media practice is understood and experienced?* the project showed how key concepts such as innovation and newness offer a critical framework to reflect upon representation of the natural world and human perception of subjects such as landscape and time.

- Project 3: **David Rokeby *Silicon Remembers Carbon* (2007) and *Plotting Against Time* (2008)**

This project addressed the central research question *Can we develop new insights about new media in the arts through the examination of creative practice?* by demonstrating how audience perceptions of new media projects can be examined through qualitative research methods and how they can shape how an exhibition is constructed and contextualized. This project addressed all four sub-questions. In addressing the first sub-question *What is the role of the curator in facilitating the development of knowledge?* the project showed how curatorial practice can include the qualitative research into audiences and how this can be developed iteratively through a project. In addressing the second sub-question *How can an understanding of the role of the audience within new media projects contribute to the development of knowledge?* the project showed how Action Research methodologies can be used to analyse audiences iteratively. In addressing the third sub-question *In what ways can practitioners' knowledge skills and expertise be articulated as a significant part of creative practice?* The project showed how artists' skills are built over extended periods of time and can be evidenced through the historical development of art projects – and that this can be contextualized in an exhibition. In addressing the fourth sub-question *How do cultural concepts around digital technology, such as 'newness' and 'innovation', affect the way that new media practice is understood and experienced?* the project showed how gallery audiences respond to exhibitions that are contextualized by technological innovation and how this in turn can be examined and moderated through textual contextualization and the organization of exhibitions.

- Project 4: *The New Media Handbook* **(2006)**

This project addressed the central research question *Can we develop new insights*

about new media in the arts through the examination of creative practice? by

demonstrating how examining practitioners skills and expertise as well as their

projects provides the opportunity to locate practice within theory. The project

addressed the third sub-question. In asking *In what ways can practitioners'*

knowledge skills and expertise be articulated as a significant part of creative practice?

the project showed how the knowledge, skills and expertise in creative practice is an

important aspect of making artwork, and also to products in the professional sector,

and offers an important way of articulating how new media theory can be evidenced.

- Project 5 & 6: '**Enter the Gallery' (2011) and 'The Narrative of**

  Technology: Understanding the Effect of New Media Artwork in the

  Museum' (2012)

This project addressed the central research question *Can we develop new insights*

about new media in the arts through the examination of creative practice? by

demonstrating how the examination of new media arts within the institution of the

museum as well as the art gallery provides a new way of understanding how it

shapes audience perceptions. The project addressed all four sub-questions. In

addressing the first sub-question *What is the role of the curator in facilitating the*

development of knowledge? the project showed how curators can act as

ethnographers and theorists to investigate and contextualize the context for new

media art in the gallery and museum. In addressing the second sub-question *How*

can an understanding of the role of the audience within new media projects contribute

to the development of knowledge? the project showed how fundamental audience

perceptions of new media effect and how it operates in museums through primary

research and it proposed reasons for the lack of study in audiences that appears to

be common in this area. In addressing the third sub-question *In what ways can practitioners' knowledge skills and expertise be articulated as a significant part of creative practice?* the project showed how key concepts shape the way that audiences behave in galleries and how this contributes to the narrative of their experience. In addressing the fourth sub-question *How do cultural concepts around digital technology, such as 'newness' and 'innovation', affect the way that new media practice is understood and experienced?* the project showed how key concepts shape the way that audiences behave in galleries and how this contributes to the narrative of their experience.

- Project 7: **'Shiny and New' (2010)**

This project addressed the central research question *Can we develop new insights about new media in the arts through the examination of creative practice?* by demonstrating how museum and art sector curators deal with new media as a catalyst for institutional change. The project addressed two of the sub-questions. In addressing the second sub-question *How can an understanding of the role of the audience within new media projects contribute to the development of knowledge?* the project showed how professionals in the museum and gallery sectors are required to address how audiences are using new platforms to experience the offerings of cultural institutions. In addressing the fourth sub-question *How do cultural concepts around digital technology, such as 'newness' and 'innovation', affect the way that new media practice is understood and experienced?* the project showed how professionals in the museum and gallery sectors conceptualise innovation in different ways and how addressing 'newness' is a driver for change in institutions.

Therefore, when the outcomes of the sub-questions are drawn together they demonstrate how the development of knowledge occurs through collected and inter-related activities. They show, in relation to the first sub-question ***What is the role of the curator in facilitating the development of knowledge?*** how curators use different methodologies to understand and evaluate their role and the processes at play when constructing exhibitions. In relation to the second sub-question ***How can an understanding of the role of the audience within new media projects contribute to the development of knowledge?*** they show how understanding the audiences involvement, comprehension and engagement of new media projects is a concept of great complexity and requires analysis on a number of different levels. Addressing the third sub-research question ***In what ways can practitioners' knowledge skills and expertise be articulated as a significant part of creative practice?*** they show the way in which practitioners skills can be identified though their ongoing role in creative projects and through the way they describe and reflect upon their work. They show, in relation to the fourth sub-question ***How do cultural concepts around digital technology, such as 'newness' and 'innovation', affect the way that new media practice is understood and experienced?*** how these concepts operate in the way that artists develop work, curators produce and critically contexualise projects, audiences respond to work and institutions frame their collecting, learning and programming strategies.

In addressing the research questions throughout this exegesis I have, in particular, turned to Donald Schön's (1983) theories of reflection and the methods used by Graeme Sullivan (2005) to create my own conceptual structure to examine the way

in which the projects deal with their questions and outcomes. This structure, the 'Framework of Curatorial Knowing' provides us with a way of understanding how curatorial knowledge is generated. It therefore not only shows that there are *new insights about new media in the arts* but it also shows how and where they have been developed by the *examination* of the different points of the *creative practice.*

The conclusion of a PhD also provides scope for additional reflection upon the process as a whole. In this case I am led to consider how the process of generating knowledge about new media and creative practice has a value beyond an academic discourse. The new media sector has often expressed frustration, sometimes rightly, that it is marginalized and under-recognized. Indeed, sometimes the topics involved in debate, expressed through text or through practice, can appeal to a very narrow field of interest. But many of the concerns explored through new media practice are also of broad ranging relevance and can, or could, be accessible to a diverse audience.

The triangulation (the 'Framework of Curatorial Knowing') proposed as a way of understanding the relevance of my practice operates with this in mind. New media practitioners, as artists, curators or other producers, often feel the need to interrogate what they do and to ask fundamental questions about the purpose and outcomes of their work. Sometimes this is framed as a shared problem solving exercise, sometimes as a contribution towards the historical archive and sometimes it is just for self-inspection. This tendency, I suggest, is highly desirable because it does not take the cultural value of what is being done for granted, but implies that it must always allow

itself to be examined. In this way, the new media field can offer to the contemporary art world a model of good practice.

My contention, and one that goes beyond the range of this academic exercise, is that if as a community of arts practitioners we cannot communicate the significance of our work then we cannot expect the public to feel involved. Our goal must be to contribute not only to new media but to a wider arts practice. To do so we constantly need to find new tools to enable us to critique what our practices are really about and how the work we carry out is making a contribution. And to do this we need to take it all apart and put it back together again.

"The art of making art

Is putting it together

...Bit by bit..."[50]

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[50] Stephen Sondheim, 'Putting it Together' from *Sunday in the Park with George,* 1984 (Sondheim 2011:41)

Appendices to the Exegesis

Item

1. Momentum Forum programme, April 2001

2. Definition of terms

Appendix 1: Momentum Forum programme, April 2001

digital arts development agency

DA2 presents *Momentum*

A forum on digital arts practice 19-21 April 2001

at Watershed Media Centre, Bristol, UK

momentum > mass & velocity, impetus & speed

SUMMARY

The *Momentum* forum is a brainstorming event. It is three days of round table discussions that ask how change effects new media practice. How do the shifting roles of cultural producers and artists, the artistic and technological demands of changing technologies and a culture of rapid and impatient innovation impact on us? It's about the velocity of change in the new media arts world.

DETAILS

As practitioners, both artists and organisers, we may come from a wide range of backgrounds and operate on different trajectories but often we are dealing with the same issues about defining and understanding arts practice. We find it increasingly important to work with, and reference, each other, often across perceived boundaries. And as such we develop a critical mass. *Momentum* aims to explore the collective knowledge that emerges from this mass.

The *Momentum* forum is not a conference or seminar. It is intended as an opportunity for a small group of peers to pool their expertise and knowledge. We want to speed the cross-fertilisation of ideas and practices, and empower the networks that exist. Each day is structured around a key question and a set of premises: challenging or amending them will be a fundamental element of the group's activity. We will not be delivering formal papers but looking at case studies so that the maximum number of attendees can put their experience on the line.

A tangible outcome of *Momentum* will be a publication in Summer 2001 which will draw on key issues of the forum. Based on this it will look at the context in which work generated by digital media organisations, like DA2, has operated over the past few years.

The question: are there distinctly new forms of arts management that are being necessitated and demonstrated by new media practice?

The premise: >> Organisations and artists are developing ways of working which seek to be more appropriate to the contexts and opportunities of new technology.   >>   Sometimes this means moving away from conventional models of exhibition/performance and presentation towards a process based, or even research-structured activity.   >>   The behaviour of organisations and the reference points applied to management roles are changing, e.g. organisations are increasingly operating as agencies and brokering collaborations; the traditional role of the curator is declining in relevance and a role as 'creative producer' or 'facilitator' is increasing.   >> New strategies may be devised to bring work to audiences, and to enable them to access to the process of development and experimentation, but there is not always adequate appraisal or evaluation to monitor their effectiveness.   >>   Artists may operate as technical facilitators as well as creative content providers, but they may also require specialist teams to work with them. Recognising, negotiating and providing for their needs presents a new set of challenges to organisers.

Case study: ~ 'Tide' (Luke Jerram)

The question: What conditions are created by high-end innovation?

The premise: >>   New issues arise with projects where the use of the technology is experimental, particularly - but not exclusively - with high-end technologies. It can also apply to interface design, software creation and programming.   >>   In experimental work the nature of the cultural innovation might not be measured in terms of artistic content but in terms of the development of 'form' or by revealing the possibility of the technology.   >>   A key artist's role may be as catalyst in this process, not as content provider. >>   Collaborative projects may have complex multiple objectives, and the innovations intended by artists and technologists may be compatible but not necessarily mutual, and may involve different risks, challenges and definitions of completion.   >>   The management of the tension between artistic and technological imperatives can be a unique challenge of the sector.

Case studies will include: ~ FLIRT mobile telephony projects (RCA) ~ 'Desert Rain' (Blast Theory and Univ of Nottingham) ~   'Code Zebra' (Sara Diamond with The Institute for New Media Performance Research) ~   WAP and text messaging projects (TEST and Laura Watts) ~ Interactive TV & VRML project (Plymouth Univ and DA2) ~ online film (Tom Flemming) ~ 'Areas of Outstanding Natural Beauty' (Susan Collins)

The question: How do we recognise and value emergence?

The premise: >> The rapid rate of technological advancement has special appeal for artists and new media practice is often contextualised by looking forward to future technological possibilities e.g. the contexts of 'emergence' and 'innovation'. >> This leads to cultural and philosophical expectations about speed and change in new media practice and artists work often helps to articulate this. >> However, a collective acknowledgement of what is new and emergent may seem to come more about from gut instinct and trend than by a definable form of analysis. >> This may itself be a necessary process but there may also be conditions or values we are applying to 'emergence' that need to be recognised.

Case studies will include: ~ b.tv ~ 'Afterworld' (Simon Poulter with Watershed and DA2) ~ Sci-art projects including 'The Search for Terrestrial Intelligence' (CAiiA/ STAR) ~ TeleSpatial research (Chris Speed)

[Case studies are not fixed but will be confirmed after proposals from participants]

Participants fee: £40 per day - but subsidy for low income organisations/individuals can be arranged

Contact: If you are interested in participating or for more information email Peter Ride, Director of DA2 peter@da2.org.uk or Daniel Brine, event co-ordinator <danielbrine@appleonline.net>

Supporters: European Social Fund, Watershed Media Centre & University of Westminster

Appendix 2

Definitions of terms

Two terms that are used within the research questions and that require definition and explanation are '***creative practice'*** and '***innovation***'. (Note: the term 'new media' is not included here because its derivation and meaning is covered substantially in the section of the Exegesis on Research Context.)

Both these terms are used in variable ways and reflect concepts that are highly complex. The goal of this appendix is to locate the way that these terms have been used within the period of the research activity. In particular, I have looked at documents produced within the cultural and creative sectors from 2001-2009.[51]

However in investigating the way that these terms have been used within available literature it becomes obvious that it is not easy to pinpoint exactly what terms have meant at particular times. By contrast it can be easier to do this when examining how the use of particular terms can change over several decades (Galloway & Dunlop 2007: 19). However what is interesting is to recognize the slippage in the meaning of terms, and how they overlap, and why some disciplines place a different emphasis on the use of different terms.

This is particularly important because the way the terms 'creative practice' and 'innovation' are used in this PhD study draws on more than one sector and area of activity. This explanation of terms therefore looks at the way that the concepts used are constructed and reflect different values.

Creative Practice

'Creative practice', as a compound noun, is a term that is in frequently use the cultural sector in documents from 2001-2009. However, it is interesting, and telling, that one of the main institutional bodies that os key to the funding and standards in relation to creative practice, the Arts and Humanities Research Council (AHRC) does not apparently define what creative practice consists of. The significance of this is that the meaning that that this body emphasizes how creative practice operates in relation to other concepts. For example, the AHRC makes succinct definitions of creative practice in relation to research:

> *The AHRB definition of research provides a distinction between research and practice per se. Creative output can be produced, or practice undertaken, as an integral part of a research process... but equally, creativity or practice may involve no such process at all, in which case they would be ineligible for funding from the Board.* (AHRC 2005)

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[51] Please note that the references in this appendix are included in the bibliography but have also been included in a reference list at the end of the appendix since they are so specific to this section.

Therefore to provide a effective definition of the way these terms have meaning in this PhD is it necessary to decouple the compound noun of 'creative' and 'practice'.

Practice

> "'Practice' is used to refer to professional practice (in art, design, etc.) or to processes usually used in professional and creative practice to produce work for any purpose other than the (deliberate) acquisition of knowledge. 'Practitioner' accordingly refers to anyone who pursues professional/creative practice. " (Niedderer & Roworth-Stokes, 2007)

This definition gives a broad understanding of the term as it is used in this PhD.

Creative

The term 'creative' is more complicated to analyse as it has a varied set of meanings.

> "By 'creative and performing arts' the AHRC is referring to subject areas concerned with practice-based visual arts, music and performing arts, and practice-led creative writing. This list is not exhaustive but could include applicants who are visual artists; architects; those working in the applied arts; fashion; curatorial practice or film, video and/or other multi-media; performers; musicians; choreographers; scenographers; theatre or film directors; designers, and creative writers and poets." (AHRC 2007)

However, it is important also to recognize that what defines creativity is not the area or discipline in which it takes place but its relationship to cultural values, which can change over time and situation:

> "There have been two waves of conceptualising creativity: firstly a Romantic notion of personal creativity, and secondly a strong emphasis on social systems, is that creativity is essentially 'democratic', in that everyone can learn it; is a co-operative activity and best learned via collective activity; and it is essentially pro-social, in that it encourages communication and feelings of empathy. But also can include creative expression that is marginal, radical, counter-cultural or in some way deemed to be anti-social." [Oakley 2009: 403]

And that within the cultural sector, the meaning of 'creativity' also embraces the language of discourse or shared meaning:

> "However, 'a work of art', etc. also connotes something that has achieved a certain cultural status. Thus my focus is not on outcomes that are simply the product of art classes, or that use art materials, and thereby become labelled as art; but rather on outcomes of socially accredited value…. We need to differentiate between activities that are to do with the personal development of the practitioner and his or her creativity, and activities that are significant for others in the field." (Biggs 2003)

This can therefore been seen as providing a meaning of 'creative practice' as being one in which the term 'creative' encapsulates the production of artefacts or activities that has a recognized and symbolic cultural value (Galloway & Dunlop 2007: 19).

Within this PhD, however, it is necessary to stress that the activities that are the subject of the research also address another context in which the term creative is singularly important – the 'creative industries', described here in a publication by a significant public sector funding agency the National Endowment for Science, Technology and the Arts (NESTA).

> "DCMS [Department of Culture, Media and Sport] Mapping Documents in 2001 identified thirteen different creative sectors, and defined the creative industries as "those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property". This definition includes both traditional arts such as painting and the performing arts, and newer media such as TV, film and software." (NESTA 2008a: 1)

This definition is itself problematic:

> "Broadly speaking the terms 'creative economy', 'creative sector' and 'creative industries' have been used to refer to a wide range of activities that involve the commercial exploitation of creative and artistic inputs. Providing an operational definition for this broad concept is, however, fraught with difficulties." (Experian 2005:5)

However, this definition, as with the AHRC definition above, also does not address the complexity of the way that 'creative' and 'cultural' are – within industry - not synonymous concepts.

> "Cultural and creative industries are often described as those that are based upon individual creativity, and creativity is the key ingredient in official UK documents. However, this would seem, almost tautologically, to define the "creative industries", since any activity that involves creativity would necessarily be "creative". Defining "creative industries" against such a measure is, if nothing else, far too wide to be useful for any purpose. ... Conflating cultural creativity with all other forms of creativity fails to take adequate account of important differences between cultural and creative industries..." (Galloway & Dunlop 2007: 19)

Within this PhD therefore 'creative practice' needs to be understood as expansive as it covers areas outside the arts and within the commercial sector. This shifts a focus of attention from the role of creative practitioner as being concerned with the individual operating in a cultural milieu but as a member of a creative economy or creative industry.

Innovation

The definition of 'innovation' is similarly complex because the term crosses many boundaries and can be seen as a concept in flux.

> "... one of the challenges of innovation is the lack of a common definition, which undermines understanding of the nature of innovation." (Baregheh, Rowley & Sambrook 2009)

The discipline of 'Innovation Studies' emphasizes the economic and commercial aspects of innovation, relating it to invention:

"Invention is the new occurrence of an idea for a product or process while innovation is the first attempt to carry it out into practice." (Fagenburg 2006:5)

But the concept of innovation, within this PhD needs to be seen in a symbiotic relationship with creativity.

"[The] broader view of innovation implies a role for 'creativity' in its widest sense, including a potentially important role for the artistic and creative activities in the innovation process. (NESTA 2007)"

And:

"Creativity and innovation are overlapping concepts. In the main, creativity is about the origination of new ideas – either new ways of looking at existing problems, or of seeing new opportunities, while innovation is about the successful exploitation of new ideas. " (NESTA 2008b: 4)

Therefore, within this PhD 'innovation' needs to be seen as having a conceptual relationship to cultural practice as well as the creative industries, and its outcomes can be non commercial as well as having commercial aspects.

References used in this Appendix:

[These references have been placed here for convenience for the reader given that there is a particular relationship between the quotations and the source material, but they have also been included in the bibliography.]

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Putting It Together: examining new media arts and creative practice

Peter Ride

Vol. 2

Commentaries on work submitted as publications to accompany the Exegesis

<u>Contents</u>

[N.B. The bibliography for works cited in the extended commentaries is to be found in Volume 1.]

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Project 1:

Lyndal Jones, _Demonstrations and Details from the_

Facts of Life

**Demonstrations and Details from The Facts of Life
Lyndal Jones**

An Exhibition at Newlyn Art Gallery, Penzance, Cornwall.
18 February - 17 March 2001.
Commissioned and produced by DA2 and Artec

'Demonstrations and Details of the Facts of Life' responds to it's viewers. Layers of material reveal themselves, but not in a way that can be controlled by the audience. Instead it appears as if a dialogue between the viewer and the work is created, each one flirting with the other.

Lyndal Jones' work explores desire and attraction through highly personal reminiscences, which take us from Charles Darwin's theories about sexual attraction to people's experience of eroticism. Lyndal Jones has created a work that blends the interactive possibilities of new technology with the sophistication of a complex video installation. She has also recently been selected to represent Australia at the Venice Biennale.

Developed over a three-year period by DA2 and Artec, this is a unique project that challenges the experience a viewer can have in a gallery.

For more information on this project, contact Peter Ride, Artist Director DA2. email: peter@da2.org.uk

This project has been supported by the Australian Council of the Arts, the National Touring Programme and The Arts Council of England.

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DA2 - Digital Arts Development Agency

DA2 c/o CARTE
University of Westminster
70 Great Portland Street
London
W1W 7NQ

Figure 1. da2 website promotion for the *Demonstrations and Details* 2001
http://www.da2.org.uk

Project 1: Lyndal Jones, *Demonstrations and Details from the Facts of Life*

Exhibition:

Lyndal Jones, *Demonstrations and Details from the Facts of Life*

Exhibited at: Ikon Gallery, Birmingham April 2000 and Newlyn Art Gallery,

Penzance, 18 February-17 March 2001

Texts:

Catalogue essay: Ride, P. 2000 'Choosing Stillness' in Doherty, C. (ed.)

Demonstrations and Details from the Facts of Life, Birmingham: Ikon Gallery

NB The catalogue is included in the evidence portfolio.

1.1 <u>INTRODUCTION</u>

The exhibition Lyndal Jones, *Demonstrations and Details from the Facts of Life* (2001) is an appropriate project with which to commence this PhD research programme. The project was instrumental for my curatorial practice, for its scope as a new media exhibition and for the breadth of its artistic and thematic ambitions. But it is particularly notable because it initially failed to achieve its aims. It therefore raises many issues about the curatorial process as well as issues pertaining to new media. A failed experiment can provide a rich resource for critical examination while a notable success does not necessarily provoke scrutiny. A failure can also be the catalyst that leads to new knowledge.

Recognising this potential places an emphasis on process: for although exhibitions and cultural events are generally discussed in terms of outputs and achievement, they represent a series of processes. The criteria for determining the relative success or failure of an art project is more typically based on the perception of the outcome, its critical reception or the manner

in which it is presented[1]. But the process by which it has taken place is equally important in terms of understanding art making as a practice[2].

This entails examining not only the means by which the parts of the entire process took place, but also addressing the relationships that were involved and the different contexts that played a part in generating the work. It requires deciphering the different levels at which a project operates, for its perceived value and indeed its aims and objectives may vary across these different levels and may, in fact need to be seen as relative rather than absolute.

*Demonstrations and Details from the Facts of Lif*e brings all these issues to the fore. Furthermore, it demonstrates how a project creates a situation that affects the work following it. In this case, the exhibition was highly formative to my curatorial practice since it sharpened my thinking about three consistent threads throughout my curatorial practice: self-reflection, the way that practice is articulated, and how critical discourse is communicated through practice.

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[1] The importance of understanding context for 'failure' is argued by Griselda Pollock: "…the troublesome issue comes with the specification of the difference between an output and an outcome, the specification of which is now demanded by the funding bodies. This requires a degree of political nous and cunning self-reflexivity on the part of the researcher to know and be able to justify *in advance* the desirable nature of the outcome of a project whose whole purpose is to be creatively productive of new knowledge. Can failure be a legitimate outcome? Can a negative finding be valued in this atmosphere?" Pollock, G. (2008)

[2] As discussed in the exegesis introduction with reference to Sullivan (2005) and Barrett (2007)

Demonstrations and Details was commissioned and planned in 1998, for

exhibition in 2000 and 2001. For the purposes of this study I am looking at

the way the project developed as complex series of engagements in which the

2001 exhibition is seen as being the final outcome. The exhibition

demonstrates the process of development that many new media projects

take, often influenced by personalities, institutional requirements and

funding opportunities. It also provides a significant example that

demonstrates how curatorial practice has a complex role that operates in

part to facilitate an artist's vision. But it also demonstrates that a curator may

need to understand that a project can be made up of a range of contributions

which are brought together through collaboration, networking and

sometimes coercion. In this case the curator may have a pivotal role in

accomplishing this as coordinator, translator and negotiator.

Demonstrations and Details also puts a spotlight on the importance of the

production of new work as a part of curatorial arts practice[3]. It shows that

there can be multiple aspects of practice-based work within one project: the

making of the artwork and the making of the exhibition. While the former is

obviously the essential component of the latter there will be separate

processes involved. As a result it can be said that the curator is responsible

for aspects of the creative content of an exhibition, working in dialogue with

---

[3] An important aspect of the context around making work comes from the policies of
arts funders, in this case Arts Council, England and the Australia Council, both of
which clearly enshrined notions of arts practice being developed through the
creation of work, although in some cases funding guidelines required careful
description of the way that funds were being seen to go into production expenses as
opposed to exhibition/display expenses.

the artist, but is also responsible for other distinct aspects of the exhibition that may not have been the direct output of the artist.

The project shows how curatorial work includes not only the production and presentation and contextualisation of the work but also the examination and evaluation of the project throughout its various presentations and iterations. Because the outcome of the exhibition was flawed, the issues that underpin these various aspects of a project can be seen sharply. It is when tensions are created that a curator is required to ask why the project is not working, how to remedy it and how to understand the cause of the problem.

Within this commentary I will refer to the *Framework for Curatorial Knowing* because this case study provides a good way of looking at different situations in which knowledge arises. As I have outlined above, and the way in which the curatorial role can include the making of the artwork as well as the the making of the exhibition is itself one of the complex aspects of the triangle/domain of *Creation* and that problem solving and negotiation between different interest groups and participants are all functions through which knowledge is gained through reflection-in-action and reflection-on-action. In this project the significance of moving between different modes of operation and in different forms of networking as a process that generates knowledge can be best understood through the concept of *transcognition*.

Figure 2. Cover of catalogue, Doherty, C. (ed.) 2000 *Demonstrations and Details from the Facts of Life*, Birmingham: Ikon Gallery

Background

Demonstrations and Details had a long genesis and was first proposed in 1997. Lyndal Jones, a prominent Australian video artist, who also had a background in performance art, had begun working with interactive technologies to explore how gallery installations could be made more performative. Several of her earlier works had combined references to Charles Darwin's early writing with autobiographic material and a feminist critique to the way natural sciences were represented[4]. Jones was interested in creating an anthology piece that drew from her substantial existing body of visual, audio

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[4] Artworks included: *From the Darwin Translations* (1994-1998) and *Spitfire 123* (shown at *Video Positive*, Bluecoat Gallery, Liverpool, 1997). A script version of a video *Room with Finches* (1994) which featured a woman speaking of her sexual fantasies was published in *Coil* (London, 1994)

and text material as video installations that suggested a series of encounters, or conversations with her archive.

I successfully raised funding from the Australia Council in 1998 to research and develop an interactive video project with Jones. This was then supplemented with production grants from the Australia Council and the National Touring Scheme from the National Lottery through the Arts Council, England. The project developed as a collaboration between DA2 Digital Arts Development Agency and Artec, where David Sinden and David Bovill had lead responsibility for the technical development, and where Jones was hosted as artist in residence.[5]

1.2 RESEARCH AIMS

The aim of this project was to explore new ways to enable an audience to interact with an artwork. The premise of the interactivity was that the exhibition could be conceptualised as operating in a social context, in which the 'work' existed as a conversation between the visitor and the artefact itself. The intention in *Demonstrations and Details* was to make this manifest by having each work 'evolve' though a number of sequences as the viewer spent time viewing it. The longer the viewer spent in front of the work the more detailed the piece would become. This would be translated as a form of 'live

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[5] The project commenced while I was working as arts programmer at Artec, The Arts Technology Centre London (1995-7) which became the recipient of the grants and when I established DA2 Digital Arts Development Agency in 1998 the project became a co-production and I remained lead curator with technical development provided by Artec.

editing' as the viewer watched the work. This would not only involve its visual imagery but also its use of audio, framing and shot sequencing. To do this Jones planned that the installations could move from relatively rapid transitions between shots being replaced by very gradual and extended sequences, that ambient sound would become first person voice-over, and that distant points of view would move in to close-ups.

Jones wanted the artwork to operate like a 'real' conversation between people in a social setting (or, because she had a background in psychotherapy, like a subject in conversation with an analyst). The longer the conversation went on the more intimate the piece would become. A second layer to the interactivity was that if viewers were in the gallery space as a group they would trigger a different version from solo viewers. In this way the work was designed as a social encounter in which interaction and content of a social exchange differs between a one-to-one and a larger group.

1.3 RESEARCH CONTEXT

Demonstrations and Details can be seen, from the early stage of research, to typify a characteristic tension with new media projects: the exploration of technological innovation against the development of an artistic concept. As an artist Jones had developed a strong visual language that experimented with form and new media, this project was an opportunity to take this to a new level. Jones' project therefore opened the way for an approach to

interactive narrative that was content-led rather than media-led[6]. A complex

level of interactivity was envisaged for the artworks, but the form of

interactivity was driven by the concept of the work. Much of the video

content had to do with suggestions of erotic encounters, sexual intensity and

moment of heightened awareness.

It was important that the viewer felt an engagement with the work that was

more than a technical interaction - but that the work had a sense of allure.

Therefore the interactivity needed to operate with considerable subtlety. But

although the form of interactivity was driven by the narrative of the artwork

it also had to take into account practical concerns: the specifics of the gallery

environment, the technology that was readily available or adaptable, budgets,

skills and personnel.

Many media producers at this time had been theorising the relationship

between technology and the audience, the concept of interactivity was crucial

to much of the discourse explored through practice of the mid-late 1990s[7].

One aspect of this dealt with the concept of narrative and how narrative

structures were affected by the audience's ability to move across material to

create new routes and readings. This was discussed in particular in relation

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[6] This concept had been explored for example, by Janet Murray in *Hamlet on the Holodeck*: *The Future of Narrative in Cyberspace* (Murray 1998)

[7] Helen Sloan provides an invaluable overview of the projects produced and shown in the UK discussing how they explored different approaches interactivity and user participation in an online essay *Cultural Resonance: Participation Audiences Interface* (Sloan 2007)

to literature and hypertext with Mark Amerika *Grammatron* 1997 but was also important in relation to the way that film language was being treated experimentally with works such as Grahame Weinbren *Sonata* (1991-5) that allowed the viewer to select pathways through the video content. This was also a consistent part of my focus at DA2 which included the *Click Forward* commissions (2000) and also work by Tom Flemming/ Cube Cinema (2000) that used live traffic on search engines to determine how online videos were being sequenced.

Interactivity and participation

Another area that was strongly demonstrated though artists' practice at that time centred on the nature of participation[8]. New media practitioners proposed that digital interactivity meant to engage with a work to the point that it changed or evolved (fully interactive work) or so that the work could be perceived as fixed in content but open in the way it could be presented (reactive work). This moved the emphasis from the concept of the audience (as passive viewer) responding to the work and placed the focus on the work responding to the audience (as active participant) (Rokeby 1996; Manovich 2001; Huhtamo 2004; Poissant 2007; Weibel 2007)[9]. *Demonstrations and Details* aimed to explore a different aspect of this paradigm – in which the

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[8] For example: Jeffrey Shaw, *The Legible City* (1989-1991); Perry Hoberman *Bar Code Hotel* (1994); Paul Sermon *Telematic Dreaming* (1992); Graham Ellard & Stephen Johnstone *Passagen* (1994) Ken Goldberg, *Telegarden* (1995) David Rokeby, *Very Nervous System* (1986-90); Simon Biggs, *Halo* (1998); Char Davis, *Osmose* (1995).

[9] An important reference point for work which dealt with embodiment by using the human body as interface and did so in an immersive environment was Char Davies *Osmose* (1995) which used hugely complex Virtual Reality technology.

narrative route through the work was determined by the audience (as a reactive artwork) but that it appeared to be operating intuitively so that even though the viewer was the active agent determining the progression of the work, the work seemed to be responding to their passivity. In this, the project tried to blur the distinction between what was deliberately taking place and what might seem to be randomly generated.

As discussed in the catalogue essay 'Choosing Stillness' (Ride, 2000) the goal for the work was that the narrative appeared to progress because of the presence of the audience, that the viewer 'desired' it to do so. The 'desire', in this case, being measured and captured by the viewer's decision to remain standing in front of the image. The work also aimed to enter another debate, that of embodiment within artworks (Turkle 2005; Jones 2006; Hansen 2006), for the work dissolved the idea of having a visible interface. Instead, mapping the viewer's body in space[10] provided the trigger that determined how software progressed. The installation could have been controlled by a physical interface that would generate the same narrative flow[11], but because the intimacy in the relationship between viewer and artwork was important as an aspect of the work it was decided that the interface should be invisible to the audience.[12]

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[10] Infra-red monitoring was used to capture the movement and presence of the audience members

[11] A keyboard interfaces had been used successfully to enable narratives to evolve in gallery installations example by Luc Courchesne, *Portrait One*, (1990) and Graham Harwood/ Mongrel *Rehearsal of Memory* (1995)

[12] A further context to this exhibition that should be noted is the significance of large scale, immersive - though non-interactive – video works by artists such as Gary Hill,

Figure 3. Lyndal Jones (2000) *Demonstrations and Details* stills from video

Historicising the context: feminist practice and the interface

In making a retrospective analysis of art projects it is not always easy to
reconstruct the historical context. This includes how the creative choices
being made reflected ideological positions as well as artistic interests, and
how an artists' approach to working with technology also helped shape these
choices. One aspect of this results from the way different types of artists were

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Tall Ships, Museum of Modern Art, Oxford, 1992 and Bill Viola *The Messenger*,
Durham Cathedral 1996.

encouraged to work with new technologies and were supported through the

funding system in the 1990s is a key part of the historical context.

Although the 90s saw the growth of a generation of artists whose practice

was 'born digital' many established artists also became adopters of new

technology. Artists I worked with closely who could be described as

'adopters' include Blast Theory and Nick Crowe, working in the field of

performance, Sue Thomas in creative writing and Susan Collins in video.

While a growing number of younger practitioners began their artistic careers

conceptually grappling with new media, the greatest number had migrated

into the field. Artists with a strong history of practice contributed finely

tuned theoretical positions which benefited the field of new media.

