Grazing the Digital Commons: artist-made softwares, politicised technologies and the creation of new generative realms

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A Thesis submitted as partial fulfillment of the requirements for a

Master of Arts by Research,

University of Technology, Sydney,

2005

#### CERTIFICATE OF AUTHORSHIP/ORIGINALITY

I certify that the work in this thesis has not previously been submitted for a degree, nor has it been submitted as part of the requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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#### Acknowledgements

This year I have discovered that, just like making art and software, academic research involves collaboration and co-operation with many others. This has resulted in a joyful experience, rather than a solitary pursuit. Many people have generously assisted my research endeavours, and I am thankful to each person for their wisdom, insight and practical assistance along the way.

The inspiring individuals who together make up the art group Mongrel in its current incarnation have made this entire project possible. To Graham Harwood, Matsuko Yokokoji, Mervin Jarman, Richard Wright, Lani Harwood, and Sun Fat, I offer my deepest thanks and appreciation. I was first introduced to *Netmonster* during an Artist-in-Residency at the Department of Modern Culture and Media Brown University, Providence, in October 2004. I would like to thank Mongrel and Professor Wendy Hui Kyong Chun for opening the door and inviting me to participate in this residency. Throughout 2005, Mongrel have extended to me an extraordinary amount of support — ranging from hundreds of hours of ongoing technical assistance, emergency software trouble shooting, and computing resources — to warm hospitality in their home and workspace on each of my visits to Southend. The creative discussions and challenges each Mongrel has shared with me has helped shape my thinking about software, culture and power. The relationship with Mongrel is ongoing, and I hope to collaborate with them in the near future, to witness, and in some way contribute to, the evolution of the next stage of the *Netmonster* project.

I wish to acknowledge the consistent encouragement and support that has been given to me throughout the year by my outstanding supervisors at the University of Technology Sydney (UTS). To my Principle Supervisor Dr James Goodman, and my Associate Supervisor Dr Ilaria Vanni, I owe a deep debt of gratitude. James and Ilaria consistently demonstrated their faith in my ability to make the progression from a chaotic and undisciplined writer to a more considered and thoughtful research student. With their steady guidance and formidable expertise, I have been directed to challenging but intellectually rewarding bodies of theoretical knowledge and research, opening up intriguing pathways to travel along. James has played a critical role in helping me develop a structure from my tangle of research interests, and Ilaria's confidence in my ability to write outside of my more familiar art box, has given me the courage to approach this task without fear.

From my first tentative steps towards study in 2004, Dr Rebecca Harris, Research Degrees Coordinator in the Faculty of Humanities and Social Sciences at UTS, has been there to illuminate the labyrinth of the University. From my initial application for a place as a Masters Candidate, Rebecca managed to cut through my natural inclination to avoid at all costs the genre of 'the form'. Her cheerful approach to such matters has enabled me to navigate all the mazes with confidence rather than the blind stumble it would have been without her advice. Susanna Davis, Research Ethics Manager, revealed the mysteries of preparing an Ethics Research Committee application. I also thank Juleigh Slater, Research Degrees Administrator, who has carefully guided my documents through the University system.

For starting me on this journey of study (after a twenty year break in my formal education), my thanks go to my friend and UTS Alumni, Dr Keri Glastonbury. An afternoon ramble in 2004 with Keri along the Coogee cliffs to a secret teardrop rock pool was a life-changing stroll. Keri's response to some excerpts of my thesis has helped coax back my more personal voice, which had become shy in the unfamiliar space of academic writing.

Dr Katrien Jacobs, now teaching at City University Hong Kong, kindly agreed to be one of my referees for the Masters Candidature in 2004. Since that time she has offered me critical feedback on a regular basis. Her insights on how to begin weaving the rigorous and the tender together, a pathway which still lies in front of me, have been invaluable. I thank Katrien and appreciate her generosity with the time she has taken to read and comment on each of my chapters.

