

Building type: Developing interpretive design strategies
to translate selected New Zealand suburban architecture
into type design.

Caroline Powley / 2011

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Attestation of authorship

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Caroline Powley:

Date:

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Preface

This is a practice-based project, with a weighting of 70% for the practical component and 30% for the accompanying exegesis.

This exegesis supports the practical component that is presented in the form of a set of publications and type specimen sheets presented in an exhibition held at Gallery Three, Auckland University of Technology, City Campus, from 9-12 November 2011.

Abstract

**BUILDING TYPE: DEVELOPING INTERPRETIVE
DESIGN STRATEGIES TO TRANSLATE SELECTED
NEW ZEALAND SUBURBAN ARCHITECTURE
INTO TYPE DESIGN.**

Building type explores interpretation as a creative strategy for developing experimental design processes that translate architecture into type. The research sits within the experimental area of the contemporary type design context. The methodology is based on a hermeneutic framework and establishes a cycle of research methods that enable the project to progress through several phases of inquiry. It is a practice-based project, but its intended outputs are not fully resolved typefaces, but rather a range of experimental type design strategies. These strategies translate aspects of selected New Zealand suburban architecture (a single-bay villa, a Californian bungalow and a state house) into letterforms and prototypfaces. The outcomes are communicated through two sets of publications, large format posters, plan print guidelines, card inserts and an exegesis.

INTRODUCTION

This research project investigates interpretation as a creative strategy within type design. More specifically, it explores four interpretive strategies for translating selected New Zealand (NZ) suburban architecture into type design. This is done with the aim of generating new experimental type design processes, which could expand the possibilities of contemporary interpretive type design.

It is a practice-led research project based on a hermeneutic framework. The research design includes a cycle of selected methods, which form a structure for each phase of research. I worked through four distinct phases, with each one exploring a particular interpretive strategy. Each phase of investigation produced experimental design processes and interpretive type. The final interpretive strategy, the metaphors of translation and its associated framework, conceptual metaphor theory, were then used to reframe and reconcile all the previous exploration.

The project is communicated through an exhibition of design work and this written exegesis. The design component consists of a set of publications

and type specimen posters that present the final metaphor-based interpretive strategy, two developed experimental type design strategies and a range of prototypefaces. The exegesis supports and contextualises my practice-led research. This introduction provides insight into the project's aim and objectives, as well as an overview of the rationale, context and structure of this project. The main body of the exegesis has two sections; the first establishes a contextual grounding for this project and the second discusses my practice. The exegesis concludes with reflection on my methodology and project outcomes, including identifying areas for further research.

