#### Statement

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

This thesis and artworks are the result of my own original work, except where otherwise stated. In the case the parts of research or artwork production were carried out jointly with others, the contribution made by the candidate is clearly indicated. Other sources are explicitly acknowledged in the text, footnotes and references in the Bibliography.

Signed
Date

### **Acknowledgments**

The briefest possible summary of the eight year journey documented in the following dissertation, and tangentially reflected in my accompanying artworks, would be a bastardised borrowing from Hunter S. Thompson's: *Long Weird Trip*. Leaving aside near all events that transpired in this time, I give grateful thanks to the following, in roughly chronological order of their involvement with this project:

At the University front...

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In the spheres of life beyond Universities and Art...

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Yes, its been a Long Weird Trip...

The storm drives him irresistibly into the future, to which his back is turned, while the pile of debris before him grows skyward. This storm is what we call progress.

— Walter Benjamin, On the Concept of History

Life can only be understood backwards; but it must be lived forwards.

— Soren Kierkegaard, *Either/Or* 

#### **Abstract**

This Practice Based Research PhD concerns how Responsive Environments may be created to evoke environmental responsibility. As a diverse constellation of practices within Interactive Art, participation, interactivity and responsivity form the poles of Artist-Artwork-Audience relations in Responsive Environments. Within these artforms, responsibility may be evoked to the physical environment of the artwork itself and/or in the social responsibility arising from the interaction between artist, artwork and audience.

This study is conducted in two interrelated domains: a dissertation and my solo and collaborative creation of a suite of artworks. Dissertation and artworks form a combined exploratory journey through questions arising from and refined by practice. Both explore context- and content-appropriate approaches for evoking environmental responsibility according to the relationship between an artworks' responsivity and the responsibility thus created for audiences.

The iteratively designed artworks produced for this PhD include a series of sight-specific plastic art installations, a non-linear single channel electronic artwork, a multi-channel semi-immersive performative-installation and a full scale multi-channel immersive installation. They were staged in exhibitions, performances and installations in Australia between 2004-2009. These artworks are presented through audiovisual documentation on a DVD and an exegesis on their production.

The dissertation contextualises my strategies amongst the broader challenges to creating Responsive Environments according to relevant practitioner-theorists. Both exegesis and dissertation highlight balance as the pivot point for all such strategies, wherein artists negotiate trade-offs between the seemingly mutually exclusive properties of authority-control, determinacy-

indeterminacy, simplicity-complexity and narrativity-interactivity. The dissertation discusses three principle 'ingredients' that determine the balancing act between these properties: content, form and Interaction Design. How these 'ingredients' may be combined with one another to evoke environmental responsibility is explored over the career trajectories of three solo and two Interactive Art collectives.

Combining these case studies with the account of my own practice contributes to understanding the challenges intrinsic to evoking environmental responsibility in Responsive Environments. Together, the suite of artworks and dissertation contributes to the small, but growing, interest in bridging gulfs between art, science and technology; analogue and digital art; and environmentalism and Interactive Art.

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## **Preface: Project Components & Mediums**

This PhD is conducted through three components that operate in tandem with one another: a Creative Component<sup>1</sup> which is a series of interrelated artworks staged<sup>2</sup> over the course of the PhD, a text-based dissertation and, included in the text, an exegesis on the artworks which comprises Chapters 4, 5 and 6 and Appendixes A, C, D and E. Thesis refers to the totality of all text and artworks while dissertation refers to all text.

The Practice Based Research (PBR) traverses diverse art practices from a position located 'outside' an art school, in an interdisciplinary centre for humanities research. This gives the PhD a stance of in-betweenness consistent with the terrain it explores: interactions and interrelations between human-computer-machine-environment, between built environment-natural environment, between art-science-technology, between artist-artwork-audience, between practice-theory, and between arts-humanities-social sciences.

Due to the ephemeral nature of the art produced for this PhD, records and recordings of artifacts staged between 2004 and 2009 (included on the attached DVD) are provided in place of the actual artworks. These works cannot be re-presented or re-staged as they were by design a product of the moment, even if the logistics of their original stagings -which each took upwards of 10 months to organise- could be reproduced. However, each artwork was informed by research and development preceding and following the staging, making a cycle of critical reflection between successive works. Both sequence of dissertation and recordings on the DVD chronologically document and reflect the stages of my art practice and stages of critical reflection. Thus there are references in the dissertation to corresponding interface designs, installation designs, film, music and sound art included in the video documentation of the DVD.

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<sup>&</sup>lt;sup>1</sup> 'Creative Component' is used for purposes of brevity, as producing the textual component is also a creative processes. Creative Component refers to the artworks made for this PhD and not to my other art practices which are listed in Appendix B.

<sup>&</sup>lt;sup>2</sup> 'Staged' is more appropriate than 'exhibited' as it includes the diverse performances, screenings, installations and exhibitions I produced and presented for the PhD.