Similarly, Professor Ricardo Dominguez, founding member of the Electronic Disturbance Theatre, has read some of my work-in-progress, encouraging my doll-wings to unfurl in new zones. He has also provided me with materials which will inform the next stage of the research work I will undertake. Muchas gracias!

Dr Antonio Traverso arranged the artist-in-residency for me at Curtin University of Technology in Perth this year, which was an outstanding opportunity to fully immerse myself in the research and development stage of *Rough Trade*, the art project which provided the conceptual framing for my use of the *Netmonster* software. Antonio and I shared many discussions about *Netmonster* on the long journey to the university, which were extremely useful to my conceptualisation of the project. To the Dean, Colin Brown, and everyone else in the Faculty of Media, Society and Culture at Curtin University who helped me in various ways, I express my thanks. I would also like to thank Paul Thomas, Co-ordinator of the Studio for Electronic Arts, with whom I had some thought-provoking conversations about art and networks. Professor Ted Snell, Christopher Malcolm and the staff at the John Curtin Gallery provided me with everything necessary to exhibit for the first time some of the prints made with *Netmonster*. Susan Flavell kindly offered me hospitality in Hamilton Hill and adventures to the Pinnacles and ancient caves down south. She shared her home, friends, and dogs Colin and Dotty with me for seven happy weeks.

Lisa Haskell, Co-ordinator of Media Art Projects (MAP) in London, arranged all of the funding and practical arrangements for the *softly from the ruins* project, which enabled me to visit England twice this year and spend 'quality time' with Mongrel. Lisa also kindly allowed me to interview her about some of the history of community-driven software art

and culture events in England, and I hope to draw on this material in the future extension of my research. I also enjoyed the hospitality of Lisa's home in Brixton for a few days, a return to a part of London that is so woven through with stories from my family history.

Agnese Trocchi participated in a series of interviews with me, sharing her insider perspective of the Roman, and Italian, underground/alternative media scenes, particularly in relation to video and social softwares, and the nexus of those fields. Agnese, Roman composer Daniele Salvati and I also made *Blood Network*, an experimental video art work using imagery from *Netmonster*. *Mille grazie a tutte due, e tanti baci* for the rewarding creative journey.

I thank Tess de Quincy and the De Quincy Co for commissioning *Blood Network*, providing three weeks in Alice Springs in August - September 2005 where the intellectually demanding sociology theory could seep into my understanding in a peaceful desert ambience. Thank you also to photographer and artist Mayu Kanamori for the magical documentation of the installation of *Blood Network* in the river bed, and her permission for the use of one of her photographs in this thesis.

Annemarie Kohn invited me to exhibit two installation versions of *Rough Trade* for the South Australian Living Artist Week Festival in August 2005. Annemarie did everything possible to allow me to present the work as I had visualised, including organising two tiny monitors for the two video animations, which involved some dedicated research on her part. I was fortunate to work with such a professional curator.

To my main proof reader Robyn Downing my sincerest thanks and gratitude. All mistakes which remain are entirely my own doing, as I kept adding words and images up to the finish line, long after Robyn had proofed my 'final' draft. Robyn also kept me supplied with chocolate, flowers and other treats to help me through the seemingly endless journey. To my other readers and supportive proofing team - Ken Bolton, Ursula Lyons, Dale Nason, Ann Sharley — thank you for your comments, corrections and encouragement that I was indeed 'nearly there'! To my 'cub' Anne Robertson, Executive Director of CraftSouth, who stayed late into the night doing the colour printing on my thesis, and persisted with the various technical battles of the machines, a big thanks. Niki Vouis, another supportive friend, also spent time with me on the preparatory stage of the colour printing — thank you!

