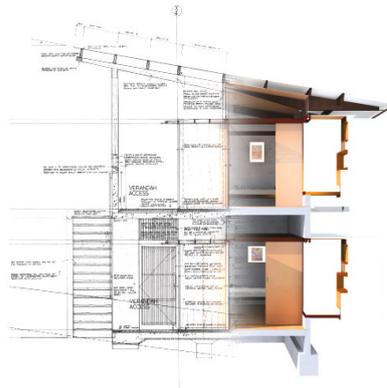


Presenting Architecture on a Digital Flatland

A Case Study on
Murcutt, Lewin and Lark's
The Arthur and Yvonne Boyd Education Centre

by
v e r d y k w e e
B. Arch (Hons), M. Arch (Digital Media)



A thesis submitted in fulfillment of the degree of Doctor of Philosophy
(with a DVD-ROM accompaniment as a submission component)
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Faculty of the Professions
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Dedication

This work is dedicated to:

Those who seek to understand

It is humbly hoped that this contribution will lead to more accessible, easily-absorbed information presentations at least within the architectural field.

And

Peace

There is little, if at all, this work could do to bring peace to many lives in many parts of the world, but thoughts and hopes would always remain for those who are in most need.

And

My family

My late father who had taught me to see the world differently in his simple ways and to appreciate and improve the many little ideas that we often take for granted. My mother: to whom I am grateful for giving me much more freedom than she allows herself to have. My siblings: through their colourful opinions, they have equipped me with the habit and skills to occupy myself with possibilities rather than to dwell in certainties.

**Correspondence and requests for materials may be addressed to:
Verdy Kwee (email: verdy.kwee@gmail.com)**

A Digital Presentation of *The Arthur and Yvonne Boyd Education Centre*
DVD-ROM



'The only way to see it is to see it' – Edward Tufte (Doernberg 1997).

Contents

Dedication..... ii

A Digital Presentation of *The Arthur and Yvonne Boyd Education Centre* DVD-ROM iii

Contents iv

Abstract..... viii

Prefacex

Statement of Originality and Agreement..... xiii

Acknowledgements..... xiv

Chapter 1 | Introduction 1

 1.1 | Background.....1

 1.2 | Hypothesis, Research Question and Aims4

 1.3 | Objectives and Scope.....4

 1.4 | Methodology7

 1.5 | Definitions10

On Media11

On Architectural Publication12

On Representation12

On Presentation.....13

On Interactivity.....15

 1.6 | Positioning Digital Architectural Representations.....15

 1.7 | Summary18

Chapter 2 | Current Scenario..... 20

 2.1 | Background.....20

 2.2 | On Textual Representation.....23

 2.3 | On Visual 2D and 3D Architectural Representations24

 2.4 | Publications of Architectural Works32

Critiques - 133

	<i>Critiques - 2</i>	38
	<i>Critiques - 3</i>	44
	<i>Critiques - 4</i>	45
2.5	Presentations - Standards or Guidelines.....	49
2.6	Digital Media - Opportunities and Considerations	54
2.7	Summary	56
Chapter 3	<i>'Architecture Media Representations'</i> Survey.....	60
3.1	Background.....	60
3.2	Survey Methodology	61
	<i>Pilot Paper-based Survey Design</i>	63
	<i>Online Survey Design and Implementation</i>	64
3.2	Survey Analysis	68
	<i>Demographics</i>	68
	<i>Resources and Media</i>	71
	<i>Factors: Importance and Understanding Scales</i>	72
	<i>Factors: Importance Ranking</i>	74
	<i>How Should Architecture be Represented?</i>	75
	<i>Media/Resources Qualities</i>	76
	<i>Media Assessment</i>	77
	<i>Resource Preferences</i>	80
3.4	Summary	81
Chapter 4	Case Study and Technique Investigation	84
4.1	Background.....	84
4.2	Case Study Methodology	84
	<i>Information Types</i>	87
	<i>Drawings and Photographs</i>	88
	<i>Video Footage</i>	88
	<i>Consultant and 'Client' Interviews</i>	90