One of these was feminist arts practice. Jones, like a number of women artists,

was interested in challenging perceptions that technology was a male-

identified area. In the same way that feminists had strategically adopted

video practice in the 1980s (Welsh, Steele & Elwes 2000) many women

artists argued that they could use technology to create alternatives to the

interfaces and environments that dominated most computer experiences,

seeing the metaphor of the goal oriented computer game, the flight console,

and the joystick as being gendered. While theorists like Sherry Turkle (2005)

and Donna Haraway (2003) postulated a post-gender and post-human

cyberspace other artists like VNS Matrix[13], Linda Dement[14], Sara Diamond[15] and Mara Tralla[16] made lo-fi alternatives as a form of critique.

These practitioners often aimed to create a visual language or way of working with technology that could be seen as feminist intervention in a technological environment that originated in the military apparatus of the Cold War and where defence industries were seen to inspire much of the development. As VNS Matrix pithily put it at Ars Electronica 1996:

"Suck my code General."

"M'am, Yes M'am." [17]

In this sense the interactive environment proposed for *Demonstrations and Details* which privileged intimacy, stillness, and subtle physicality can be seen as operating within a feminist context (as referenced above), and that conventional perceptions of technological interfaces were being challenged.

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[13] http://lx.sysx.org/vnsmatrix.html

[14] http://www.lindadement.com/

[15] http://www.codezebra.net/

[16] http://lizard.artun.ee/~trimadu/ see also Pauline van Mourik Broekman (2000*) 'State of Play*: An Interview with *Mare Tralla'*

[17] VNS Matrix in 'Nothing is Certain' in *Ars Electronica Festival Catalogue 1996: The Future of Evolution* (1996:182)

1.4 RESEARCH METHOD

The research project can be seen to embody all the different characteristics of practice-based research defined by Smith and Dean and by Candy. In its early stages it clearly demonstrates how it is led by theoretical and conceptual interests as is typical of *[practice based] research-led-practice*. As the production commenced it demonstrated a further aspect of *[practice based] practice-led-research*, but in way that is also anticipated by Smith and Dean, which is contingency management such that creative solutions are devised through necessity rather than pre-planning, and lead to concrete outcomes and insights.

Additionally, as will be discussed later, the project generated secondary layers of research which typify Candy's characteristics of *practice-led research* in that it creates knowledge which directly informs further practice and the sector.

Part of the significance of *Demonstrations and Details*, is that its outcome demonstrates how the inherent complexity of the collaboration that is inherent in the relationship between a curator and creative team are simplified by models of curating which follow a straightforward progression of stages and procedures[18].

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[18] For example Robert Storr gives a typical and pragmatic account of curatorial processes in Storr, R., 'Show and Tell' in Marincola 2008.

Approaches to curatorial practice: (i) binary separation

This project demonstrates the problematic aspect of two different

approaches to curatorial practice. The first approach is centred on the notion

of the binary separation between curator and arts production. In exhibitions

in visual arts, where the work pre-exists or production of work is largely

under the management of the artist, the relationship of the artist and curator

is often described in terms which create a binary separation. This allocates

different aspects of creative endeavour and contribution to the artist and the

curator, especially the production of the artwork itself. [19].

In this binary approach, the curatorial creativity is seen to focus on the

construction of criticality, through the siting and spatial presentation of the

work and the creation of associations with other spaces or projects. It

involves the use of text and dialogue to contextualise, interrogate and situate

the work, but is not part of the making of the artwork. New media projects

encompass these aspects of curation but add other aspects that both

complicate and sometimes subvert them as the construction of criticality also

comes through the development of the artwork itself.

In 2011 these concerns do not need to be emphasised as an aspect of new

media as the complexities of the curatorial role has been well documented

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[19] It is arguable that much of the discourse around the 'curatorial turn' also embraces the notion of the binary: artist and curator as separate entities. Boris Groys, for example, identifies curatorial activity as being 'iconophile' and 'iconoclastic', simultaneously aiming to make itself both invisible and apparent in relation to the artwork and the processes around it (Groys 2008: 46).

over the last decade[20]. Part of the significance of *Demonstrations and Details*

is that in 2000/2001 such discussions were relatively marginal within the

arts and frameworks for reference around new media curatorial practice

were still attaining a critical mass, so that Graham and Cook could still write

in 2004 "What is it about new media that makes curating so damn tricky?"

(Graham & Cook 2004: 84). As they later articulated (2010) there is a

distinction between the separation of the roles of curator and creative

producers that is endorsed by traditional arts institutions such as museums[21],

whereas new media productions are often seen as operating through a much

more flexible and highly variable process (Graham & Cook 2010: 154)

Approaches to curatorial practice: (ii) integrated roles

In examining the development of *Demonstrations and Details* it becomes

obvious that the binary approach is not applicable. Instead the project

indicates a different approach – one in which there are a number of inter-

relationships between curator and artist and between the artist and

technologist that are mediated by the curator. This can be termed an

'integrated' approach to the roles and activities in the project. From its

earliest planning as a commissioned project involving a technical team and a

collaboration between producers as well as contributions from two major

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[20] Graham, B. and Cook, S., (2010), Paul, C., (2008); Dietz, S. 'Curating New Media' Y Productions (2000); also extensively discussed on the discussion forum of www.crumb.net

[21] Although it is outside the scope of this PhD project is worth reflecting upon the depth and history of arts practice that has endorsed the binary division between curator and artist producer and which arguably has its roots in the understanding of the curator as being an 'art historian through practice' and curation as being close to 'close reading' of the artwork.

funding bodies the project had a detailed timetable with milestones, which

progressed through a number of stages all of which show how the curator is

involved in the complex realization of an exhibition.

Based on my professional expertise, this can be described as a '6 stage'[22]

model:

Stage 1. Initial research and development: at this point the scope, purpose

and need for the project has defined. At this stage the curator's role was to

create the space for the artist to develop the initial concepts, and this

included securing start-up resources (in this case R&D funds and a residency

for Lyndal Jones at Artec).

Stage 2. Production development: having clarified the creative aims of the

project and its desired form, the role of the curator was to gather together

the production team – this role is in facilitating, brokering relationships and

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[22] This 6 stage plan is not drawn from any specific reference but had been evolved by me through the 1990s and 2000s using my practice as my source. I first began using this when working at Artec and co-ordinating a national programme for new media commissions. I also applied it in discussions with the Arts Council of Great Britain in the 1990s to explain why a three stage model of conceptual R&D, followed by production and exhibition, that was the structure expected – or required - by the available funding schemes in the visual arts, was inadequate for the needs of digital productions as they required much more extensive and resource-heavy development, and because the resulting production might be more open-ended than a conventional visual arts exhibition. I suspect, based on conversations with colleagues around the same time, that many media curators devised their own, similar, versions for their own planning, funding applications and project management.

raising and managing production resources (Australia Council funds and a National Lottery/ACE touring grant).

Stage 3. Production: this stage envisaged that work is produced in an iterative process – technology is being created alongside the content of the work. Artist and technologist are working in a co-relationship and each responds to the needs but also creates possibilities for the other. At this point it was envisaged that Jones would be drawing material from her video archive that would form the content of the exhibition (all of which had to be digitized), software was being written to enable the interactivity that the exhibition required and hardware was being sourced or modified (using motion detection or sensors to map the audiences movements).

The role of the curator at this stage was to facilitate this exchange and to make sure that the dialogue was fluid and effective. At the same time the curators responsibilities involved securing and promoting the tour (two additional venues were secured though in the end the exhibition only toured to one), liaising with the directors and curators of the host galleries and developing interpretation programmes with the venues (this was desirable practice but also an important aspect of the National Lottery funding application).

Stage 4. Presentation: This stage involves realisation of the work at the venue (in this case Ikon, the first venue). This requires the curator to work jointly with the artist on the siting of the work in line with her key concepts, and with the technical team on their vision for the project and the specific needs to fulfill what is been developed. Evaluation commences if it has not taken place before. The schedule that we worked to incorporated testing time and trials with the public to ensure that work was 'debugged'. It also requires working with the host organisation on their specific needs and to address the institutional politics so that they have a strong sense of ownership (for example making sure that front of house, marketing, and resident technicians all felt invested in the exhibitions).

Stage 5. Analysis: this stage involves monitoring the exhibition of the work in the space, making critical assessments and re-revisions as required. For the curator this is often a critical point when team have been disbanded and artists left so that continued networking is crucial. This stage also leads to the planning of the way that the exhibition will be presented in other venues and re-formulated if necessary.

Stage 6: Consolidation: feedback and evaluation are concluded. Exhibition dis-assembled, all resources carefully logged and stored/shipped/ returned.

Reflecting of the viability of the '6 stage' model

Given the orderly outline of this '6 stage' model, why would I commence this chapter stating that the project was initially a failure? Indeed, using many criteria it failed very solidly. At the point of the opening of *Demonstrations and Details* at Ikon Gallery in April 2000 the software was not working with adequate sensitivity to trigger the interaction required, the data-base could not process the size of the video files adequately so that the work did not have the smoothness required, the motion detection was effective but limited. Consequently the system crashed constantly.

The programmer and the lead producer resigned and the Director of the Ikon Galley where it was being exhibited threaten to withhold the artist's exhibiting fee asserting that 'the work' had not been delivered according to the terms of the contract. The exhibition was then partially closed immediately after the opening night and reopened a few days later, without interactivity and then over the following week a new technical team reconstructed the software and, working with Lyndal Jones, scaled back the video content to a workable element. Working closely with Claire Doherty (the curator at Ikon who was sympathetic to the problems and committed to finding a solution) we treated the exhibition as a 'live project' and used the exhibition space to re-work the piece, installing new software, monitoring and revising where needed.

Consequently the exhibition was all working by the second half of the exhibition period - after substantial 'patching' of the software and the budget. But it was never able to present the subtle and sophisticated level of interactivity that had been intended whereby the videos appeared to progress driven by human curiosity and where the work rewarded attention. Relationships were also patched up across the project team and between organisations, but accusations of blame clouded the air.

Mapping a theoretical model onto a real world situation

What went wrong demonstrates how theoretical models do not always accommodate 'real world' situations. In this case the funding was a determining factor because it structured the power relationships and responsibilities. I had successfully applied for two production grants. The first was received while I was working at Artec and so it retained the funds covering artist's commission and stipend, technical support and production hardware. Therefore Artec was contracted for the project management of the production - which was appropriate since it was a production space. The National Lottery grant I had raised at DA2 covered touring logistics, artists fee post production, exhibition equipment not covered by production. I was based in Bristol while the artist and production team were in London. As curator I was involved in the conceptual development with the artist but not working on the ground and since I saw the role of DA2 as an agency, facilitator and catalyst, I wanted to avoid technical production knowing from

experience how much that can monopolise the time and focus of an organisation, opting instead to work in collaboration with other partners.

This scenario is not in itself problematic, and because all parties knew each other quite well we assumed that joint management would be effective. However, what we had not addressed was that the significant factors that determine how a project evolves is not up to the management of stages of work but is in the negotiated relationship and the understanding between different people about their roles and how they relate to the process of production (Muller 2011). What the 6 stage model and the divisions of financial power and project responsibility above do not take account of is communication and processes by which consensus is reached which are fundamental aspects of collaboration.

The implications of collaboration have been clearly described by Sara Diamond: "Collaboration can be understood as a process between two or more individuals that blurs roles, can confuse authorship, and can create new forms of identification and cohesion. At the same time, this process inevitably leads away from the lucid single voice to work that is either explicitly or inexplicitly process-driven and multi-vocal" (Diamond 2008: 136). Diamond's point is absolutely clear, that sole control of a work invested in one of the partners is not possible in a collaborative arrangement – but that this poses risks as well as advantages. However what she does not state is that the nature of the collaboration and its status as a joint endeavor needs to

be clarified and communicated throughout partnership otherwise is it not possible to operate by consensus.

Paradigms of creative production*: 'singular artistic vision'* **Vs** *'collective operation'*

One of the problems with the '6 stage' model given above, is that there can be subtle differences in priorities of the individuals or groups involved and these have potential for conflict. These can be articulated as being different *paradigms of creative production*[23]. The first is a *'singular artistic vision'* paradigm based around the formative notion of the artist[24] as being the singular creative force and - although a project might be defined as a collaboration - the defining aims of a project is to realise the vision of the artist. The second paradigm is a *'collective operation'* in which it is recognised that the aim may have been originally proposed by the artist but is actually the outcome of negotiation and deliberation. Within this all members work to different, but related, objectives to reach a mutual goal. In projects with an interdisciplinary range of practitioners and researchers the individual objectives can be quite divergent[25].

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[23] As with the 6 stage model there is no reference for this – these are terms I have been using for many years and probably adopted from other colleagues.
[24] I am using the singular 'artist' for the convenience of writing but mean this to also encompass artists partnerships or groups.
[25] This is discussed at greater length in a paper co-authored with Jane Prophet 'Active Daydreaming: the Nature of Collaboration' (Prophet & Ride 2004) and also by Jane Prophet and Mark d'Inverno 'Creative conflict in interdisciplinary collaboration' (d'Inverno & Prophet: 2005)

It can be argued that many arts project embody both of these paradigms, moving between them at different stages. Typically, the *singular artistic vision* paradigm often comes into play when a project is commissioned and when it is presented or exhibited, and it is the dominant convention when visual art exhibitions are described. However, the *collective operation* paradigm defines the way that it is produced, particularly when it requires collaborative inter-disciplinary teams or groups involved in innovative and specialist work[26]. Since in new media projects the creative production is often the work of a team, or experts, and not the work of a single individual as 'the artist', therefore the second paradigm is of great significance. However, this means that the project managers need to operate with a degree of plasticity to ensure that multiple objectives are met, and to ensure that the needs, drives and concerns of all the people within the collective are communicated to each other. In some cases communication requires a form of translation, since different disciplines may employ different linguistic concepts and structures. (Prophet & Ride 2004; d'Inverno & Prophet: 2005)

1.5 RESEARCH OUTCOMES

It became obvious prior to the initial exhibition of *Demonstrations and Details* in April 2000 at Ikon Gallery in Birmingham that the two paradigms of

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[26] The implications of collaboration as also being something that creates ambiguities and fluid structures is described by Sara Diamond: "Collaboration can be understood as a process between two or more individuals that blurs roles, can confuse authorship, and can create new forms of identification and cohesion. At the same time, this process inevitably leads away from the lucid single voice to work that is either explicitly or inexplicitly process-driven and multi-vocal" (Diamond 2008: 136).

singular artistic vision and *collective operation* of exhibition production were simultaneously in operation but were unresolved and communication was not adequate. As a result there was a conflicting understanding of what the project was attempting to achieve. In power terms, this could be seen as a conflict between the authority of the artist over key artistic concepts and the authority of the technologists over the structural concepts. In practical terms this created a lack of integration and irretrievable miscommunication between the artist and the technical team. However this was not evident at project meetings and in the test of the product being developed where difficulties were only perceived as being problems requiring technical solutions. The separation of the production manager and team in London from me in Bristol coupled with the budgetary management of the production and the lines of authority that this created meant that when problems started to occur they were not communicated. The cracks below the surface were not noticed.

The term 'cracks' usually implies areas of weakness or fissures, but it can also imply situations which become risky. What the experience of *Demonstrations and Details* indicates is that new media projects need to anticipate considerable flexibility and contingency and the ability to respond to risk can be considered in this context. I would argue that risk management is rarely examined at the outset of a project in the same detail as the artistic aims and

criteria for success[27]. And where it is made explicit risk management usually

focuses on production goals, following a framework such as the *6 stage*

model, and does not include the risk involved in inadequate communication.

Because the project required a large gallery space the project could not be

tested as a working entity until the gallery set-up occurred in Birmingham.

Although an extensive set-up time in situ had been originally planned so that

problems could be ironed out and to enable 'trial runs' this had been reduced

by the gallery to a standard two week turn-over period including the take-

down of the previous show and the construction of internal walls which

meant that the budget and timescale prevented us from hiring a space where

we could do test-runs.

The problems became evident when the project team moved to Birmingham

to install. The system, once running as a single complex installation, could not

operate effectively and many problems that should have been evident earlier

became glaringly obvious. The problems, which ranged from difficulties with

the software used to 'live edit' video, the size of the video files, the software

that coordinated the computer network and the effectiveness of the infra-red

detectors all compounded when operating in the space. Consequently the

system hit glitches and crashed constantly. The audience members were

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[27] Anne Nigten examines this issue in relation to complex project management
dealing with her experience as manager of the V2 Lab: *Tunnels, Collisions and
Connections* (Nigten 2004)

frequently confounded by what it was they were seeing or meant to be experiencing.[28]

Reflecting on the *framework for curatorial knowing*

As identified earlier, failure is an important and under-recognised part of the learning experience in the arts and well demonstrated in this project. Failure is a catalyst for self examination – especially through reflection-on-action – for the simple reason that it is necessary to know what went wrong and how to get it right in future. The way that the theoretical concepts that I outlined above, the *6 stage* model and the *paradigms of creative production* affect how a project unfolds. The examination of this, or what I have described as mapping theoretical concepts onto real world situations, demonstrates the way that knowledge also operates in a cycular fashion. Reflection-on-action provides the tools to enable an examination of past practice and this in turn enables greater reflection.

Because the 6 stage model is linear and focused upon tasks and outputs it does not account for the fluidly that is part of a creative production. The significant knowledge about curatorial practice has not been generated through an orderly progression from one stage to another but by moving from one aspect of the project to another. This correlates directly to the *framework for curatorial knowing* in which the movement equates to

[28] This is obvious in the review for the exhibition in the Guardian included in the appendix, item 4.

transcognition or 'thinking across practices'. The example – because of failure – shows how there can be a stark difference in the ways of thinking about artistic production and the production of a working exhibit, which equates to the triangles/ domains of *creation* and *realisation*.
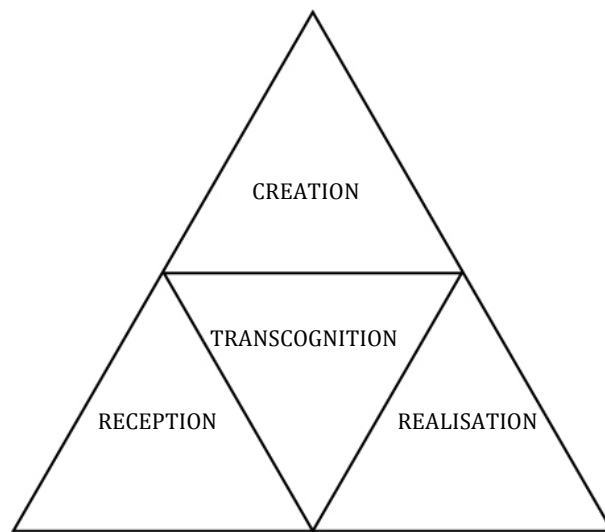
Figure 4. Ride, P. 'Framework of Curatorial Knowing' (2012)

It needs to be noted how the domain of *reception* can also reflect conceptual structures such as the *paradigms of creative production*. The Ikon gallery, at the executive level, also worked with the paradigm of the artist-visionary and as a result found it hard to comprehend precisely why difficulties had occurred. They interpreted the exhibition problems as being caused by 'technicians' being unable to make work in accordance to the artist's requirements and not as a problem inherent to the collaboration[29]. This was

[29] This was compounded by a change of directorship at Ikon. The former Director who had commissioned the project, Liz Ann MacGregor had understood the project as being experimental whereas the newly arrived Director did not see that experimentation was compatible with gallery exhibition [ref: un-recorded conversation with Peter Ride 2000].

also reflected in the way that the marketing department and education department also used conceptual language around the project.

In terms of generating curatorial knowledge this also demonstrates how reception is itself a complex domain. The curator is required to understand, and relate to, the point of view of a diverse range of people involved in reception of a project, from visiting public to the officers of a host organisation, and must include the artistic and production team. All of these are audience and have particular ways of perceiving the project once it is presented in the public realm. And all of them have, and can wield, particular power and influence, ranging from funding and investment, peer group approbation, public feedback and the creative team's personal sense of well-being and reward. As previously illustrated, *transcognition* represents the space in which the curatorial process draws connections between these various ways of conceptualising the project.

Figures 5 & 6. *Demonstrations and Details* installation at Newlyn Art Gallery in 2001

Revision of project for Newlyn Art Gallery

The initial failure of the project to achieve its original aims led me to evaluate what had been achieved and how the material could be revised for the second exhibition of *Demonstrations and Details* in Newlyn Art Gallery in 2001. This required a revision of the working relationships between artist and technologists to ensure that common goals were set and achieved.[30] As a result the project was presented with slightly less material due to a smaller gallery space (there had been eight video projections at Ikon, which were reduced to four). The installations worked to the technical specifications, and as such the exhibition could then be assessed as being artistically and technologically successful and received positive feedback from curators and audience members. [31]

However, the exhibition lead to another level of research activity, which involved the analysis of its functionality and research into the audience's experience. This conforms to Candy's description of *practice-led research* and in this instance the outcomes could the seen as being both applied research and theoretical. This has direct implication in the way that the curatorial knowledge is derived from an engagement with the domain of *reception*.

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[30] It also involved the employment of new team members who were commissioned to radically re-write the software as Sinden and Bovill decided to leave the project due to ill health.

[31] It is not always easy to measure critical response to exhibitions at regional art galleries due to the lack of coverage their exhibitions get in arts journals. Two significant measures worth considering are the reports for the funders (Arts Council, England report by Amanda King 2001), and also the interest of the arts community (Katie Deepwell appraisal of the exhibition in an article about the work of Lyndal Jones 2001).

The reconstruction of *Demonstrations and Details* led to an awareness that there was an inherent problem in addressing one of its aspirations: to create a subtle interactive environment in which the audience members felt engaged with the work, operating with it seamlessly, not negotiating with an interface or computer programming. It was obviously apparent that this had not worked at the first exhibition at Ikon in 2000 due to the technical flaws, but it was also apparent that two other factors had been significant.

Informal feedback had been collected from audience members at Ikon, using unstructured interviews[32], which indicated that the way that the public responded to the exhibition was partially conditioned by the contextualising information that framed the exhibition. This could be seen as being specific information in text form, through the exhibition wall panels, handouts and catalogue, and indirectly by the associations made by the gallery. For example, the language of the press releases and the way that the gallery invigilators were briefed about the show all emphasised the project as 'computer driven' and having 'interactive technology'. The public response therefore could be seen as being contextualised by a meta-narrative influenced by the way that concepts around technology were socially constructed.[33]

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[32] The interviews and observations were not intended to ever be used for further analysis, they were undertaken as a means to an end, and were never transcribed or typed up.

[33] This argument is extended in the articles 'Enter the Gallery' and 'The Narrative of Technology' Projects 5 & 6.

Changing the frame of reference that the gallery used for the later showing at Newlyn made a substantial difference to the public response. References to technology were minimised and less references were made about the extent to which the installations were interactive. The audience feedback, unlike the feedback at Ikon, became focused on the response to the artwork rather than the adequacies and inadequacies of the technology.

1.6 CONCLUSIONS

In addressing the impact and significance of *Demonstrations and Details* as a research project, four areas need to be considered. Firstly the exhibition itself can be seen as an articulation of a creative concern in new media: to explore how installations could create subtle experiences in which the audience dealt with interactivity intuitively. This is demonstrated through the evidence of the work itself.

Secondly, the project can be seen as advancing frameworks for knowledge, by placing the dynamics and structures of new media collaboration under scrutiny. This is made evident through discussion amongst peers about the project as a case study at conferences, symposia and workshops.[34]

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[34] *Momentum Forum, Bristol, 2001; Interaction: Systems, Practice and Theory*, University of Technology, Sydney, November 2004; *Curated Space* Arnolfini, Bristol, 2005; *II International Symposium on Contemporary Art*, Paço das Artes, Sao Paulo, Brazil, 2007

Thirdly, *Demonstrations and Details* brings into prominence the importance of the concept of failure. It shows why it needs to be considered as a stimulus for decision making and how 'reflection in action' and 'reflection on action' both play a part in this[35]. It also illustrates how in academic terms failure can itself provide a significant output not a negative (or non-existent) output. And lastly, how dealing with creative failure can be seen to be an aspect of a process-based project, whereas in a product-oriented project risk is more likely to be seen as being dangerous[36].

Demonstrations and Details also demonstrates how the issue of failure and success needs to be considered in relation to the concept of curatorial knowledge. Although it is easy to discuss arts projects in terms of artistic merits, the curatorial processes cover a number of different areas – as demonstrated in the *framework of curatorial knowing.* Successful practice cannot be measured by outcome in one area but requires activity in all the domains: *creation*, *realisation* and *reception*, and also the fluid and flexible movement between them. An incident of failure acts like a spoke in the wheels, it emphasises the importance of the balance between the different processes. Failure in one area is against one set of criteria only, and still leads

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[35] Artist Nina Pope argues that failure provides a necessary learning curve in new media since new working with digital technologies requires practical testing of possible and probably possibilities. (Pope, N. classroom lecture, University of Westminster, 23 March 2012)

[36] This point and the artists "right to fail" were concepts discussed at the *Commissioning & Collecting Variable Media Symposium: Video 08*, Baltic, March 2010, documented http://www.crumbweb.org/getPresentation.php?presID=76&op=4&sublink=&fromSearch=1

to curatorial knowledge.[37] The following diagram maps many of the concepts

and issues discussed in this chapter onto the *framework of curatorial*

knowing.

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[37] It needs to be pointed out different types of arts institutions reflect different concepts of success and failure. Large, high profile institutions such as art museums and large galleries are often likely to be risk-averse. This is addressed by Cook 2008; Paul 2008; Graham & Cook 2010; Turnbull and Connell 2011.
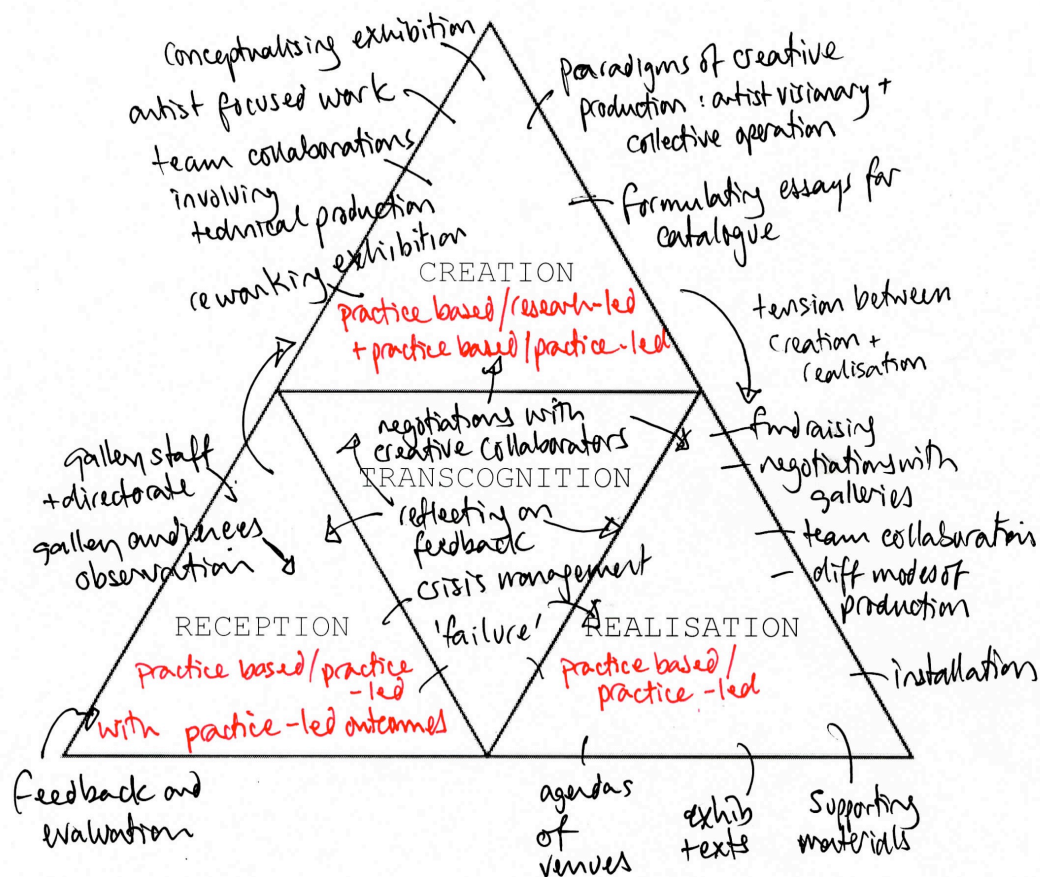
Figure 11. 'Framework of curatorial knowing' as configured with key concepts

arising through the project Lyndal Jones *Demonstrations and Details*

The fourth outcome, is in the audience's perceptions of the exhibition and the understanding of the way in which the contextualisation of technology affected the audience's response. This presents a different aspect of research outcomes which at the time were of lesser significance – an issue to be dealt with in order to make the project work more successfully. But as time has passed it is apparent how these tie into Schön's paradigm of continuous reflection-on-action. The outcomes of the research project have remained alive as research material and led to continued examination and exploration.

How this project leads to my further enquiry into audiences

Within the timescale of the exhibition, the importance of this finding was that it demonstrated how the curator can define and shape the experience of the audience through the way that the exhibition is referenced and framed through texts. However, in order to effectively appraise the way the audience responded to the work and if, indeed, it was possible to create an environment in which the audience operated intuitively, I also recognised that as a curator I had inadequate research resources. Not only that, but within the new media sector it could be argued that descriptions of audience response were often incomplete or even haphazard (Graham and Cook, 2010: 177;). While there was considerable theoretical enquiry into concepts such as embodiment, interactivity and engagement which all, by implication, asked

questions about audience responses, they were not examined in practice or

documented using effective and comprehensive methodologies.[38]

It is worth considering that one aspect of practice-led research is that it can

generate outcomes that develop over time. As such, audience perceptions

became a subject of further research in my work. The essay 'Enter the Gallery'

included in this PhD programme makes references to *Demonstrations and

Details* though leaves it un-named for reasons of professional ethics. In

addition, the experience of this project led directly to the planning and

strategy for another practice-based project in this programme, David

Rokeby's, *Silicon Remembers Carbon* (2007).

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[38] Since 2001, important initiatives in new media audience research and which have developed new methodologies have included work by Lizzie Muller's work at Betaspace Gallery Powerplant Sydney (2001-5) and Gabriella Giannachi's work with Blast Theory's projects (2010)

Appendix to Project 1

Items

1. DA2 promotion card for exhibition and Ikon gallery leaflet (2000)

2. Lyndal Jones *Demonstrations and Details (2000*) detail showing how image sequences started off at a distance

3. Lyndal Jones *Demonstrations and Details (2000)* detail showing how image sequences changed to create an intimate space

4. Review *The Guardian* (2000)

5. Newlyn Art Gallery brochure (February 2001)

Item 1. DA2 promotion card for exhibition and Ikon gallery leaflet (2000)

Item 2. Lyndal Jones *Demonstrations and Details (2000)* detail showing how image sequences started off at a distance (see following image)
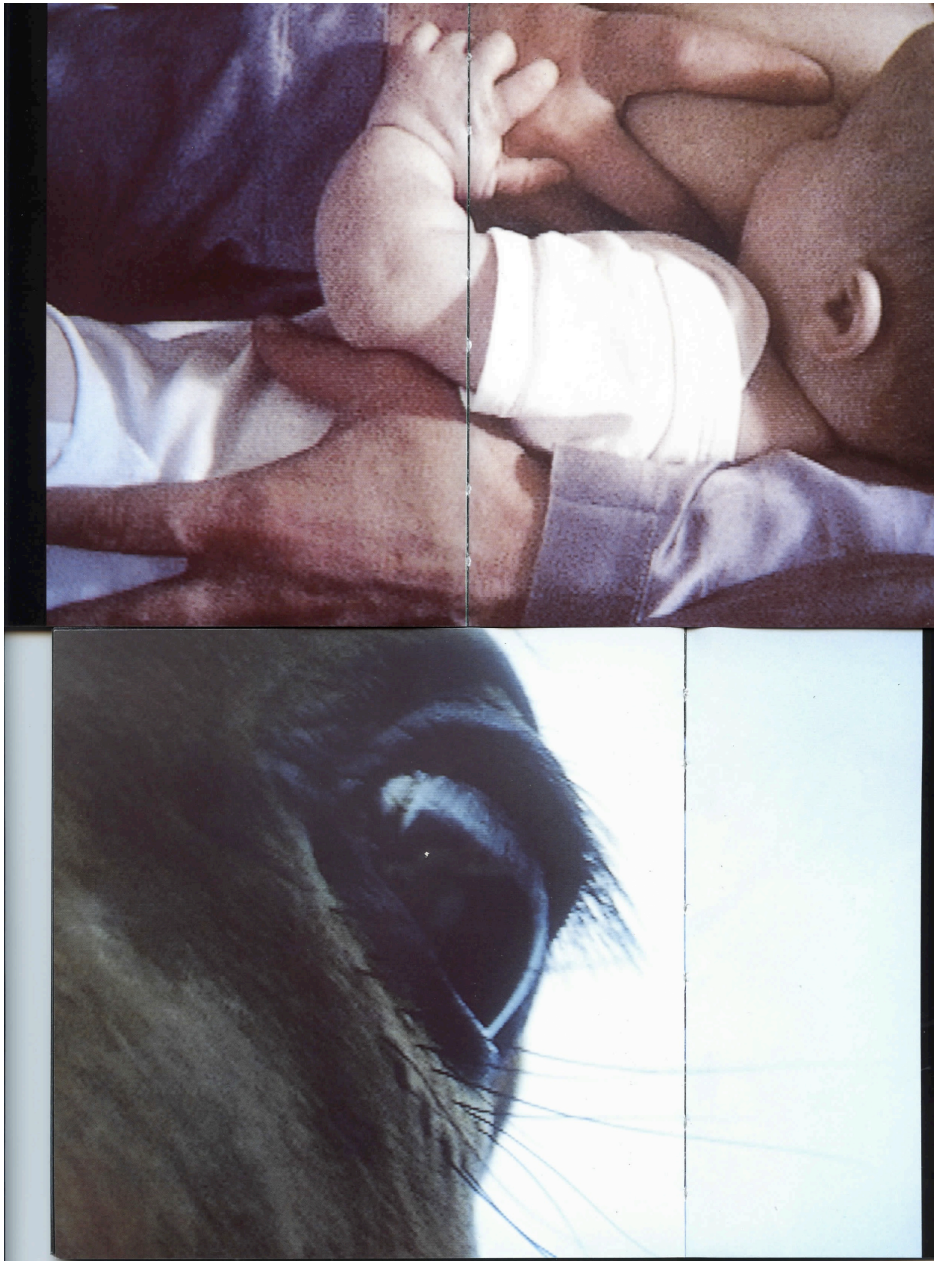
Item 3. Lyndal Jones *Demonstrations and Details (2000)* detail showing how image sequences changed to create an intimate space (see preceding image)

Lyndal Jones

Ikon Gallery, Birmingham

Demonstrations and Details From the Facts of Life is a video installation on the theme of human sexual attraction. The wall text as you enter the show seems irrelevant to what follows, and misses the opportunity to say something about Charles Darwin whose discoveries about sexual selection are fundamental to Lyndal Jones' vision.