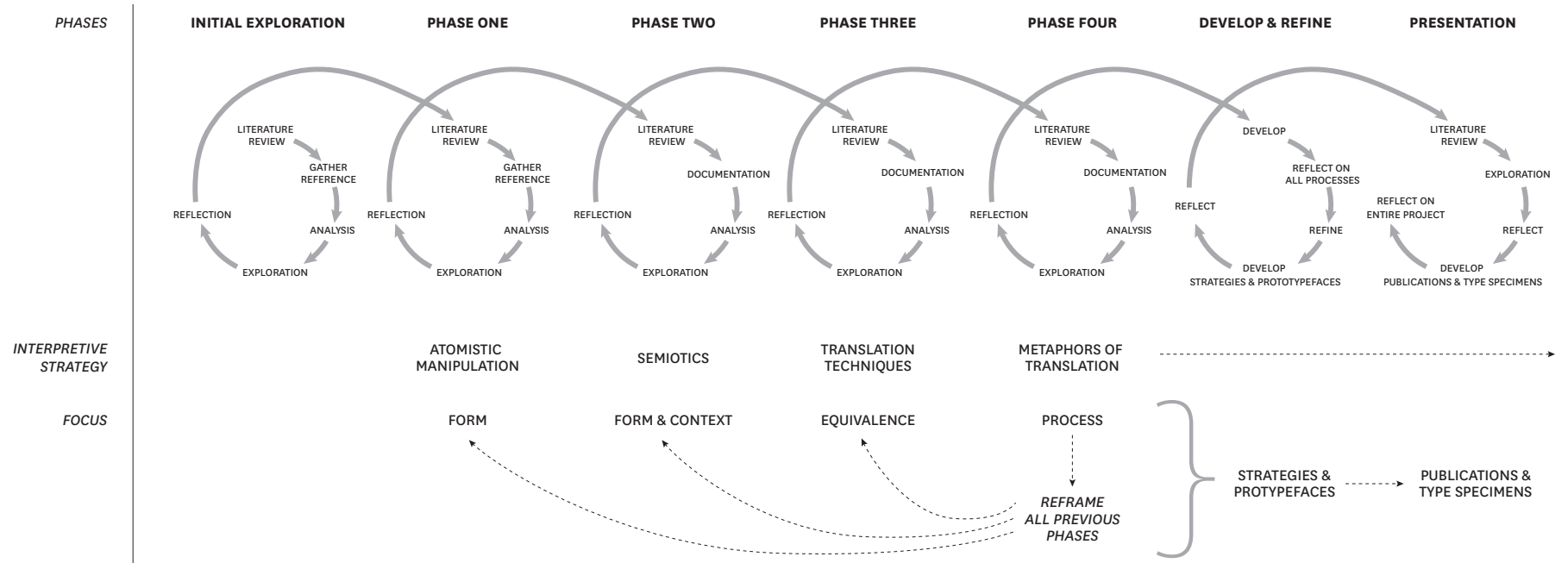


Figure 1. Diagram showing all project phases for Building type.

Definitions

Listed below are some of the specific terms I use throughout this exegesis. Several of them are designed to differentiate themselves from similar existing terms, while others look to clarify between different layers of process within this project. They are listed below in an order that follows the layers of my research.

INTERPRETIVE TYPEFACES

Typefaces that take their inspiration and key forms or structures from another object or form. This excludes typefaces that are created by interpreting an existing typeface or type specimen.

INTERPRETIVE STRATEGIES

Each interpretive strategy represents a particular approach to interpretation.
In this project I explored four interpretive strategies:
_atomistic manipulation
_semiotic analysis
_translation techniques
_metaphors of translation

RESEARCH PHASE

I worked through four phases during my research.. Each research phase explored a particular interpretive strategy through a cycle of defined research methods.

EXPERIMENTAL TYPE DESIGN STRATEGIES

These are the intended outcomes of this research project. I have selected two of the experimental design processes I generated during my research and refined them into a set of guidelines for translating architecture into type.

PROTOTYPEFACES

These are not complete or resolved typefaces. They are a set of letterforms and/or type concepts created during the exploration cycles of my research. Selected prototypefaces are also presented as proof of concept for my experimental type design strategies.

PLEASE ALSO NOTE:

The terms font and typeface are often used interchangeably. Traditionally a font is a single weight and size of type, whereas a typeface is a coherent set of type designs. I have used font where I am aware of only one weight of the type and typeface where there is more than one weight or variety of a type design.

I have chosen to italicise the name of fonts and typefaces. This is not standard practice but was done to differentiate the names from the body of the text.

Research intentions

RESEARCH QUESTION

How can interpretation act as a creative strategy for developing experimental type design processes that translate architecture into type?

OBJECTIVES

The objectives for this project are to:

- understand the use of interpretation and experimental design processes in type design to establish their creative potential and possible outcomes
- define several aspects of the selected NZ suburban architecture in order to have a range of source material to interpret/translate
- investigate a range of interpretive strategies with the intention of exploring their creative potential for generating experimental design processes and interpretive type
- evaluate the creative potential of each interpretive strategy and communicate the more successful outcomes.

EVALUATIVE CRITERIA

The criteria I used to evaluate my research developed as the project progressed. Each phase of my research investigated a new interpretive strategy for translating architecture into type and I evaluated my research for each phase through that particular lens. This is discussed in more depth in section 3. My final evaluative criteria can be summarised as:

- develop a research methodology that is structured and rigorous, but also appropriate for a creative and interpretive research question
- identify an interpretive strategy that provides a clear but productive framework for creating and reconciling a range of type design processes
- create experimental type design strategies that have clear steps and guidelines but are flexible enough to be used by other designers
- create experimental type design strategies that are generative and produce a range of type outcomes
- create interpretive prototypefaces that communicate something of their source architecture without being a literal transfer of forms

Positioning statement

The research question for this project developed from a range of personal interests, previous post-graduate research and from early experimentation. I did not start my research with the intention of creating experimental type design strategies and interpretive typefaces. As Snodgrass and Coyne (1997, p. 20) suggest, “Genuine questions are not something we think up nor something we do. On the contrary, they occur to us, they happen, they arise of their own accord”.

I have an interest in design within a local context; a previous post-graduate research project, *Reading Signs*, explored the denotative and connotative readings of hand-generated vintage signs in situ around Auckland. At the time of that project, the experience of driving around a large number of Auckland’s suburban areas searching for hand-painted signs also acted as a process of re-familiarising myself with the city.

