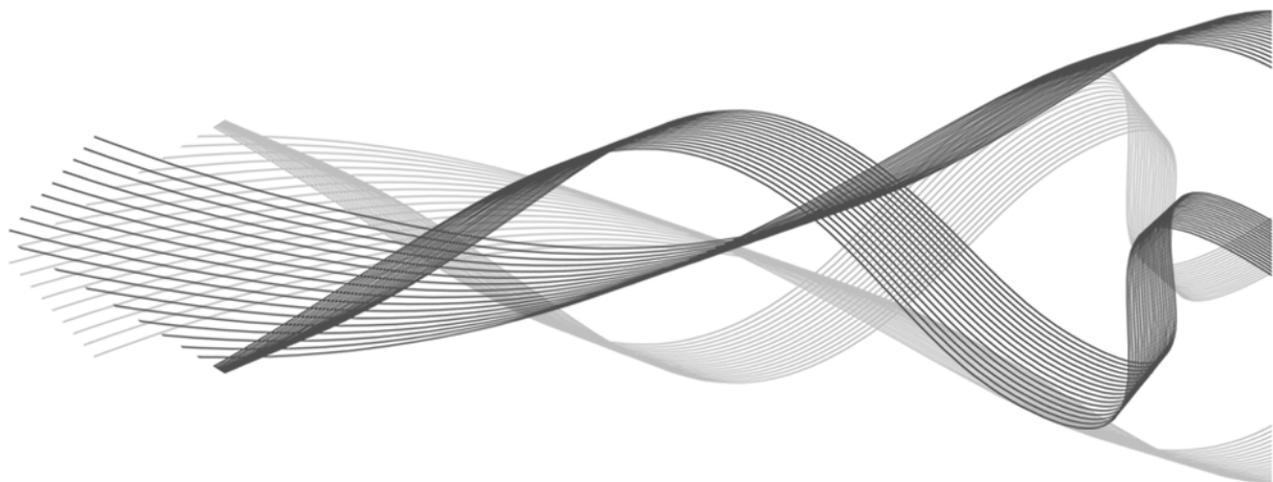


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Flow

a case study in integrating sustainability values with affective design



Master of Design Essay | 197.800 | Massey University Wellington
A written component in partial fulfillment of the requirements for the degree
of Master of Design at Massey University, College of Creative Arts.

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Abstract

This research integrates affective design strategies with sustainability values in the context of a soft seating furniture design solution. Rejecting polyurethane foam cushioning, the research proposes a conceptual and material alternative to the conventions of soft seating. A full-scale prototype demonstrates the fusion of ethical integrity and dynamic form, explored through an innovative and iterative design process.

Keywords:

affective design, desirable, product experience, soft seating furniture, sustainability, bamboo

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My sincere appreciation goes out to my family for the financial, moral and spiritual support. Your prayers and concern have been empowering.

A special thank you to my beautiful wife Dana and our precious son Caleb, who joined us during the course of this study. You have both been incredibly generous in accompanying me along this adventure. I am humbled to have you at my side and love you both dearly.

This document is dedicated in loving memory of my Poppa, Dave Bengé and Grannie, Cathy Paton who both went home to be with the Lord in 2010.

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Instructions to the Reader

Hello and welcome to my Master of Design essay. This document provides background and context to my research, situating it within a body of work by scholars and practitioners who hold a concern in my field of inquiry. Discussion includes the approach taken to the research, contemporary theoretical discourse and models for sustainability and affective design, acknowledgement of sources of design inspiration, my creative response to those stimuli and reflection on the processes undertaken. This project is firmly couched in the belief that design is a valid and rewarding mode of research inquiry.

The document is written in first person voice, as the research has been a personal search for an approach to design that brings a sense of fulfilment and integrity. A Case Study methodology has been employed, with the goal that this project may provide a personally relevant process template for engaging with future design projects.

A List of Figures appears after the main body of text and before the Bibliography. Image credits are listed subsequently.

Referencing within this document has been laid out using footnotes in accordance with the 16th edition of the Chicago style. The intention behind using this style is to provide citation where needed, without disrupting the flow of the text. The footnotes progress in ascending numeric order, with a corresponding reference placed at the bottom of the page on which the footnote appears within the text. The footnote includes a condensed form of citation, featuring the author's surname, publication title and page reference (if appropriate). A full bibliography is included at the end of the main body of text, containing full references plus sources that have influenced the direction of this study without necessarily being directly referred to.

To assist in defining terms distinctive to this research, a glossary has been included ahead of the main body of text. Terms that feature in the glossary are indicated by an asterisk after the word the first time they appear within the main body of text. For example: The off-gassing* of these compounds from furniture...

Glossary of terms

Affective design: a relatively new field of design research concerned with how a person relates emotionally with a product throughout a user experience. This is typically a result of cognitive processing of sensory stimulation, and addresses questions such as: 'What feelings does the product elicit?' and 'What associations are made to the product?'

Bio-accumulate: the absorption of a substance, such as pesticide chemicals, at a rate greater than an organism or ecosystem is capable of breaking down and removing it. This can be problematic if the substance poses health risks.

Biological Nutrient: A material derived from organic sources that can be broken down and absorbed into a biospheric food chain without detrimental effect. For example; wool.

Carcinogen: a substance or agent that can cause cancer.

Ecosystem services: provisions that nature supplies for free to society, including holding our soil, regulating water flow, cleaning our air and our water, and recycling nutrients so that

ecosystems can remain productive. These are the result of complex interactions between living organisms and cycles from the atmosphere, biosphere, lithosphere and hydrosphere.

Off-gassing: the release of compounds or fine air-borne particles into the atmosphere by chemical degradation. Can lead to a reduction in air quality, particularly indoors and in enclosed environments leading to respiratory related illness and general physical discomfort.

Product architecture: the configuration and interaction of components within an assembled three-dimensional product.

Technical Nutrient: A material from the lithosphere that can be used and recycled in a perpetual closed cycle. For example; aluminium.