	<i>Building User Feedback</i>	94
	<i>Other Additional Information</i>	96
4.3	<i>Technique Investigation Methodology</i>	96
	<i>Data Collection, Digital Reconstruction and Rendering</i>	96
	<i>The Approach to Exploring Presentation Techniques</i>	101
	<i>Learning from Architectural Documentation and Movies</i>	102
	<i>Learning from layering</i>	104
	<i>Learning from Sliding Overlays</i>	109
	<i>Learning from a Magnifying Lens</i>	110
	<i>Learning from Zooming and Panning Techniques in Graphic Applications</i>	113
	<i>Learning from 3D Stereo images</i>	113
	<i>Learning from the Interactivity Technique in 'Reflectance Field' Demo</i>	115
	<i>Considerations for Digital Presentation</i>	117
4.4	<i>Summary</i>	120
Chapter 5	<i>Digital Presentation Prototype</i>	122
5.1	<i>Background</i>	122
5.2	<i>Guide</i>	123
	<i>Installation</i>	124
	<i>Button Overview</i>	131
5.3	<i>The Digital Presentation</i>	134
5.3	<i>Summary</i>	152
Chapter 6	<i>Discussions and Conclusions</i>	154
6.1	<i>Background</i>	154
6.2	<i>Additional Considerations and Evaluations</i>	155
	<i>'Architecture Media Representations' Survey</i>	155
	<i>Information of 'The Arthur and Yvonne Boyd Education Centre'</i>	156
	<i>Presentation Prototype of 'the Arthur and Yvonne Boyd Education Centre'</i>	157
6.3	<i>Final Words and Challenges</i>	158

6.4	Future Work Possibilities	162
6.5	Conclusions	165
References	169
Appendix A	Collected Data & Process.....	181
	‘Architecture Media Representations’ Survey Questions	182
	‘Architecture Media Representations’ Survey Data.....	192
	Transcripts of Interviews.....	245
	- <i>Architects: Glenn Murcutt (G), Wendy Lewin (W) and Reg Lark (R)</i>	245
	- <i>Structural Engineer: James Taylor (J)</i>	245
	- <i>Hydraulic Engineer: Peter Bacon (P)</i>	245
	- <i>Landscape Architects: Sue Barnsley (S)</i>	275
	- <i>Former Director of Bundanon property: David Chalker (D)</i>	283
	- <i>Builder: Jonko Berg (J)</i>	299
	Release Forms	311
	Building User and Visitor Feedback	319
	Building User and Visitor Feedback	319
Appendix B	Publications	335
	The International Journal of Architectural Computing	336
	The 10th CAADRIA Conference 2005.....	353
	The 7th VAST Conference 2006	363
	The 40th ANZAScA Conference 2006	372
	The 4th GRAPHITE Conference 2006	381
Appendix C	DVD-ROM	
	Technique Investigations - Chapter 4 Figures (/figures)	
	3D-Model (/model)	
	Photographs (/photographs)	
	Digital Experiments (/processes-experiments)	
	Video Footages (/video)	

Abstract

This thesis primarily deals with the presentation of architectural information in order to allow a wider audience to gain a better understanding of an existing architectural work. It proposes to augment the role of visual media in explaining architectural subjects – beyond the commonly accepted levels in the current print publications or on the internet.

The effectiveness of traditional publications of notable buildings in terms of their level of presentation and degree of information rigour are commonly presumed but unproven. In this era, their unchallenged role as facilitators for clear and in-depth learning results in mainly digital replications of conventional presentation methods. Little has been explored in the area of expanding digital visualisation capabilities to leverage information clarity. This thesis enquires into architectural precedent presentation possibilities specifically within the limitations of computer screens.

The approach involves a worldwide online survey to investigate public perception of current media effectiveness within commonly available publications. The research also explores several digital visualisation presentation techniques. Together with the collected data about the building, this exploration and the results of the survey are considered in the production of a digital presentation prototype of *The Arthur and Yvonne Boyd Education Centre* by Australian architects Glenn Murcutt, Wendy Lewin and Reg Lark. While the thesis findings highlight critical areas overlooked by current publications, the illustrative prototype serves as a basis to propose opportunities that could be explored.

There are three obvious outcomes derived from this research project:

- The scope and depth of information about *the Arthur and Yvonne Boyd Education Centre* extends beyond what any one secondary source currently provides. Materials relevant to many aspects of the building are researched from primary sources.
- There are presently numerous methods to visualise architectural information. However, in order to use them as more robust learning instruments, the thesis highlights several factors for their design enhancement. It describes some digital visualisation possibilities for adoption in future digital architectural publications.
- The thesis outlines the stages undertaken and some considerations in their implementations. The design of the digital prototype presentation of *the Arthur and Yvonne Boyd Education Centre* suggests not only a direction for similar future works, but also identifies the technological facilitation gaps that we still need to address.

Preface

As words often possess a penchant to be misapprehended, it is perhaps appropriate to qualify this research in advance with the following phrase by Gilles Deleuze with fervent hopes that it [the research work] too could be ‘understood’ for its unique roles through the multi-coloured lenses of its audience:

“ We are wrong to believe in facts;

There are only signs

We are wrong to believe in truth;

There are only interpretations” – (Deleuze 2000)

True to its message, the above phrase does not adhere itself to any assumption; for if it is to be ‘true’, it would also question its own validity in relation to its being a fact or taken as true. It leaves one to wonder if we are also wrong to believe there are only signs and mere interpretations or if there was any certainty at all. With this ambiguity, this self-negation appears to celebrate its ‘conviction’ even more; thus transforming it from theory into an interpretation of reality.