The first gallery has three videos on different walls, together showing a dismaying variety of still and moving images, apparently triggered by the number and movements of visitors to the show. Even if this works technically, little is gained in terms of preparing the viewer for the rest of the piece. You pass into a wide gallery with a vast three-screen projection, showing a lush green tropical environment overlaid with the pink flesh of discreetly naked bodies. It references the Galapagos Islands, but it's also an Adam and Eve scenario. The handout suggests that new thoughts and old memories will be triggered in the viewer's mind. And that might well have happened if the earlier parts of the installation had pulled their weight. Even sitting in the final room, with a periodically blank screen, the viewer's own imagination is stymied by the knowledge that every so often an image of breast-like pomegranates, followed by another, flashes up.

Overcomplication, is the word. It's a shame, because the artist and her support team have obviously tried to put the viewer at centre stage. It just hasn't worked out that way. But for anyone interested in video art, the show would be worth experiencing, for the original narrative journey the viewer undertakes through rooms, screens and images.

'Demonstrations and Details': Ikon Gallery, Birmingham (0121 248 0708) to 29 May

Sexy fruit: a still from Lyndal Jones's work 'Facts of Life'

Item 4. Review *The Guardian* (2000)

19 February - 14 March

Lyndal Jones

Demonstrations and details from the facts of life

Images and scenes interwoven from many sources will fill the Upper Gallery creating a complex narrative about attraction and temptation. Projected on the walls at a monumental scale, these images work on the senses to provoke many trains of thought, not least the idea of a Garden of Eden in which Darwin's theories of sexual selection are made manifest. Ranging from the classical to botanical, the images create a sense of the interaction between people, animals and plants.

In the Lower Gallery a video installation is designed to respond to the presence of the viewers, selecting layers of images and sound according to their reactions. These very intimate images flicker from the flirtatious to the romantic, the erotic and the disturbing. Lyndal Jones draws upon the way we use our voices, faces and bodies to communicate, referring to our primeval strategies for finding a mate.

Note: entry to this part of the exhibition will be supervised and it will not be suitable for young children. We do not recommend viewing by unaccompanied children.

Events
all events are free unless otherwise stated.

Gallery Talk
Sunday 18 February
12 noon
Lyndal Jones will talk about her work in the Gallery.

Lunchtime Talk
by Esen Kaya,
Saturday 24 February
12 noon

Workshop – Projected Imagery
Saturday 3 March
11am - 4pm
Looking at collage and hands-on, low-tech projection methods, to create layered and changing images. Fee £12*, advance booking is essential

Workshop on digital photography
Saturday 10 March
11am - 4pm.
Explore a variety of ways of manipulating photographic images using a range of technological equipment. Fee £12*, advance booking is essential

Cover, top and background
Lyndal Jones,
details from 'Demonstrations and details from the facts of life'

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Item 5. Newlyn Art Gallery brochure (February 2001)

Project 2:

Timeless: Time, Landscape and New Media

Figure 8. Susan Collins, *Glenlandia* (2005) image included in *Timeless: Time,*

Landscape and New Media 2006

Project 2: _Timeless: Time, Landscape and New Media_

Exhibition*:*

Timeless: Time, Landscape and New Media group exhibition with artists: Suky Best, Susan Collins, Rebecca Cummins, Simon Faithfull, Jane Prophet, David Rokeby and Chris Welsby.

Exhibited at: Harbourfront Centre, York Quay, Toronto, as part of Images Festival Toronto 2006. 25 March 2006 – 30 April 2006

Texts:

Exhibition brochure with curator's essay, Ride, P. 2006. _Timeless: Time, Landscape and New Media._

NB. A reprint of this brochure in included in the evidence portfolio. No original copies remain from the print of 2006. Also included is the Gallery brochure from Oakville Galleries containing the essay for the successor exhibition to 'Timeless' (see note on p. 74.)

2.1 INTRODUCTION

The exhibition *Timeless: Time, Landscape and New Media* was a group show built around a singular and familiar theme, that of the landscape. The project drew on existing work. However, the exhibition also demonstrates a complex layering of curatorial intentions.

The exhibition was partly driven by the desire to explore how contemporary artists were responding to the theme of landscape and how new media offered new ways of conceptualising what it means to represent land and our relationship with it. As discussed in the curator's essay in the exhibition brochure, I was particularly interested in the notion that the concept of photographic time and time-based media had dominated contemporary representations of landscape. I wished to demonstrate how new media was offering two different approaches in ways described best by Lev Manovich (2001)[39]. Firstly, it was enabling artists to rethink landscape described as Turing-esque, thinking through the machine, but secondly it was enabling photography and video artists working within a Duchampean perspective, new ways to approach creativity. It aimed to show how new media could free us from working within persistent tropes and offer new ways of understanding how we experience the space around us.

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[39] I am adapting the terminology used by Lev Manovich (1996) who identifies two different tendencies in arts practice as being 'machine based' and following Alan Turing (Turing-land) and 'conceptually centred' on the art object following Marcel Duchamp (Duchamp-land).

2.2 RESEARCH AIMS

The research aims was to investigate, through practice, how an exhibition can contribute to a shift in the conventional paradigms of new media themed exhibitions and to find innovative ways to explore landscape as a visual subject. As a practice-based research project, the exhibition can therefore be seen to typify an example of *research-led-practice*.

2.3 RESEARCH CONTEXT

There were multiple research contexts to this exhibition. Firstly, within my own practice I had been persistently working around ideas of landscape and the physical world. The 2001 DA2 commission, *Tide* by Luke Jerram, which I curated, explored how the gravitational pull of the moon upon the Earth's surface was something we will always be subtly aware of and through data conversion it was represented as a live audio stream that emanated from an acoustic sculpture. A research project, co-curated with Nina Czegledy and with a group of international artists, investigated how the Aurora borealis was experienced as a visual and physical phenomenon[40]. My work on the representation of landscape had been persistent since the 1995 group exhibition I curated *After the Sublime: Landscape in Contemporary*

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[40] The project 'Research into new media artists responding to natural phenomena such as the Aurora Borealis' was supported by AHRC Small Grants in Creative & Performing Arts in 2002; further research into representations of time and in particular into artists' interactions with astro-physicists resulted in a symposium 'Time, Space and the Artist's Document' (Nov 2003; speakers including Prof Jana Levin).

Photography[41].

In a broader research context, land and our place within it appeared to a subject that was enjoying a resurgence and this became a focal point for my research. Within academic discourse the writing of WJT Mitchell (2002) addressed the importance of seeing the representations of landscape within power structures and cultural debates as well as seeing it as an area of individual expression. Various essays by Nikos Papastergiadis (2006) addressed ideas of land, inhabiting space, cultural identities and movement across territories within his studies of spatial aesthetics. The writing of Rebecca Solnitt (2003, 2004) addressed how cultural readings of the landscape, especially through photography, were bound up with the development of industrial technologies such as the railway as much as technology. In 2005 Google launched the software Google Earth which brought the idea of global visualisation to the desktop (Goodchild 2007).

But, from my point of view, a more complex aspect of the research context was of the role of the curated group exhibition. Group shows on a common theme are a well-established curatorial device in contemporary arts and new media alike. However, I was aware that there was often a discrepancy between the way that themes were selected and presented in the different sectors. Within the contemporary visual arts I would find it typical to see exhibitions dealing with broad or specific cultural themes such as mapping, identity, gender representation, sexuality, pain, loss or belonging. The list

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[41] *After the Sublime: Landscape in Contemporary Photography* was exhibited at Harewood House and Cambridge Darkroom Gallery in 2005.

could go on. However, in the new media exhibitions I was regularly visiting,

themes often appeared to be driven by the culture of technology or by

technology itself: the wired world, artificial intelligence, streaming,

biotechnology, software and open source, gaming, mediated surveillance or

net-art. [42]It can be argued that that the critical mass of exhibitions fostering

the development of new media as a cultural form essentially referenced

technological innovation (Paul 2008: 67). I would not position this as a

dilemma, because I had been and continued to be one of the many people

operating in this area, but it was a consideration that was worth critiquing.

The issue was one of positioning: what David Garcia later described as a self-

referential quality of new media arts that firmly located it within a modernist

paradigm while most arts practices had moved beyond modernism[43].

I saw this exhibition is an opportunity to contribute an alternative voice to

the discourse in the new media art sector, one that viewed new media from a

point of view more closely related to visual culture.

A key aspect of visual culture lies in the approach of practitioners and artists

who only deal with visual representation, but ask questions about visual

pleasure and why some visual tropes were recurrent across our culture

because they had lasting attraction as subjects (Mirzoeff, 1999; Elkins 1999,

2004, 2010; Mitchell 2006). While many new media artists made work that

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[42] This is evidenced by looking at the documentation, from the 1990s-2000s, of the major international festivals such as ISEA, Ars Electronica, Transmission, Lovebytes, or exhibitions in UK venues and events such as Cornerhouse, Tramway, FACT, Site, Zone and Future Physical.
[43] David Garcia, quoted in Ride (2010) 'Shiny and New', *Tate Encounters Edition 5*

directly spoke to technological experimentation, and made a social critique of technology, many did not - or made work that spoke to a range of subject matters. This exhibition was a way of providing a different context in which work of this nature could be seen.

In addition, not a lot is written in curatorial texts about the pleasure of discovery that takes place in creating exhibitions and which can be fundamental motivation. While we articulate, and legitimise, exhibition projects from a theoretical perspective, part of the purpose of curatorial work is the delight of making something happen that otherwise would not take place. For me, this is a performative action and underlines that exhibition making is a practice-based activity.

Within the *Framework of Curatorial Knowing* this needs to be seen as a component of the triangle/domain of *Creation*. And like most of the other aspects of curatorial activity it involves close inter-relationship with the domain of *Realisation*. It also makes it clear that for curators, the artists or the creative teams producing the work are also the audience of the work (and sometimes highly critical audiences, and frequently articulate audiences, too!) and therefore there is a strong relationship with between the delight of making something happen as an aspect of *Creation* and the triangle/domain of *Reception*. And to repeat my earlier assertion, it is the movement across these modes that can be termed as a transcognitive process.

2.4 RESEARCH METHOD

The starting point for this project was my interest in exploring how David
Rokeby's art work, *Machine for Taking Time (2001)* would operate in a
gallery space. I had shown this piece many times as documentation[44] but I
was interested to see how gallery viewers would respond to it as a work that
unfolded over time and required patience and contemplation. The work is
the accumulation of several years of video, recording the passage of time in a
garden; the sequence of images that are seen in the gallery are stitched
together from a database of clips and could be drawn from anywhere in the
garden's history. The camera pans across the garden in an elegant and
everlasting figure-of-eight loop, and time shuffles back and forth as the
images flow in a sequence that follows geography but seems to play with
memory and anticipation and with past and future [Figure 2]. The artwork is
both complex and subtle, and I anticipated that it needed a conducive
environment that would allow viewers to respond to it in the fullest degree.

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[44] David Rokeby had produced a DVD version of the work as a liner video
output of approx 180 minutes. I had used this for teaching purposes and
public lectures and workshops; I had also organized the sale of it to a private
collector as an editioned work.

Figure 9. David Rokeby, *Machine for Taking Time* (2001) showing the pan of the images across the landscape.

I was interested in juxtaposing this work with that of Susan Collins [Figure 3] and Jane Prophet [Figure 4], with whom I had long working relationships, and whose work was very different in approach from David Rokeby's but also required concentrated and passive viewing. Often a curatorial priority relating to exhibition display and visual presence is to create juxtapositions so that art works are considered to 'speak' to each other across the room, and threads and connections are built up that the audience might, or might not, choose to acknowledge.

As an aspect of curatorial practice this is highly personal and subjective but can also be based on experience and feedback; it can also be seen to be an aspect of craft in the same way that the organisation, structuring and placement of material is often part of a visual artists practice.[45]. (I would also describe this as an essential element of the first triangle/ domain C*reation*.)

Figure 10. Susan Collins still from *Glenlandia* (2005) exhibited in *Timeless* as a live feed and this image as one of a selection of 'archived' prints.

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[45] This structuring technique where part of the power of an exhibition comes from the juxtaposition of works is often emphasised within artist curator projects such as Mark Wallinger's exhibition *The Russian Linesman: Frontiers, Borders and Thresholds* at Hayward Gallery in 2009 (Wallinger 2009) and John Baldessari *Ways of Seeing: John Baldessari Explores the Collection* exhibited at the Hirshhorn Museum and Sculpture Garden, Smithsonian Institution in 2007 (Baldessari, 2007). In exhibitions like this the 'craft' of selection and arrangement is often described as being a typical expertise of artists and one that is being employed in a curatorial context.

Figure 11. Jane Prophet stills from *Decoy* showing a sequence of images from the

computer animation displayed in *Timeless*

Proposal of exhibition and selection of artists

I was invited by Images Festival, Toronto, to submit a proposal for
consideration by the selection jury, which is a typical process for public
sector organisations in Canada where selection is frequently by a peer-
review committee.[46] I negotiated with the Festival directors on the venue: the
exhibition needed a large space but I also wanted somewhere that had a
strong sense of location within a physical environment so that the work
could "speak" to the landscape. Harbourfront Gallery is located on the shores
of Lake Ontario in a waterside complex and the environs are used for sports,
family recreation and cultural activities. As a venue Harbourfront had a
surprisingly low-key profile amongst Toronto's very buoyant contemporary
arts scene although the exhibitions gallery and exhibition spaces had a
consistent programme of high quality exhibitions and foot traffic of hundreds
of people per day during weekends. However, Images Festival also had a
good reputation for propelling its audiences to venues across the city and a
well honed relationship with the arts press and 'opinion formers' in the
cultural sector. This combination provided me with an extensive and variable
gallery space, a potentially large audience, and a critical focus from the
festival audience.

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[46] Images Festival is an historically important festival within the Canadian sector,
presenting film, photography, video and new media. Images is funded largely by
the Canada Council for the arts and additional financial support for the exhibition
of £8,000 was received from Canada Council and British Council.

Figure 12. Harbourfront Centre, Toronto

I selected work from a range of British and International artists (ordered alphabetically): Suky Best (UK), Susan Collins (UK), Rebecca Cummins (USA), Simon Faithfull (UK/Germany), Jane Prophet (UK), David Rokeby (Canada), Chris Welsby (UK/ Canada). These artists' approaches were all distinctly different in form and presentation[47]. The group included works that were presented as photographic prints, video shown on screens and projection, computer animation and computer monitors showing webcam images. The selection contained works that linked the inside of the gallery to the external space of the surrounding location. It also had works that linked the time and the space of the gallery to time and space in a different part of the world. It included works that encouraged a space of intimacy and close involvement and others that suggested spectacle and sensation.

As such, it tried to include a range of different viewing modes for the

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[47] Detailed information and the descriptions of the works are included in the curators essay included in the appendix and so I will not repeat it here.

audience. None of the pieces involved complex computer setups or had

human–computer interaction and this was a deliberate choice because I

knew that the gallery did not have the resources to maintain highly technical

pieces and that the festival did not have the budget for technicians on call.

One piece, Chris Welsby *Trees In Winter* (2006), did have a complex

operation with sensors that responded to the wind on Lake Ontario and I had

organised the artist to provide spare components and a software manual in

the event of any problems.[48]

2.5 RESEARCH OUTCOMES

The development of the exhibition content is an important aspect of the

curatorial outcomes of the project. The themes and questions of the

exhibition remained consistent from the point of its original proposal, as can

be seen in the original proposal document (included in the appendix),

although the selection of artists, and in some cases in the work chosen from

the artists, did change to a degree due to availability, resources for

international shipping, and the input of Images Festival.

The selection of David Rokeby, Simon Faithful, Susan Collins, Jane Prophet

and Rebecca Cummins, as artists whose outlook and practice dealt with the

concepts I was interested in exploring through the practice of exhibition, was

integral to the premise of the project. However, the actual work proposed for

David Rokeby was the only artwork that remained constant across the

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[48] The only real problem that occurred was that Toronto unexpectedly had a sustained period without much wind on Lake Ontario which mean that the installation sometimes had to run in a default mode.

development of the project. The work initially proposed for Susan Collins, which looked at the landscape of East Anglia, *Fenlandia* was the documentation of webwork that had been commissioned by Film and Video Umbrella. It was replaced in the exhibition by a later project she was undertaking *Glenlandia,* which used the same concept but the subject of the work as an area of the Scottish highlands. This attracted me because live webfeed created risk but also the potential for greater immediacy. Also because I negotiated with Susan on having her include archive prints of the project. At that point she had only used these as documentation and not as part of the exhibition material for her projects.

I had initially proposed exhibiting one of Jane Prophet's *Blot* (2003) print series of landscape images alongside her computer animations, in particular works which had been made in Canada in residence at Banff. However shipping proved to be too costly to make this possible. Therefore only the *Decoy* animation series was included. I decided to run this on two screens each having three sequences.

The works proposed for Rebecca Cummins dealt with light: they included a 'hypothetical' video-link project that connected the Australian Desert to the USA plus a commission for a site specific 'sun-dial work' and documentation of other sun-dial projects. Funding made the commission impossible and Cummins proposed making another work that could be included, that featured her body as the invisible gnomon on a sundial (and moon dial) taken in a mountain landscape: one taken at night and one at day. This work

Another Light (2006) consisted of two large-scale prints.

Figure 13. Rebecca Cummins *Another Light* (2006)

Two other choices had been included in the original selection: Thomson and

Craighead whose Template Cinema created a new way of dealing with the

concept of the archive as a creative source, and which complemented the

approach of David Rokeby. Also the Canadian video artist Stan Denniston whose video work created landscape images as apparent 'durational stills' had been proposed. Images Festival had a separate interest in exhibiting Denniston in a later festival and requested another choice. And lack of funding made it impossible to commission work from Thomson and Craighead which was what had been intended.

Figure 14. Suky Best 'Marsh Dagger Moth' from *Return of the Native* (2005)

The other artists introduced were Suky Best and Chris Welsby. Suky Best's work *Return of the Native* (2005) used video and print to create a pseudo natural history narrative. Set in the East Anglia landscape her works took as their subject the endangered and extinct species of wildlife of the area, placing museum specimens into the contemporary industrially farmed fields

and busy roadsides.

Chris Welsby, a British film and video artist , based in Vancouver, combined the style of a 1970s structuralist aesthetic with responsive interaction in which an external feed monitoring aspects of the weather live-edited the feed.

Figure 15. Chris Welsby, still from *Trees in Winter* (2006)

Lastly Simon Faithful's work remained as planned. The work took a radio transmitted feed from a camera suspended to a chair and a weather balloon, showing the passage of time as the video footage progressed from showing recognisable a landscape to the rim of earth at the edge of space.

Figure 16. Simon Faithful, stills from *30km* (2003)

Audience research and attendance

Although it was not my intention to carry out any formal audience evaluations I was interested in observing audience behaviours and so an extension of my curatorial work was as 'participant observer' (Silverman 2004; Flick 2006) in the gallery alongside the invigilators where I looked at the patterns of movement and time spent by audience members. Because none of the works had human–computer interaction the audience relationship to the work, in physical terms, was relatively conventional and I could easily observe how audiences chose to spend time in front of different works. Because I was not intending to make any publication of my findings I did not write up my observations as I would for an ethnographic style study. I was carrying out the work to discover what approaches to observation seemed to be successful and which ones seemed to give inadequate information. I also used the opportunity to speak to gallery staff, volunteers and members of the public which was partly from my curatorial curiosity to gain feedback on the way that people had responded to the arrangements, and appreciated the different works, but also as a way of finding out what form of questioning was useful in gaining frank and un-intimidated responses. Therefore the exhibition has a secondary aspect in that it has a partial degree of *practice-led* research.

Audiences were varied. While some of the audience members who I questioned considered themselves to be regular gallery goers or had come

because were following the Images Festival publicity others were passing

visitors. Because the gallery was in a very prominent public area on the

waterfront the visitor numbers were consistently high. An additional factor

in terms of attendance was that the gallery was positioned next to Toronto's

largest public sector (and non-museum) visual arts gallery, the Powerplant,

and also received a spillover from their audience.

2.6 CONCLUSIONS

As expressed at the outset of this chapter, the aims of this project were to

explore how contemporary artists were responding to the theme of

landscape and how new media offered new ways of conceptualising what it

means to represent land and our relationship with it. Therefore this was

predominantly a practice-based/ research-led project. However as I have

discussed in this commentary the process of making, organising and

presenting the exhibition has to be seen as a practice-based/ practice led

exercise and in addition it resulted in practice-led outcomes in terms of new

knowledge generated from the activities

The exhibition was awarded a special citation by the Images Festival Jury for

'Excellence in a Curated Project". As a curated exhibition *Timeless* was

ineligible for any of the categories, and so a special mention was given.

A direct outcome of this exhibition was an invitation to curate an exhibition

for the Oakville Galleries, Ontario, a short distance from the Toronto

metropolitan area. This exhibition was structured as a double exhibition

Outlook Express(ed)/ Accumulated Outlook co-curated with Marnie Flemming

the curator at Oakville Galleries which has twin venues, in which Marnie

curated *Outlook Express(ed)* and I curated *Accumulated Outlook.* The

exhibition had the work of three artists duos and individuals: Thomson and

Craighead; Cheryl Sourkes; Dara Gelman and Lesley Peters. It did not deal

with landscape as a theme but continued some of sub themes that were

included in *Timeless* while Marnie's exhibition dealt specifically with

landscape and used the works I had shown previously, Rokeby's *Machine for*

Taking Time (which Oakville Galleries had initially commissioned), a work by

Susan Collins and work by the Canadian artist Lois Anderson[49].

The concepts behind the exhibition were further developed through research

and incorporated into a conference paper (selected by peer review panels)

for *The Society for Photographic Education (USA) National Conference 2007*,

Miami USA, March 2007[50].

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[49] A copy of the exhibition brochure is included in the published items because the
page size makes it too large to scan for the appendix
[50] An additional paper submitted to *Engage: Interaction, Art and Audience*
conference at the University of Technology, Sydney, November 2006. The full paper
for *Engage* was reviewed and accepted by a peer review committee but I was unable
to attend and present it.

Reflections upon *Timeless* in relation to the 'Framework of curatorial knowing'

The 'Framework of curatorial knowing' triangle diagram with handwritten annotations:

Top (CREATION) area:
- Construction of essay + texts
- Conceptualising exhibition
- selection of works (pre-existing)
- re-selections due to resources/availability
- development and creation of next exhibit
- CREATION — *practice based/research-led* — *practice based/practice-led*

Middle (TRANSCOGNITION):
- reflections on the way exhib is experienced
- TRANSCOGNITION
- reflection during selection + planning process + afterwards
- working with artists
- negotiating with festival + gallery
- organisation of space

Lower left (RECEPTION):
- observation of audience
- evaluation by artists
- involvement of festival audience
- RECEPTION — *practice based/practice led* — *leads to: practice led outcomes*

Lower right (REALISATION):
- placement + presentation
- installation
- REALISATION — *practice based/practice-led*

Bottom row:
- feedback/endorsement of festival curators
- planning: "where to go" from here
- Interpretation events + seminars + tours
- Setting quality and standards

Figure 17. 'Framework of curatorial knowing' as configured with key concepts arising through *Timeless*

When the themes and issues expressed in the commentary are mapped onto the *Framework of curatorial knowing* they demonstrate a more orderly development of activities and knowledge than was demonstrated in the preceding project *Demonstrations and Details* because the reflection was not born out of crisis management. But instead they indicate a consistent movement across the triangles/domains that leads to knowledge.

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Appendix to Project 2.

Items

1. Images Festival Brochure (2006) Cover

2. Images Festival Brochure (2006) Exhibition description

3. Ride (2005) Second proposal to Images Festival for exhibition

4. The original layout of *Timeless* proposed for Harbourfront Gallery (2005)

5. The final layout play for *Timeless* at Harbourfront Gallery (2006)

6. Harbourfront Gallery announcement using image of Suky Best (2005)

7. Cover of gallery brochure for Oakville Galleries (2007)

Item 1. Images Festival Brochure (2006) Cover

Harbourfront centre York Quay Centre, Harbourfront Centre
235 Queens Quay West
416 973 5379
harbourfrontcentre.com

March 25 to April 30

Tuesday to Thursday, 12 PM to 6 PM
Wednesday, Friday & Saturday, 12 PM to 8 PM
Sunday 12 PM to 6 PM

Timeless — Time, Landscape & New Media

Our sense of time informs the way that we think about landscape: from the epic to the immediate, from the expansive timeframe of geological and botanical forces to the time of human occupancy of indigenous and colonizing communities, even of mythological and spiritual time.

New media technologies have provided artists with unique ways of thinking about time and thus new ways to represent landscape. The frozen time of photography or the evolving time of cinema is often not the core reference point in these digital works. Instead the re-purposability of data offers new ways to address how landscape can be considered. Just as the lens provided ways of seeing the world that could not previously be comprehended, so too does the computer. Although digital images incorporate some of the same dominating forms of representation, and use some of the same framing devices as traditional photographic methods, networking and data acquisition of digital processes create a different context of synchronicity and a-synchronicity.

The three prevailing themes of this exhibition are Un-fixity, Immediacy and Simulation.

Un-fixity: the database is the dominant metaphor for new media. Artifacts are not made but comprised of existing material. As a result the existing works re-shape and change; they are never static. These images are not witnesses to an event, they unfold rather than appear as fixed objects. Time is never frozen, it shuffles and moves from one zone to another.

There will be an Artist Talk with Peter Ride, Suky Best, Susan Collins, Rebecca Cummins, Jane Prophet and Chris Welsby at York Quay Centre, Harbourfront Centre on Sunday, April 16, 3 to 5 PM. See p.21 for details.

Immediacy: networked communication has become the key to modern media. Peer-to-peer, network to network, individual to vast unknowable online communities. Media has little individual ownership. Its value is not in originality but in its capacity to be transmitted, sorted and re-sent.

Simulation: the border-line between the real and the unreal, and the natural and the un-natural, has eroded from the discourse about landscape. Simulation is no longer an extraordinary way of representing the world, but is fully comprehensible as a form of documentation. We easily grasp things that are intricately fabricated, evolving from code rather than design. Just as these landscapes are not real, they also play with time as a fiction, re-inventing it, stretching it.

— Peter Ride

Return of the Native
Suky Best
UK 2005

A series of short digital animations "reintroduce" formerly indigenous insect and bird life to the contemporary agricultural landscape of the East Anglian Fenland. Highlighting extinct or endangered species, the stylized nature of each composition elicits a haunting and disquieting sense of loss.

Glenlandia
Susan Collins
UK 2004

With one pixel updated every second, *Glenlandia* rebuilds a live image from rural Scotland over a 24-hour period. Collins' work also observes the relationship between landscape and technology as she portrays the man made Loch Faskally as a quintessentially "natural" Scottish locale. *Glenlandia was co-commissioned by Film and Video Umbrella and Horse-cross; supported by FRS Freshwater Laboratory.*

IMAGES

Item 2. Images Festival Brochure (2006) Exhibition description

Another Light
Rebecca Cummins
USA 2006

Working in collaboration with an astrophysicist at the University of Washington, Rebecca Cummins reflects on the photographic and spatial measurement of time by using the earliest time-measuring technology: the sundial. With her own body as gnomon, Cummins' measures how modern timekeeping devices have altered the way we conceptualize time.

30km
Simon Faithfull
UK/Germany 2003

30km documents the flight taken by a meteorological balloon as it ascends from the earth. Tracking the journey until the curvature of the earth can be detected, the video stream follows the balloon to the edge of space where it explodes from the change in atmospheric pressure.

Decoy
Jane Prophet
UK 2001

Prophet's screen-based digital work reflects the politics of landscape, construction and ownership. Drawing on works by painters such as Gainsborough and Poussin as well as the creations of landscape designers Humphry Repton and "Capability" Brown, Prophet's animated digital "paintings" combine fractal landscapes with photographic images of the grounds of various country homes. Prophet unearths the artificiality of each landscape's past; either by returning the setting to a closer approximation of "wild" nature, or by allowing the viewer to project ahead into the future according to different growth and planting patterns.

Machine for Taking Time
David Rokeby
Canada 2001

Machine for Taking Time is included in this exhibition as a central conceptual piece and was commissioned and first shown by the Oakville Galleries in 2001. With images drawn from a database archive, Rokeby's work shows a continuous pan across the gallery gardens. Slowly traveling through the archive of images, the computer software wanders through time as it jumps from the recent past to months previous.

Trees in Winter
Chris Welsby
Canada 2006

Trees in Winter presents three separate takes of a tree shot against the background of stormy winter skies. The wind chafes at the few remaining dead leaves and the branches shake. In the gallery the projected image is edited live, with sequential decisions determined by measurements of wind conditions outside the gallery taken by an anemometer. *Technical production by Mark Brady.*

Since 2001, **Suky Best** has had solo shows at venues including The Photographers' Gallery London, The Centre for Photography Amsterdam, Street Level Gallery, Glasgow and The British Council Gallery in Ecuador, as well as participating in major group shows in New York, San Francisco, Berlin, Cologne and Slovenia. She lives and works in London.

Susan Collins works across a range of media, exhibiting widely nationally and internationally, often in public and site-specific locations. Recent works mainly employ transmission, networking and time as primary materials, often exploring the role of illusion or belief in their construction and interpretation. Collins is Head of Electronic Media at the Slade School of Fine Art, University College London.

Rebecca Cummins' body of work over the last decade has explored the sculptural and experiential possibilities of light and natural phenomena (often referencing the history of optics). Her creations include a camera obscura/fiber-optic journey through the center of the earth, paranoid dinner-table devices, an interactive computer/video rifle, a periscope birdbath and a singing rainbow machine. Cummins is Associate Professor at the School of Art, University of Washington.

Simon Faithfull was born in Ipsden, Oxfordshire and studied art at Central St Martins and then Reading University. His practice takes a variety of forms — ranging from video making, to digital drawing projects and installation work. He is based in Berlin.

Jane Prophet's works include large-scale installations, digital prints and objects, reflecting her interest in science, technology and landscape. Among her past projects is the award-winning website, TechnoSphere (1995-2001) inspired by complexity theory, landscape and artificial life. Site-specific projects include Conductor (2000) which involved 74 tonnes of water and 120 electro luminescent cables and The Landscape Room (2001), which combined photographs with computer-simulated landscapes.

David Rokeby is based in Toronto, Canada. He has won numerous prestigious awards including: the British Academy for Film and Television Arts (BAFTA) award for Interactive Art (2000); the Prix Ars Electronica (1991 and 1997); the Golden Nica (2002) and the Canadian Governor General's Award in Visual and Media Arts (2002). In 2004 he represented Canada at the Sao Paulo Bienniale in Brazil.

Chris Welsby has been making and exhibiting work since 1969. His films and film/video installations have been exhibited internationally, at major galleries including: the Tate and Hayward galleries in London; the Musée du Louvre and the Centre Georges Pompidou in Paris; the Museum of Modern Art in New York; the Carnegie Institute in Pittsburgh; and the Art Gallery of Ontario in Toronto.

Peter Ride is Co-Director & Senior Research Fellow at the Centre for Arts Research Technology and Education (CARTE), University of Westminster. His emphasis is on research into the field of digital media arts and interdisciplinary arts practice. He was one of the first curators in the UK to develop internet and digitally networked arts projects. He is also Artistic Director of DA2, Digital Arts Development Agency, an organization that develops commissions, artist residencies and curatorial training schemes. His current research projects include "Cell", an investigation of new theories of adult stem cell development, being developed in collaboration with medical and computer scientists and visual artists.

Item 3. Proposal to Images Festival for exhibition (August 2005).

(NB Thomson and Craighead and Stan Denniston – listed here - were not included in the final selection. Images Festival were considering exhibiting Denniston's work for another event and funds could not be raised to commission Thomson and Craighead. Chris Welsby and Suky Best were included instead which enabled the exhibition to broaden its themes.)

Exhibition proposal: Peter Ride
For: Images Festival, Toronto

Title: *TIMELESS – time, landscape and new media*

Curatorial concept

Our understanding of time plays an essential part in the way that we conceptualise landscape. This exhibition looks at the way that new media has given us a new way of thinking about time, and through this, the way that artists represent the landscape takes on new qualities and gives us a different understanding of our place in space..

There are many different ways that various 'markers' of time can be observed and ways that the images of landscape can be seen to represent time. From epic scale of time - that is recognised in the sublime - to the immediate and personal scale of time through lived experience, time frames the way address the landscape objectively and subjectively. This includes the way we think of landscape from the expansive timeframe of geological and botanical forces, to the time of human occupancy both indigenous and colonising communities; mythological time and spiritual time. Or from the experience of landscaping, cultivation, gardening and growth, and industries of building, mining and agriculture, to the time taken to walk regularly over fields and through wilderness. These have all been the focus of artistic activity in the last hundred years.