I had lived away from New Zealand for seven years while working as a designer in London. When I returned I had the strange experience of finding my hometown disconcertingly foreign yet familiar at the

same time. One thing that struck me immediately was the houses – all the individual wooden, painted suburban houses. They were inherently familiar to me from having grown up in a wooden bungalow on a quarter acre section in Sandringham, but also strangely foreign after living in a narrow Victorian terrace house in Brixton, South London. To me, the sprawling suburbs are a defining feature of Auckland. This is reinforced by the New Zealand obsession with home ownership and renovation.

Creating the *Reading Signs* project increased my interest in the connection between type and place, and the relationship between type and architecture. As a starting point for this project I returned to my initial strategy for *Reading Signs*, which was to drive around a number of suburban shopping areas and document the vernacular typography. I then generated a range of experimental designs, which mainly looked at narratives of place through vernacular typography. One experiment produced a sectioned flipbook that allowed the viewer to generate variations on the number 7, gathered from handwritten opening hours signs. This particular



Figure 2. Hand-generated number sevens, vectorised and layered.

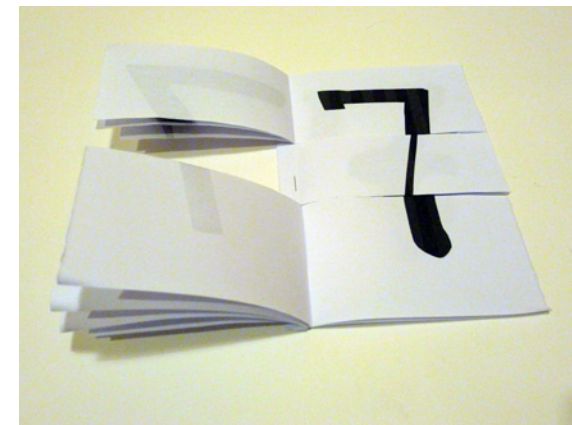


Figure 3. Flipbook experimenting with variable number sevens.

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Figures 4-5. Flückiger, M. & Kunz, N. (2009) *Laika*, screen grabs of the dynamic typeface.

Figure 6. Harris, N. (1987). *The Lettering Book*, cover.

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experiment triggered a discussion with my supervisor around digital interactive typeface design.

I have been interested in typography and type design from an early age. When I was eight years old I bought *The lettering book* (Harris, 1987) and started to spend an inordinate amount of time on my project titles and workbook headings.

While I have now worked as a professional designer and lecturer for over 15 years, I had not found an opportunity to dedicate a block of time to designing my own typeface. I was already familiar with projects that had worked with some of the issues raised by my number 7 flipbook experiment. Ed Fella had created a range of typographic posters and designs using a combination of vernacular letterforms. A research project by Michael Flückiger and Nicolas Kunz explored the interactive and variable aspects of digital type. I didn't want to repeat what they had already done, but I wasn't sure where to go from there. Somehow an idea arose; what if I tried to interpret suburban architecture into type?

Architecture was selected as the source material for interpretation partly based on the personal

experience and interests already outlined, but also because it is a complex form that offers many possible readings. It is also a field that almost everyone is familiar with, as we constantly engage with and respond to architecture. I chose three New Zealand suburban houses (single-bay villa, Californian bungalow and state house) as they were the dominant domestic house forms found in Auckland's suburbs before 1970. They also each represent a shift in New Zealand's societal values, influences and lifestyles.

The bay villa is "an essentially Auckland house style" (Hansen, Reynolds, & Salmond, 2009, p. 38), which peaked in popularity between 1895 and 1915 (Stewart, 1992). They were an expression of the New Zealand middle class society and "expressed perfectly the exuberance and energy of an age of invention and achievement" (Salmond, 1986, p. 182). However, by the 1920s the Californian bungalow was the predominant new kind of house in NZ (Toomath, 1996). It represented a shift in influence from Britain to the United States, a move from our colonial history to New Zealand's first modern house (Ashford, 1994).

Figure 7. Fella, E. (2002). Typographic poster.

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Figure 8. Novarese, A. (n.d.). Diagram showing the relationship between the type and architecture of different periods.

It also reflected a more relaxed and informal lifestyle. Then, in 1936, the Labour government initiated the state house programme, and “by the late 40s and 50s, the State house style tended to be predominant in low-cost private housing” (Cameron, 1970, as cited in Knight, 1994). At the time it was a kind of revolutionary social experiment that aimed to provide convenient and healthy houses to all New Zealanders (Knight, 1994).

