



**THE
NATURE OF
NETWORKS:**

An aesthetic model for the connected condition

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Cover image: Figure 54

Love is a metaphysical gravity (2016)
Colour print on Hahnemuhle
120 cm diameter, image detail



Figure 1 *A giddiness best left unsaid*
Performance and installation.
Looped video, generative audio-visual feedback, water, nebulisers, aluminium.
600 cm diameter
(2018)

CERTIFICATE OF ORIGINAL AUTHORSHIP

I, Ella Barclay, declare that this thesis is submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the Faculty of Arts and Social Science at the University of Technology Sydney. This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution. This research is supported by the Australian Government Research Training Program.

Signature: Production Note:
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THE FORMAT OF THIS THESIS

This non-traditional doctoral thesis uses a narrative drawn from a series of creative works (and one curated exhibition) to elucidate knowledge contextualised with current research in this area. The structure of this research comprises an abstract, an introduction, an extended contextual review followed by six chapters, each documenting a body of artworks. This is followed by a conclusion, an appendix list of images, an appendix video link and reference list.

LIST OF CREATIVE WORKS INCLUDED

Ella Barclay

Our voices are muted, as if we are speaking through felt (2014)

Electroluminescent sheeting, PVC, polycarbonate, electronics

240 x 140 x 90 cm.

Ella Barclay

When you dream that you are naked, you are not aware that you are dreaming (2014)

Inkjet colour print on cotton rag

150 x 90 cm

Ella Barclay

Love is a metaphysical gravity (2016)

Inkjet colour print on cotton rag

120 cm diameter

Ella Barclay

Plastic environments imaginatively inhabited (dopamine long morning bedhead)
(2016)

Inkjet colour print on cotton rag

120 cm diameter

Ella Barclay

The nerds have got to stop working for the thugs (2016)

Inkjet colour print on cotton rag

120 cm diameter

Ella Barclay

Summoning the Nereid Nerdz (2015)

Acrylic, water, looped video with sound, electronics

230 x 90 x 20 cm

Ella Barclay

Access remote fervour (2017)

Acrylic, water, looped video with sound, electronics

Two parts, each 240 x 90 x 20 cm

Ella Barclay

Mystic heuristics I (2016)

Acrylic, electroluminescent wire, looped audio

150 x 100 x 100 cm

Ella Barclay

Mystic heuristics II (2016)

Acrylic, electroluminescent wire, looped audio

150 x 100 x 100 cm

Ella Barclay

Mystic heuristics III (2016)

Acrylic, electroluminescent wire, looped audio

150 x 100 x 100 cm

Ella Barclay

Mystic heuristics IV (2016)

Acrylic, electroluminescent wire, looped audio

150 x 100 x 100 cm

Ella Barclay

Mystic heuristics V (2016)

Acrylic, electroluminescent wire, looped audio

150 x 100 x 100 cm

Ella Barclay

Greetings program (2016)

Watercolour and ink on cotton rag, aluminium

Dimensions variable

Ella Barclay

The woozy jacuzzi (2016)

Gin and Tonic, LED ice cube, frozen carbon dioxide

Ella Barclay

A giddiness best left unsaid (2018)

Above ground swimming pool, paint, electronics, looped video, interactive generative audio. Performance by Ella Barclay, Kusum Normoyle, Brian Fuata

TABLE OF CONTENTS

ABSTRACT	1
CHAPTER ONE	3
INTRODUCTION	
CHAPTER TWO	12
CONTEXTUAL REVIEW: The aesthetics of networks in the artistic imagination	
CHAPTER THREE	70
BOTTLENECKS AND BACKENDS: The network as realised in real time and space	
CHAPTER FOUR	86
SUMMONING THE NEREID NERDZ: Invisibility and visions within network architectures	
CHAPTER FIVE	116
MYSTIC HEURISTICS: Social determinism in network technology design	

CHAPTER SIX	135
I HAD TO DO IT: The exhibition as a live network	
CHAPTER SEVEN	148
A GIDDINESS BEST LEFT UNSAID: Dynamic behaviour in complex systems and quantum improvisation	
CHAPTER 8	159
CONCLUSION	
APPENDIX I	166
LIST OF IMAGES	
APPENDIX II	189
LINK TO VIDEO WORKS	
REFERENCES	190

ABSTRACT

This research abstracts a history of human-machine interaction to map the look, feel and sounds of a networked environment and what it is to exist within it. To do this, a cross-disciplinary examination of systems theory, art history, computational design and contemporary philosophy has been employed to chart the aesthetics of the network and to critically understand deterministic forces in the architectures of connection.

With so much discussion about networked technologies predicated upon its future, it is vital to turn our heads back to historical examples of both technological innovation and how artists have engaged with it. This thesis examines key events in network culture, such as the implementation of the telegraph, the advent of the database, cybernetics, the Macy conferences and the world wide web alongside contextual responses from historical and contemporary art.

What cultural influences are at work in the construction of the digital architectures set to shape this century? What is the aesthetic language used to explore and communicate these ideas? What is the form that information takes? This thesis explores the ways in which art making practices can help us understand the connected condition and the politics of a lived experience that is fundamentally embedded. It comprises a written thesis with documentation of an accompanying body of work, contextualised with historical and contemporary contributions to the fields of art, computational history and philosophy.

I argue that knowledge pertaining to the semantics of innovation, the nature of information storage and the aesthetics of new systems in cryptography and transmission are being revealed in current art making practices and bring important, valuable insight to understanding the connected condition. This research determines that key characteristics of network aesthetics draw upon the cybernetic ideas of self-reflexivity, dissonance, poetic technicity, dynamic behaviour, the telematic and metaphor, but also stresses the importance of understanding less visible relationships between gender, labour and ethnicity in technological innovation.