The shift created by digital media is immense. Just as the lens gave us a way of seeing the world that was not comprehended previously, so to does the computer. It lets our imagination run differently. The nineteenth and twentieth centuries were the period of the photographic eye and also the period of modernism's quest for certainty and as a result came the debate - for and against - the image as empirical evidence. The twenty first century is being revealed as one less concerned

with creating dominating visual statements, but in re-examining, re-sourcing and re-purposing, and the dominant media form is that of the digital image – endlessly re-purposable data.

Photography gave new ways to conceptualise time and the landscape and gave us the iconic images of landscape: the mechanics of the shutter gave images that 'froze' a moment of time, emphasising the here-and-now and the image as an object. The moving image, through film and video, increased the way that we understand a-synchronised observation – the playing out of the moment that we get to observe at a later point, either as real time or condensed and restructured through editing.

Digital processes provide a different approach to time. One of the big cultural shifts brought about by new technology is because data is modular and infinitely variable. Digital processes also incorporate some of the same dominating forms of representation, and use some of the same framing devices, but the way that they are networked, received and the data acquired also create a different context to synchronicity and a-synchronicity. Exact 'frozen' time is not often a reference point.

There are three prevailing themes to the culture of digital media that are explored in this exhibition as they relate to landscape.

1. Time is not fixed: the database is the dominant metaphor for new media: artworks are not 'made they are organised out of existing material. Material is drawn from one or more sources, and in some cases the key create act that determines the experience that the viewer has is not in the selection of the work but in the scripting of the software, or algorithm that underlies the computer program. As a result the existing works re-shape and change, they are never static; this view of landscape is one that is never predictable. These images are not the witnesses to an event that tell us how it was at that specific time. They unfold before us rather than being given as fixed objects. Time is never frozen, it shuffles and moves from one time zone to another.

2. Immediacy: networked communication has become the key to modern media – peer-to-peer, network to network, individual to vast unknowable online communities. An aspect of this is that media has little individual ownership. Its value is not in originality but in its capacity to be transmitted, sorted and re-sent.

3. The time of simulation: the border-line between 'real' and 'unreal' has been eroded, just as the border between 'natural' and 'un-natural'. Simulation, through computer software, is no longer an extra-ordinary way of representing the world, but fully comprehendable as a form of documentation. Just as we live in a culture that anticipates modification, to images, bodies and data, so to do we anticipate that things which are completely fabricated, evolving out of code rather than atoms or human intelligence, are an important part of our life. Just as these landscapes are not real, they also play with time as a fiction, re-inventing it, stretching it.

PROPOSED LAYOUT

Entrance – I propose the entrance space to the exhibition should include some 'conventional' landscape photographs (eg B&W images of the Ansell Adams school of endless grandeur; social documentary style images of human activity in the land; personal diary style images). They would

be accompanied by classic quotes on photography (e.g. Dorothea Lange, "I never meddle. I photograph as I see it."). These should be presented as a text image compilation. The intention is to create a context of the conventional way of portraying landscape through imagery.

ARTISTS AND WORKS PROPOSED

### 1. David Rokeby, 'Machine for Taking Time'.

Key information:

This is a signature piece for the show: it encapsulates most of the ideas – and serves them up in a highly aesthetic work. It should be close to the entrance, preferably on a free standing wall. Its should be made dominant – eg through paint colour on the wall so that the audience have to encounter it. However it shouldn't be in an area where people feel they have to move on quickly. The piece is very subtle and beautiful - people will stand and watch for a long time.

Display format:

Preferably shown large to medium scale (ie a good quality plasma screen)

***Description of work*:**
This work is a quintessential example of the way that the database is the digital media form that frames our understanding of time. A screen showing a continuous pan back and forth across a garden draws its images from a database that has been continuously archiving images of the same pathway through the garden. The timeframe can slide or jump from recent past to months previous. It plays on the way that seasonal change and human use of the garden space give a very direct understanding of time
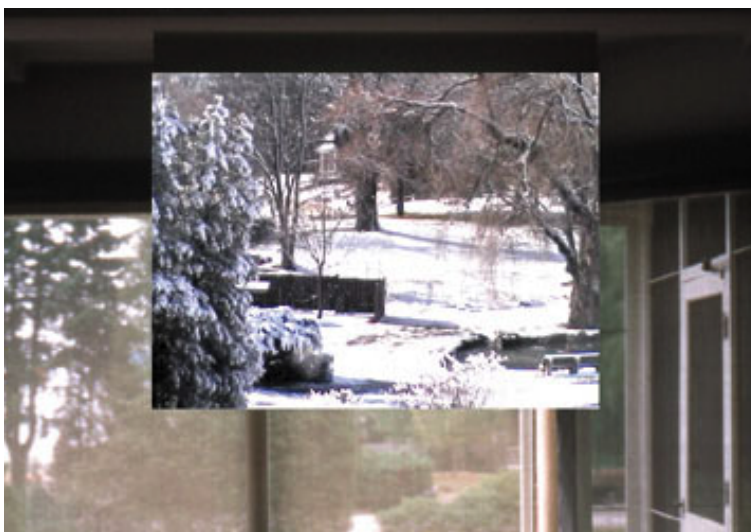
2. Simon Faithfull, *'30km'*.

Key information:

This piece is something of a showstopper. It should be located in a central space in the gallery so that audience can move back and forwards to see it through its duration.

Display format:

The preferred way to show it is on a hanging circular screen and projected on both sides. (Best diameter approx 2 meters). The artist wants the work to feel like an object in space – think of a large moon. (It has been previously shown projected onto a circle on the floor but this requires a raised viewing platform and I think not suitable here.)

Description of work:
This video documents the flight taken by a meteorological balloon and its point of view is looking down towards earth. Its flight (and the video) starts with the hand of the artist un-tethering it in a city park and it rises gradually till he and the park are a speck beneath him, and further till land is unrecognisable and the curvature of the earth can be detected. It continues until the balloon reached the edge of space and exploded through atmospheric pressure. A video steam was transmitted live and recorded.

'30K' is very simple and prosaic, yet it is something that previously would have only been created through special effects or massive technology. More than any other work this piece deals with a very contemporary sense of the sublime, how scale, awe and grandeur are referenced now, but how the route to experiencing this is now through simultaneity and immediacy, not distance. Far from being an overpowering spectacular experience it seems as personal and intimate as a immediate as a mobile phone call (which of course is roughly the technology that is being used).

This work sets a very humanist tone for the exhibition.

3. Susan Collins, 'Fenlandia'. (2004)

Display format:

Preferably shown as a projection It is important that it is large enough for the audience to get a sense of pixels making up the image. Second option is a large plasma screen (e.g. 40").

I suggest that it also has a supporting set of images that show different images from the evolving work, as a grid. This could be mounted on a flanking wall at approx. 40x40". The aim of this is to give the sense that the work generates an archive, it is not only being streamed. It also emphasises the 'live-ness' of the main work (and as a secondary benefit, since the live image can be fairly unspectacular if the weather at that time is not good, it allows the audience to properly comprehend the nature of the work).

Description of work:

Fenlandia is a live streaming image from the rural Norfolk Fens in which one pixel is updated every

second, which results in the image being entirely rebuilt over a 24 hour period. The viewer sees a

landscape image that therefore incorporates a glimpse of time from the span of a full day.

4. Jane Prophet, *'Decoy'*. (2001)

Key information:

These works are very easy for an audience to relate to – they both critique and re-create scenes of 'sublime' beauty. They are best seen with contextual information which can be textual, describing the intentions of the piece, or visual, such as images from historical collections of illustrations of the stately 'picturesque' gardens of the 19thC.

Display format:

Two plasma screens are required (there is a total of 6 sequences, ie 3 sequences playing on each) These works are very aesthetically pleasing, and the sequences unfold quite quickly. But they are quiet and contemplative and need space.

Description of work:

In Decoy, Prophet has worked with the gardens of the great English country houses "improved" by landscape gardeners in the 18th and 19th centuries according to notions of the picturesque and the sublime. In her videos of these landscapes digital forms are 'grown' from evolving computer code so that the landscapes reform themselves or trees grow areas.

5. Jane Prophet, *'Lac Des Arcs'*. (2003) from 'Blot' Series

Display format:

2 large scale prints 80" x 26.5" wall mounted. These will require an entire wall to themselves.

Description of work:

Two large-scale photographic images show the Lafage Exshaw mineral excavation plant situated on the banks of the Lac Des Arc, Alberta. 'The natural' geological outline (pre-mining) has been recreated as a very evident computer simulation and un-natural trees grow as ghostly forms within the lake. The two images show the same scene by night and day; the night scene appears even more like the landscape of a computer game – a heightened un-worldly reality.
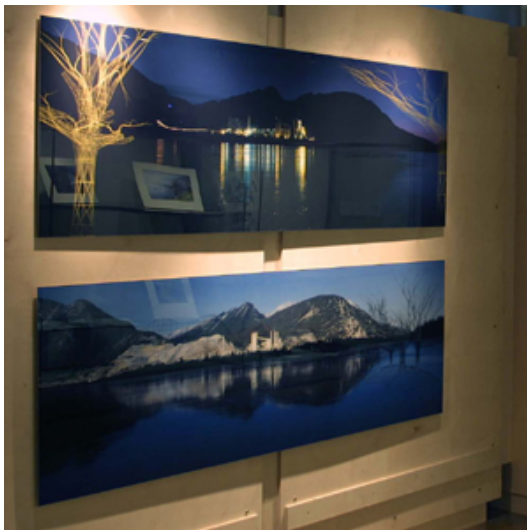
[bottom: installation at the Victoria & Albert Museum, London 2003]

6. Thomson and Craighead, *'Template Cinema'* (proposed commission)
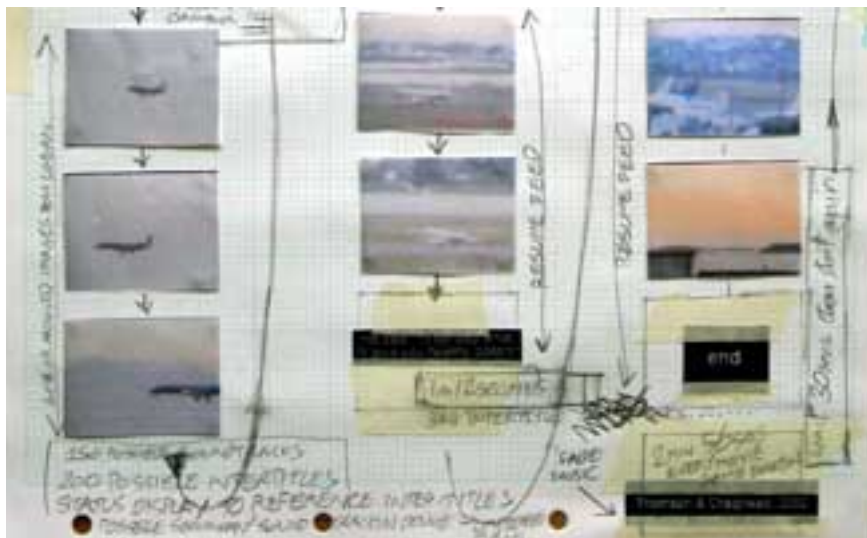
Key information:

Thomson and Craighead create low-tech films in which source material is drawn entirely form the web. Video images are juxtaposed against text that creates a form of dialogue. The work creates a strange sensation of watching something that could be about nothing but could also be from anywhere at any time. The pieces they create seem simultaneously fractured and dislocated while having a sense of formal unity.

The best know work of this series which operates as a gallery installation or as on online piece is "Short Films about Flying' (2004) in which a live video feed from Logan Airport in Boston with randomly loaded net radio sourced from elsewhere in the world. It is supplemented by text grabbed from a variety of on-line message boards is periodically inserted, appearing like cinematic inter-titles when viewed in combination with all the other components.

Proposal:

To commission a work using the 'Template Cinema' format that would be appropriate for the exhibition.

7. Rebecca Cummins 'Another light' (2006)

Key information:

This is the least 'new media' of the works included. One of the intentions is to emphasise the connectedness between places and how landscapes can be linked conceptually

The work will have three elements:

(i) Architectural simulations of sunlight (ii) A shadow/sundial piece   (iii) A conceptual prototype (series of diagrams and images) titled 'Journey through the centre of the earth to telematically link the central Australian desert with the north American wilderness

Display format:

(i) architectural simulation: computer monitor or plasma screen to show simulation

(ii) sundial work: can either be photo documentation of work with existing shadows/sundials OR an installation outside the gallery where the artist will mark on the ground the traces of shadow lengths at different times; this would use existing objects such as lamp-posts, trees etc.

(iii) conceptual prototype: framed works, wall mounted

Description of works:

Working in collaboration with an astrophysicist at the University of Washington, Cummins reflects on the photographic and architectural measurement of time by using early technology: the sundial. Her work includes using real objects as sundials to indicate the time in distant places and also incorporates architectural simulations of light patterning across days and seasons.
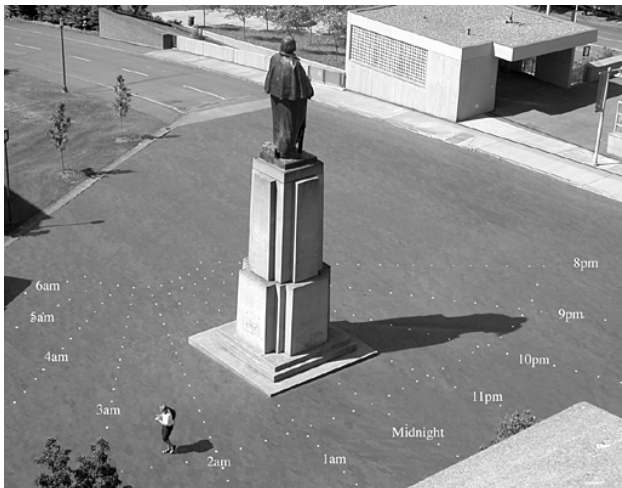
Rebecca Cummins *Baghdad by George* (2003) statue of George Washington, in the campus of Wahshington State University, used as a sundial and indicators giving the time in Baghdad, Iraq

8. Stan Denniston 'Scenic' (2003-4)

Display format:

DVD played on video monitor (or possibly as wall projection)

Description of works:

Stan Denniston' series 'Stills' utilises a stationary video camera to shoot the landscape scenes. These pieces are composed as traditional photographs – a still images but with a durational form. At first sight these imagaes are apparently revealling no motion but underneath subtle movement reward the viewer's attention, change of light, cloud movement or wind. There are no pans, zooms, or edits. These fixed-focus movies create a sense of granduer and fragility and, at the same time, perpetual distance.

'Stills' makes us think about the way momumental landscape is treated as being 'timeless', but it also re-inforces the notion of human subjectivity and the human timescale involved in observation.

Artist Cheryl Sourkes writes: "'Stills' may be located within the lineage of structuralist films, including those made by such seminal artists as Andy Warhol, Jan Dibbets, and Michael Snow. However, while Warhol made use of looped footage to create protracted movies, such as *Sleep and Empire,* Denniston's *stills* unfold in real time. And while Warhol's and Snow's films tend to be exhibited in the context of art-house cinema, Denniston's works are mounted on television monitors within the gallery context, where viewers are free to choose their own length of engagement with each piece."
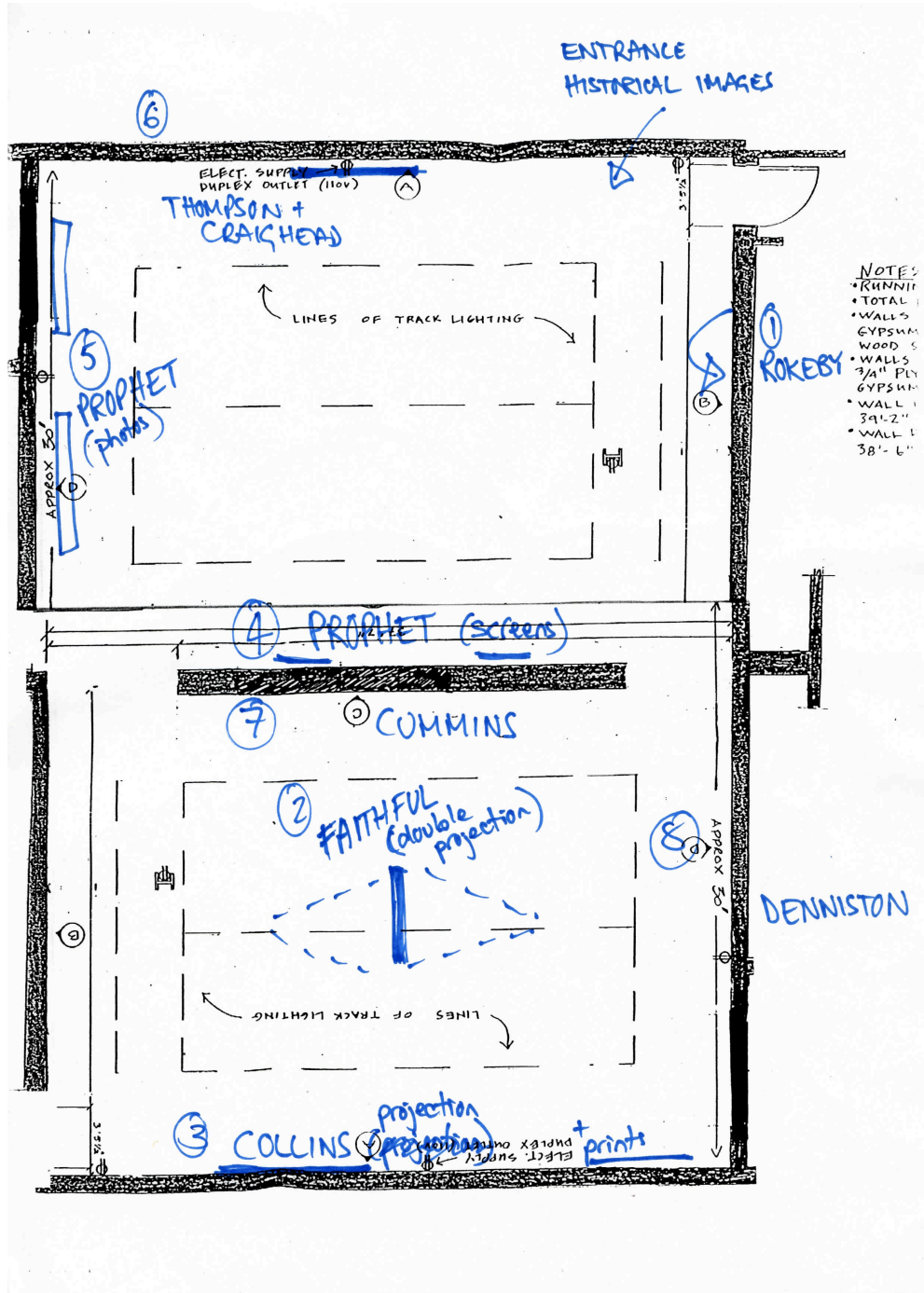
Item 4. The original layout of *Timeless* proposed for Harbourfront Gallery. (NB this grouping included Thomson and Craighead and Stan Denniston and was made prior to me visiting Harbourfront –curating remotely)

Item 5. The final layout of *Timeless* at Harbourfront Gallery (2006) after preliminary visits: this layout shows how additional space was utilized and the narrative flow of the exhibition was constructed.

Item 6. Harbourfront Gallery announcement using image of Suky Best (2005)

Item 7. Cover of gallery brochure for Oakville Galleries (2007)

Project 3:

David Rokeby: Silicon Remembers Carbon

and *David Rokeby: Plotting Against Time*
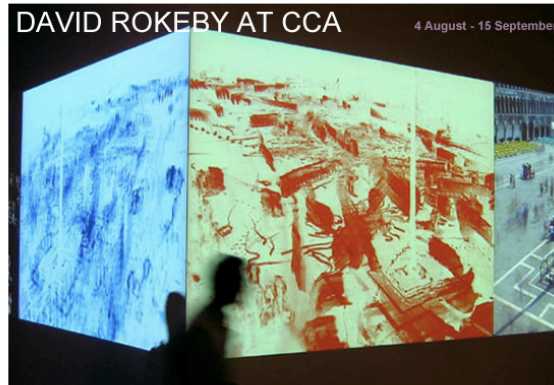
Figure 18. *David Rokeby: Silicon Remembers Carbon* (2007) index page to project

website http://www.rokebyshow.org.uk [51]

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[51] This website no longer exists and was accessed through Wayback Internet

Archive 20 Sept 2012

Project 3: David Rokeby

Exhibition:

David Rokeby: Silicon Remembers Carbon exhibited at: Foundation for Art and

Creative Technology (FACT), Liverpool 19 April – 25 May 2007 and Centre

for Contemporary Art, Glasgow 4 August – 15 Sept 2007

and:

David Rokeby: Plotting Against Time

exhibited at: Art Gallery of Windsor, Canada, 26 January – 16 March 2008

Texts:

Online catalogue essay: Ride, P. 2007, *Who Remembers What?*

Catalogue essay: Ride, P., 2008 'Plotting Against Time' in *David Rokeby:*

Plotting Against Time. Windsor: Art Gallery of Windsor

NB The catalogue 'David Rokeby: Plotting Against Time' is included in the

evidence portfolio, but the website containing the online catalogue for

'David Rokeby: Silicon Remembers Carbon' no longer exists (although it

can be accessed through archive retrieval platforms). Therefore the essay

has been printed and is included in the appendix to this section (item no 1).

3.1 INTRODUCTION

The exhibition duo *David Rokeby: Silicon Remembers Carbon* and *Plotting Against Time* is a particularly significant research output in this programme because it demonstrates how research can take new directions as a creative project evolves. The project commenced as practice-based research, with an emphasis on practice based/ research-led practice, but it also shows how the practice of making an exhibition generates new problems and from those new awareness emerges.

The curatorial knowledge that developed as a result of this project can be seen to exist in two ways: firstly, as contributing towards knowledge about new media art through exhibition, discussion and publication, and secondly, by providing new approaches to curatorial research methods. These are demonstrations of Candy's definition of *practice-led* research and the knowledge outcomes that arose from this project then generated further research that is included in this PhD survey.

Background: David Rokeby

David Rokeby is a Canadian new media artist who, by the 2000s, was regarded as a pioneer in the field, having been making and exhibiting work since the mid 1980s (Penny 1995; Gale 2005; Grau 2005; Madhill 2005; Dixon 2007; Popper 2007; Shanken 2009). His work had been exhibited internationally in all major new media arts festivals and dedicated venues, and he had won many prestigious international awards given in open

competition for new media artists[52]. His work to that point had only

infrequently seen in the UK, although a commission for the Science Museum[53]

had won him the BAFTA for Interactive Art in 2000. Examining the body of

Rokeby's work it was evident that since the 1980s he had developed a

singular point of view as an artist, and a fascination with machine intelligence.

This had resulted in a number of works that used computer processes to

make the audience reflect upon natural perception and cognition.

The exhibition was developed as a collaboration with FACT, in Liverpool,

with a secondary tour venue to the Centre for Contemporary Art (CCA) in

Glasgow. During the development of these exhibitions I secured interest for a

further re-presentation of the exhibition at the Windsor Art Gallery in

Windsor, Ontario, Canada which would be a re-working of the show with new

material and a new title: *David Rokeby: Plotting Against Time.*

3.2 RESEARCH AIMS

The research aims for this project can be seen as being driven by three

hypotheses or propositions which demonstrate creative and theoretical

problems: (i) that it was possible to successfully exhibit the work of a

significant new media artist that acknowledged its historical development;

(ii) that it was possible to critique the way exhibitions become framed by

technology through the structure of the exhibition itself; (iii) that it was

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[52] Rokeby has twice been awarded the Austrian Prix Ars Electronica Award of
Distinction (1991 and 1997).
[53] *Watched and Measured* (2000)

possible to gain useful information on audience experience. These three

hypotheses were interlinked as it was through exploration of the third that

the first two could be fully examined. However, it is also important to

recognise that as practice-based research these propositions were *research-*

led practice by Smith and Dean's definition. In addition, the curatorial

practice also created *practice-led* research outcomes.

The project also demonstrates how research can be emergent, and this

suggests that it can seen as a characteristic of practice-led research under

Candy's definition. In this case the audience evaluation became an emergent

area of research that extended throughout the project, commencing with one

exhibition but continuing and growing in consequence from one to the next.

3.3 RESEARCH CONTEXT

The research for this project was driven by three research interests, which

can be understood as research-led practice. Though conceptually-based these

concepts were entirely embedded within curatorial practice and explored

though the way the exhibition was to be realised.

(i) The consequence of historiography

My interest in devising an exhibition had a strategic focus that went beyond

commissioning or exhibiting a new piece of work but in exhibiting a

substantial number of works that spanned Rokeby's career. To my

knowledge there had been no single distinctive exhibition of a new media

artist in the UK that was framed as a retrospective and showed how an artist's milieu evolved. Arguably, this was an important omission that needed to be addressed. New media work had until the early 2000s been most frequently exhibited in the UK in festivals and special events relating to digital technology or in the few spaces that specialised in media arts[54]. Although some very important work was presented in festival situations, most typically the works shown were recently created artworks and installations, or a small number of artworks by the same artist, and not extensive exhibitions dedicated to a single artist. This meant that very rarely could work be seen in the context of the development of the artist's own practice, or with a thorough examination of the concepts and themes that had driven it and emerged through it.

Rokeby was not only significant as a contemporary artist who made arresting and engaging works but also representative of a generation of self-taught new media practitioners who began to work creatively at a time when was it possible, and often necessary, to be responsible for all the computer coding of their programs. As such, Rokeby, and artists like him, were inventors as well

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[54] A notable exception of new media being exhibited in a major gallery in a context unrelated to a festival or digital technology event is *Serious Games*, curated by Beryl Graham Laing Art Gallery Newcastle and Barbican Art Gallery, 1997; I am not including the smaller galleries that formed part of the community of spaces, mostly created in the 1980s dedicated to showing photography and video practices, and which became early promoters of digital media practices, such as Camerawork, London, Site Gallery, Sheffield, Watershed Media Centre or Cambridge Darkroom Gallery (where as Director I exhibited a number of new media projects including Jane Prophet & Gordon Selley *TechnoSphere* 1997, Nina Pope & Karen Guthrie, *A Hypertext Journal*, 1997.)

as artistic creators.[55] The software that Rokeby had devised was widely regarded as innovative and he consistently developed this to a point of considerable sophistication so that his work could be seen as a dual and integrated evolution of creative ideas and technological structures. Within the academic new media sector in the mid 2000s there was a strong and consistent interest in the historicisation of new media work as a distinct form of practice, particularly through archiving and recording new media histories[56]. Therefore, my decision to use the well established form of the retrospective, was that, in this case, it was innovative and provided a contribution through practice to the academic discourse of the time.

My essay, 'Who Remembers What' published as part of the online catalogue for the exhibition and tour alongside aimed to present this argument in a form that was easily accessible to a gallery audience [Appendix item 2]. A brief outline of this argument was included in the opening introduction in the gallery handout at FACT [Appendix item 3].

(ii) The context of technology

My curatorial work to date had made me familiar with the way that work presented in a new media environment created a highly specific context around the exhibition. Often work I had curated and commissioned was

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[55] The context of media practice and the role of artists as inventor is addressed in studies reviewing media history Shanken (2009) but also implicit in over-views such as Wilson (2002).

[56] This was demonstrated a series of conference presentations culminating in the 2005 conference *Refresh! The First International Conference on the Histories of Media Art, Science and Technology*, supported by the Database for Virtual Art, Leonardo, and the Banff New Media Institute, and is documented on http://www.mediaarthistory.org/

designed to examine how technological innovation could be addressed

creatively and critically, for example projects that were commissioned to

enable artists to explore new software or to use new levels of programming

to find new solutions for creative expression[57]. However, I recognised that

while innovation was often an aspect of the work this was a double edged

sword and meant that work could be perceived – and judged – by audiences,

consciously or unconsciously on the basis of its apparent newness and as a

result its capacity to excite, challenge or stimulate. This was an issue that had

particularly arisen in the exhibition by Lyndal Jones *Demonstrations and*

Details as it became evident how the critical context devised for an exhibition

could affect the audience's perception of it as a technological experience. I

was also aware, through my continued curatorial work with DA2 Digital Arts

Development Agency, of how the social narrative of technology, as an

innovative and progressive force, could condition audiences when they

engaged with new media exhibitions.[58]

This concern had a direct impact upon the development of the exhibition, as

the exhibition concept aimed to show the evolution of Rokeby's practice from

the 80s to the present in a way that highlighted development of his ideas

expressed through technical form and content. However, it was apparent that

showing older works could present a number of problems. Firstly, this was not

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[57] An example of this is the 2000 series of commissions *Click Forward* in which four artists explored new ways that using web technology could offer an online cinematic experience – and one which challenged the convention of the linear video; these included Nick Crowe *Discrete Packets* exhibited at Video Positive 2000 and San Francisco Museum of Modern Art 2000.
[58] This argument is explored in greater detail in Ride, P. 'The Narrative of Technology' (2012) and examined in a later section of this PhD exegesis.

always technically convenient as Rokeby was required to adapt works that were designed on obsolete hardware and operating systems, but this inherently resulted in a revised version, rather than a re-staging of the original. Secondly, there was the possibility that older works might be seen by a contemporary audience in 2007 as outmoded and unsophisticated in manner, and this could affect the way that audiences engaged with all the works. Consequently, it was obvious that the model of the retrospective that had been chosen raised many problems in terms of research but also in the form of practical concerns for the staging the exhibition. [These themes are expressed in the tour proposal document for the exhibitions Appendix Item 2.]

(iii) Audience evaluations

My third research aim as a curator was to gain an understanding of how the audience understood the work and how they participated in the exhibition. My interest in this as an area of research had emerged from the exhibition *Demonstrations and Details* in which gaining audience feedback had been critical to its successful staging. I argued that my curatorial colleagues and I were often dependent upon guesswork or anecdotal assumptions when anticipating how audiences would respond but we could only infrequently back this up with harder evidence. While not embarking upon rigorous audience research that would qualify as an ethnographic study, my motivation was to determine if gaining an understanding of the way that audiences experienced the exhibition could be of benefit to curatorial decision making.

Three areas were initially identified as the subject for research: firstly to test my curatorial premise that sited Rokeby's work in an historical framework using the form of a retrospective and to examine how the audience responded to this thesis. A second more pragmatic call was that three exhibition spaces would require different selections of work due to the spaces available and the layout of each venue. I wanted audience feedback to inform the choices I would make for the selection and re-orientation. Lastly, the growing importance of discussion around the need to archive and record the histories of new media indicated to me the significance of understanding audience engagement. The archive project of the Daniel Langlois Foundation and the Variable Media Project, for example, indicated the importance of documenting not just what an exhibition looked like but how it was experienced since works could not always be reconstructed[59]. I argued that to adequately document work meant that we had to be able to document how people had used and understood it if we wished to communicate to future media historians how experimental interactive work had meaning for its audience.

3.4 RESEARCH METHOD

It is instructive to trace how the exhibition evolved for the three venues in Liverpool, Glasgow and Windsor Ontario by concentrating on the audience research. Firstly, because it provides for an additional critical aspect on the exhibition. Secondly, as emergent research, it shaped the way that, as a

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[59] http://www.guggenheim.org/new-york/collections/conservation/conservation-projects/variable-media

curator, I used audience research as tool within my practice. It also indicates how different aspects of practice-based research can have consequences beyond the exhibition itself. This is also discussed in the articles 'Enter The Gallery' and 'The Narrative of Technology' which address audience research within a broader framework of the culture of technology.
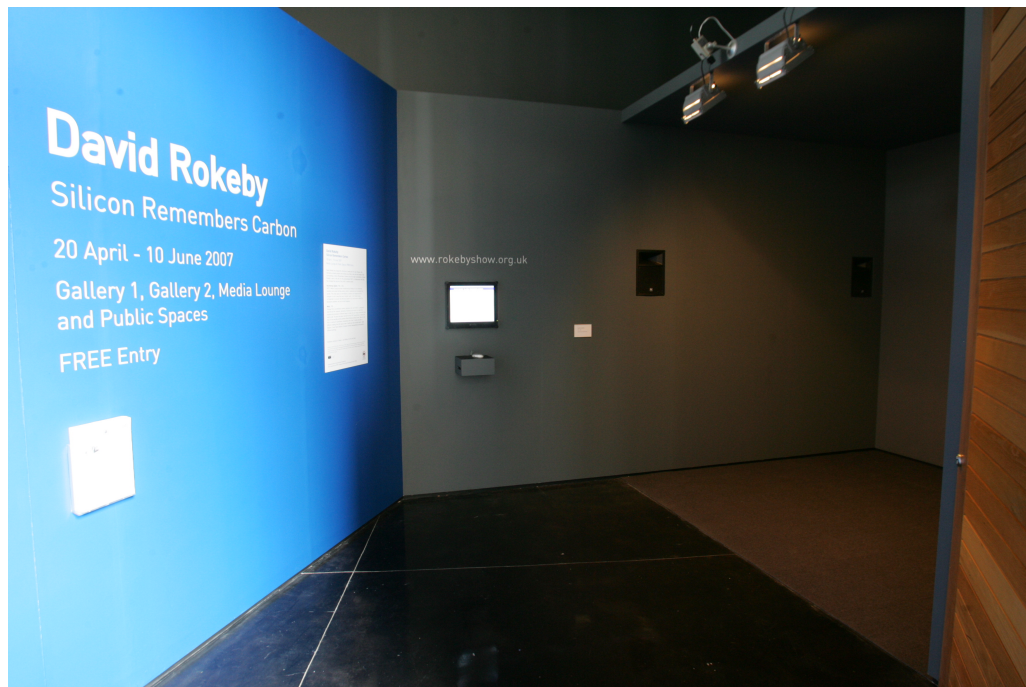
Figure 19. Entrance to exhibition at FACT (photo by Brian Slater)

Developing a framework for qualitative research

Earlier, I described this project as one which demonstrates how research encompassed in a project can be emergent. I would speculate that in practice–led-research this is not uncommon and that discoveries and knowledge might often be generated though means that are serendipitous as well as calculated. This is not limited to creative outcomes as methods of enquiry can also be emergent. The lasting significance of the audience research in this project is that it provided me with a new approach to using

qualitative research methods. As stated before, the audience research was not planned as an ethnographic research project and the purpose of the research was highly functional: to test the effectiveness of my curatorial approach and to design the critical framework and the presentation to be as effective as possible. However, it soon became obvious that, to use the data I was generating to the fullest degree, I required a more evolved understanding of research methodology that I could incorporate into my curatorial practice.