In retrospect, the idea to combine architecture and type probably drew on two other existing type design references, although I was not consciously thinking of them at the time. The first reference is the diagram created by Aldo Novarese, type designer for Società Nebiolo in Turin (Dair, 1952). As seen in Figure 8, it suggests a relationship between type and architecture. The second reference is harder to pin down, as it was a series of comments made during a presentation by Christian Schwartz during the TypeShed11 conference in Wellington (C. Schwartz, personal communication, 13 February, 2009). He discussed how type can have equivalents with other cultural references, for instance *Gill Sans* evokes

English pinstripe suits and fish and chips, whereas *Franklin Gothic* is associated with American jeans and burgers. He also discussed his process for designing a new typeface set for *The Guardian* newspaper, where he and his collaborative partner Paul Barnes referred to architecture as a way of understanding the type they were creating. He did not directly refer to any forms, nor develop a design process to interpret the architecture, but they did refer to the proportions of buildings and the feel of architectural ironwork from the Georgian period as evocative associations.

Once I had decided my research would involve designing type, I started to review contemporary type design practice. I quickly realised that if I wanted to generate a fully functioning commercial font, I would need to spend a large amount of time learning software and refining technical details. I also realised that my ambition was not to complete one particular font. Instead my interest lay in the generative sources that inspired designers to embark on the journey of designing a typeface. It also seemed to me that spending years tweaking the details of a typeface and creating the minimum 256 glyphs required for a

commercial font, while potentially fulfilling, did not necessarily constitute research. My plan then, was to engage with the more exploratory and creative end of the type design process, with the view to developing the technical details in my own time after the research project had been submitted.

Every designer about to create a typeface has to start somewhere. A large number of contemporary designs draw their inspiration from historical type reference, or are developed in response to technical or commercial requirements. In contrast to these traditional inspiration sources, I have chosen to explore how interpretation from one field (architecture) into another field (typography) can work as a creative strategy. Many artists and designers have used the generative energy found in the interaction between two fields as a creative source. Charles L. Owen (2010) suggests that, “Simply asking the questions, ‘How could these components work together?’ is often enough to open highly productive trains of thought to be able to contemplate completely new vistas” (p. 3). The interaction between two fields can open up a liminal

space – the undefined zone between two specific states. This research hopes to use the generative energy from the act of interpretation to inspire new design processes and create prototypefaces.

There are examples of contemporary type design that are based on interpretation of other fields, which I have called interpretive type. Overall these typefaces tend to consist of a direct transfer of form, from one object to another, with the source forms dominating the letterforms, as shown in Figure 1.12 *Cityscape* on page 17. I thought interpretation could have more creative potential than shown by most existing, rather literal, examples. I decided to work in the more experimental end of type design practice to allow space to investigate those possibilities. The role of interpretation in contemporary type design and existing experimental design processes are reviewed in the following section.

1. CONTEXT

1.1 Contemporary type design

This section discusses the field of contemporary type design and establishes a contextual grounding for this research project.

I will begin by clarifying the difference between type design, lettering and typography. Jonty Valentine (2009) defines type design as “the production of a system of stylistically coherent types for printing using contemporary mechanical reproduction technology” (p. 7). While the emphasis on means of reproduction is less relevant to this project, the rest of his definition for type design applies. In contrast, lettering refers to text created as a single, unique entity, and is often hand-generated. This includes sign writing, calligraphy and some logotypes. Typography is an all-encompassing term for the setting and arrangement of text. A typographic composition can include type design and lettering, but I am highlighting type design as a specific subsection of typography. In this project type design means the design of a set of stylistically or conceptually coherent letterforms that can be combined to form any word.

Contemporary type design is a varied and expanding field – Peter Bil’ak (2011) says that it

“seems to be a golden age of type design” (para. 2). Access to the means of production and distribution for type design has become easier and more direct. Correspondingly, there has been a huge increase in the number of type foundries. There are now over 150,000 fonts available for direct download (Peter Bil’ak, 2011). The rise of personal computing and the introduction of the dropdown preview type menu have raised public awareness of the variety of type available, while typeface selection remains a key concern for graphic designers.

