Acknowledgements

A number of people have directly and indirectly contributed to this dissertation. I would especially like to thank:

Dr Robert Zimmer, my doctorate supervisor, for allowing me to taste real academic freedom for the first time and for helping me to enter the world of "publish or perish".

Dr Mike Elstob, my *other* doctorate supervisor, for endless hours of intense and always highly rewarding philosophical discussion and for his friendship and support these past few years as I struggled to shift paradigms.

Dr Muhammad Abdelrazik, for encouraging me to pursue a doctorate in the first instance and for helping me secure the EPSRC studentship.

Dr Frederic Geurts, for the excursions into Flatland during the *Complex'94* conference dinner and for an afternoon walk down Rockhampton beach speculating about life in cellular automaton universes.

The intellectual community which gathered at Tucson, Arizona in 1996, for awakening me to the diversity of approaches currently being pursued in an attempt to move us "Towards a Science of Consciousness".

Class of '96 students on the MSc Foundation of Intelligent Systems course which I colectured with Mike Elstob. In particular, Marc Florio for challenging discussions on second-order cybernetics, Kantian idealism and evolutionary epistemology.

Helen Lee, for the introduction to Conway's Game of Life.

My small circle of friends, for their bewilderment.

My wife, for being the other to my self.

My baby daughter, for the (un)timely distractions.

My parents, for instilling in me the love of wisdom and for helping me at every step on the journey towards enlightenment. Words cannot express ...

Philip Glass, Michael Nyman and Kitaro for providing inspirational musical accompaniment as I composed the various chapters of this thesis.

I would also like to thank the proprietor of a small second-hand bookstore in London who had the foresight to procure a copy of Alexander's *Space*, *Time*, *and Deity*.

This work was supported by a EPSRC Studentship Award No. 91309398.