Many other friends and colleagues have contributed to my research process. Teri Hoskin alerted me to new writers, gave me sublime music to write to, and provided many opportunities and delicious family dinners to discuss the ideas that were racing around in my mind. All the gang at the always-welcoming Experimental Art Foundation in Adelaide – Julie Lawton, Michael Grimm, Melentie Pandilovski and Ken Bolton – helped with office resources, Jamaican roots music, books and encouragement, like a dream quick response team! To my extended family in Sydney – my twin John Tonkin, Lionel Bawden, Josephine Starrs, and Leon Cmielewski, I offer my appreciation for your welcoming hospitality and comfortable guest rooms during my Sydney visits this year to meet with my supervisors. The knowledge that I could have a temporary haven in Sydney when needed made my experience as a 'Distance' student much easier. My colleague, PhD Candidate at Curtin University of Technology, Ted Mitew has kindly sent me readings, and wild Ukrainian music to help me run towards the finishing line. Dale Nason has also sent me music and words to think by, which has made smoothed the edges of this last passage of work. Software wizard Andy Nicholson sent me material on the subject of speculative programming, and we cooked some plans to develop a programming language for spells in the tradition of Gnostic coding. Adam Grubby found me Caliban and the Witch when I despaired of ever locating this invaluable book. Parvin Rezaie (Merci, azizam hoshkalam!) has nurtured me with many Persian feasts, and reminded me about the importance of referencing my sources. Dr Matthew Fuller has offered thoughtful critique at important times, and has supported my goal to continue my studies as a PhD Candidate. Dr Darren Tofts has similarly offered support towards my PhD application. The confidence in my abilities from my colleagues has been heartening.

Finally, I would like to thank my family — my son Simon Derrick and his partner Ainslie Roberts, have prepared many special dinners to ensure that I would not go hungry this year. Both of them are trained in the sciences and mathematics, so it has been very useful to run my free form ideas and writing before such rational minds. Simon's feedback to my prologue has also been helpful. The Torchio family have welcomed me with countless delicious Italian meals, a comfy bed in the little box room, and insights into our family history — the 'old days in Brixton', whenever I visited London. Some of my late Uncle Frank's memories are recorded in the Prologue. My mother, the late Anna-Maria Torchio, generously bought me a laptop as a gift 'to inspire me to great creativity'. I trust that my work this year has in some way fulfilled her wish for me.

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#### Abstract

The growth of the free software movement from the mid-1980s to the present day has contributed vast amounts of creative labour and technical innovation to what has become known as the digital commons. In many instances it has been 'the greater good' rather than commercial gain which has driven this research and production. Artists have played a significant role in the research, development, creative application and socialisation of various technologies, yet their recent contributions to cultural software have not been widely documented and critically examined outside of the media arts field. This thesis focuses on the recent work of the leading art group Mongrel, and their development of a powerful software platform called Netmonster. By drawing on current theoretical ideas from sociology including the qualities of immaterial labour in advanced capitalism, and the social and power dynamics of network society, I have built a framework to consider the social role and potential of cultural software. My research begins by outlining early developments in the history of computing, emphasising social and political factors shaping the technologies, and the ideas and goals of their inventors. This is followed by a discussion of the creative power of the digital commons, the collaborative labour processes involved in the free software movement, examples of innovative social technologies which are being produced, and the kinds of opportunities which can be opened up through the adoption of these tools and processes. The research concludes with an in-depth study of the Netmonster software. Netmonster is a 'poetic structure for producing network visualisations'. I draw upon my own participant-observer experiences of using Netmonster as a research and art-making tool in 2005 to explain and illustrate its features. According to Mongrel, Netmonster was created for 'the online resourcing and collaborative construction of the 'networked image'. A responsive, immediate and sensuous space for projects based on networked collaboration - the future of generative social software'. My research concludes that the digital commons is a thriving site of creative and affective production which flows through and animates the networks of 'informational capitalism'. Although the digital commons is increasingly a site of contestation as attempts are made by various forces to restrict, commodify or enclose it, it continues to grow and diversify, adding new nodes of generative activity to itself, and in the process transforming the nature of network society itself.