Using action research

Action research methods provided me with a framework in which to operate[60]. Contested in its status as a research methodology, many researchers refer to it instead as a research method or an orientation to research[61] but the source of their reservations are precisely the reasons why it was the appropriate model for my research. The reality of conditions under which I was operating meant that all of the variables were changeable and no data gathering could be consistent or reproducible therefore it could not conform to traditional social science paradigms.

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[60] Key texts on action research that demonstrate different approaches to using it as a methodology include: McNiff & Whitehead 2009; MacIntyre 2009; MacIntosh 2010.

[61] This is partly dependent on the perspective and different traditions of sector and disciplines, for example Minkler, M., & Wallerstein, N. *Community-based participatory research for health* San Francisco: Jossey-Bass, 2003; Koshy, V., *Action Research for Improving Educational Practice: A Step-by-Step Guide*, Sage 2009

However, action research[62] is mostly intended to help solve a specific problem or deal with an ongoing situation and is therefore pragmatic in its goals, the ultimate intention being to effect and manage change. The purpose of the findings that are generated is therefore 'useful knowledge' rather than 'academic knowledge' and consequently the writing up of the project in terms of its 'research outcomes' is often a byproduct rather than a specific intention. Action research investigators need have no critical distance as they are active participants within the situation, with a vested interest, unlike other forms of ethnographers.

Action research is usually applied using a cyclical model in which the model of activity is repeated and can continue indefinitely. At its simplest form it commences with (i) the identification of a problem/situation/activity which then leads to (ii) enquiry/monitoring through which the researcher (iii) evaluates findings/outcomes and (iv) creates action plan which are then (iv) implemented. The changes to the problem/situation/activity are further examined and as a result the cycle can be infinitely repeated (O'Brien 1998). The structure used allows for changes to data gathering method as the process of research is itself under scrutiny and needs to be adapted to reflect best the requirements and situation of the project.

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[62] The term action research is sometimes capitalized as Action Research, sometimes not – and possibly this differs between writers and editors using this as an indicator of methodology status - as with Grounded Theory. I have chosen to stick with lower case.
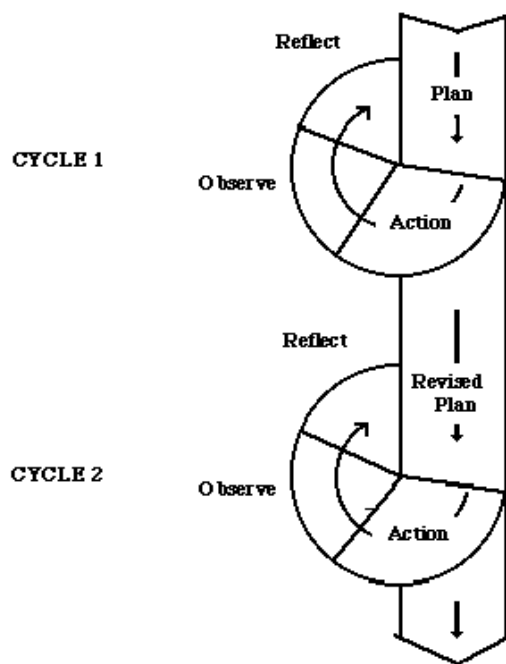
Figure 20. A simple action research model (O'Brien, R 1998)

The great benefit I perceived in applying an action research model was that I was able to apply the critical analysis I was making on the success of the exhibition, based on the audience feedback, to the later iteration of the exhibition in the next venue. But it also enabled me to consider how I was using data gathering, and by going though a number of classic cycles I refined the approach that I had to what I might loosely term as a form of 'ethnographic-based' observation.

I argue that while it is possible to have conventional ethnographic observation taking place alongside curated projects the knowledge produced plays an entirely different role and is often reflective rather than actively used in the development of a project. I had direct experience of a

'conventional' project of this form when working alongside the group Blast

Theory on their project *Desert Rain* (2000)[63] in which professional

ethnographers were involved. In situation like this it is impractical, or

impossible, for a curator to take on such a research role. But in positions such

as mine, it is rare to have the resources of a trained ethnographer on the

team and so it is important for a curator to be able to identify how and why

an exhibition should evolve using a systematic method, rather than relying

on intuition.

The following indicates how my data gathering technique evolved. Plans for

audience research had been built into the plans for the show prior to the

launch of the exhibition, which is indicated by the tour proposal documents

[included in the appendix to this chapter]. At FACT I relied primarily on my

own observation with brief feedback question-and-answer interviews with

members of the audience that I conducted intermittently over a five-day

period. I had originally anticipated a greater involvement with the FACT

gallery staff and hoped to get a large amount of oral and written feedback

from the gallery invigilators. Each gallery space at FACT had an invigilator, or

front of house staff, in attendance who also had been briefed by FACT to 'help'

visitors with exhibitions as well as answer questions. However despite their

overall willingness it was not easy for them make records of their

interactions, with a general feeling that taking down notes on audience

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[63] *Desert Rain* was a collaboration between Blast Theory and the Mixed Reality Lab
at the University of Nottingham. It was originally co-commissioned by
Contemporary Archives and ZKM Centre for Arts & Media, Karlsruhe, Germany, in
association with DA2, and KTH, Stockholm, Sweden. KTH conducted an
ethnographic observation of the development and production.

behavior and feedback was contrary to the visitor-friendly behavior they tried to display.

At CCA in Glasgow, where there was only one gallery attendant on duty at any one time, the gallery staff felt more able to make and record their observations, aided by the fact they were constantly moving within the spaces. I gave staff a template of questions to use, and they provided written records and quantitative data relating to the amount of time that people spent in front of the different artworks. [These are included in the appendix: items 5, 6, 7, 8].

I spent four days interviewing thirteen members of the audience in Glasgow. These were semi-structured but in-depth interviews lasting approximately half an hour to an hour in which I followed a series of set questions but let the interviewees dictate the mood [see Appendix item 4]. As such I followed a model for semi-structured interviews advocated by Rubin and Rubin (1995) in which the interview operates as a conversation rather than a series of questions and the follow-on questions are only asked if the area has not been already covered through the discussion.

> *23 August 2007: Graham (a musician) and Alison (artist)*
> *Graham: [Discussing Taken] I like that there were multiple senses of time and I like the way that you can see the same thing stated in different ways. Sensory data can go into your head and make something else. It felt like a very unified piece – I like that and I like being able to experience different*

temporal levels at the same time.

Alison: There was no barrier to expression. No 'I have to do this in order to achieve' which can sometimes act as a barrier. (45.30)

The importance of these sessions was mostly from having in-depth discussion with audiences. But I also learned as much from what the interviewees did not say as I did from what they actually articulated, for example most of the interviewees talked most effusively about the interactive works and few of the interviewees talked in detail about the work *'Machine for Taking Time'* unless prompted.

These interviews were not transcribed but analysed from audio files, identifying key points, based on the technique for analysing qualitative research methods advocated by H. Rubin & I. Rubin (1995), David Silverman (2004) and Uwe Flick (2006).

At the later exhibition in Windsor, Ontario, I used the same technique of observation of the public and interviews over a three-day period. This was slightly less successful because the town was in the grip of a severe blizzard that week and attendance at the exhibition was therefore lower than usual. This made observation of the public more intrusive and less practical. However, I interviewed ten people, which gave sufficient information for me to produce relevant findings.

7 March 2008 Vuk (high school student)

Vuk: The piece I engaged with the most was the one with the toys because I was alone I was able to do things without other peoples eyes. The privacy was important because it gave me the time to realise whatever it was I needed to realise. (13.07)

3.5 RESEARCH OUTCOMES

The exhibition was presented at the three venues in Liverpool, Glasgow and Windsor Ontario as planned, with positive critical reception at each. In this document I will not try to re-create the exhibition: the accompanying visual documentation (also in the Appendix to this chapter and in the evidence portfolio) indicates how the installations were sited; textual documentation indicates how the exhibition was contextualised in each venue with accompanying information panels, essays by contributing curators and academics which were available online as well as through print; and how detailed descriptions of the works were presented as handouts. Additional reviews and reports identify how peers in the sector reviewed the exhibition.

Audience Research at FACT

As stated previously, the audience research was initially envisaged as a functionally-driven research exercise. In FACT I began the audience research work relying mostly upon the observations and interactions of gallery staff and invigilators. This working method proved to be problematic as I realised that I was only able to get partial information on what was happening in the gallery. Gallery staff provided quantitative observational data on visitor

numbers, the length of time audiences stayed with installations and on their behavior as interactors, but their ability to provide qualitative information was inconsistent so I revised my approach and began conducting my own interviews. The combination of approaches gave me crucial information about the way that the public engaged with some installations or had found them hard to work with.

At FACT my prime concern was to identify how the audience had engaged with the installations: whether texts had facilitated their participation and intellectual involvement; how the placement of the work had affected the way that they had responded; how the retrospective thesis of the exhibition was understood.

At FACT, six works were exhibited over three gallery spaces and one was positioned in the main foyer. With the retrospective thesis in mind the exhibition had been designed with Rokeby's two earliest works, *Very Nervous System* (1986-90) and *Watch* (1995) placed in the ground floor in the foyer area so that all visitors would encounter them as they entered the space. These works dealt with two of Rokeby's main themes, mapping human movement and creating feedback, in *Very Nervous System* and deconstructing key aspects of perception and visual intelligence in *Watch*. My premise was that audiences should understand these as dominant constructs before engaging with the rest of the exhibition so they should function as the 'preface' to the later works. The remainder of the installations were not organised chronologically but the captions and supplementary texts placed

them in an historical context.

Figure 21. *Very Nervous System* (1986-2004) at FACT (photo by Brian Slater)

Figure 22. Entrance to exhibition at FACT showing *Watch* (1995) (photo by Brian

Slater)

However, audience observation showed that visitors were more likely to spend time at the foyer exhibits while exiting the gallery, not on entry. Group and individual interviews revealed that audiences were not interested in the significance of the retrospective, but by contrast, were more likely to assume that all the works were contemporaneous. Interview subjects made it obvious that they had found other thematic threads throughout the exhibition that were more useful for their reading than my historicisation of the works.[64]

Additionally, the audience response to the texts in the galleries revealed another tension. Captions had been written as technically informative and described the functionality of the works so that audiences had cues that invited them to participate. The FACT curators were concerned that unless audiences were given instructions, the audiences could be frustrated when faced with interactive works and not know how to behave.

This revealed a conundrum around the use of text in galleries. In art galleries the debate between the use of informational text and minimal labels is well established, often with distinct positions between learning-interpretations approach and a modernist approach[65]; debate around the use and limitations of functional text to encourage participation is more common in museum

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[64] Feedback from artists and new media academic however demonstrated a clear understanding of the exhibition themes and strategies: for example Charlotte Frost's interview with Rokeby *Twisting Fistfuls of Time* (2007)

[65] As currently evident through the 'text-light' approach to hanging the permanent collection at Tate Britain: *Tate Report 2010-11* http://www.tate.org

discourse which has a long history of analysing the effect of language upon

visitors (Black 2005; Simon, 2010). The experience from FACT revealed that

texts that instructed the visitors could have a useful effect but could also

create negative results. Instructional texts emphasised the functionality and

performance of the artworks but this meant that if audiences had problems

in engaging with the work they were less likely to think about the intellectual

and artistic content and instead they were likely to dwell on its non-

performance.

For example, the installation *n-Cha(n)t* (2001) featured voice recognition

software. The intention was that audience members would speak to a group

of computers that would 'hear' what was being said, repeat words back,

playing with the language and riffing off it. The computers would then

network with each other and 'improvise' with the spoken words that they

had 'heard' for their own collective chant. The process was represented

visually as well as through audio. However, it became apparent that the data

processing was not capable of dealing with the vocal tones and modulations

of British regional accents. As a result, the language they generated bore little

relation to the words that had been said to them.
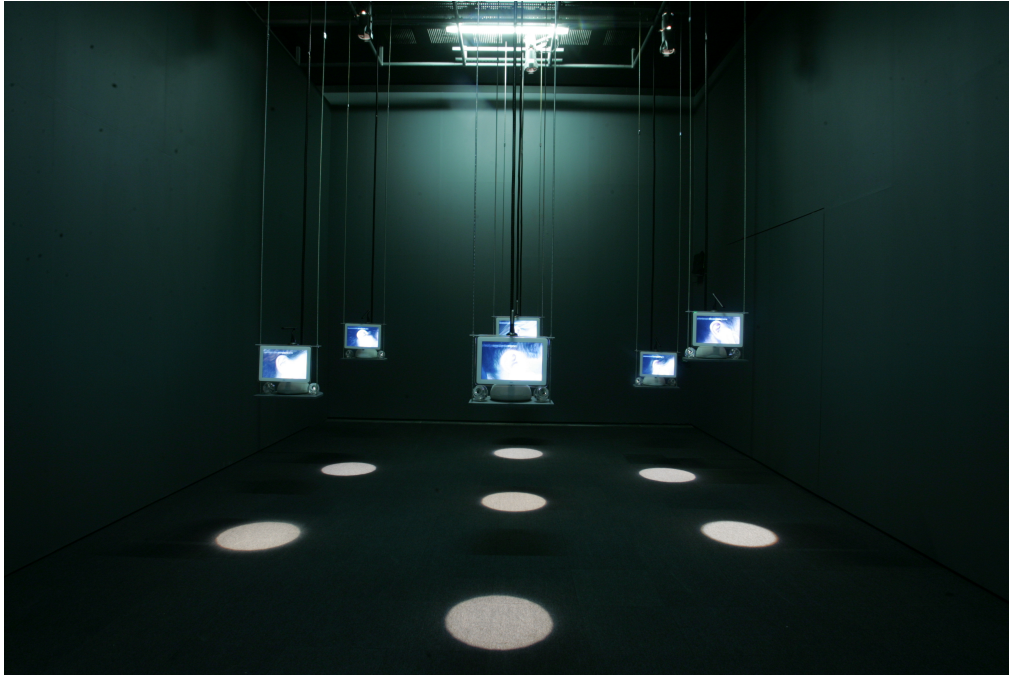
Figure 23. *n-Cha(n)t* (2001)at FACT (photo by Brian Slater)

Rokeby's primary interest was in demonstrating how a computer network operates, creating a metaphor with social and neutral networks and making allusions to human connectedness, and therefore he felt that it was not essential for the computers to pick up exactly what had been said. However, representing the piece as one in which the computers used voice recognition software, shaped the audience's expectations of the work on the premise that they would be participating with the system and would be understood. Consequently, the feedback received through the audience monitoring was of frustration and non-comprehension and it appeared that visitors did not understand the purpose of the work unless it was discussed with them.

Presentation and audience research at CCA

As detailed in the articles 'Enter The Gallery' and 'The Narrative of Technology', the exhibition layout and texts were modified for the later exhibitions on the basis of audience research at FACT. At CCA, in Glasgow and the Art Gallery of Windsor the thesis around the significance of the retrospective was reduced and used only in secondary textual information, online and in gallery handouts. The layout of the exhibition did not try to emphasise the historical sequence of works and the thematic developments. Wall texts were also written in language that emphasised the concepts behind the installations rather than the way that they functioned, and as a result audience engagement was not framed by notions of successful or unsuccessful interaction.[66]

Figure 24. Installation of *Taken* (2001) at CCA (photo by David Rokeby)

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[66] It is worth noting the review for the CCA exhibition (see Appendix item 4) uses the phrase "interactive multimedia" but does not dwell on the technological aspects of the works but instead concentrates on their conceptual qualities and associations.

Some works were dramatically reconfigured due to audience research and led me to negotiate with Rokeby to find different creative solutions. For example, at FACT the installation *Very Nervous System* had been positioned within the main foyer in a small alcove and our research showed that visitors felt intimidated by exploring the work in a public space, observed by passers-by, as it required them to play in an uninhibited way. At CCA we exhibited it in a secluded space, a small room tucked behind a study area. Audience members had also described the difficulty of 'getting into the work' in FACT where the installation was brightly lit. In response to this feedback, at CCA the lighting was kept at as low a level as possible so that the space felt it was intimate, and interactors were also invited to wear eye-masks so that they could explore it blindfolded therefore emphasising the tactile sense of their bodies[67].
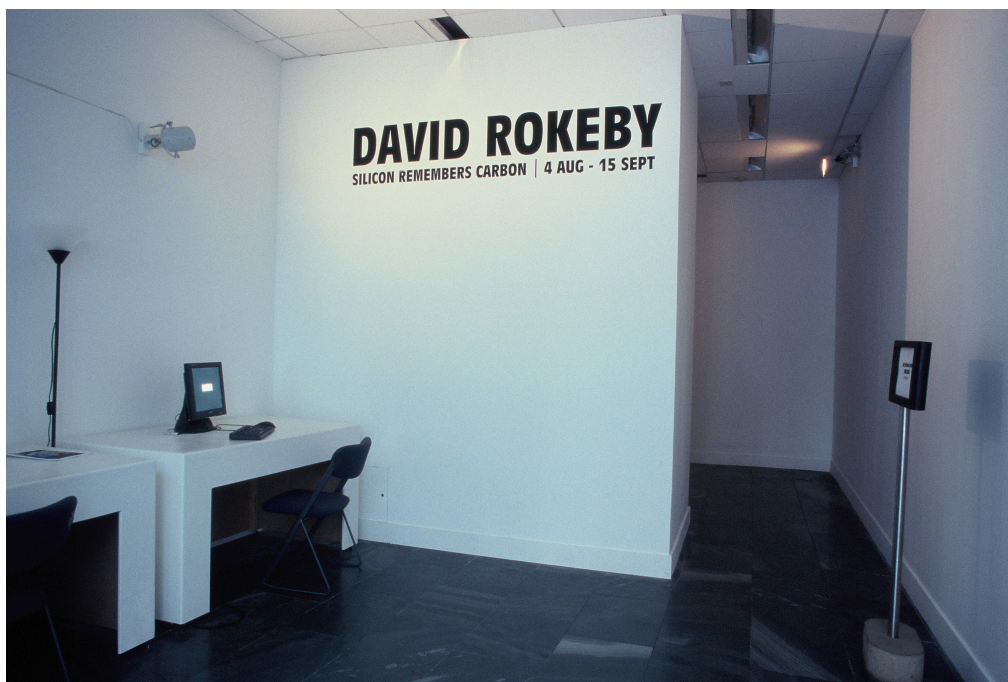
Figure 25. CCA *Very Nervous System* (1986-90) in secluded area (photo: CCA)

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[67] This required careful negotiation with Rokeby as the monitoring video technology needed to clearly identify people's body shapes.

Figure 26. CCA, Glasgow, *Very Nervous System* (1986-2004) being explored

(photo: CCA)

Figure 27. Gallery installation at CCA showing location of *The Giver of Names* (1991-)

and *Machine for Taking Time* (2001) The close proximity of these artworks created

issues which was made explicit in the audience research. [See appendix item 8.]

Presentation and audience research at the Art Gallery of Windsor

The process of modification and restructuring the exhibition continued with the Canadian venue, the Art Gallery of Windsor, a leading regional historical and contemporary art museum, where the work was shown in a dedicated temporary gallery. After some discussion with the curatorial team at the gallery we agreed that it was apparent that there was no great value in presenting the work as a retrospective in Rokeby's home state of Ontario. Instead, the exhibition was re-constructed around the theme of visual perception and re-titled *David Rokeby: Plotting Against Time.* A focal point in the exhibition was a new iteration of one of Rokeby's works, *Watch*, presenting a live feed of the landscape outside the gallery.

Figures 28 & 29 Installation of *Watch* (2008) at Windsor Art Gallery as a full-scale wall projection. In the upper image only stationary objects are made visible; in the lower image only moving objects (or partially moving) are visible.

The exhibition also included new versions of *Machine for Taking Time* that 'live-edited' video from a database taken in Montreal, which Rokeby had recently completed and wanted to exhibit titled: *Machine for Taking Time (Boul. Saint-Laurent) (2006-2007)*. An earlier (2000) version of this installation (which had been extremely popular in the exhibition *Timeless*) had proved to be problematic in Glasgow where, despite its prominent positioning, most audience members disregarded it in favour of adjacent interactive works[68].

Figures 30. David Rokeby, *Machine for Taking Time (Boul. Saint-Laurent) (2006-2007)* screenshots of the video arranged to illustrate the pan and edit.

Responding to the findings from Glasgow, the gallery layout in Windsor was

[68] See Appendix item 8 which gives examples of audience feedback in which members of the audience frequently responded to questions about their impressions of *Machine for Taking Time* with statements like "cant remember", "a bit boring compared to the interactive ones" and "didn't notice this one".
This is also discussed further in Ride, P 'Enter The Gallery' and 'The Narrative of Technology' in Projects 5 & 6.

designed to prioritise space for the more passive video and non-interactive works in which the audience was a viewer rather than an interactor. Therefore, they could be viewed in a contemplative fashion without competition from the more dynamic works that required a different form of engagement. Interviews with audience members in Windsor indicated that this strategy was successful and interviewees responded to the questions about the artistic and intellectual content of both types of work equally.

Figure 31. Installation at Art Gallery of Windsor (above) showing exhibition entrance and (lower) installation of *Seen (2002)* (photo: Peter Ride)
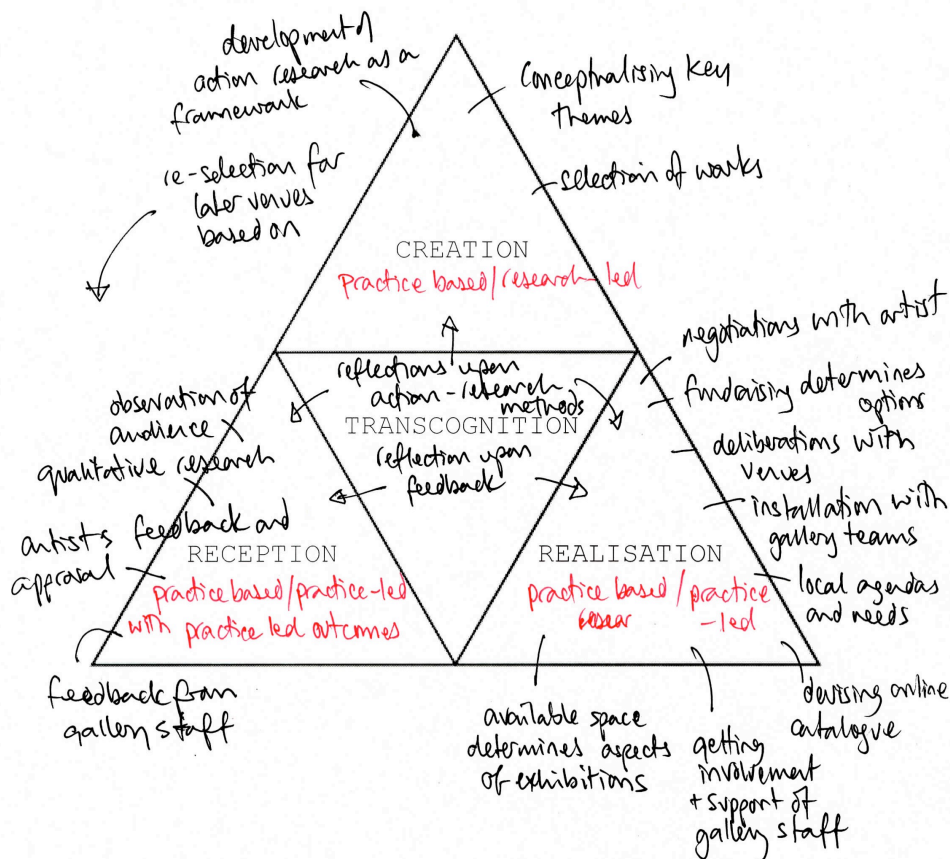
Figure 32. 'Framework of curatorial knowing' as configured with key concepts arising through *David Rokeby* exhibitions.

3.6 CONCLUSIONS

The research outcomes of the project are both diverse and cumulative. On one hand, the outcomes can be seen in the project itself, the exhibition was a practice-led activity that successfully presented a major exhibition and realised the strategic aims of exhibiting an important international figure in the UK. But through the progression of the exhibition, over its three presentations, we can also see the development of self-reflexive curatorial practice and the application of a distinct working method. The outcome of this was, in part, to expand my practice and to incorporate my findings in

future projects. But my findings were also disseminated to peers within the arts sector, through conference presentations at ISEA2009, Dortmund[69] and The Experimental Media Congress, Toronto, 2010 and further with the publications that are included in this programme and which show how the research was extended into other areas.

It can also be argued that the audience research demonstrated through this project was timely and that it has helped to contribute to the development of an emerging critical mass of research in this area. The development of a critical awareness on audience research, by artists as well as academics and curators, was the subject of the panel presentation at ISEA2009 '*A to X: Audience Experience in Media Art Research*' which was co-convened by Lizzie Muller[70] who collaborated with me as panel co-convener had also used David Rokeby's work as the subject for her own research (Jones & Muller 2007).

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[69] *A to X: Audience Experience in Media Art Research*, ISEA2009

[70] Lizzie Muller had also done substantial research on David Rokeby's work, in Canada and in Australia, as the subject for her own projects (Jones & Muller 2007).

Appendix to Project 2.

Items

1. Ride, P (2007) 'Who Remembers What?' Curator's essay published on the website to accompany the exhibition

2. Ride, P. (2006) Tour proposal for (untitled) Exhibition of work by Rokeby

3. FACT gallery handout and information for *David Rokeby: Silicon Remembers Carbon* (2007)

4. Exhibition review, *The List* Glasgow 23 August 2007

5. Audience research at CCA (2007) Interview notepad with initial draft for the semi-structured interview questions

6. Audience research at CCA (2007) graphs showing analysis of the time spent by audience at the installations and the modes in which they engaged.

7. Audience research at CCA (2007) initial data on duration of the time spent by audience at the installations and the modes in which they engaged.

8. Audience research at CCA (2007) by gallery attendants: main impressions of installations (i) *Giver of Names* (ii) *Taken* (iii) *Machine for Taking Time*.

9. Ride, P (2008) 'Plotting Against Time' curator's essay in the catalogue *David Rokeby: Plotting Against Time*, pub. Art Gallery of Windsor, 2008.

Item 1. Ride, P (2007) 'Who Remembers What?' Curator's essay published on the website to accompany the exhibition **David Rokeby: Silicon Remembers Carbon** *http://www.rokeby-show.org.uk*

Image below: screen grab from Wayback Archive

Following pages: text of essay

Introduction

This website is designed to accompany the exhibition David Rokeby: Silicon Remembers Carbon at FACT, Foundation for Art and Creative Technology, Liverpool, and will develop over 2007-8 while the exhibition is seen in the UK.

The website for this project is in part catalogue for the show but also in part an exploration of the process by which an exhibition is constructed and presented to its audience. Over 2007-8, while the exhibition tours the UK the website will expand to include discussions with curators, scientists and cultural critics, feedback from audience members about their response to the work and commentary from David Rokeby about the installations and the way that they are recontextualised with each showing. As such the site intends to serve as a window onto the artistic, curatorial and social practices that all come into play when work is presented as an exhibition.

Peter Ride, *Who Remembers What?*

The title for this exhibition, 'Silicon Remembers Carbon' was first used by David Rokeby for a gallery installation in 1993. In this piece the audience cast 'shadows' of themselves on a bed of sand. These were not real shadows, however, but images generated in response to the movements of the individuals in the gallery. Analysis of their movement determined how a video stream was mixed and dissolved, and when projected it took the form of a lingering trace of the audience's presence. In the 1993 installation and then in later versions, the audience could easily read the title as referring to sand (which is comprised of silicon) and deduce that the reference to memory suggested that the sand was being given the ability to register the presence of carbon based organisms - themselves.

The exhibition's title features a cleverly poetic use of language that one has come to expect from Rokeby. (Another installation, the 'Giver of Names' , where the computer

sprouted seemingly gibberish sounding language was in fact, the audience discovers,

language constructed from very logical associations and deviations.) Silicon is of course

the principal component of most semiconductor devices, most importantly, integrated

circuits or microchips. And carbon can be considered to be the chemical basis of all known

life. So the title, through it's luxurious sweep of metaphor, takes us to one of Rokeby's

central concerns, one which has threaded its way through the evolution of his installations:

the relationship between the computer processes and human cognition; how difference

and similarity are recognized through each process; and the way in which this relationship

is expressed.

In David Rokeby's work, silicon, though the microchip, is replaying many of the processes

that we identify as part of human cognition, perception and social engagement--replaying

but without the benefit of a value system. Behaviours are created which are appropriate to

abilities, but not necessarily those that we might value and so choose ourselves. David

Rokeby has said of his work: "I am fascinated by the way we transform the raw

impressions streaming in through our senses into a coherent mental picture of reality. So I

create artworks that look and listen, and try to make sense of what they see and hear. I am

caught in the daily clash between the logical world of the computer and the embodied

experience of living. So I bring these two worlds into closer dialogue to see what fails and

what resolves." [As quoted in Dot Tuer: "The Art of David Rokeby: Towards a New Poetics

of Language", in The Canada Council for the Arts - The Governor General's Awards in

Visual and Media Arts 2002. [http://www.canadacouncil.ca/prizes/ggavma/] So the

remembrance referred to in the title is also ironic. The audience is remembering what it

means to be human; remembering because they have been dislocated from the normal

rules of play, momentarily disorientated as if they were facing a distorting mirror.

Information technology has become the dominant conceptual reference for understanding our mental processes. We have a cultural inclination to reference the technologies and practices that we have created--from engineering to architecture to photography--in representing how we understand ourselves. And this is exactly what David Rokeby's work does: the subject is not so much the computer, it is ourselves.

Memory itself is a complicated process, one which we find easy to name, but extraordinarily difficult to conceptualise. Our neural networks, when triggered by a new stimulus, map what we have just encountered against the history of other incidents we have experienced. To use a computer analogy it is like searching a database for 'like terms', a wide reaching trawl that can bring up anything from seemingly random associations to obviously repeated patterns. The more often those terms are brought to the surface, the more likely they will become the 'top of the list' of requested items. It is this process that, according to cognitive science, enables us to have a belief system, to employ value systems, to develop likes and dislikes for our experiences.

And this 'remembering' goes even deeper. The word makes us consider that this is indeed a retrospective, and that the exhibition itself is an act of remembrance--and a particularly complicated one, as a retrospective has a dual function. It should create an history of an artist's work by drawing together significant pieces and threading a connection between them. Sometimes these connections are made easily--by the works' chronology or by how they have been named. Other connections are less apparent and surface only through the

reflection that hindsight offers, or by bracketing together seemingly disassociated groups of works to reveal previously unseen patterns.

In some cases a retrospective also needs to acknowledge how works are shaped by the context in which they are created. In regards to this, new media works are in a rather singular position. The new media sector is sometimes rather obsessive about the role of technology in art work. Understandably so, since innovation is often at the heart of the work: innovation in terms of finding new ways to work with technology, and in applying or devising new programs or hardware. Critique of innovation is crucial too in the new media sector. An artist's perspective is invaluable in challenging or problematising how technology is represented, and it expands discourses of technology which are often led and defined by industry.

However, there is an inherent limitation in this, as it means that the computer and its attributes can become the over-riding reference point for work. Works are 'dated' not just by the time and sequence in which they are made but 'dated', or out dated, by the sophistication of the systems that they use. It is not just an intellectual or technological consideration, but an important concern in understanding how audiences will relate to work. The dating of technology cannot be ignored as it both shapes and reflects our concerns with the art work. Sometimes this offers up very practical choices in framing a retrospective, such as whether or not to display works with their historical integrity intact or to 'revise' a work: a piece made in the early 90s re-platformed on an updated Apple Mac operating system might irrevocably change inherent qualities in the work but on the other

hand performing on an older system may not realize all of its current potential, and might put off technologically savvy audiences.

Looking back over the last two and a half decades in which David Rokeby has been working we can see an evolution of ideas about technology. One of the many opportunities that a retrospective provides is to enable us to track and define how dominating ideas have shaped the interest in, and discourse around, art practices. So, for example, media arts was hugely concerned with the way in which interactive media could re-shape the relationships between the artist and the work, and the audience and the work. Installations like Rokeby's 'Very Nervous System' were very important in not only offering new possibilities but also in creating a focal point for discussion. Similarly, the role of artificial intelligence and how it might be implemented is a major context for some of his other works. In media arts, debates quickly shift and slide away from being major areas of interest, yet they importantly offer another framing device for work.

Perhaps we can now say that the new media arts debate has shifted in quite another direction altogether, away from technology, and that there is a prevalent concern to see artists' work outside the vantage of a technological perspective. 'Very Nervous System' is less about exploring interactivity and the human-computer interface through a feedback loop, and is more a performance work in which we are able to find a contemplative space that links our bodies and minds in a quite different way from which we normally sense our own movement. 'Watch', which separates stillness from movement within a live video image, is not just a computer visualization operation but a simple and elegiac

demonstration of the way in which we give meaning to the space around us through complicated layering of visual perception.

These two works are particularly significant because, in the tradition of the retrospective, they stand as milestone pieces that offer understandings and new ways of experiencing the works of later years. As De Certeau describes in 'The Practice of Everyday Life' our understanding of the world around us is through living it, not though our 'raw' senses, but by attributing values and building up and sharing experiences. Through Rokeby's installations we are put in new situations and offered new ways of thinking about the ways we describe the world and how we live in it. Sometimes the describing is done through language, sometimes through visual representation. Always, we are put in a position where we have to challenge the ways in which we are accustomed to making sense of the information our senses receive and how we organize that information. And through the build-up of patterns and behaviours - the remembering - we develop a deeper awareness of what we see, how we hear and the ways in which we interact with others.