Many designers are passionate about typography and understand the impact a typeface can have on communication. Karen Cheng (2005) describes type as “the visual manifestation of language” but also says that “type does more than merely make messages tangible. The form of the type itself colours, and even alters, the initial intent of a communication” (p. 7). Typefaces can evoke an emotional response, reflect the era or culture they were designed in or act as symbolic indicators. The subtle interplay of associations and references create a response in every viewer, whether consciously

or not. Robert Bringhurst (1992/2008) says,

“Letterforms have tone, timbre and character, just as words and sentences do. The moment a text and a typeface are chosen, two streams of thought, two rhythmical systems, two sets of habits, or if you like, personalities, intersect” (p. 22). Type designers keep producing new typefaces to feed graphic designers’ desire to find a font that meshes well with what they are communicating.

Despite the exponential increase in the number of digital fonts, there are still several reasons for designing and distributing a typeface. Some are created as custom or bespoke typefaces, designed specifically for use by one particular client. These are often designed to communicate brand values or respond to production or viewer requirements. The majority of contemporary typefaces are designed for a wider audience and are commercially released through font houses or independently distributed online. These include multi-weight, sometimes multi-lingual font families designed for a broad range of commercial purposes. Designers also engage in self-initiated projects that explore a particular

concept, process or formal element. Working without commercial or pragmatic constraints allows designers to explore experimental processes or produce typefaces that are outside standard categorisation.

Although I have identified bespoke, commercial and self-initiated type design, these are not distinct categories. Designers can be motivated by one approach at the start of a project but the outcomes may function in another way. My research has no intended commercial outcomes; however, the resulting interpretive design strategies could be used to generate bespoke or commercial typefaces. For example, if a brand was based around an iconic building then these strategies could be used to create a bespoke typeface that has some of the same inherent forms or qualities as the brand focus. Or the prototypefaces created as outcomes of an experimental use of my strategies could be refined and sold as commercial typefaces.

There is no ideal process for creating typefaces and type designers develop their own methods and strategies. Karen Cheng (2005) outlines a general

process that begins with identifying what the inspiration is for designing a new typeface. Once an initial idea has germinated the next step is to “define specific typographic parameters ... by sketching a few key letters that establish the proportions and personality of a font” (p. 8). When these letters have been roughly outlined the designer can start testing the forms by combining letterforms into words. This early exploration can be performed manually or digitally, but is often done by hand. This is partly due to the flexibility and grace of hand-drawn curves, but also because “free sketching encourages creativity in the early stages of design” (Cheng, 2005, p. 8). Once the essential design idea for a font has been determined “the full set of characters (letters, numerals, punctuation, symbols and diacritics) must be fleshed out” (Cheng, 2005, p. 8). The forms are transferred to a digital format at this point, sometimes through scanning and digital tracing software, and sometimes through a complete re-drawing in Illustrator or other software. After the digital letterforms are refined they must be “imported into specialized font software ... to complete the final

stages of production: spacing, kerning and hinting” (Cheng, 2005, p. 8). Once this is complete it can be distributed and used by graphic designers in a range of design software.

My research is focused on the early stages of this type design process. It investigates interpretation as a creative strategy and explores experimental type design processes to translate architecture into type. The main outcome is a set of interpretive type design strategies. The prototypefaces that are also produced are taken only as far as establishing the essential design idea; they are not refined to a full character set or completed as a functional digital typeface.

This project’s two key contexts, experimental type design processes and interpretive type, are reviewed in the following chapters.

1.2 Experimental type design (what if?)

Very few terms have been used so habitually and carelessly as the word ‘experiment’. In the field of graphic design and typography, experiment as a noun has been used to signify anything new, unconventional, defying easy categorization, or confounding expectations. As a verb, ‘to experiment’ is often synonymous with the design process itself, which may not exactly be helpful, considering that all design is a result of the design process. The term experiment can also have the connotation of an implicit disclaimer; it suggests not taking responsibility for the result. When students are asked what they intend by creating certain forms, they often say, ‘It’s just an experiment...’, when they don’t have a better response. (Bil’ak, 2005, para. 2)

In this chapter I will unpack the term experimental and define what it means within this research. There is no definitive explanation or categorisation of what an experiment is within type design so I will look at scientific, avant-garde, post-modern, conceptual and contemporary models. Considering the range of applications for the term and some of the negative

connotations, I will review a range of viewpoints and practical design work.

The historical, science-based understanding of an experiment sits within an empirical approach to knowledge. An experiment is a set of actions that set out to prove or disprove a hypothesis using objective measurements in a controlled environment. If correctly performed, the experiment could be repeated and produce the same results, therefore proving a link between a particular action and phenomenon (Bil’ak, 2005). Some type design processes include quantitative research methods to establish links between formal qualities and performance of the letterforms in specific situations. Bespoke typefaces may be commissioned to respond to the requirements of the production technology, the reading environment or the viewer themselves.

