

## Example thesis map:

**Constructing bodies: gesture, space and representation in architecture design studios.**

**Total word count: 84,000 words (approx)**

*Note: This document is a compilation of documents prepared by Inger Mewburn in October 2008 for her last PhD progress report. Inger Mewburn is the current Director of Research Training at The Australian National University (ANU). This document varies only slightly from what was eventually submitted for examination on 25 March 2009. This thesis won the John Grice award for Best Architecture Thesis in the Faculty of Architecture, at the University of Melbourne, and was runner up for the University Medal for Best Thesis.*

*This document is intended to act as a model for a thesis map for participants of the ANU Thesis Boot Camp program. It contains a thesis rationale, including thesis statement; a description of the contribution to knowledge and importance of the work; and a list of the main research questions. This is followed by a chapter-by-chapter synopsis, with subheadings as they appear in the final thesis. At the end, Chapter 5 (the largest discussion chapter) is expanded in more detail with a list of subheadings.*

*This document is released under the Creative Commons Share A-Like Attribution License. You may freely circulate, use and alter this document, but you must acknowledge Inger Mewburn as the original author.*

Remaining Tasks	Date to complete tasks
Finish copy edit and rewrite introduction and conclusion	Start of December 2008
Submit second draft to supervisor panel	Mid February 2009
Make changes to second draft and prepare for submission	March 2009
Submit	End of March, 2009 (extension available to September as contingency)

### Thesis Rationale

*1. Thesis Statement: "Gesture does important knowledge work in the design studio"*

In other words: The way bodies and representations are mobilised in design studios is intrinsic to the generation of design knowledge and knowing and gesture is pivotal to this process.

*2. This thesis contributes to knowledge by:*

Analysing gesture behaviour of teachers and students at work four different design studios (both here and at RMIT University) and determining what kind of *work* gesture can do when teachers and students talk to each other about design propositions.

The interest here is in the ways gesture can operate with speech and representations to create architectural meanings and architectural subjectivities and even the design studio itself

*3. This study is important because:*

Architectural education has always involved enculturation of some sort – training in a way of being and doing as much as a set of skills.

In the contemporary academy the design studio is the main location for this enculturation, but rationalising processes have been going on in universities world wide for some 30 years

In some places, like here, the amount of time architecture students spend with their disciplinary cohort is being reduced and many other aspects of teaching and learning are being moved to online or blended formats.

Without bodily presence the design studio would be a different *kind* of teaching and learning environment. If we don't know what gesture contributes its special role risks being lost because it becomes difficult to effectively *translate* what it does to other formats.

#### *4. Key research question: What work is gesture doing in the design studio?*

##### *Sub-questions:*

- *How do architecture teachers and students gesture when they work on designs together?*
- *Do students and teachers produce different kinds of gesture when they use different kinds of representations (drawings, models, computer images etc)?*
- *Can we categorise these gestures into 'types'? Are there patterns of gesture behaviour that we could call 'architectural'?*
- *What work is the gesturing doing to making meaning in the design process?*
- *How does gesture help the students and teachers perform the design studio together?*

## **Chapter by chapter synopsis**

### **Introduction (3000 words)**

The introduction starts with the main research question: What work is gesture doing in the design studio? It outlines the lack of research on non-verbal communication in design knowledge making practices and offers a theoretical framework for how the phenomenon might be investigated and what it might have to offer for the practice of architectural education.

### **Chapter One: The spaces of architectural education (Background 10,600 words)**

This chapter provides background for readers who might not be familiar with the history of architecture education. It explains how architectural education has developed over the last thousand years in Western Europe and how this tradition was translated in the Australian context. The chapter argues that the spaces of architectural education have always been the product of socio-material relations, from the medieval guilds to contemporary academia. This chapter argues that how and where bodies are mobilised produces different kinds of architectural subjectivities: 'master mason', 'master artist' and 'knowledge worker'.

##### **Subheadings:**

1. The shape of the contemporary design studio
2. The medieval guild system
3. Moving into the academy
4. The Beaux Arts and Atelier
5. Articled clerks and governmentality
6. Design studio as 'knowledge generator'
7. Contemporary anxieties

### **Chapter Two (lit review 1): Design Studio as Actor Network or 'Mr Corrigan's Sighs' (11,000 words)**

This chapter outlines some of the literature on design studio as an educational type for readers who are expert in gesture communications, but who do not have a background in educational theory. It outlines the work of two influential educational theorists in particular Donald Schön (the reflective

practitioner), the work of Bryan Lawson, who is informed by cognitive science and Snodgrass and Coyne who work in a hermeneutical tradition. All of these theorists, to various degrees, suggest that materiality is important to design practice. They all recognise the materiality of representations but not the materiality of the body. Actor Network Theory (ANT) is then put as another way of theorising the design studio that can bring the body in; ANT is described through an incident from the research field notes.