The issues discussed in this introduction will form the basis of on going discussion with the artist, curators, audience and other critics for the duration of the exhibition in 2007-8.

Item 2. Peter Ride (2006) Tour proposal for (then untitled) exhibition of work

by David Rokeby

Tour proposal

**DAVID ROKEBY: Exhibition, New Commission and
Tour**

DA2 Digital Arts Development Agency

10 North Green Street

Bristol BS8 4NE

Contact:

Peter Ride, Director DA2

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1. SUMMARY

DA2 proposes an exhibition of the leading Canadian new media artist, David Rokeby. This project is a collaboration with FACT

- Proposed dates for the exhibition are: initial exhibition May/ June 2007; national tour 2008/9

Contents of this document:

- *2. David Rokeby: the artist*
- *3. DA2, the organizing body*
- *4 Exhibition, Commission and Tour*
- *5. Touring information, fees and resources*
- *6. Audience development:*
- *8. Marketing activity*
- *9. Evaluation & Follow up*
- *Appendix: Description of works to accompany the DVD of work by David Rokeby and CV of David Rokeby*

2. David Rokeby: the artist

David Rokeby is a key figure in contemporary media art in Canada and is internationally recognised as an innovator and a pioneer who makes creative works with computers. His work has been exhibited in leading international centres e.g. ZKM, Karlsruhe; Eyebeam, New York; NTT ICC, Tokyo; Ars Electronica, Linz. He has been chosen to represent Canada at extremely significant cultural events including the Venice Biennale of Architecture 2002 and Sao Paulo Bienale 2004. He has received major international awards such as the BAFTA for Interactive Arts, 2000. In Canada he has received the prestigious Petro Canada Award for media arts 1998 and the Governor General's Award in Visual and Media Arts, 2002.

One reason for this proposed exhibition is that despite his international status Rokeby has had limited exposure in the UK: two installations have been exhibited including a commission by the Science Museum, which won him the BAFTA Award for Interactive Arts 2000. Therefore this upcoming project is aimed at giving a new and essential opportunity for UK audiences to experience first hand the work of this celebrated Canadian media arts practitioner.

Rokeby is significant as a contemporary artist but also because he was one of the first exponents of new media arts, beginning his practice in the mid 1980s, a track record which few current artists can claim. [NB the term 'new media arts' is relatively recent and is alternatively described as 'digital', 'interactive' or 'electronic' arts.]

Rokeby has had an enormous influence upon the current state of new media arts internationally having been at the forefront of the debate about the nature of new

technology and how it can have its own aesthetics within the context of fine art. His practice has always focused debate around exhibiting new media and how the interaction with computers in a gallery space can challenge the audience in radical ways.

At its heart, Rokeby's work deals with the fundamentals of human perception and intelligence: how we see, verbalise and communicate. By exploring aesthetically how machines operate, Rokeby creates a space that lets us discover new meanings in human communication and perception. His work questions the human condition, our relationship to the world and the very media itself.

> David Rokeby says of his work: *"I am fascinated by the way we transform the raw impressions streaming in through our senses into a coherent mental picture of reality. So I create artworks that look and listen, and try to make sense of what they see and hear. I am caught in the daily clash between the logical world of the computer and the embodied experience of living. So I bring these two worlds into closer dialogue to see what fails and what resolves."*

[Please see also appendix for description of works and images plus CV of David Rokeby]

3. DA2, the organizing body

DA2 Digital Arts Development Agency is a non-profit arts organization that supports production and research into creative work using digital technologies. It aims to explore how the digital processes are shaping our understanding of the world and giving new breadth to the imagination.

DA2 has operated since 1998, established as a company under a three year National Lottery A4E award and latterly with support from the University of Westminster, a relationship which enables knowledge transfer and partnership with the academic research sector. DA2's philosophy is to develop collaborative and complex projects e.g.

Key projects developed by DA2 so far include:

- Luke Jerram, Sky Orchestra (2004 and ongoing with Fierce Festival)
- Suky Best, *Walking Meditations* (2000, with English Heritage at Cleeve Abbey)
- Blast Theory's *Desert Rain* (2000 with NOW Festival).
- *Timeless: time landscape and new media* (various artists); exhibition curated by DA2 for Images Festival, Toronto, 2006.

This project is also a collaboration with FACT, the Foundation for Art and Creative Technology, Liverpool. As the leading organisation for the commissioning and presentation of film, video and media works and state-of-the-art exhibition facilities, FACT is a unique and appropriate collaborator for this proposal.

4 Exhibition, Commission and Tour

The project will consist of:

(i) A retrospective selection of Rokeby's works

The selection will be divided into themes representing the main interests displayed in his work. For example:

- Works that respond to an audience's presence and respond through creating a sophisticated trail of sound and music (*Very Nervous System*)
- Works that explore how vision operates by constantly manipulating a video feed to create images that separates out different parts of our visual processing into a series of beguiling visual juxtapositions (*Watch, Racing Daemon, Watched and Measured, Seen, Machine for Taking Time*)
- Works that explore how verbal intelligence operates by allowing the computers to respond to objects or spoken language and then play with it, either on their own or as part of a community. (*The Giver of Names, n-Cha(n)t*)
- Object based works which play with the audience expectations of the gallery and how sound can have spatial effects that redefine the gallery space (*Echoing Narcissus*)

(ii) New commission

As part of the exhibition project, Rokeby will develop a work that explores the site of the city, how people move within it and how this can be observed. The work will create a visual representation of the 'machine vision'. Using a public thoroughfare in Liverpool this will be based on Rokeby's existing software and re-defined in a new context. Rokeby speaks of his current interest in these works as an artist's interpretations of a given space and community; they are authored works in which the computer works with collected data not live feeds. They result in a complex series of visual interpretations of movement that both separate out and indicate how we occupy time and space. Like 'Machine for Taking Time' which was commissioned by the Oakville Galleries in Canada, Rokeby sees these works as visual pieces which are not site specific but are suitable to tour.

(iii) Tour
The exhibition will be developed as a 'modular' show so different venues can select different parts of the exhibition suitable to their venue and the context in which they are presenting the work.

The venues are intended to offer an experience to different communities and different parts of the arts sector. Each brings a different way of showing the work because of its context. It is also intended that each part of the tour will manifest local collaborations between the host organisation and bodies from other sectors. Key examples of this are:

- FACT, Liverpool, the inaugural venue, has a national status as a organisation now investigating ways to show media within the gallery context and, through a recent partnership with John Moores University, addresses how to teach digital arts curating.

- The Science Museum, London, is initiating a new dedicated programme of arts exhibitions to emphasise that creative work should be seem alongside 'scientific' knowledge. Partnership with The University of Westminster will result in a symposium addressing the historiography of new media work.
- The Public, West Bromwich, the new visitor experience centre, will offer the context of a centre that is pioneering how interactive environments can be the backbone structure of a permanent collection. The University of Central England will work with the Public to hold educational events with students and local artists.

Additional venues both nationally and internationally are currently under discussion. These include:

- Newlyn Art Gallery
- Windsor Art Gallery, Ontario

(iv) Comprehensive website

An integral part of this project is an online publication which is intended to provide supporting textual information but will also be a tool through which the experience at each venue will be documented, and thus provide a cumulative interpretive tool and allow for increased audience participation.

This will constitute:
- An e-publication (e-catalogue) with contextualising essays giving an historical overview of Rokeby's practice and new media arts
- Interviews with Rokeby relating to each of the key works in the exhibition addressing have been developed through their various iterations over time.
- Documentation from the symposia held in conjunction with the exhibition by University of Westminster
- The site will continue to grow with audience activity and feedback throughout the tour. It will remain as a permanent online resource and archive of the exhibition.

(v) Audience Participation tool

We will design a unique online resource to encourage audience participation:

- Individuals can upload their own responses to the exhibition and how they have worked with the interactive elements
- These can then be downloaded as podcasts for other audience members to get an alternative 'reading' of the exhibition
- This is intended as a way of empowering audiences and enhancing their involvement by allowing them to contribute and to share their experiences with their peers

(vi)   Education and interpretation programme:

Further understanding and deeper knowledge of the work will also be granted through workshops organised in conjunction with the Education Team at FACT. A programme of suggested activities will be offered to other touring venues. A teacher's pack, prepared by the Education Team, will be available to download from the website

 DA2 will co-ordinate workshop groups at each venue for new media artists wishing to engage with David Rokeby and the debates that his work deals with; these events will be either in group situations or held on-line

5. Touring information, fees and resources

Content

- Of the main works by Rokeby from 1983-2006 there are 10 of which any combination could be included in an exhibition. However for curatorial reasons we obviously want to have a dialogue about the choice of works for each venue.

Fee

- The hire fee = £3000. This is adjustable upon content.
- The fee covers participation in the project, credit for participating in the commission, participation in the e-publication and the audience participation tool.

Equipment and support
- We recognise that each venue will have different access to equipment and technical support. The hire fee includes a limited amount of equipment and technical information and installation. (The equipment required is standard media exhibition computer resources: Apple Macs, video cameras, data projectors and monitors). A full range of equipment can be provided by FACT plus technical support. The cost is to be negotiated.
- Rokeby has indicated that he would be available to install all showings of the exhibition.

Administration
- The tour will be managed by FACT

6. Audience development:

Objective: To give new audiences the opportunity to encounter and understand this area of work and to further our understanding of the way audiences operate.

Rationale: The online publication and the audience participation tool will enable remote audiences to experience the work, it will provide a legacy through the documentation of the project, it will also record how audiences have responded to it. The strategy of the tour venues and their marketing means that different audiences will be able to encounter the work.

Beneficiaries: remote audiences, mixed audiences of different venues, curators and those interested in studying new media practice.

8. Marketing activity

Project wide marketing:
Online publication and website

- Posting of information on online discussion forums (e.g. Crumb, Empyre) for media arts community (national and international)
- Links to sites relating to media arts (e.g. Rhizome)
- Education and public programme: teacher's pack, workshops, talks, screenings
- Promotion of new commission as unique work

Tour venue marketing:
FACT: tie-in with wider publicity for cultural activities around the Liverpool 700 anniversary and with Science Week 2007

- The Public: tie-in with publicity around the innovative approach of The Public as a C21st centre for the arts and creative experience
- Science Museum: tie-in with the opening of the Science Museum's new programme of arts exhibitions and a dedicated arts space; tie-in with activities in Dana Centre
- Marketing though partner academic institutions: University of Westminster, and John Moores University to the academic sector
- Marketing materials: print - private view card, press reviews and adverts, interpretation materials
- Documentation: in-house documentation
- Targeted education and outreach groups in line with the strategies and ongoing sector relationships of each venue
- Conference and talks programmes of venues including artist's talks

9. Evaluation & Follow up
Evaluation of project measured through audience feedback (qualitative feedback from focus groups and individual visitors of exhibition plus users of audience participation tool)

- Artist feedback on exhibition and reflections upon his practice (qualitative feedback through interview)
- Venue feedback (curators and gallery attendants responses)
- Attendance statistics at exhibitions showing patterns of use (quantitative data) - reviewed by DA2 /FACT
- Feedback from conference and educational events (qualitative) through response forms and online discussion
- DA2 evaluation of project upon its organisational development (self assessment) - reviewed by Director with Chair

Works in the exhibition

n-Cha(n)t

In <u>n-Cha(n)t</u> (2001) the audience encounters a room full of computer monitors suspended at head height with images of ears. The work is a creative demonstration of artificial intelligence in which machines respond to humans but also work together as a community 'appearing' to think as if they are collaborating.

If the viewer speaks directly to the computers they listen and then respond by speaking out loud their own poetic responses to what they hear. As long as viewers are speaking, the computers respond to this stimulus by chattering individually in a dissonant chorus of language. The ears visible on the computer monitors show the state of receptivity of each system. When the system is ready to listen, a listening ear is shown on the screen. If the system hears a sound, it cups its ear to concentrate. When 'thinking', a finger is pressed into the ear.

If the system feels over stimulated, it covers its ear with a hand to indicate its unwillingness to listen. Left alone and in silence, the computers gradually network together each offering, and sharing, a stream of verbal associations. In time they find a common 'stream' and their chattering organically subsides into a sonorous, collective chant. Coming across them at this moment, it is as if the viewer has entered a medieval cloister in which a haunting chorus of words fills the space with a sacred residue.

This work uses the social quality of the gallery space to demonstrate Rokeby's remarkable ability to meld a technical virtuosity and a minimalist aesthetic. It transports the viewer to a realm where the experience of art and of technology is heightened and transformed.

Watch

In <u>Watch</u> (1995), in which the viewer encounters a double projection fed by a surveillance camera located on the street outside the exhibition space.

The computer monitors them for stillness and motion, and then reprocesses them as mirror reflections of each other. In one half of the projection, the only discernible objects are static, such as pedestrians waiting for a streetlight to turn green. In the other, the only visible objects are moving, such as cars driving by or people walking or snow softly falling. As ghostly figures appear and disappear within a shimmering solarized background, the sounds of a watch ticking, a heart beating, soft breathing, are heard. The viewer, immersed in a sensory realm, experiences an eerie sense of physical displacement. The image, split apart, no longer confirms the world as we see it, but reveals how the computer can see us.
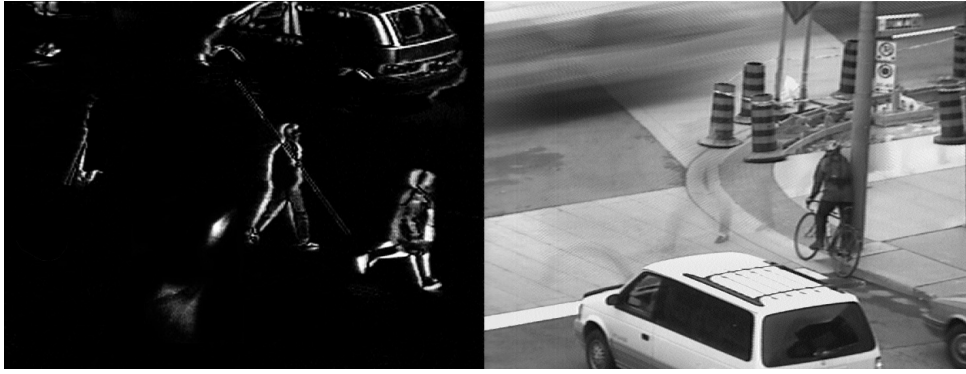
The work not only relates to principles of perception but also to photographic visualisation (it appears reminiscent of mid C19th photography for example where the camera could only capture movement as a blur). Implicit in work such as this is that the computer is being used to make obvious the different parts of our perceptual processes – for although we register all the differences between movement and stillness our cognitive processing melds the together into a seamless whole. This work allows us to step back from our own complexity and see things, literally, from a different point of view.

Taken

A work using similar principles, to Watch is Taken (2001), which maps how audiences operate within a gallery space. The computer stores images of people's movement and when it deduces that there are associations between the way that people are currently moving, or spending time in front of exhibits, it shows amalgamations of activity in the gallery past and present. The screened images immerse the audience in a sensory realm, so that they experience an eerie sense of physical displacement, their actions being merged into a common experience.
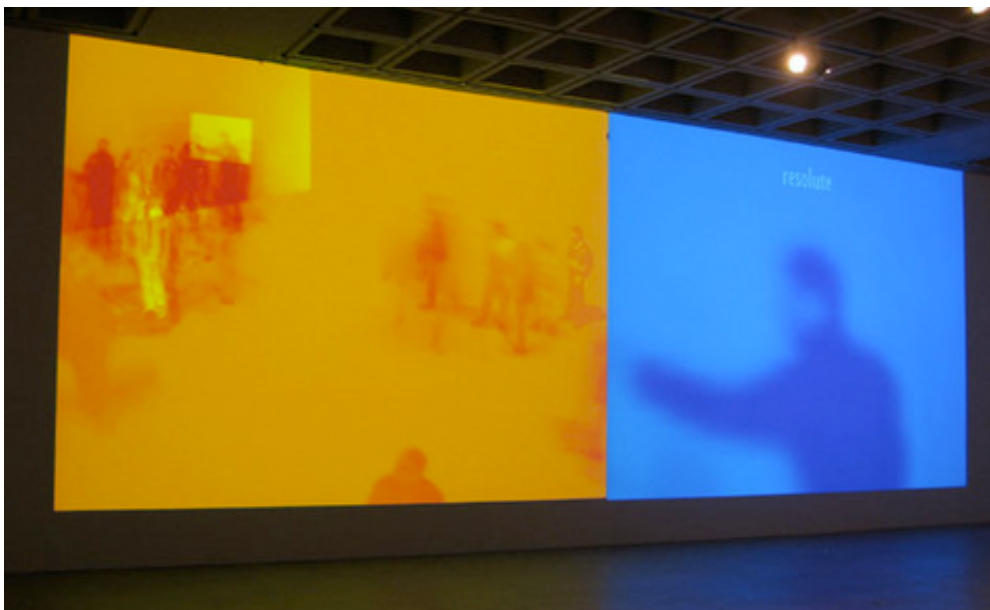
Seen

In Seen (2002) which was created for the *Venice Biennale of Architecture* the same principles of vision and translation are at play. Only here it is the continuous flow of movement across Piazza San Marco, a space that is one of the most significant tourist destinations in the world, that is 'read' by the computer for stillness and motion. It transforms the banality of pedestrian movement, as pigeon activity, into an explosion of colour and abstraction. Here the work is shown on a number of screens. Viewers can see different views of pedestrian movement in Piazza San Marco unfolding simultaneously. It gives the impression that the flow of people is creating brushstrokes of colour as their movement created a ghostly trace that recorded their history as well as depicting the square.
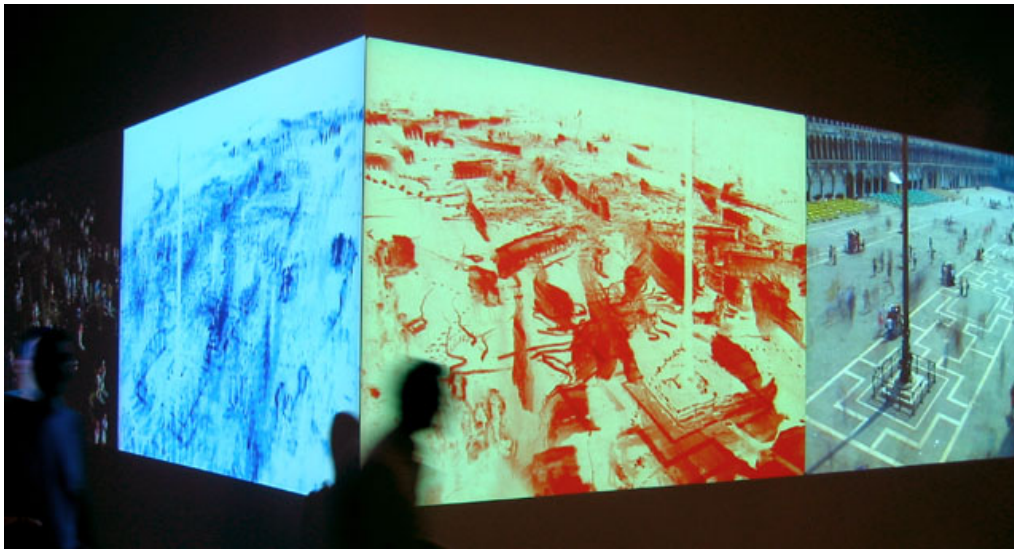
As with Watch the work sets up a tension between the way that the permanent, architectural, aspects of the space are experienced and the way that space is experienced, socially, as a place thronged with people and movement. It is a separation that we can conceptualise but that we cannot visually experience. Yet when it is presented to us visually it provides not only a captivating experience but a critique of the way that we understand how space is inhabited.

Seen is not a 'live' work, but operates with a pre-sampled video which has then been processed over time. Like many other works of Rokeby's it is more concerned with aesthetics and the intelligence that the relationship of the artwork to the sampling of live data – which has been presumed to be the pre-occupation of much new media work over the last decade. In line with recent theorists such as Mark Hansen who argue that new media art should best be talked about in terms of phenomenology rather than digitality, technological innovation, and data flow; it is 'presence' and 'affect' that make experiencing it memorable. Rokeby's work is a timely illustration of this.

Machine for Taking Time

Machine for Taking Time (2001), is another work that plays with our accustomed 'photographic' notions of time. This is the most lyrical of Rokeby's works and, more than any other piece, has a specific 'art object' quality as a 'stand alone' piece of work.

Rokeby has placed a video camera in a garden setting, its 360 degree pan covers a wide landscape and the images are constantly sampled and stored by the computer. In the gallery installation, the computer software travels through this accumulating archive selecting images to show, seamlessly merging them together.

On a projection-screen, what appears at first to be unfolding is a continuous panoramic rotation, but on closer inspection is obvious that though the rotation is consistent the time-frame is not. In the computer's act of re-picturing the landscape, the view remains unchanged but the seasonal variations of the garden shift and blend within the frame of the pan. Through the work nature becomes simultaneously present in the gallery and transformed, real and a dreamscape, concrete and liquid.

The image might dissolve sequentially from day to day as it progresses along the rotation or it might dissolve from date to date randomly: time appears to move forwards or back as though it is being folded in upon itself. The piece never repeats itself and illustrates how the apparent continuity is an elaborate fabrication in several senses. The effect is like a piece of music being played in infinite variations. Similar to n-Cha(n)t, Machine for Taking Time imbues the technological dimensions of the computer with a visceral poignancy and an intangible spirituality.

The implications of photographing and filming landscape is reflected this work: static or evolving linear time has been fundamental to the way that landscape is experienced. Machine for Taking Time, as its title suggests, gives a completely different way of comprehending how we experience and remember landscape (rural or urban). Our perception is not linear like a film but it relies on our memories that move back and forward constantly; our whole process of 'making meaning' of a space is in comparing contrasting how things have been previously and are now.

[Machine for Taking Time was commissioned by Oakville Galleries, Canada.]

The Giver of Names
The Giver of Names (1991-) explores how the computer translates visual stimuli into language and lets the audience playfully engage with the computer.

This work endows the computer with a resemblance to artificial intelligence in which the computer interprets objects placed by the viewer on a pedestal in front of a video camera. On the video screen above the pedestal, the viewer watches how the computer analyses the colours, textures and outlines of the objects it sees, and then hears how the computer names what it sees by drawing upon an associative databank of language. On the computer screen, the ways in which it uses the associative database are represented as clusters of words retrieved from its memory bank. The result is a flow of grammatically correct, nonsensical and often endearing interpretations of objects, an idiosyncratic concrete poetry forged from the viewer's choice of objects and the computer's assembly of words.
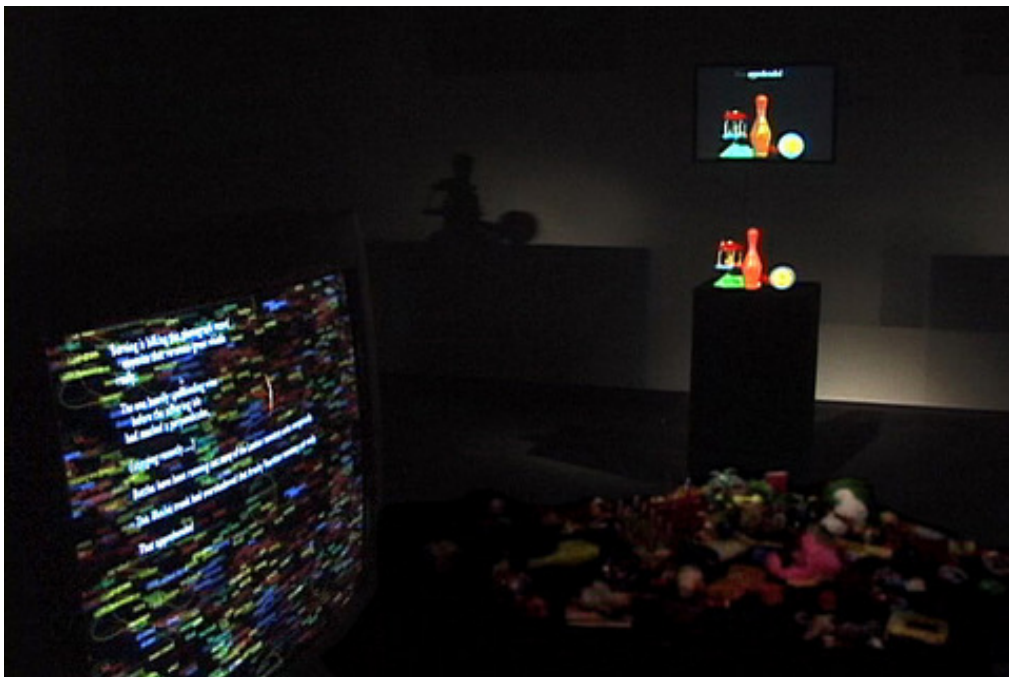
As an artificial perceptual system that not only sees but describes, <u>The Giver of Names</u> corresponds to our own internal value system of what makes us social beings through language. Yet at the same time, it mimics rather than embodies how we achieve meaning through naming, lacking the secondary processes of the unconscious dreams, desire and fantasy that shape the complexity of language. In the industrial and military applications of cybernetics, the ethos of artificial intelligence programmers is to mask the gap between human and machine. As an artist, Rokeby is committed to critically questioning this gap, revealing through the computer's linguistic sophistication the differences between deductive logic and our cultural and subjective framework for meaning. In the process, he cautions us against accepting the authority of computers to interpret the world for us.

Very Nervous System

<u>Very Nervous System</u> (1986-90) is one of Rokeby's earliest works, but fundamental to understanding how his work has developed both thematically and in terms of technological investigation.

In this piece the viewer enters an empty space; except for speakers; in which a computer translates the gestures of the viewer into an improvised soundscape. As people start to play with the space it becomes obvious that the computer is reading even very subtle gestures and that the sound that is created is not just the product of translating movement into sound, but that it is evolving a complex response to the movement.

The installation is a complex but quick feedback loop; the loop is subject to constant transformation as the elements, human and computer, change in response to each other. The two interpenetrate, until the notion of control is lost and the relationship becomes one of encounter and involvement. The diffuse, parallel nature of the interaction and the intensity of the interactive feedback loop can produce a state that is almost shamanistic.

The active ingredient of the work is its interface. The interface is unusual because it is invisible and very diffuse, occupying a large volume of space, whereas most interfaces are focused and definite. Though diffuse, the interface is vital and strongly textured through time and space. The interface becomes a zone of experience, of multi-dimensional encounter. The language of encounter is initially unclear, but evolves as one explores and experiences.

The software 'substrate' which was devised by Rokeby for this work, has become the basis of the operating system used by Rokeby in most of his later works. This piece is therefore fundamental to understanding the historical evolution of his body of works, and his investigation into computer 'intelligence' and of the way that we perceive it and engage with it.
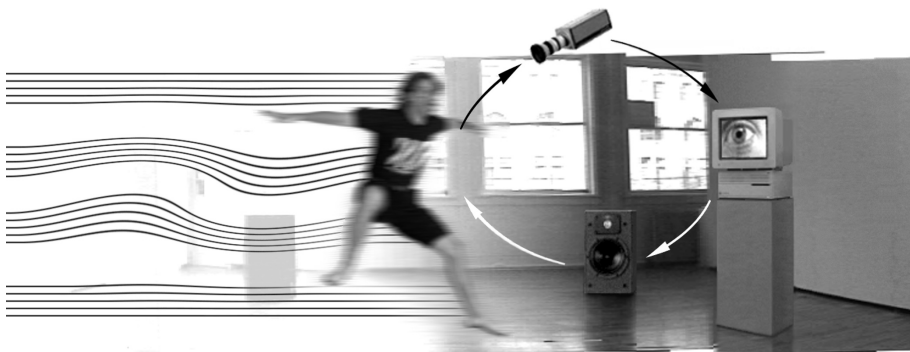
[With thanks to Dot Tuer for permission to draw on her writings about David Rokeby for these notes.]

Item 3. FACT gallery handout and information for 'David Rokeby: Silicon

Remembers Carbon' (2007)

DAVID ROKEBY: SILICON REMEMBERS CARBON,

Galleries 1 &2, Media Lounge and Public Spaces @FACT

20 April – 10 June

> *I am fascinated by the way we transform the raw*
> *impressions streaming in through our senses into a*
> *coherent mental picture of reality. So I create*
> *artworks that look and listen, and try to make sense*
> *of what they see and hear. I am caught in the daily*
> *clash between the logical world of the computer and*
> *the embodied experience of living. So I bring these*
> *two worlds into closer dialogue to see what fails and*
> *what resolves."[71]*

David Rokeby has shaped the history of media arts for
over 20 years. His interactive artworks explore how
humans perceive in an aim to make computers more human
and to make us more aware of how our own perception and
rational machinery work.

Born in Ontario, Canada, in 1960, David Rokeby has
received acclaim in both arts and technical fields
across the globe. His work has represented Canada at
the Venice Biennale since the mid 80es; he received a
BAFTA for interactive art in the UK in 2000 and has
been awarded 3 times at the prestigious Ars
Electronica. However, the UK has never seen a major
presentation his work.

For the premiere of David Rokeby in the UK FACT, in
collaboration with DA2, has restaged pieces that
signify key moments in the development of the artist's
creative career. Interactive installations of machines
that see, hear, talk and make decisions invite us into
the mysterious, magical and lonely realm of the
computer. In *Watch* and *Taken* surveillance images are

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[71] As quoted in Dot Tuer: "The Art of David Rokeby: Towards a New Poetics of Language", in The Canada
Council for the Arts – The Governor General's Awards in Visual and Media Arts 2002.
http://www.canadacouncil.ca/prizes/ggavma/

broken down into different components such as movement and stillness to present us with another way of seeing our same reality. *The Giver of Names* and *n-Cha(n)t* are systems that have learnt to talk in their own subjective computer lingo from a database of associated words.

David Rokeby's work carries a critical reflection on human psychology, language, vision, memory and learning and how technology currently defines the way we perceive the world around us, constantly mediated and under surveillance.

Technology in the work of David Rokeby allows the artistic representation of the complex mechanism by which the human brain processes a chaotic array of colours, sounds and shapes into a reality that makes sense in our rational way of understanding the world. Experiencing Rokeby's work audiences find themselves in a paradoxical loop where they become aware of the mechanism that is taking place in their minds while looking, listening and comprehending the work.

The artist imagines, programmes and creates his inventions, including the cultural environment where his works are "educated": he defines the vocabulary — images and/or words - that the machines will use and establishes the basic associations that can happen; he defines the system's intelligence. The result is a seemingly logical behaviour that lacks a rational content we can recognise and interpret (i.e.: a sentence is grammatically correct but illogical). In separating the content from the mechanism that constructs it, we are drawn to the familiar mechanism in an unprecedented way while the words, images and movement in the work dissolve into artistic abstraction, with its own, inherent, humorous and unexpected logic.

David Rokeby's represents the avant-garde of artists exploring and playing with the creative possibilities of interfaces. Interfaces are where the communication and understanding between humans and computers happens; the work of David Rokeby exists in the ambiguous space where the real and the virtual meet. His critical approach questions the current design of computers and their interfaces, considered as mirrors that return a distorted vision of the self to the user.

Watch (1995)

Surveillance installation; FACT public space

Footage from a surveillance camera placed outside the FACT building is being analyzed in real time by the computer; elements of stillness and motion are then separated into 2 images presented side by side. *Watch* is the first in a series of surveillance installations that "look" at reality and offer us a different reading from the logical construct of reality that we have socially learnt.

> *One of my professors told us one day that we would be looking out a window for the whole three-hour class. I was incensed. I'd been willing to go along with most of the unusual activities these classes had entailed, but I felt this was going too far. I stood at my assigned window and glared out through the pane. I saw cars, two buildings, a person on the street. Another person, another car. This was stupid! For fifteen minutes I fumed, and muttered to myself. Then I started to notice things. The flow of traffic down the street was like a river, each car seemingly drawn along by the next, connected. The blinds in each of the windows of the facing building were each a slightly different colour. The shadow of a maple tree in the wind shifted shape like some giant amoeba. For the remaining hours of the class I was electrified by the scene outside. After fifteen minutes, the "names" had started separating from the objects. Part of the desire that drove me to produce "Very Nervous System" was a desire to slip out of my own self-consciousness into direct, open experience of the world. In the right circumstances, the feedback loop of "Very Nervous System" effectively neutralizes consciousness, and can occasionally lead to states that could best be described as shamanistic. It can be intoxicating and.[72]*

Commissioned for the Info-Art show at the 1996 KwangJu Biennale

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[72] David Rokeby. "The Construction of Experience: Interface as Content," in Clark Dodsworth, Jr. (ed.) Digital Illusion: Entertaining the Future with High Technology, New York, Addison-Wesley Publishing Company, 1988

Very Nervous System (1986 – 2004)

Interactive sound environment; Media Lounge

An empty space controlled by a camera is mapped onto the computer in a way that every 'pixel' of the space corresponds to a sound. It is an invisible, room-scale ambient interface with which users can make music from thin air as their body movements are translated into a soundscape. *Very Nervous System* is an environment where the boundaries between real and virtual disappear

> *Part of the desire that drove me to produce "Very Nervous System" was a desire to slip out of my own self-consciousness into direct, open experience of the world. In the right circumstances, the feedback loop of "Very Nervous System" effectively neutralizes consciousness, and can occasionally lead to states that could best be described as shamanistic. It can be intoxicating and addictive.*[73]

PetroCanada Media Arts Award (1988); Prix Ars Electronica Award of Distinction for Interactive Art (1991); financially assisted by the Canada Council for the Arts and the Ontario Arts Council.

GALLERY 1

Seen (2002)

Surveillance installation; Gallery 1

Footage from Venice's Piazza San Marco was processed in 4 different ways: moving elements — people and pigeons — were removed from the architecture; the movement trajectories were tracked and rendered; images are layered onto themselves to create clouds of movement; architectural, static elements appear empty of any movement. This aestheticized and painterly look on reality invites the viewer to reflect on shared social spaces. The installation was commissioned for "Next Memory City", the Canadian Pavilion of the Venice Biennale of Architecture 2002.