For example, *Transport* was designed to provide maximum visibility of road signs for drivers. As part of their design process, Margaret Calvert and Jock Kinneir conducted quantitative tests with drivers who drove past draft sign designs using *Transport*, “to

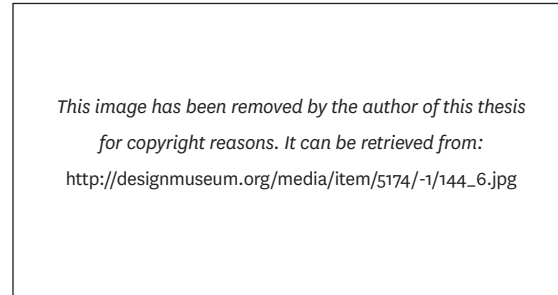


Figure 1.1. Calvert, M & Kinneir, J. (1957-63). *Transport*, in use on draft sign layout.

determine suitable background colours and reading distance” (Design Museum, n.d., para. 12).

Adopting empirical testing methods is relevant to typefaces with very specific production or user needs. However, as discussed in the Methodology section, this project does not sit within an empirical framework or the natural sciences, and the objective, hypothesis testing experiment model does not apply.

Within a culture-based framework, an established location for experimental practice is the avant-garde. The French term, avant-garde, meant the foremost part of an army, but it has been adopted in English to mean “the pioneers or innovators in any art in a particular period” (Oxford English Dictionary, 2011). Avant-garde is a complex term, with its own multitude of meanings and base within the modernist movement.

An example of experimental typeface design within the modernist movement is Herbert Bayer’s *Archetype bayer*, which was designed in 1925 for the Bauhaus school. Bayer attempted to use basic geometric forms to create a single typeface that included both upper and lowercase letterforms. This is an attempt

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[http://image.linotype.com/fontlounge/fontfeatures/
constructivists/bayer.jpg](http://image.linotype.com/fontlounge/fontfeatures/constructivists/bayer.jpg)

Figure 1.2. Herbert Bayer, H. (1925). *Architype bayer*, development.

to create something new, and also a reaction against traditional type design by reducing the forms to elemental basics and rejecting complex forms.

To place this avant-garde model within a contemporary context, I am focusing on the understanding that “The avant-garde offers critiques on the mainstream, challenging accepted conventions and developing new ‘ways of seeing’” (Triggs, 2003, p. 7). These two key ideas – a search for the new and a critical challenging of the traditional – are relevant to a range of experimental type design.

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brody12.jpg](http://citrinatas.com/history_of_viscom/images/computer/brody12.jpg)

Figure 1.3. Brody, N & Wozencroft, J. (circa 1997). *Fuse*.

David Carson said, “Experimental is something I haven’t tried before ... something that hasn’t been seen or heard” (Triggs, 2003, p. 37). This suggestion that the nature of an experiment lies in its novelty or originality is potentially difficult. On one hand, a post-graduate research project like this demands originality and so perhaps all post-graduate research could be defined as experimental. On the other hand, contemporary designers have access to a huge archive of type examples and new designs constantly appear on the Internet. As Peter Bil’ak suggests, “proclaiming

novelty today can seem like historical ignorance on a designer’s part” (2005, para. 7). In relation to my research, the key point is to differentiate between experimental type design processes and experimental type designs. Although the processes I am exploring could be called experimental, in that I am aiming to create something new, the prototypefaces developed through using these processes may not be completely unique. My research is focused on the type design process, not the typefaces produced.

The other aspect of avant-garde understanding of the experimental is “that the essence of experimentation is in going against the prevailing patterns, rather than being guided by conventions” (Bil’ak, 2005, para. 8). This places an experiment as a reactive act that takes place outside the margins of the mainstream. In early avant-garde work this also implied a challenge to the political or social establishment. In graphic design it often meant designing to challenge traditional understanding of the role of type in design.

For example, *Fuse*, an interactive magazine created by Neville Brody and John Wozencroft, was intended to be “a dynamic new forum for typography that will stimulate a new sensibility in visual expression, one grounded in ideas, not just image” (Wozencroft 1991, as cited in Rock, 2004). Twenty issues of *Fuse* were created; each based on a theme, ranging from codes to secrets, religion to pornography. Several designers were given the opportunity to explore type design outside the restrictions of a commercial brief by responding to these themes. The intention was not just to create something new, *Fuse* was also “a conscious effort to reinvest letters with some kind of magic power”

(Rock, 2004, para. 13). It was a reaction against the typographic establishment, which was seen as inherently conservative and restrictive (Rock, 2004).