With some caveats, it is apt to highlight that this thesis is a compilation of a series of thoughts or ‘signs’ that are based on other published interpretations, which may only suggest ‘facts’ and/or ‘truth’. As such, it does not insist on perfection or indisputability. It should be treated as merely means that are hoped to lead to various other avenues for visually presenting digital information – of architectural information, in particular. Therefore, as one negotiates through this interpretive journey, some contingencies and tolerance need to be allowed for rooms to err, spaces to expand, and forms to explore.

For the past twenty years I have been exposed to the broad field of architecture. This period extends from my early education to my practice in the field of construction and design as well as digital presentations. In my early architectural education, apart from the frustration of having to

adjust to a different educational system, it was found difficult to penetrate through the fortress that the discipline seemed to use - in terms of jargons and loose explanations found in most of the publications of renowned architectural works. Why should it be so? It was not at all surprising to discover that most students learn quicker in the world of practice than in academia. This poses a grave concern since students are exposed to more high quality architectural works during their early education years than in later practice. To lose the opportunity in understanding distinguished works at a deeper level at this early stage of their education is a pity and could pose future dire implications.

The general concern of this thesis lies specifically within a significant part of architectural publications – those that students utilise as material for their precedent studies. Numerous series of publications like these have been produced as far back as anyone can remember, and they have served well to preserve architectural information. The scholarly rigour of many publications is questionable which results in an inadequacy of information depth. The contents do not readily address the needs of the audience as well as they could. This problem often leads to students and architectural enthusiasts to skip much of the information delivered which may often be important. Visual information becomes the predominant element relied upon to attract interests.

As an educator, I have become intensely conscious of the strengths of media and their roles in learning, exploring them with students in their design projects. For instance, some of our design exercises have shown that no matter how explicit written texts may be in describing spatial elements and qualities, individual interpretations are always varied. Exercises like these suggest that it would be detrimental to rely on the predominantly textual culture found in existing publications to relay important messages. Visual media should take a larger, more active role as communication means to assist in the formation of knowledge.

In the meantime, there is an increasing number of new architectural publications circulated today in addition to the exponential growth of information and generated data carried by the new digital platform. It is time to reflect the opportunities we may be missing during the current shift towards digitalisation to cater for the expanding visually-inclined strata within the community.

This thesis could be experienced in two ways:

- By following the flow of the prescribed thesis content: the thesis background and the significance of the various process components are aimed to provide an understanding of the research project and methodology used. The digital visualisation work in the enclosed DVD-ROM shall be introduced in a later chapter.
- By starting with a reading of the abstract, then Chapter 5 in conjunction with the CD presentation: the abstract provides an essential brief overview of the research project necessary before beginning a detailed installation procedure and exploration of the DVD-ROM. The DVD-ROM contains a digital presentation of *The Arthur and Yvonne Boyd Education Centre* as a prototypical illustration of digital 'architectural publication'. This could then be followed by the introduction chapter and the rest of the texts in the thesis.

It is hoped that soon architectural knowledge through digital publications would be far more accessible to students and those with genuine interest for the field. Realistically, this thesis work surrenders to the interpretations of many authors who are instrumental in materialising this intention through their personal missions.

Statement of Originality and Agreement

The thesis contains no material which has been accepted for the award of any other degree or diploma in any university and that, to 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.

Several publications were completed during the PhD candidature (see Appendix B) with my supervisors as second and third authors. The writings or illustrations by other authors have not been included in the body of this thesis unless stated in the text.

I consent to the thesis being made available for photocopying and loan if accepted for the award of the degree. The interviews with the stakeholders have been carried out under the agreement that the recordings, transcripts and quotations would only be used in this thesis which includes the DVD-ROM component. Any quotation and/or use of collected materials will need explicit permission from them.

Verdy Kwee

Date:

Acknowledgements

I have worked with digital visualisations in architecture and utilised digital graphic applications for almost two decades now. Disregarding this vantage point (and my unwavering interest in digital works), this research project has taken a life of its own and guided me through its own interesting twist-and-turn's.

With all sincerity, this work could never have been conceived and completed without the support from and collaboration with people whom I deeply admire. This work owes its life to many wonderful organisations and souls - much more than I can possibly name. Through them, I personally have learnt to see far and travel deep.

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I have benefited from the opportunities given to me to present in forums, lectures and conferences on the topic connected to this thesis. The generally positive responses received have been a tremendous encouragement. My special thanks to The University of Adelaide for the Adelaide Scholarship International that has supported my studies. I am also thankful for the travel assistance and Clive E.Boyce as well as Harold J Rodda scholarships awarded during the candidature.

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Last but not least, Dr. Bob Martin has assisted in providing support and access to a wealth of research materials through the CUMINCAD library. The authors of works in this online library have had much influence and impact in the sculpting of this thesis