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[73] David Rokeby: "The Construction of Experience"; Op. Cit.

> *This explains our attraction to optical illusions
> and mind-altering experiences (chemically-induced
> or not). Those moments of confusion, where
> identification and resolution aren't immediate,
> give us a flash of the raw experience of being.
> These moments of confusion are also the fulcra of
> paradigm shifts. It's only when our conventional
> way of dealing with things breaks down that we can
> adopt another model, another way of imagining and
> experiencing a scenario.*[74]

n-Cha(n)t (2001)

Interactive installation; Gallery 2

> *"The Giver of Names" is awash in a sea of a
> language it can manipulate but cannot understand.
> Its plight and its 'loneliness' seemed to demand a
> social group. So I imagined a group of intelligent
> agents, hanging out in some corner of the internet
> during their idle time, jamming with their
> synthetic wits... trying out language on each
> other... perhaps finding their own patois...
> making this alien language somehow their own.*[75]

In Gallery 1 audiences will encounter a community of
computers suspended from the ceiling, with an image of
an ear on the screen, chatting with the audience or
chanting among themselves. The listening ears are
cupped to concentrate; users' words trigger the system
to find associations from a pool of related words.
When left alone the computers will synchronize their
streams of consciousness, chanting associated words in
unison.

Commissioned by the Banff Centre for the Arts. Prix
Ars Electronica Golden Nica for Interactive Art 2002.

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[74] David Rokeby: "The Construction of Experience"; Op. Cit.

[75] From David Rokeby's homepage; http://homepage.mac.com/davidrokeby/nchant.html

GALLERY 2

The Giver of Names (1991)

Interactive installation;

This piece invites the user to reflect on the construction of language, memory and learning. A computer analyzes objects identifying outstanding features such as colour, shape and form; these are paired with its database of associated words. The visual analysis of the objects is projected at the same time as the words triggered appear in clouds of colours that correspond to each object on the screen. Finally the computer speaks a grammatically correct but logically nonsensical sentence built from its knowledge base. The system expresses the machines' subjectivity in a flow of artificial consciousness.

Commissioned in part by the Kiasma Museum of Contemporary Art, Helsinki; financial assistance from the Canada Council for the Arts and the Ontario Arts Council.

Taken (2002)

Surveillance installation; Gallery 2

In a similar way to *Watch* (public spaces@ FACT), the 2 projected images are different visual renderings of the same information. The computer tracks visitors and presents in one projection, clouds of activity around the gallery space; in the other, a grid of headshots of recent visitors. The installation confronts its audience with the visual representation of an experience shared through time, with a moving image of collective memory.

http://davidrokeby.com

This exhibition is curated by Peter Ride, Artistic
Director of DA2, Digital Arts Development Agency;
Director& Senior Research Fellow Centre for Arts
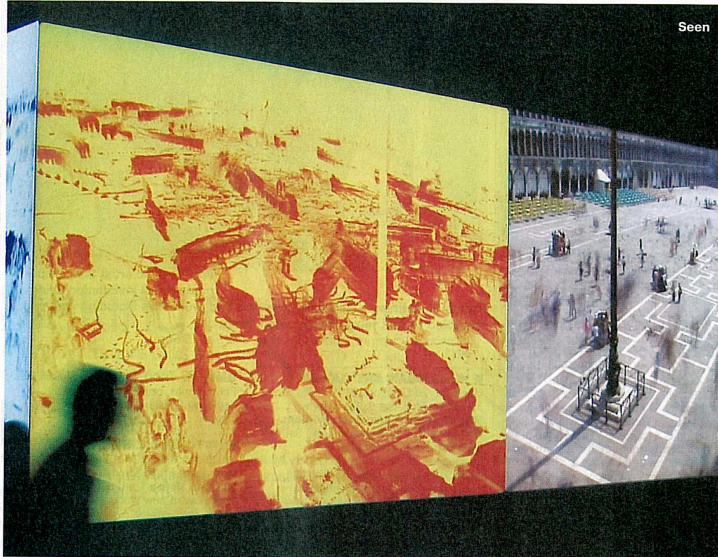Research Technology and Education (CARTE).

http://www.da2.org.uk

http://www.carte.org.uk

http://www.wmin.ac.uk

Exhibition travelling to The Centre for Contemporary
Art, Glasgow http://www.cca-glasgow.com/

'IF YOU DON'T LOOK OR ACT GUILTY YOU AREN'T'

Seen

Big brother is watching

Alexander Kennedy sees and is seen as he inhabits Silicone Remembers Carbon, a stunning new interactive multimedia work from David Rokeby

In the first ten minutes of experiencing David Rokeby's work at Glasgow's CCA, I am 'taken', 'dismayed', 'intrigued but resistant', 'troubled', 'voyeuristic' and then 'convinced'. So the randomly generated adjectives tell me, words that appear floating above the image of my disembodied head that has been recorded, 'Taken', by the cameras, in the installation of the same name.

'Some viewers are troubled by seeing their image in the work, others are seduced,' says David Rokeby of his interactive multimedia show. Seeing yourself in the work goes beyond the usual sense of identification that one feels with a character or subject in an artwork. You *are* the artwork, to a certain extent, a form that floats through the artist's composition, being shoved about and labelled by his overall sense of order.

This work is also a comment on the CCTV-moderated world we now live in, of course, where we are followed, recorded, and labelled as a threat or not. We are already assumed to be guilty in the CCTV world. We need watching; the signs of our guilt are written on our bodies through our actions. If you don't look or act guilty you aren't. (As I skulk through the gallery with my hood up, I assume I look very dodgy indeed; ask the gallery attendant who followed me). But Rokeby's work is not as theoretically or as formally barren as it appears on paper. The viewer is instantly attracted by the seductive oranges and pale blues of the bisected screen of 'Taken', as you follow yourself about on the red screen and then see yourself in a mugshot on the blue section. As I leave the room and peer behind me I am told that I am 'still intrigued', and I am.

The artist has expertly utilised the space of the largest gallery. In 'Seen' the wall juts out like the prow of a ship into the rectangular room, with four screens of visual information hitting the viewer right between the eyes as you stand facing the work straight on. Footage from Venice's Piazza San Marco is recorded and projected in four different ways, four different views of the same historically (and aesthetically) rich area of land. Stationary constructions – buildings, monuments, coloured paving stones etc – remain as solid, looming presences. Figures passing through the space leave coloured vapour trails behind them, or is it before them? The body is deconstructed into layers of smoky colour, aureoles of anti-form projecting before and behind an imagined body – leaving history behind it and walking into a predicted future.

The body is almost totally erased in gallery one, where 'Very Nervous System' records the surface of your body, translating it into rattling, scraping sounds – the sounds of the edges of the body banging off invisible drawers of cutlery and buckets of nuts and bolts. This is the first programme that Rokeby created in the 80s, and is here in a format that puts the tactile (haptic) over the optic. As I stand, the foreboding sound of heavy material being dragged over a flat surface fills the room. Each move and twitch becomes imbued with symbolic sound. As I reach into my satchel I hear the rattle of a heavy, expensive Channel bracelet. Oh, if only.

Silicone Remembers Carbon, CCA, Glasgow, until Sat 15 Sep ●●●●○

Item 5. Audience research at CCA (2007) Interview notepad with 'working' list of the semi-structured interview questions. (An ethnographer advised me that typed-up lists of questions made an interview seem formal whereas handwritten notes more likely to lead to a casual and conversation mood.)

Drakes Executive Pad

DAVID ROKESY   FEEDBACK/INTERVIEWS – KEY QUESTIONS
+ SUB QUESTIONS

1.   ABOUT THE EXHIB AS A WHOLE: → OVERALL WHAT DID YOU GOT ?
1.a WHAT WORK ENGAGED YOU THE MOST ? IF YOU WERE TO SUM IT UP IN ONE WORD ?
     WHY / WHAT ABOUT IT DID THAT (WHAT DID YOU EXPERIENCE

                                    OF THE WORKS
     b   WHAT MADE YOU MORE INTERESTED IN SOME THAN OTHERS ?

     c   IS THERE A DIFFERENCE BETWEEN THE WAY YOU ENGAGED
         WITH SOME WORKS + WITH OTHERS .
     d. RETROSPECTIVE (DO YOU SEE CONTINUITY :
         [* By 'engaged' mean what appealled, captured attention + involved you]

2   ABOUT THE WORK NAMED ABOVE PLUS ONE ORTWO OTHERS:
     a   WHAT DID YOU EXPERIENCE
     b   WHAT WERE THE MAIN THINGS THAT AFFECTED YOU

3   INTERACTIVE INSTALLATIONS
     a) DESCRIBE HOW YOU INTERACTED WITH THE ART WORK
     b) IS THERE A POINT AT WHICH YOU 'GOT' THE WORK + WHAT DID YOU 'GET' ?
     c) WHAT ASPECT GAVE YOU THE MOST SATISFACTION

4.   ABOUT THEM !
     a) WHAT IS YOUR PRIOR KNOWLEDGE + RELEVANT FIELD OF INTEREST ?
     b) HOW DID THIS AFFECT HOW YOU RESPONDED TO THE
         EXHIB ?

     3(d) Did you feel you had to 'understand' the work .

Item 6. Audience research at CCA (2007) graphs showing analysis of the time spent by audience at the installations and the modes in which they engaged.

(i) shows whether audience member actively participated or passively viewer or did both. And if they did so alone or in a group.

Participation in pieces

Taking Part	Observing	Both	Alone	With Others
57.3%	8.4%	34.3%	42.7%	57.3%
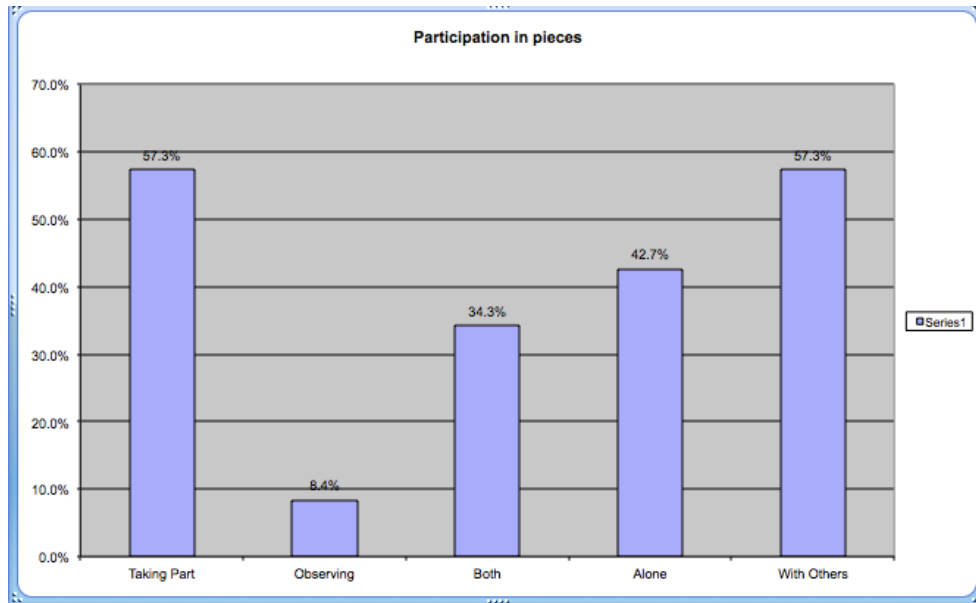
(ii) shows time spent at the three interactive installations

Average number of minutes spent at each piece (personal experience feedback)

Taken, 7.0

Very Nervous System, 5.7

Giver of Names, 7.1

Legend:
- Very Nervous System
- Giver of Names
- Taken
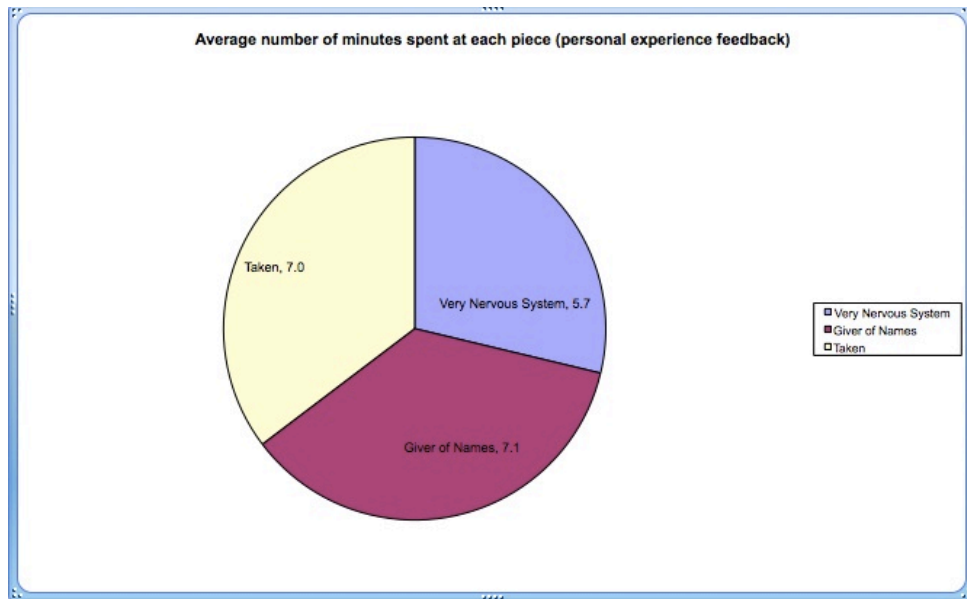
Item 7. Audience research at CCA (2007) initial data on duration of the time spent by audience at the installations and the modes in which they engaged.

Time spent at each piece (mins)				Mode of engagment			Single or group	
Very Nervous System	Giver of Names	Taken		Taking Part	Observing	Both	Alone	With Others
5	1	10			1			1
0	5	5				1		1
0	5	5			1			1
2	4	5				1	1	
5	5	5		1			1	
3	3	3				1	1	
4	4	5		1				1
5	2	5				1	1	
5	5	5		1			1	
10	10	10		1			1	
		5		1				1
5	2	10		1			1	
10	10	10		1				1
5	10	10				1	1	
5		1		1				1
5	1	1			1			1
5	10	5		1			1	
5	15	10				1		1
1	5	10		1			1	
3	1	1			1			1
5	5	2				1		1
5	5	8		1				1
5	1	5		1			1	
2	2	10		1				1
5	20	10		1				1
10	10	3		1				1
10	10	5			1			1
	20 sec	3				1	1	
						1		1
10	15	10		1				1
2	2	2		1			1	1
2	2	2		1				1
5	10	5		1				1

Item 8. Audience research at CCA (2007) by gallery attendants: main impressions of installations (i) Giver of Names (ii) Taken (iii) Machine for Taking Time.

Note language used to describe interactive installations (i & ii) and less enthusiastic language used to describe (iii).

Giver of Names
Sorry this one lost me.
The gramatically/syntactic relationship with lack of meaning.
Kid taking the sax and going off to play with it.
I enjoyed the interactivity of this, made me think about language.
the fact that the computer was "feel" books.
man v's machine intersesing competition
Mac voice
burroughs as computer love
it seemed interesting, but seemeperhaps a little intimidating, technology wise.
fascination, stimulates thought about language
excellent significantly build on your own exhibition within an exhibition whilst being given an unreal diagnosis of the situation.
Interesting although it needed prompting to move objects.
It was fascinating how the digital imagery de-personalised the biographical objects
words, letters, colours and shapes and given into a poem
objects becoming "still life" and something analysable, empherical quality of my own hand appearing in the image
the reminder of the power of word association, even an intelligent machine can product poetry
good interaction, interesting concept
felt it reflected modern city environment
playfull, less solid idea more mad than the others.
gibberish
confusing
approaching death
it was a bit of fun
shapes and colours
The technological ability to record a random grouping of objects.
did not understand
Digital automatic poetry inspired by childhood memorabilia and generated by colour.
How the computer associated words with my puma carrier bag into something quite literally
creatively interactive, drowing in its own sign production, surprisingly filled with innuendo. Still life with a difference.
interesting good for kids, not much art thoughBEST WORK SURVEILLANCE THEME
images-strength of colour/unreality of some of the objects when on screen
the random word play outcomes the constantly renewing interface
fun enjoyable good to take part in
Blue duck.Ro

Taken
Very interesting piece on time and movement
was very intimidating I got almost upset but stayed because of curiosity
Again reaction of kids in space + reservation of adults.
I liked having my image projected in large scale.
fun for all types of people-kids like it too.
addictive we can all male impressions
wundering
interaction/movement repeated surveillance and being watched and placed
totalitarianism
felt the need to try and recognise faces
deep quality of work visually engaging, fun. Well executed
Iinteresting and endorsing
wasn't expecting what happened loved playing around with visuals felt hurt (to some extent) if label was negative
The sense of memory and impact of a person to a space that became more chaotic and intricate with more people
Being singled out & having word associations with my posture/expression. Striking at my vanity.
almost begs choregraphy: beautiful that even a breathe weilded a small sound
the novelty of seeing my non image as seen by others, how revealing is that.
visually very watchable
familiar face on big screen, a bit scary
nice to be alone, or with 20 of your cloned self!
totally absorbing
eternity
was interesting
enjoyed the tracking system and ghost images of the recent past.
Ghosting/rewinding of movement in space.
instant visual playback and scale of projection
interactive
fun enjoyable good to take part in
eerie, creepy, random
too much zoomed-no overview too fast obvious changes
Awesome!
A constant feeling of being watched.
very interesting to choreograph the space
ability to replay different events of time at the same time.
intelligent
nice interactive metaphor for the memory of a surveillance society
speakers lower, space darker

Machine for Taking Time
have to see again-not love at first sight
Relationship of time and reality.
that we all have the potential to create something similar from our own photo albums
Made me think about the difgital moving image and reps of our surroundings in this way.
time can go back and forth
excellent effect/take on the cctv and memory
softness
reminded me of trish's work
least interested
not as captivating as the interactive pieces
beauty
nice idea a bit boring when compaired to the interactive works
liked where moving objects removed
Slower more passive piece compared to others.
Very clever, didn't keep my attention as much.
Better to read about. Good feel, after encountering giver of names tests patience.
calm real yet unreal!
the looping. Not underestimating the amount of work the artist put in
didn't feel for this so much, less interactive
Didn't focus much on this one.
not sure still trying to decide
a garden
a bit passe
pleasant enough visual effects, however overal impression is whole thing is insipid and pretentious.
a little bored
didn't see this, will look tomorrow.
nothing
really beautiful - like a living painting - layers building up
didn't really look - didn't grab attention
didn't feel for this so much, less interactive
like a painting
interesting
movement of time that we cant stop
simple idea done better elsewhere
perhaps the least interesting piece for me.
season change, time flies and we live and die
found this difficult to engage with
beauty disturbing almost drug induced
very memorable
engrossed
I cant really remember

David Rokeby

Art Gallery of Windsor

Plotting Against Time

One of the main discussions in studies of contemporary culture over recent decades has been around the centrality of the visual image. Indeed, the idea that a media saturated world is dominated by images is taken as a truism.

The extent of visual imagery goes from highly stylised advertising to impromptu and informal online photo-blogs, from computer graphics to identity portraits, from ultra-sound images depicting our internal bodies to data maps sent by satellite. Images are used to document, guide us through interfaces, interpret datasets or other information, identify us, persuade us and bring us pleasure. However the importance of the visual material is not just based upon increased capacity to produce and circulate images, but on the extent of their use: we have made a choice to use images and structure them into our social, personal and political networks. We communicate through them ways where previously we may have used other means, such as written or spoken language.

One of the contentious points in contemporary visual studies is that visuality itself is changing: that it is possible we see things differently from the way that our ancestors did. It is argued that the industrial revolution and the enlightenment brought about a change in the way that people treated images, responded to spectacle and created in response redefined genres such as such as portraits and landscapes. In the 21st century the understanding of what an 'image' is may be going through a new development because of the huge cultural and social shifts brought about by information technology. The visual and media arts have always critiqued, responded to and drawn from the image world around them and, consequently, they have to find new ways to respond to these changes.

As one of Canada's leading visual artists, and a pioneer in digital media arts, David Rokeby has been at the forefront of this area of enquiry. His

work demonstrates to us that not only can new technology offer challenges to the imagination, and new avenues with which to explore and represent the world around us, but that it also enables us to think anew about modes of perception that we have taken for granted. His work not only explores how the computer can find new ways of doing things but how we can understand ourselves differently. Rokeby says "I am fascinated by the way we transform the raw impressions streaming in through our senses into a coherent mental picture of reality. So I create artworks that look and listen, and try to make sense of what they see and hear. I am caught in the daily clash between the logical world of the computer and the embodied experience of living. So I bring these two worlds into closer dialogue to see what fails and what resolves."

Rokeby's practice draws on interdisciplinary fields, reflecting computer science, cognitive and perceptual science and media arts. It encompasses a number of current social concerns which includes how we amass information and how we use it, and how the outcome of observation is not always benign.

It could be said that the notion of subjectivity is central to this work, as it is with much contemporary practice, but with a paradox. For it appears that the subjectivity in question is the computer's: how does the computer 'see' and respond to a situation; how does the computer interpret what it encounters in a way that is unique to itself? The paradox of course is that the computer is not responding or interpreting, but rather processing and managing information in ways that may seem unexpected to us. The meaning that we observe is entirely constructed through our own subjectivity. Rokeby has often used the metaphor of the mirror when discussing interactive work, and it applies to even non-interactive work. The artwork 'mirrors' us in that it reflects back on us and allows us to comprehend ourselves, and our understanding, from a different point of view.

Nowhere is this more obvious than in Rokeby's way of interpreting the space around us. We are used to the representation of space mediated through photography and film, which are media that often convey to the viewer the illusion of a 'naturalistic' understanding of time. But this conventional representation is completely discarded in many of Rokeby's installations where time seems to become a more flexible and fluid element. In writing a computer program time to sort and organize data, a linear timeline need not be an automatic construct, but instead it is a variable which can change according to any number of different conditions. The timeline can seem in some works to feedback on itself, and be repeated over again, giving us multiple impressions of a space as a place

in which the past and present co-exist. Or time may seem stretched, moving fast at one moment and being slowed at another.

Initially this sort of representation may seem extraordinary or a distortion of a logical pattern, but on consideration it provides a way of seeing that is not unfamiliar. We do not just experience space around us in a liner timeframe. We reflect back on moments past or we project forward. This ability to recall and to anticipate is one of the ways that we develop the subtle sense of our existence. Our experience of social space is not the same as that of the lens.

Rokeby demonstrates this in **Machine for Taking Time (Boul. St Laurent) (2006-7)** which turns the cityscape of central Montreal into a meditation upon time. Twin screens show complementary images that pan across the city, taking in details of the street, apartment buildings, offices and neighborhood parks. But the image also moves across time as it traverses laterally across the scenery: this year's spring melts into last year's winter and last week becomes today. The pan holds its consistent geographical progression but past and present become irrelevant. The representation of the city becomes a mixture of memory and association. We pick up on small details, how window boxes outside an apartment change through the seasons, how shop fronts alter their displays and how the density in the colour of the sky changes at different times of the year. The work is both lyrical and whimsical. Yet it reminds us that getting to know a place is a process of deep familiarization. When we know somewhere, what we experience is more than just an immediate observation it is a complex fabrication, drawn from the past as well as the present.

San Marco Flow (2005) takes another approach to observing a public space by exploring the Piazza San Marco in Venice. Instead of looking at the social scene or the obvious visual elements, Rokeby concentrates on the quality of movement and the density of the crowd crossing the square. On side-by-side screens one image slowly accumulates like a patina in which human movement seems to gather and swell into dark and light. In contrast to this almost static image a second screen shows the same scene but evolving much more rapidly so that movement becomes intense trajectories of light and colour. As our eyes move from one to the other we my become aware of the extended seeing we are experiencing is the concentration and an extrapolation of a small amount of information. Yet this is not only about computer processing but it conveys the deep concentration that can be experienced by the artist, or the casual observer, in a physical space and which transforms naturalistic perception into intense illusion. The work exposes a tension between the architectural

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aspects of the piazza, which can sometimes be detected, and the way that social space is experienced. San Marco is still dominated by human congestion and movement, but is re-defined as a highly evolved abstraction.

Rokeby's representations give us something that we regularly understand and can conceptualise, but is foreign to our way of seeing. This is one of the themes consistent across much of his work. It is demonstrated in one of his earliest pieces, **Watch (1995-2008),** which shows the difference between the way that we normally see exterior space and the way that the computer can represent it. The computer monitors the image and separates out movement and stillness so that one side of the image shows only things that are static, such as objects or people standing still, and the other shows only things that have motion, pedestrians or vehicles.

Watch has been regularly re-constructed by Rokeby to investigate different locations and is shown at the Art Gallery of Windsor in its latest form. It presents a dislocated world, not immediately recognizable but oddly familiar. It appears reminiscent of mid C19th photography, for example, where the camera could only capture movement as a blur. The work also makes the different parts of our perceptual processes obvious, for although we register all the differences between movement and stillness our cognitive processing melds them together into a seamless whole. Ordinarily this separation is something we can conceptualise but we cannot experience visually. **Watch** not only provides us with a captivating experience but also a critique of the way in which we understand how space is inhabited.

Another early work, **The Giver of Names (1991-2004)** explores another aspect of visualization: the relationship between language and visual stimuli. The computer observes objects, such as children's toys, that have been placed on a pedestal by the audience. The computer analyses the colours, textures and outlines of what it sees and then draws on a databank of language to offer verbal associations, which it then speaks aloud. The result is a stream of apparent word associations and grammatically correct but often obtuse or elliptical descriptions. The work superbly deconstructs for us how our sense of visual recognition operates and how the ability to name objects, and articulate connotations, is an extraordinarily complex and fragile process. As the installation demonstrates, meaning is only viable when it is shared - meaning can easily go awry. What the computer cannot offer is the layering of knowledge, experience and recollection that goes into human communication.

Although the most obvious subject of **The Giver of Names** is language, the computer is essentially carrying out some of the same operations that are taking place in the installations which are about visualising space like **San Marco Flow**. The computer is sorting data and selecting different attributes or occurrences on which it concentrates and elaborates. A further aspect of the work is that a second screen shows a cloud of words that grows from a few terms to a dense mass as the computer plays with language associations, grouping words against objects. It is a window onto the process and the audience can visualise how the computer selects different terms in why it considers them to be appropriate descriptions. This component takes the work full circle: at the beginning of the process the work seems to be about the way the computer looks at the objects, but by the end of the process it appears that the work is just as much about the way that we can use visual cues to understand intelligence, albeit a limited artificial intelligence. As with pieces like **Watch** the crux of the artwork lies in the recognition of the difference and similarities between the way that the computer and the human mind construct visual meaning from what they see.

A subtext to **The Giver of Names** is that visual intelligence can be treated as an abstract subject, but culturally and politically it has considerable weight. Ascribing names, key terms and other language definitions to objects, people or documents is one of the important ways that we tag data for the archive or any form of database. It enables vast quantities of data to be searchable. Associations can be made, and shared, by social networks as demonstrated by tagging a photo on Facebook. But they can also be imposed upon us, and not in neutral way.

In **Taken (2002)** Rokeby demonstrates how our image is something that we love to play with, but also that having our image tagged can be both flattering or threatening. On one side of the double screen the computer observes the social space of the gallery and, as with other works, it plays with time, showing not only what is taking place within the space, but overlays this with a selective history of previous moments. The audience see not only themselves at a given moment, but as they had been moments before, or maybe traces of people who had previously been in the space. It offers a social memory and in a very playful way the audience can perform to themselves and to future audiences. The other side of the screen builds an archive of head shots of the audience and, when it finds a subject in which it is 'interested', it zooms in. A close up portrait results and is labeled with a subtitle such a 'disinterested' or 'resistant. While the artwork is often a joyous piece to be engaged in it is also very reminiscent of the way that CCTV operates and how it can be constructed as 'evidence'.

One of the great areas of interest in current multidisciplinary studies is how fields such as the arts can give us insight into how the human mind operates. Often we cannot comprehend the possibility of a paradigm shift until a particular way of operating breaks down and we are offered a new way of experiencing. Work by artists such as Rokeby can offer us many ways of thinking about human awareness. Rarely do we find ourselves so acutely aware of the significant difference between vision, which is the processes by which we see, and of visuality, which is the way that we make meanings out of what we see. Rokeby's work shows us that there are many different ways of visualizing and attaining intellectual and aesthetic pleasure out of observation.

[note: David Rokeby quoted in Dot Tuer: "The Art of David Rokeby: Towards a New Poetics of Language", in The Canada Council for the Arts - The Governor General's Awards in Visual and Media Arts 2002. [http://www.canadacouncil.ca/prizes/ggavma/]

Project 4:

The New Media Handbook
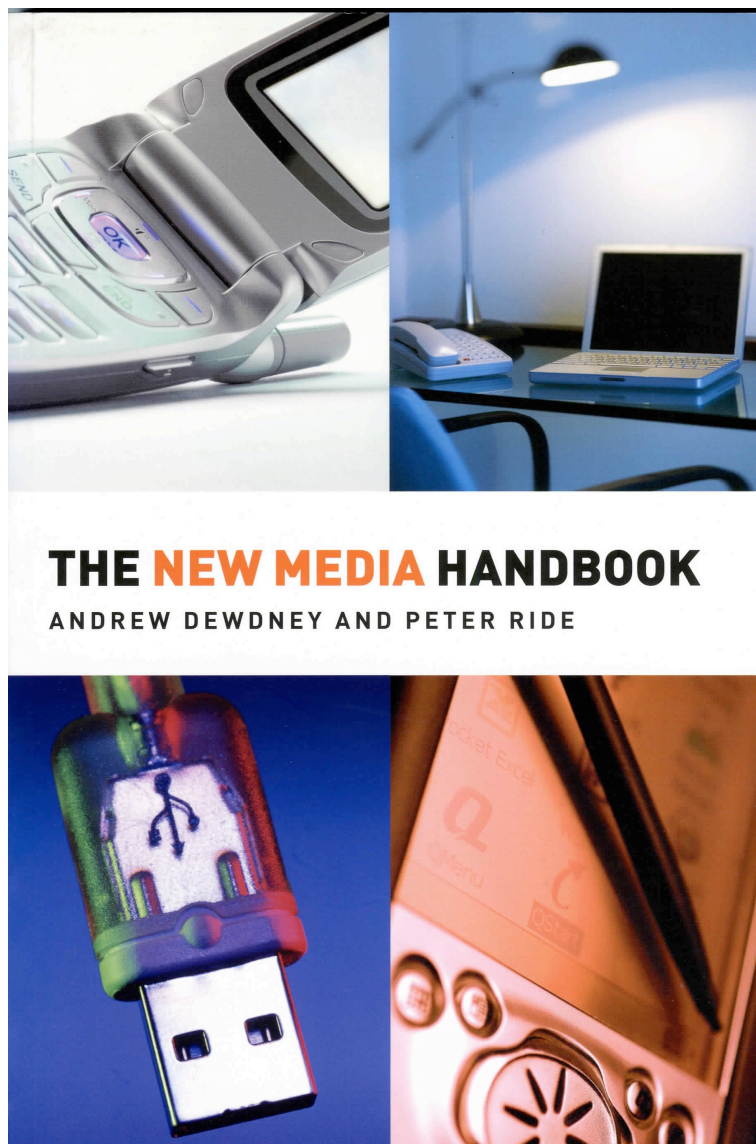
Figure 33. Cover of: Dewdney, A. & Ride, P. 2006 *The New Media Handbook*, London:

Routledge.

Project 4: *The New Media Handbook*

Dewdney, A. & Ride, P. 2006 *The New Media Handbook*, London: Routledge.

Content 'sole-authored' by Ride: seventeen interviews, each comprising

approx. 3,000-4,000 words

NB this volume is included in the evidence portfolio.

4.1 INTRODUCTION

The New Media Handbook was a collaboration with Professor Andrew Dewdney (South Bank University) and published by Routledge in 2006. It presented the theoretical and cultural context around new media and explored what it meant to be a professional practitioner in new media.

4.2 RESEARCH AIMS

The New Media Handbook aimed to map the way that new media practice has evolved as a field of practice and theory. It also aimed to examine how creative practitioners develop and apply the expertise and knowledge that are fundamental to their practice.

This project demonstrates practice-led research under the definition of Candy (2011) because it draws on my expertise as a curator and the working relationships that I had developed with artists through exhibitions and other projects. It demonstrates a further level of practice-based research in the form of curatorial writing.

4.3 RESEARCH CONTEXT

The genesis of the *New Media Handbook* was a proposal made to Routledge for a book that traced the recent history of new media art in the UK. This

proposal drew heavily on my experience as a curator and arts organiser working with a number of arts organisations in the UK, and on the knowledge of my collaborator, Professor Andrew Dewey, who had been chair of the board of directors of DA2 Digital Arts Development Agency. Routledge had responded that the scope of our proposed book was too localised for their international distribution, however, they invited us to rework our proposal for their Handbook series which was targeted at the higher education market. We argued that it was not viable to create a conventional handbook for new media practice, nor was it within our research interests to do so.

The series editor, James Curran, was enthusiastic about us interpreting the format of the handbook in a broader way. As a result, we proposed a structure of two halves. One half gave a theoretical overview of the development of new media discourse, particularly in relation to photography and media arts, and to cultural and visual theory. The other half was devoted to studies of creative practice which encompassed artists working in new media and areas of professional work that ranged from commercial businesses and education to scientific research.

The book was planned as a collaboration from the initial concept: Andrew Dewdney and I worked jointly on developing the detailed structure and contents, planning the two sides of the book as interrelated halves. We had decided early-on that Dewdney would be responsible for writing up the sections on the theoretical overview and that I would be responsible for the sections on creative practice. We critiqued each other's work and jointly

defined the direction that the two sections were taking. Our intention was that the book should function as a dialogue between theory and practice. In our early correspondence with Routledge we explained that we saw this like a conference where the knowledge gained came partly from hearing the papers being delivered and partly from the conversations that took place in the bar afterwards where delegates would relate their own experience to the presentation they had just heard.