Subheadings:

1. Prologue in the form of a story about a design studio
2. Studying the design studio
3. Donald Schon gets lost in translation
4. The design studio as a way of thinking
5. An alternative proposition (the story of the recalcitrant photocopier)
6. Mr Corrigan's sighs (design studio as performance)

### **Chapter Three (lit review 2): What kind of animal is gesture? (9000 words)**

This chapter is a literature review of the research on gesture, with a particular emphasis on research on gesture in educational settings. It starts with a story of the difference between the way my father in law (a builder) and I handle drawing sets. I discuss how ways of knowing and ways of acting in the world are deeply entangled through Mauss, Goffman, Bourdieu and Foucault. I then highlight gesture as a good site to investigate the 'disciplining' of the body in design studios. I survey the literature on gesture including what little exists about architecture studios and identify the possibilities for a study of gesture in the design studio.

Subheadings:

1. Another prologue in the form of a story about a builder
2. Ways of knowing / ways of being
3. The body of the architect
4. What is gesture?
5. Definitions of gesture in gesture research
6. How do we interpret gesture
7. Gesture as an object of research
8. Gesture and Learning
9. Gesture, disciplinary thinking and knowing
10. Gesture does knowledge work?

### **Chapter Four: Method (6000 words)**

This chapter is an outline of the methods and the theoretical orientation underpinning them. I outline the two primary methods of analysis: content analysis and thick description. It includes information on the research participants, the instruments used to collect data and the analysis process. Finally it outlines some difficulties encountered in the field and limitations of the method and dataset.

Subheadings:

1. Theoretical framing
2. Research participants
3. The student participants
4. The teacher participants
5. Researcher construction
6. Data collection, techniques and instruments
7. Data assemblage and limitations

8. Data analysis and interpretations
9. Presentation of the data in this thesis

### **Chapter Five (findings 1): Three gesture performers (captured live on location) (30,000 words)**

This is a long chapter where the results of the content analysis are offered in three separate parts. Each part concerns a pattern of gesture behaviour discerned in the data, which is identified and described in detail. At the end the way that these different types of gesture work together and in relation to different types of representation is examined and discussed.  
(see subheadings in expanded synopsis at the end of this document)

### **Chapter Six (findings 2): Gesture as knowing in motion (10,000 words)**

In this chapter I discuss the other category that emerged from the alternative 'thick description' data analysis which are called 'ordering gestures'. I discuss how body work of this kind is integral in the 'affect work' necessarily to design studios and knowledge production. The implications of this analysis are discussed, in particular how this way of looking frames power relations in the design studio.

Subheadings:

1. Gesture and normative classroom practices
2. Ordering gestures
3. A promiscuous model
4. Affect work
5. Knowledge as performance

### **Chapter Seven: Conclusion - A 'micro-physics' of power? (4000 words)**

The conclusion works through the implications of the findings in relation to the theory of design studios as actor-networks. If the material-semiotic constitution of a design studio is changed, so too is the types of architectural meanings and knowledge(s) that are produced. This is not to claim that teaching design online is impossible but unless we appropriately *translate* the work gesture does in face-to-face teaching effective teaching online will be difficult to achieve; a project of future research in this area is then sketched out.

### **Expanded Chapter 5 Synopsis (30,000 words)**

This is a long chapter where the results of the conversational/content analysis are offered in three separate parts. Each part concerns a pattern of gesture behaviour discerned in the data, which is identified and described in detail. At the end the way that these different types of gesture work together and in relation to different types of representation is examined and discussed.

This chapter will be broken into three main parts:

**Compositional gestures (10,000):** these described physical properties of space and different kinds of compositional 'acts' in the design process. These gestures 'speak' architectural design in another mode, in a way that is entirely other than talking, drawing or modelling but works with these other modes to extend and clarify them. Speech, representations and compositional gestures collaborate to make a 'virtual world' which designers can play in and surface meanings. These meanings and knowings may be fleeting, provisional, uncertain but are vital to the experimental processes of designerly collaboration with representations.

Subsections:

- compositional gestures ('performing space') 2000
- Some instances of compositional gesture work 7000
- Summary of compositional gestures 3000

**Mediating Gestures (10,000):** is the term I have used for those gestures observed to strategically 'glue' speech to architectural representations. These worked to short cut spoken explanations at the same time as keeping teachers and students 'tuned in' to the meaning that is being created. Through mediating gestures representations become 'animated', certain parts became salient over others and sometimes this gesturing allowed the representations to 'talk back' in interesting ways and help to create design possibilities.

Subsections:

- Mediating Gestures (performing connection) 2000
- Some instances of mediating gesture work 7000
- Summary of mediating gesture work 3000

**Qualitative Gestures (10,000):** were those used to capture and describe aspects about architecture that might elude other modes of representation: time, light, the movement of people and so on. These gestures created 'virtual effects' rather than static, objective renderings. Qualitative gestures made these dimensions of architectural experience into phenomenological objects that could be shared with others.

Subsections:

- Qualitative Gestures (performing feeling) 2000
- Some instances of qualitative gesture work 7000
- Summary of qualitative gesture work 3000