In a contemporary context, revisionism continues to be a dominant feature of type design. A commonplace source of inspiration is an existing type specimen or vernacular letterforms. Peter Bil'ak (2011) is concerned that:

The vast majority of new fonts desperately lack originality. Just as in the music industry, where cover versions and remixes are often more popular than new music, font designers seemingly prefer to exploit successful models from the past rather than strive for new solutions. (para. 3)

My project is, in part, a reaction against this mainstream approach to type design. However, my aims are more modest than a truly avant-garde challenge to the traditional inspiration source. I am looking for an alternative approach, with the intention of extending the options available to type designers. My research aims to enhance the process of developing interpretive type and to explore its potential in a rigorous way. It does not intend to dismiss the dominant inspiration source or established type design processes. The challenge to traditional typography and its associated issue of legibility is not specifically relevant to my research.

Despite having been assimilated into everyday culture, the post-modernist movement of the 1990s is still strongly associated with the term experimental typography. Sometimes called 'grunge' type or 'deconstructivist', it was driven by the ideas of French theorists such as Jacques Derrida and Francois Lyotard. Their theories explored philosophical or linguistic

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http://moma.org/explore/inside_out/inside_out/wp-content/uploads/2011/01/NevilleBrody.jpg

Figure 1.4. Brody, N. (1991). *Blur*. The letterforms are based on distortion from blurry vision.

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http://www.maxbruinsma.nl/Kisman_fudoni.jpg

Figure 1.6. Kisman, M. (1991). *Fudoni*. These letterforms were created by combining two existing typefaces: *Futura* and *Bodoni*.

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https://www.fontfont.com/staticcontent/inuseimages/original/FF_You_Can_Read_Me-Showing_by_Sven_Fuchs.png?1312550314

Figure 1.5. Baines, P. (1995). *You can read me*. The letterforms have been deconstructed, leaving just enough form to maintain the possibility of legibility.

issues, but were also adapted into a framework for developing type design processes. Visual strategies included distortion, deconstruction or combination of forms, in an attempt to reflect the subjective and fragmented view of knowledge discussed in the theory.

This understanding of experimentation as a formal exploration of or response to theory is relevant to my research in that I am investigating interpretive strategies that are based on theories from other fields. As discussed in Section 2, I have drawn from semiotics, translation strategies and conceptual

metaphor theory as frameworks for developing experimental type design processes.

Other designers have adopted another experimental approach, one that could be linked to conceptual visual art theory. Sol LeWitt's statement "The idea becomes the machine that makes the art" (Bil'ak, 2011, para. 12) is reflected in several experimental type design processes from the 1990s and today.

Letterror is a collective formed by Erik van Blokland and Just van Rossum. They decided that rather than design fonts, they would write the code that makes fonts. Their typeface *Beowolf* was one of the first to be designed as a digital generator that produced a range of variable formal outcomes. Everytime a letter was typed it would look different. Another Letterror project is *RobotFonts*, which are based on a bitmap font called *Python-Sans*, designed by Just van Rossum. They developed a computer code that transforms the font in multiple ways to create completely new forms. Both of these are conceptual examples of experimental type design where, "it is the machine that makes the type" (Bil'ak, 2011, para. 12).

This notion of the experiment as a system that produces variable outcomes is relevant to my research. In contrast to the designs shown, this project aims to offer interpretive design strategies for creating type; it does not create a new physical or digital tool to actually produce type designs. On the other hand, Bil'ak suggests that "By deciding to design the process rather than controlling the end result, Letterror embraced the possibilities of unexpected results" (Bil'ak, 2011, para. 12). My strategies may be more organic and allow space for a range of outcomes depending on how a designer

applies them, but I am still focused on 'designing the process' and welcome unexpected outcomes.

Therefore, the dictionary definition of experiment that relates best to my research is, "a tentative procedure; a method, system of things, or course of action, adopted in uncertainty whether it will answer the purpose" (Oxford English Dictionary, 2011). This approach to type design is discussed by Kent Lew, who says, "for me, ideas generally come from 'what if' scenarios. What if *Joanna* had been designed by W. A. Dwiggins, instead of by Eric Gill? What if Mozart had been a punchcutter, rather than a composer?" (Cheng, 2005, p. 8).