Publishing context

From 2003, the point at which we commenced writing *The New Media Handbook*, to 2006 when it was published there was a boom in the publishing of books on digital media and new media practice. While it is not the place to present a literature review, a glance at the significant titles that were produced in this period indicates how new media was then becoming established as a field of scholarly practice. These included: Martin Lister, et al *New Media: A Critical Introduction*, Routledge 2003 that created an overview of the theoretical underpinnings of new media placing it within a broad sweep of technologies and speaking to a scholarly audience; Charlie Gere, *Digital Culture*, Reaktion Books 2002 positioned new media and cultural practices within an historical narrative of experimental arts practices; and Stephen Wilson *Information Arts, Intersections of Art Science and Technology* MIT Press, 2002 created a survey that positioned new media practice within a wide range of technologically informed practices.

Studies of new media that specifically addressed work by arts practitioners

included: Oliver Grau, *Virtual Art from Illusion to Immersion*, MIT Press, 2003; Rachel Greene, *Internet Art*, Thames and Hudson, 2004; and Michael Rush, *New Media in Art*, Thames and Hudson, 2005; Mark Tribe and Jana Reese *New Media Art* Taschen, 2006. Texts which selectively examined new media art and placed examples within a specific thesis included Julian Stallabrass, *Internet Art: The Online Clash of Culture and Commerce*, Tate Publishing, 2003, addressing the way artists interacted with, and critiqued, commercial values; and Mark Hansen, *New Philosophy for New Media*, MIT Press, 2005, which explored embodiment as a theme of digital media practice. These texts and others like them firmly established the place of creative work in new media as an important object for study.

The context of practitioners' knowledge and skills

From an educator's perspective it is arguable that texts such as these above are invaluable in the way that they illustrate conceptual skills in analysis, critical and theoretical contextualisation of art practices. But at the same time it is not their purpose to look at the way that art-making and other forms of creative practice demonstrate a whole range of expertise, knowledge and abilities. These abilities are often termed as higher level critical skills, sometimes expressed through the creative act of art-making but also through professional expertise. We argued that students of new media needed to learn about *ways* to practice, and the *approaches* to developing their craft as practitioners as well as dealing with theoretical knowledge.

We took the position that while the requirements for technical knowledge

were determined by the specific area that students were working towards, the greatest amount of general knowledge that practitioners demonstrated through their work as artists, producers or makers lay in the way the way they applied their technical skills and theoretical expertise to solve 'real world' problems and to carry out regular tasks. This form of thinking demonstrated how important the combination of transferable skills and conceptual analysis is to practitioners, especially in fields where the terrain is constantly changing.

We observed that this information was lacking and should be provided to students and other practitioners within the sector. It therefore became the guiding problem, or provocation, to our research project.

Professional practice as subject and theme

Another important aspect of the *New Media Handbook* was the framing context of professional practice. In planning the book we took the definition that had been established through the creative industries that new media was a field that encompassed a wide range of activities from fine arts, the media industries, games industries, software design and telecommunications.[76] It was important that students and young graduates from new media-related courses saw that they had a breadth of opportunities in terms of their areas of future employment. But additionally, we wanted to stress that skills and aptitudes had to be seen as transferable in

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[76] The problem around distinctions being made between art and design or artistic and commercial occupations in the cultural sector are referred to in the *Exegesis Introduction,* with reference to Lisa Haskell (Haskell 2004)

a literal sense and that practitioners could move between different areas. We wanted to imply to readers that disciplines and professional areas were not ring-fenced.

David Boud's writing on professional experience provides a significant reference point to this project (Boud & Miller 1996; Boud & Garrick 199; Boud, Cressey & Docherty 2005). Boud argues that the cornerstone of learning is experience and that the processes that occur in the workplace provide the means for people to transmit and acquire knowledge (1996). It is important to recognise that the field of educational practice is a research context for a project of this nature as it directly relates to professional learning and concerns about student employability. In our research we surveyed course leaders and students to ask what areas they expect to work in and we asked professionals in all areas what they had imagined they might do when they themselves were students. Additionally, surveys of graduates from UK universities indicated the fluid transition that practitioners took in working between the arts and commercial fields such as gaming or web design, and how over a short number of years graduates would often move between different sectors as career opportunities developed and technologies changed, from industry to education. It would therefore be unrepresentative if we were only to represent fine arts, if we were looking at the breadth of practice that constitutes creative practice.

4.4 RESEARCH METHOD

Originally, it was planned that both halves of the book would be written in a similar style taking the third person authorial position and giving an 'art historical' analysis of the approach taken by creative practitioners. However, it soon became clear that if we wanted the book to function as a dialogue between theory and practice it should be structured as such, and using the direct words of practitioners as interviewees provided the appropriate narrative structure that were both 'break out' sessions from the text and case studies that the text could link back to. We also felt that the voices of the practitioners should be heard directly and without mediation. We made this decision partly because we wanted the readers of the book to be able to identify with the people whose career path they might follow and because the unedited 'voices' of authentic experience seemed more appropriate.

Practitioners voices

I felt it was important to select subjects who would be representative of the diversity of practitioner fields but who also illustrated the breadth of conceptual approaches in working with new media. It would have defeated the purpose of the exercise if the practitioners all seemed to speak with the same voice or represented the same value system. However, partly because of our own commitment to creative practice and because we wanted the book to speak to students within schools of art and design we included more artist practitioners than any other specific group. Approximately forty practitioners were 'shortlisted' as subjects, and I contacted them and had preliminary exchanges to ascertain their interest, their availability and their

appropriateness as interview subjects. Twenty-two subjects were

interviewed but these were reduced to seventeen for inclusion in the book.

The final selection included a high-profile artist of international renown,

Rafael Lozanno-Hemmer, who had frequently been interviewed about his

award-winning project *Vectorial Elevation* (2000)[77] but who had rarely

spoken about the process of making the work, and an artist, Nina Pope, who

could reflect upon early practice in new media work and how approaches to

making work had evolved since the 1990s. One of the first curators of new

media projects, Benjamin Weil, who had founded *ada-web*[78] in 1994, was

included to give a curator's perception of the way that new media practice

had raised issues for practitioners who were not themselves makers. Tim

Wright, a games producer had produced a BAFTA award winning site *Online

Caroline*[79] which created an evolving drama through email exchange, webcam,

and which personalised the experience for the viewer. The project had never

been included in any texts of new media practice, to my knowledge, and the

inclusion of interviews like this served an additional purpose which was to

add to the historical record of new media projects. Commercial producers

like Vivienne Stone, running a design department for a branch of Saatchi &

Saatchi, and David Bickerstaff, illustrated how practitioners who were

themselves graduates in fine arts used their skills to move into the

commercial area but felt that their background gave them a finely-tuned way

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[77] http://www.vectorialvancouver.net/ ; also Graham 2010, Lozanno-Hemmer 2007
[78] http://www.adaweb.com/; Green 2004
[79] Online Caroline is no longer available online. It is reviewed by Walker, J (2005) How I was Played by Online Caroline'.

of working and developing creative products.

Using interviews as a narrative form

I found that using the interview as a formal structure was highly compatible
with my approach as a curator. Although most of the published writing I had
done to date had been catalogue essays, analytical articles and creative
reviews most of the work I had done with artists were always based around
dialogue: from developing an exhibition concept to putting together a
funding proposal; from studio visit to gallery installation; negotiating
production requirements to publicity material. The process of drawing out
information, and then re-organising restructuring and repackaging it, was at
the heart of my curatorial process. The curatorial interview had many
precedents, and its viability as a method of textual expression in visual
culture and contemporary arts has been well established by curators such as
Hans Ulrich Obrist (2003; 2008), David Sylvester (1987; 2001), Carolee Thea
(2009) and Paul O'Neil (2010). As expressed by Marquard Smith in *Visual
Culture Studies: Interviews with Key Thinkers* (2008):

> "the medium of the interview offers affable, personal insights into the
> research, writings, and activities of […] particular individuals, and the
> drives and agendas that motivate their thought, as well as a focus on
> their own intellectual development." (2008:11)

Within the new media sector, the direct voice was also being used for another
reason, it referenced the importance of textual communication that had
become a significant part of digital culture through email lists, discussion

sites, bulletin boards. For example, *Interaction: Artistic Practice in the Network* (2001) edited by Amy Scholder and Jordan Crandall was sampled from correspondence on a discussion site that Crandall had moderated for Eyebeam, a cultural organisation based in New York[80].

However, the practical issues of constructing an interview to suit the purpose of the book meant that in fact what I was constructing was an elaborate reconstruction of a conversation that had taken place often across a number of sessions.[81] Most of the interviews were initially of around 10,000 words which would be transcribed and then used in planning conversations with Andrew, where we addressed how best to match the points that he was making in his text with the issues being confronted by the practitioners. The interviews were then usually restructured and edited, with the dialogue condensed. Essentially, they were rewritten as dramatic exposition, but to ensure that no liberties had been taken, this was followed by discussion with all the participants, who were asked to comment on the way the interview had been represented and whether they felt that result was consistent with the ideas that they had originally expressed. This last stage was complicated as it required subtle editing of the material, bringing word length to 3-4,000 words, but it was crucial to ensure the authenticity of the material that was being presented.

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[80] Similarly sites such as the CRUMB online discussion forum use the format of moderated but unedited email lists (CRUMB Curatorial Resource for Upstart Media Bliss http://www.crumbweb.org.)

[81] I initially planned that some of the interviews would be presented as email correspondence but Andrew Dewdney and I made an editorial decision that this unnecessarily complicated the structure of the book and the appearance of the 'conversation' between theory and practice.

I should also acknowledge that the development of interview technique was an evolving process in itself and followed a pattern of action, assessment, re-evaluation and refinement, although this was not intentional at first. However the period of interviews took over 18 months in which time the final format evolved. Feedback from the interviewees on what they had got out of the process was an important aspect as well as the assessment of Andrew as to how the interviews and other texts would be integrated. This informed the shape and structure of these sections. Much of the earlier chapters then had to be re-written which necessitated going back to the original transcripts or in some cases to the subjects themselves.

In most cases what took place was straightforward reflective analysis in which the practitioners were asked to examine an important aspect of their work, usually focusing on specific examples which they could describe in practical terms, and to consider exactly what skills, experience, and aptitude they had which had made this possible. Where possible I asked professionals to consider choices they had made and to discuss the implications of those choices. In doing so I was applying Donald Schön's (1983) reflection-on-action method by inviting the professionals to retrace their steps and to critically reconsider what they had done and their decision-making process. In some cases this was difficult, as some professionals found it easier to take an art historical approach to describing and theorising their projects. So where possible conversations were structured as narratives in which they were asked to describe typical activities in their professional life or specific

projects that could be easily analysed in coherent steps and related to the

wider context of new media.[82]

[82] For example it was striking how few of the interviewees referred to their technical skills as being essential elements of their work, but nearly all discussed in one form or another the necessity to work in teams, manage multiple outcomes across different platforms. The also emphasised how important it was to be able to understand the different perceptions colleagues, clients and audiences had about new media and where necessary act as the point of translation, and ensure that these different notions of new media were effectively communication between partners. Additionally, I drew on my experience with the project *Demonstration and Details from the Facts of Life* in which I learned the importance of failure as stimulus for learning. I often asked the practitioners about things that were not successful or had limited outcomes and invited them to reflect on the how they had learned from experience, and what their criteria for success was.

4.5 RESEARCH OUTCOMES

The impact of this project is hard to measure because of the breadth of its aspirations. In publishing terms the book the book made its targets for sales and distribution. However, we had hoped that it would 'cross over' from being an educational text to a critical new media study, but this was not to be, maybe because it was listed as part of a 'handbook' series, and therefore not represented as a critical text about creative practice. A contributing factor may also be that we had so strongly stipulated that we were addressing commercial as well as arts practices. As a result it was rarely stocked by art specialist bookshops, nor did it get reviews in arts publications. Despite this, it was measured by Routledge as a distinct success and subsequently Andrew Dewdney and I have been contracted to write a revised edition that would update the content to reflect the changed needs of the sector.

4.6 CONCLUSIONS

An important aspect of this research lies within the trajectory of my practice: this was the influence of this book upon my practice as a critical writer. In particular, I found that the use of the interview and dialogic form offered me an important way to reference directly the voices of subject experts, professionals and artists. The subsequent article, *Shiny and New,* is an example of this; another co-authored article using this technique but not included in this PhD programme is Prophet, J. and Ride, P. 'Active Daydreaming: the Nature of Collaboration', published in Cumberlidge, C. (ed.) *Wonderful: Visions of the Near Future,* NESTA/ Wellcome Trust, 2004.

The figure contains the following handwritten and printed annotations:

accessing professional knowledge

curatorial writing

facilitating critical reflection by producers

dialogue

accessing professional knowledge + expertise

collaboration

(mostly) practice-led research

[these are reflection-in-action]

Creative projects as historical event (re-examined from contemporary context)

CREATION

Interviews as process

[These are reflection-on-action]

TRANSCOGNITION

Feedback from collaborator

(affects on-going writing)

Interviews as product (constructed as narratives)

RECEPTION

REALISATION

(mostly) practice based / practice-led research

Feedback from participants / interview subjects

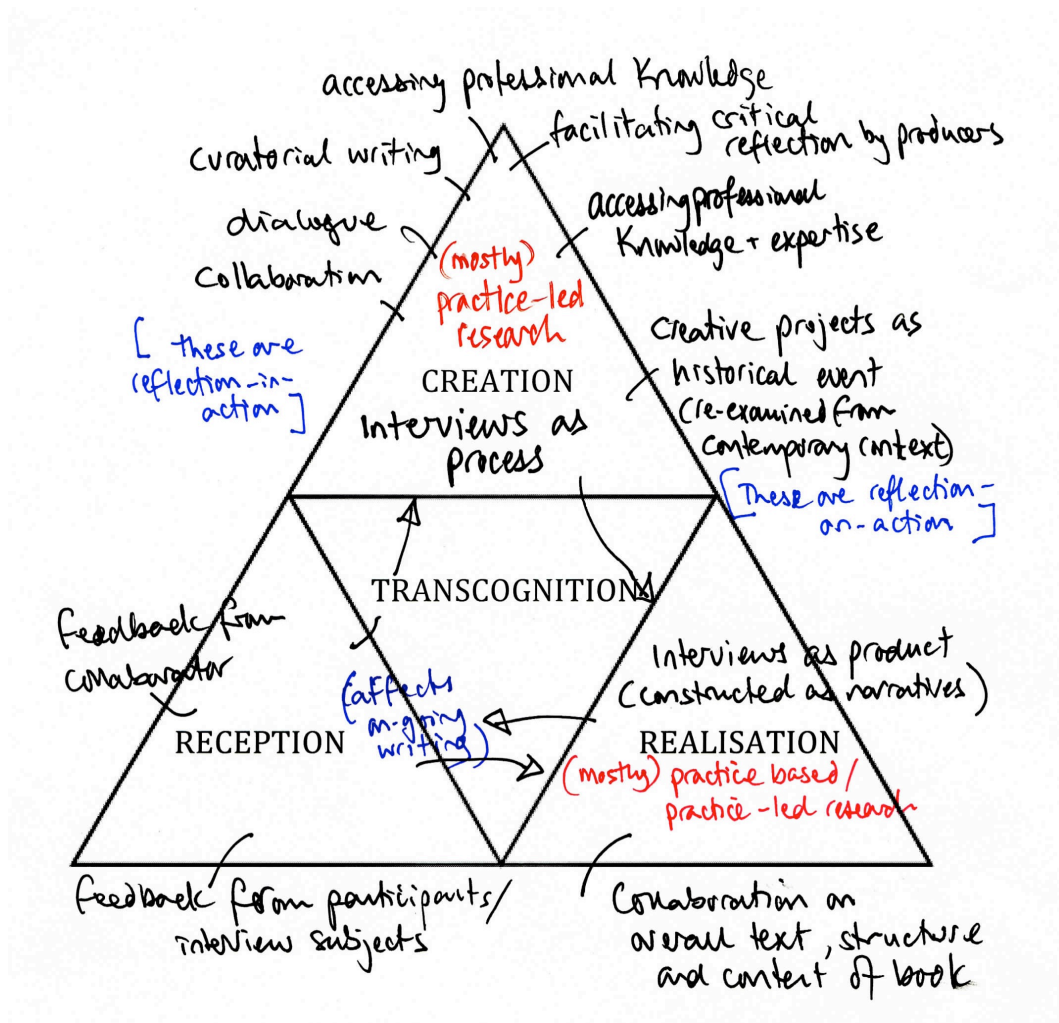Collaboration on overall text, structure and content of book

Figure 34. 'Framework of curatorial knowing' as configured with key concepts arising through *The New Media Handbook.*

I commenced this visual analysis with some caution: the project was not practice-based, although it was centred on practice. Therefore it is not a direct fit. However, I think it is useful to reference how we can reconstruct and re-examine practice as a research-led activity. And to consider how this overlaps with curatorial projects.

I have not used the framework for the remaining projects as they follow a more convention route of academic research, fieldwork and writing.

Projects 5 & 6:
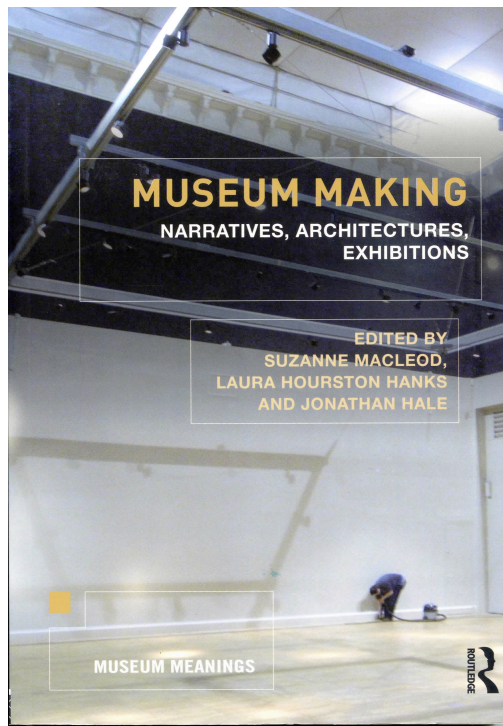
Enter the Gallery & The Narrative of Technology

Figure 35 & 36. covers of: (upper) Public, No 44 and (lower) MacLeod, S., Hanks, L.
H. and Hale, J. (eds.) *Museum Making: Narratives, Architectures, Exhibitions*, London:
Routledge, 2012

Projects 5 & 6: *Enter the Gallery & The Narrative of Technology*

Ride, P. 'Enter the Gallery'

published in *Public*, No. 44, Toronto: Public Access Collective, 2011

Ride, P. 'The Narrative of Technology: Understanding the Effect of New Media

artwork in the Museum'

published in MacLeod, S., Hanks, L. H. and Hale, J. (eds.) *Museum Making:*

Narratives, Architectures, Exhibitions, London: Routledge, 2012

NB The volume 'Museum Making: Narratives, Architectures, Exhibitions' is

included in the evidence portfolio. The issue of 'Public' is no longer available

having sold out (the only issue of 'Public' to have done so in recent years).

Therefore, the item submitted as evidence is printout of a PDF file.

5.1 INTRODUCTION

These two articles are inter-related and connect my earlier curatorial

practice with theoretical investigation. Both articles argue that the

engagement of the audience is not explored enough within new media arts

practice. 'Enter the Gallery' specifically uses case studies of the Lyndal Jones

and David Rokeby exhibitions and addresses why curators need to develop

methodologies that allow them to gain a greater understanding of the

audience's experience. 'The Narrative of Technology' considers additional

aspects of this and postulates that overarching cultural narratives around

technology effect how audiences experience new media work. The chapter

used ethnographic observation analysis methods to make small-scale

evaluation case studies of other museum new media art projects and

suggested how audience evaluation can be used by organisations.

5.2 RESEARCH AIMS

These projects aimed to examine the role of the audience and its relationship

to new media art within the art gallery and the museum.

5.3 RESEARCH CONTEXT

Both projects detail exhibitions included in this PhD survey: Lyndal Jones'

Demonstrations and Details from the Facts of Life and David Rokeby's *Silicon*

Remembers Carbon. Additionally, they expand on the reflections that arose

from those exhibitions and develop them as theoretical considerations. The articles demonstrate a further development of my research practice, in that while it still addresses the place and operation of new media art within the gallery, it looks more closely at the role of the audience. As my curatorial practice has developed I have concentrated on issues around the engagement and experience of the audience and how little we know about these. In part, this is because of my continued academic interest in visual culture and how it is manifest within the gallery space, as well as my interest in museum studies which have a deeper tradition of visitor analysis.

In part, it is also out of the concern that the historical record for interactive and participatory work will be incomplete unless it is possible to convey, within some form of documentation, what it was that contemporary audiences experienced. As an illustration of this point: in 2005 I organised a seminar at Tate Modern to which I invited the artist Heath Bunting to speak and suggested that he should show a piece of work that had been part of a project I had commissioned in 1997. Heath declined to do this saying he would rather talk about it first, and then show it, because an internet piece from 1997 would be meaningless to an audience in 2005 who could not possibly understand how it felt to sit in front of the screen with the mindset and technological functionality of the previous decade. He might have been wrong in his assumptions but they were astute. This was one of many incidents in my interactions with artists that made me interested in pursuing this as part of my curatorial research with the exhibitions of work by David Rokeby (2007, 2008)

5.4 RESEARCH METHOD

These two essays demonstrate practice-led research under Candy's definition: the research arises directly from practice-based work, in this case exhibitions, and is designed to be a contribution to the field of practice and to inform other creative projects.

The article 'Enter the Gallery' was an invited submission for *Public* at the request of the editorial board. I had presented a peer-reviewed paper at a 2010 conference, the *Experimental Media Congress,* in Toronto, that dealt with these issues. The editorial committee invited a number of the conference participants to contribute to a special edition of the journal. *Public* is an independent arts journal and published by the Public Arts Collective, which is constituted as a charitable non-profit organisation, but is also supported by, and closely associated with, York University, Toronto.

'The Narrative of Technology' was also based upon a conference paper submitted to a peer review selection for Leicester University Museum Studies Centre conference *Narrative Space* 2010. It was also invited by the editors of the publication, which is one of Routledge's museum studies series, and was submitted for a secondary peer review process before being accepted. The paper was a development of research which I had been doing into this area over two years, looking closely at the way that artists work was presented in museums as interventions in the collection or as special exhibitions, and as part of this research I had interviewed a large number of artists and curators,

as well as inspecting exhibitions and displays. This essay had been preceded by a peer-reviewed conference paper dealing with the same theme, but examining different examples, for the conference *The Go-Between* in Cardiff 2009, *an international cross-disciplinary conference focusing on the role of the artist in mediating between collections and audiences.*

However, for the paper 'The Narrative of Technology' I decided to experiment with methods of qualitative research expanding on the participant observation techniques I had used in previous exhibitions and using small-scale interviews with the public to gain a deeper knowledge of audience experience. While I would not claim that these offered the rigour that would be required for ethnographic studies, they did provide a legitimate way of gaining a deeper understanding of the way that audiences were engaging with exhibitions, using the space within galleries, and relating to each other. These methods were intended to provide detail to my observations about exhibition and curatorial practice rather than provide data which would be the basis of systematic analysis and from which major conclusions could be drawn. Using this technique provided me with a valuable opportunity to explore how quantitative methods could be employed within my practice, so that theoretical work could then inform my curatorial practice.

5.5 RESEARCH OUTCOMES and 5.6 CONCLUSIONS

The research has since led to further projects including an ongoing programme of work with University of Leicester Museum Studies

Department into the way that the museum public use foyers and threshold spaces and how technology can enhance, empower or complicate the way that visitors experience museum space. The work has also involved collaboration with other new media researchers. In 2010 I co-organised a panel session at Ars Electronica with Dr Lizzie Muller, from University of Technology, Sydney *A to X: Audience Experience in media art research* with papers presented by: Dr Katja Kwastek; Dr Lizzie Muller, Dr Chris Salter; Dr Nathaniel Stern and myself. A proposal for a publication arising from this conference is currently in discussion with Ashgate.
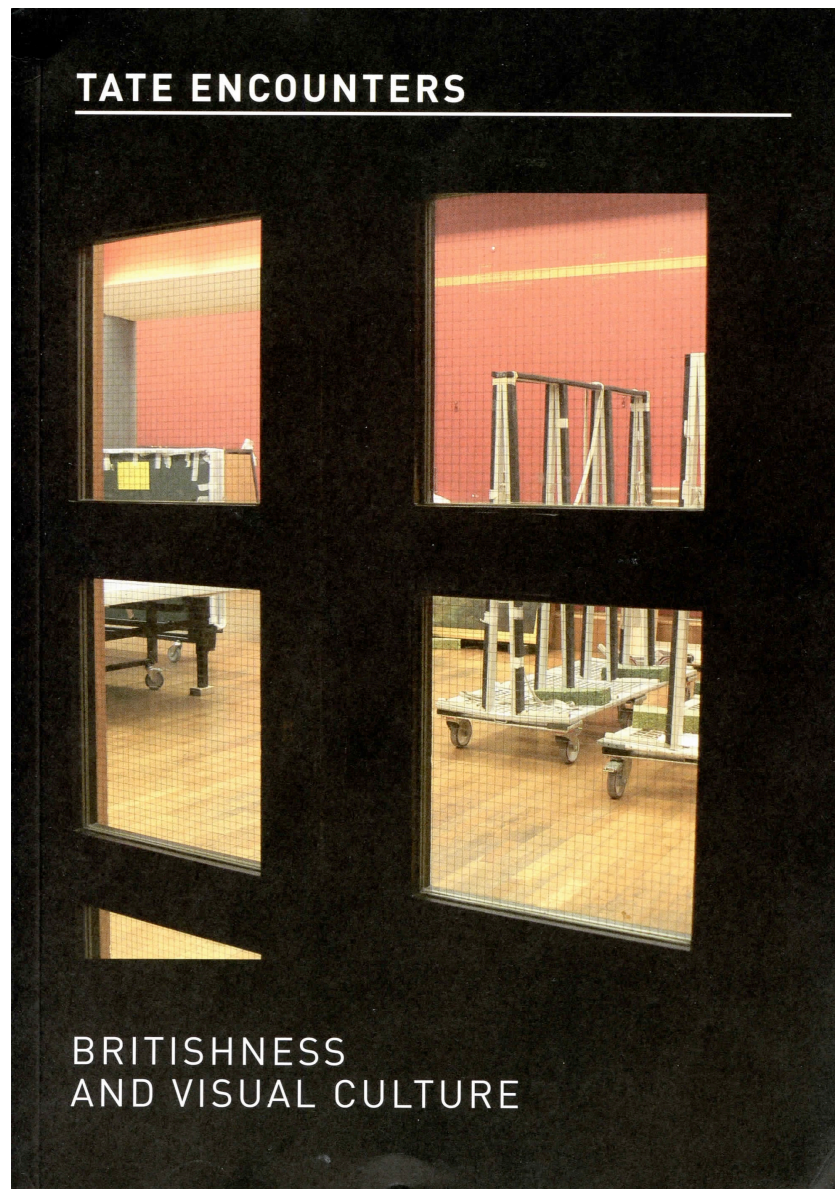
Project 7:

Shiny and New

Figure 37. Cover of: report of *Tate Encounters: Britishness and Visual Culture* (2011)

Project 7: *Shiny and New*

Ride, P, 'Shiny and New: Reflections on 'Resolutely Analogue? Art Museums

in Digital Culture' published in *Tate Encounters Edition 5*, July 2010

http://www2.tate.org.uk/tate-encounters/editions.shtm

NB This essay exists only as an online publication, also downloadable as a

PDF. The item included in the evidence portfolio is the print out of this.

7.1 INTRODUCTION

Project background and aims

Shiny and New: Reflections on 'Resolutely Analogue? Art Museums in Digital Culture represents the culmination of the PhD research programme. It creates a symmetry to the narrative arc of the programme which began with a collaboration with an artist on the creation of new forms of work and with the experimentation with the space of the gallery as a place to present new media and takes it to the point of view of the institution and the arts organisation.

7.2 RESEARCH AIMS

The article aimed to explore the concept of 'newness' and how it impacts the public perception of technology, drawing its content from a series of discussions around new media and the museum that I was commissioned by Tate to organise from my perspective a curator.

7.3 RESEARCH CONTEXT

This project demonstrates practice-led research as contributes to understandings of practice with reference to curatorial practice. The practice it deals with specifically is professional practice within arts organisations and

it demonstrates how the cultural impact of new media reverberates through different fields and disciplines within the arts sector. The essay represents another approach to exploring how practical knowledge is situated within professional ways of working. It also demonstrates that a viable way to study how practitioners approach change and innovation in the field that they are working in is to position them so that they reflect upon the way in which they use and express their expertise and knowledge[83].

Like the two previous essays included in this program, *Enter the Gallery,* and, *The Narrative of Technology*, *Shiny and New,* does not represent a discrete program of research leading to a self-contained article. Instead, *Shiny and New,* needs to be seen as an articulation of an ongoing thread throughout my research that came into being through an opportunity created for me by Tate Britain as part of the *Tate Encounters* programme[84].

Research context of Tate Encounters

The *Tate Encounters* was a three-year research project funded by the Arts and Humanities Research Council through the Diasporas, Migration and Identities Programme. The project started in April 2007 and involved three collaborating institutions: Tate Britain, London South Bank University and the University of the Arts London, through Chelsea College. Led by principal investigators Professor Andrew Dewdney, Dr David Dibosa and Dr Victoria Walsh, the program had been investigating the experiences of Tate Britain's

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[83] This relates directly to the studies in professional knowledge and learning learning from the professional sector, e.g. Boud Cressey & Docherty 2005; Boud & Solomon 2008; Mezirow & Taylor 2009.
[84] http://www.tate.org.uk/about/projects/tate-encounters

audiences to develop knowledge and understandings of how narratives of

Britishness are contained, constructed, and reproduced within the curatorial

practices and collection of Tate Britain (Dewdney, Dibosa & Walsh 2011a). As

part of its programme of fieldwork, *Tate Encounters* investigated four specific

themes through a series of workshops, interviews and public discussions: the

history of education practice in the art museum; visual culture,

transmigration and spectatorship; cultural policy; and museums, technology

and culture. I was invited by Dewdney and Walsh to collaborate with them to

coordinate a week-long programme of seminars which would examine the

last theme under the heading *Resolutely Analogue? Art Museums in Digital*

Culture. The programme which Dewdney and I constructed had seventeen

speakers over five days[85] and used the format of presentation and discussion.

7.4 RESEARCH METHOD

The material that resulted from this was used in two ways, firstly, within the

Tate Encounters project by Dewdney, Dibosa and Walsh in formulating their

conclusions and recommendations (Dewdney, Dibosa and Walsh 2011b). I

was also invited by them to treat this as data that I would investigate from

my own point of view, as a curator and academic. I was then commissioned to

produce a research document in the form of an article that would be

published online in the 'Editions' that formed part of the *Tate Encounters*

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[85] Names and professional positions of all participants are included in the
endnotes of the article *Shiny and New* (2010)

project.[86]

The resulting article was not only linked to *Tate Encounters* but addressed the research problems that had been investigated throughout my sustained research, and covered by the PhD programme. It examined how notions of innovation impact on the way that artists, curators, organisers and audiences deal with digital media and it directly drew on the experience of practitioners from these four groups.

The article demonstrated the importance of critical and situated knowledge of practitioners. I drew on the well-established style of the interview (as typified by Hans Ulrich Obrist (2003; 2008) and Marquard Smith (2008)) which I had used in the *New Media Handbook*, but I did so through hints and snippets rather than sustained dialogue. By so doing, I chose a writing style that made direct reference to the workshop process that had taken place, by quoting the participants of the seminars. I used their voices to provide a parallel narrative structure to the article and as a way of demonstrating how multiple perspectives were informing my conclusions.

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[86] I am reluctant to describe the organisation of a symposia or workshop as an exercise in 'curating' although the term is frequently used that way. However, it does form part of my curatorial practice. And, arguably, my curatorial expertise was specifically the reason I was been invited to participate by Dewdney and Walsh. Therefore, by Linda Candy's definition of 'practice-based' I would also describe this project as also demonstrating practice-based research.

7.5 RESEARCH OUTCOMES and 7.6 CONCLUSIONS

The outcomes of the research project have been various. The research can be seen to be part of a general expanding consciousness around the importance of the issues of change, technology and the museum. This includes the work of the Tate Research Centre, established in 2009, whose focus includes examining the impact of "the information revolution initiated by the web and the opportunities provided by new technologies (especially social media)" and how the art museum's traditional functions of collecting, conserving, displaying and interpreting art are now being reframed in the light of new art practices and a rapidly evolving vision of the relationship of art museums and their publics."[87]

In addition, the knowledge developed through the project has contributed directly to my scholarly activities, in particular to the design of a new MA of which I am the Course Leader, MA Museums, Galleries and Contemporary Culture, which is taught in close partnership with Tate Britain and the Museum of London[88]. It has also lead to by involvement as co-investigator in a three-year research project funded by the Higher Education Academy National Teaching Fellowship Scheme 2010 to enable the "development of a pedagogic model using authentic assessment to drive development of higher

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[87] http://www.tate.org.uk/about/our-work/tate-research/research-centres/art-museum-and-its-future

[88] http://2009.westminster.ac.uk/schools/humanities/english,-linguistics-and-cultural-studies/postgraduate-study/ma-museums,-galleries-and-contemporary-culture

order cognitive skills"[89]. The research at Westminster looks in particular at the way that students can participate in online cultural resources created by museums and other cultural institutions, in particular working with the Tate and the British Museum.

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[89]

http://www.heacademy.ac.uk/projects/detail/ntfs/ntfsproject_Westminster 10