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Kanopi

How might we improve the environmental and social outcomes of biodiversity conservation projects?

Masters of Design
Sam Rye



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Sam Rye

Abstract

The environmental conservation sector in New Zealand and Australia is not able to keep pace with the scale of the challenges facing it, causing widespread loss of our planet's biodiversity and the potential for profound societal challenges due to our reliance on ecosystem services. Many of the issues are interconnected and dynamic, brought about through the downstream effects of population growth and anthropocentric worldviews. Change is needed in how the conservation sector is able to operate, which better enables the existing sector stakeholders to create positive social and environmental outcomes. However the sector is chronically underfunded, and thus unable to muster the resources or a collective direction to address the systemic challenges alone. The challenges are complex (dynamic and emergent), yet we find the majority of resources poured into planning-based responses that are inadequate due to their reliance on predictive approaches to the unpredictable challenge. The alternative to planning, is prototyping; a culture rooted in experimentation, adaptation and continuous learning, in order to continually re-orientate efforts to a desired future.

This research project has focused on designing a targeted systems change intervention, rooted prototyping culture, which seeks to challenge power dynamics and the mental models of the types of impact that conservation groups can generate. Through systemic and strategic design, I have generated systems sight, crafted strategy, and developed a portfolio of concepts which serve as both technological and socio-cultural 'Trojan Mice' to challenge existing paradigms which limit the sector's ability to reverse biodiversity loss.

Keywords: systems change, systemic design, strategic design, environmental conservation

This exegesis is also available online at <https://kanopi.gitbook.io/mdes-exegesis/>

Acknowledgements

This is dedicated to my father, Mark, who passed away suddenly during my research. He was an inspiration to me, and a wonderful father. I love you and miss you deeply.

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Orientation

To find your way in this exegesis on <https://kanopi.gitbook.io/mdes-exegesis>, you could use one or more of these modes:

- **The Three Part Story** - if you prefer to see the videos which outline the intervention, navigate to the Thesis section where you will find the three of the videos explaining the research outputs together.
- **The Research Story** - start from the beginning and use the 'Next article' navigation at the bottom of each section to explore the story of the project as I have structured it.
- **Choose Your Own Adventure** - if you're interested in particular aspects of the research, the directory on the left signposts some places to begin your own reading, or use the search box at the top right to look for specific terms which may interest you.

The layers which make up this intervention, and thus the main chapters of this exegesis are:

1. **Generating Systems Sight**
2. **Crafting Strategy**
3. **Designing A Portfolio of Concepts**

I present the Portfolio of Concepts first to give form to the insights generated in the first two phases. Each section of this exegesis details my design practice, with detail about my design activities, snapshots of boundary artefacts, and reflections.