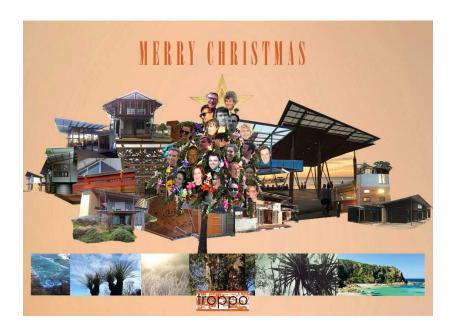
Pattern, Contingency and Lifestyle

The Houses of Troppo Architects



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B. Arch Studies, B. Arch (Hons)

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Dedication

This work is dedicated to:

Those who are passionate about a simple way of life

It is hoped that this thesis will contribute to our appreciation of how architecturally designed spaces can bring delight into everyday experience.

And

Environmental concerns

In search of sustainability, it is also hoped that this study will heighten the concerns that we ought to have for the design of our fragile living and built environments.

And

My family

My father who sadly passed away before the submission of this thesis once taught me the perseverance and determination to achieve dreams in life, despite unexpected difficulties and challenges the life throws at me. My mother, who never doubts my ability, always displays her faith in the intention of my studies although she has no clue what they are for and how they can be useful for building a better world tomorrow. My two boys, who have spent most of their weekends in my office showed their support and belief in my hunch about the fruitful outcomes of this study and how they might influence the ways that people understand the use of everyday space and live life to its fullest!

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Abstract

Troppo Architects, a multi-award-winning practice originally established in Darwin in the tropical Top End of Australia in 1980, has long been regarded as a leader among a small vanguard of Australian architects focused on climatically responsive design. Over a period of three decades, founding partners, Phil Harris and Adrian Welke, grew and incrementally expanded the practice to five regional offices – Darwin, Townsville, Adelaide, Byron Bay and Perth – across Australia. Whilst the practice has had to adapt in order to address and respond to a greatly expanded range of both climatic and socio-cultural variations in context, it has continued to attract outstanding critical acclaim including a Global Award for International Sustainable Architecture in 2010 and the Gold Medal of the Australian Institute of Architects (AIA) in 2014. How this design practice has succeeded in sustaining its own internal cohesion through such a process of major organisational growth and change while it has also sustained its capacity to respond effectively to context and clients' needs in a distinctive and exemplary manner, is the multifaceted question explored in this thesis.

The study focuses exclusively on Troppo's single family houses. It investigates how residential designs from the regional offices in the decade up to 2014 relate to the ideas and values that Harris and Welke espoused in their first decade of practice in Darwin. Through a theoretical framework that engages this work with concepts of pattern language, contingency, and responsive cohesion between designs and their physical and psychological contexts, the study offers insight into relationships between Troppo's design ideas, their values, and their attitudes to space, place, culture, and the quality of delight in environments for everyday living. Fieldwork-based and centred on a cluster of comprehensive case studies, the methodology also includes extensive interviews with both the architects and the residents of the houses in question, formal analysis of original design documentation as well as the built and

occupied houses, observation of design processes within the different regional Troppo offices, and the most thorough examination yet undertaken of the archives of the Troppo practice.

PART 1 presents an initial historical overview of the Troppo practice, the aims and objectives of the research, and a review of the relevant literatures underpinning the theoretical framework and methodologies to be applied. PART 2 first discerns and describes a pattern language that is observed to have emerged from a corpus of Darwin houses designed and built in the first decade of the Troppo practice, through the 1980s. Identifying visually distinctive patterns in plan or form for particular spatial functions as well as psychological spaces associated with particular sensory experiences, the thesis reconstructs the original contexts and design reasoning in and through which these patterns were first explored. Representative houses designed and built by each of Troppo's regional offices in the past decade (up to 2014) are then examined in a series of five comprehensive case-studies. These map the relationships between these later houses and Troppo's early residential commissions in Darwin. PART 3 then discusses the similarities and differences between the respective formal languages of these regionally dispersed cases and the early houses with respect to the broader theoretical foci and the framework of the study (pattern, contingency, responsive cohesion). The thesis concludes with a brief overview of the key findings of the study and their implications for contemporary architectural practice and education, and for further research in those sub-fields.

The thesis shows how the design of Troppo's houses reflects a process of cohesion between architects and owners around shared values and aspirations for delight in the spaces within houses and for experiencing close links with nature. It also reveals the critical importance of mentoring in the relationships between Harris and Welke, the regional directors and their clients. It also shows how the practice has negotiated conflict between its values and the realities of commercial practice in diverse regional offices with changing client expectations, code requirements and building costs.

Acknowledgements

I have had a great passion for computational visualizations and generative design since I was an architecture student. The 'unseen' and 'unheard' creative design ideas formed in design processes had always been the most curious human activity in my academic training, teaching and working in the architectural field for almost two decades. Productivity, speed and visual representations of design were matters in the early years. The more time I spent working on quantity and visual aspects of architecture, the farther I found myself away from grasping the truth to my curiosity as to what was the 'something' that made architecture meaningful, aesthetically striking and functionally satisfactory for the user of spaces. Furthermore, what it is in the space of a building that influences the way the user lives and works with delight on a daily basis. This 'something' has been elevated to become the impetus of this study and set a course to seek, unravel and examine those 'unknowns' in the design process of architects.

With enormous gratitude, this study would never have been accomplished without the assistance and support of many people who participated, engaged and spent a substantial amount of time with me over the years. Their enthusiasm, encouragement, and anticipations for the completion of this study were the power sources for me to dive deep, travel far and arrive at the destination of this long voyage of what that 'something' is making us to live our lives to its fullest.

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Without the sincerity of the occupants of early and later Troppo houses, this thesis would not have gone deep into understanding the meaning of everyday life by living, experiencing and profoundly engaging with the work of Troppo Architects. Their verbal descriptions and body language demonstrate the 'feeling' they received from and grew with the house and its surrounding landscapes over time. Many thanks also go to the occupants of early Troppo houses and neighbours in Coconut Grove, Darwin for their enthusiasm in participating in interviews and allowing house visits.

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Statement of Originality and Agreement

This thesis contains no material which has been accepted for an award or any other degree or diploma in any university. It is the best of the candidate's knowledge and belief, the thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

One journal article was completed and published during the candidature of the PhD with my supervisor Emeritus Professor Antony Radford as the second author in 2013. The quotations and illustrations by other authors and media have not been included in the body of this thesis unless stated in the text otherwise.

I consent to the thesis being made available for photocopying and loan if accepted for the award of the degree. The interviews with the associated stakeholders have been conducted with consent that recordings, transcripts and quotations would only be used in the thesis and academic publications in the future. Any quotations and/or use of graphic images, photographs, sketches and working drawings of selected case studies will need explicit permission from them.

Jessica Huang		
Date:		

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