

Pattern, Contingency and Lifestyle

The Houses of Troppo Architects



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B. Arch Studies, B. Arch (Hons)

A thesis submitted in fulfilment of the degree of
Doctor of Philosophy
School of Architecture and Built Environment
Faculty of the Professions
September 2016



THE UNIVERSITY
of ADELAIDE

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

Tropo 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 Tropo'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 Tropo'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.

My supervisors, Emeritus Professor Antony Radford and Dr. Peter Scriver, have given me their faith in the depth and significance of this study right from the beginning. Their supervision, assistance, advice, and friendship have given me strength, different perspectives and approaches in search of ways to reach the aims and objectives of this study.

Professor Phil Harris and Adrian Welke, the founders of Troppo Architects, have been incredibly supportive throughout the time of this study. Their generous time was most appreciated in responding to my enquiries about their practice, assisting to collate crucial first-hand materials, setting aside time

for interviews in their busy schedules and offering the contacts of the clients. My personal gratitude has to go to my classmate and now a branch director of Troppo Architects in Adelaide, Cary Duffield. He has shown and opened the 'unseen' door to understand Troppo's practice culture, the details of everyday life inside of Troppo practice, pros and cons on the practicality of Troppo's principles and theory. He was the first-point in contact for the associated stakeholders and made time for discussions explaining questions and uncertainty about the operations and processes of projects.

Former Darwin director, Greg McNamara, who tragically passed away in a motor accident two weeks after my visit in 2011, stimulated me with most valuable thoughts about changing policy and environmental concerns in the climate of current practice. His passion for architecture and kind personality was appreciated deeply by driving me around to visit early Troppo projects and engaging with me in insightful discussions a month before the tragedy took place. My thanks are extended to Townsville director, Terry O'Toole, and former in-house architect Aftab Khamisa and Zammi Rohan, former Byron Bay manager Dan Connolly, former Townsville director Geoff Clark, and senior architect in Adelaide branch Damien Guerin for their generous time in discussions and providing materials for the major part of this thesis – five case studies.

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.

I am particularly grateful to personal support from many individuals along this long journey. Without their encouragement, support and assistance in many different ways, this thesis would not have been accomplished. Foremost is Dr. Kate Cadman, who constantly showed me her faith in my research and generously offered me an enormous amount of time editing this thesis with advice and an eye for mistakes in my writings. Individuals are my dear colleagues and friends, Dr. Vanessa Menadue, Vivien Ho, Dr. Marwa El-Ashmouni, Martin and Ruth Nordstrom, Dr. Bill Mihalopoulos, Helen Low, Dr. Gerry

Groot, Mansoor Ma, Robert Caprile and many others. Special thanks are extended to them for their mental support, friendships, and inspirational conversations at the difficult times of this study.

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:

Statement of Authorship

Title of Paper	HOUSES FOR RESPONSIBLE HEDONISTS: TROPPO ARCHITECTS IN THE NORTH OF AUSTRALIA 1980-1990
Publication Status	<input checked="" type="checkbox"/> Published, <input type="checkbox"/> Accepted for Publication, <input type="checkbox"/> Submitted for Publication, <input type="checkbox"/> Publication style
Publication Details	ARCHITECTURAL RESEARCH QUARTERLY, VOL. 17, ISSUE 3-4, DECEMBER 2013, PP. 217-226

Author Contributions

By signing the Statement of Authorship, each author certifies that their stated contribution to the publication is accurate and that permission is granted for the publication to be included in the candidate's thesis.

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Signature		Date	

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Contribution to the Paper	<ul style="list-style-type: none"> • PART OF THE STRUCTURE OF THE PAPER, ITS THEORETICAL FRAMEWORK AND LITERATURE REVIEW • REVIEW AND ADVICE ON CONTENT • REFINEMENT OF ENGLISH-LANGUAGE EXPRESSION 		
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