Michael Worthington also suggests that experimentation means taking risks and "not knowing the outcome but trying something that you think will be successful, but you have no proof. What happens if I mix element A with element F? Could be gold, could be sulphur. Let's find out" (Triggs. 2003, p. 115). The forms should not be preconceived, instead the experimentation occurs in the creation of the forms and the results can be unexpected. Worthington says, "... isn't that why designers aspire to create experimental work? Work that is actually creative and not mere production?" (Triggs. 2003, p. 115).

Rick Poynor recently wrote:

Typographic experimentation, which was once a source of feverish interest among forward-thinking designers, ceased to be a pressing concern some time ago. If graphic design in the 1990s was dominated by the idea that type (and typography) needed urgent reinvention ... then the past decade has been a period of consolidation as the type foundries went 'pro,' optimized the major

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<http://www.lettererror.com/catalog/robot/matrix.jpg>

Figure 1.7. van Blokland, E. & van Rossum, J. (2010). *LTR Python Robot*.

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<http://graphics8.nytimes.com/images/2011/01/24/arts/24iht-design2/24iht-design2-popup.jpg>

Figure 1.8. van Blokland, E. & van Rossum, J. (1989). *Beowolf*.

font families, and re-launched them in OpenType versions. (2010, para. 3)

While Poynor has focused on the 1990s post-modern understanding of experimental type design, I think a contemporary ‘what if’ approach to experimentation is still active and relevant. Designers have moved on from being tied to postmodern desires to disrupt and challenge. It is also not necessarily about doing something new for the sake of it. It has become more about a personal curiosity and expanding designers’ creative practice and visual language.

The impetus to create new experimental typefaces can be driven by personal, historical, theoretical or cultural inquiry (Cheng, 2005, p. 8). Peter Bil’ak designed a typeface called *History* that includes 21 individual typefaces that can be layered to create thousands of different unique styles. Bil’ak (2010) was “inspired by the “polyhistorical” model of Milan Kundera’s *Immortality*, and it became the theoretical foundation of the project. It mixes personalities of the past and present, describing an imaginary dialogue of Goethe and Hemingway” (p. 48). The typefaces draw

on a range of existing font styles including baroque, early grotesque and humanistic renaissance, but places them within a basic formal structure to allow combination layers. Bil’ak (2010) calls it a “conceptual typeface” and says that he, “focused on the creative process rather than its market potential. I’ve learned that it is still worthwhile to do projects that I personally believe in” (p. 48).

Overall this contemporary understanding of experimental type design is the most relevant to my research. It is an active investigation of an area of interest, engaged in by designers for the sake of extending their own practice, rather than to fulfil a commercial brief. It does not set out to specifically challenge the mainstream, although it may react to it and develop an alternative approach. The process does not begin with clear formal outcomes in mind, and is open to unexpected results. This is the approach to experimental type design that this research is adopting. I have chosen interpretation as the focus of my inquiry and will discuss interpretive type in the following chapter.

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<http://cg.scs.carleton.ca/~luc/PeterBilak--History-2008.jpg>

Figure 1.9. Bil’ak, P. (2008). *History*.

1.3 Interpretive type (what if this became that?)

“What inspires you?

Objects with interesting shapes and curves always touch a little nerve that could inspire the creation of a new typeface” (Benezri, 2010, p. 54).

In this chapter I will review some of the key issues relating to what I have classed as interpretive type. I have defined this as type designs that are based on or inspired by objects or forms that aren’t existing letterforms. This is a broad field and includes not only experimental designs but also bespoke and commercial typefaces. More specifically, this research investigates interpretation as a creative strategy for translating selected New Zealand suburban architecture into type. This review includes examples of typefaces that draw on architecture as an inspiration. It also looks at issues associated with interpretive type including levels of abstraction and literal transfer, the role of action and the possibility of communicating culture or place through type.

Rhett Dashwood created his *Google map type* by spending seven months trawling Google maps for architecture and landforms that resembled

letterforms (Dashwood, 2009). In contrast to Dashwood’s use of positive forms found in existing digital maps, Lisa Reinermann searched for her letterforms in the negative space found between buildings. She noticed the letter Q first, spotting it when she looked up in a small courtyard in Barcelona. She spent weeks looking for the rest of the letterforms and sourced enough for a full *Type in the sky* font in 2005 (Abbink & Anderson, 2010, p. 182).

Both of these examples are a very basic form of interpretation. Simply shifting the context of found forms into an alphabet is enough to make the architecture function as type. Both are visually engaging; there is something enjoyable about familiar forms being revealed in an unexpected environment. However, the interpretive design strategy of creating type by photographing found forms is a common and quite simplistic approach. I am hoping to develop strategies that are more considered and allow for more creative interaction by the designer.

Both *Cityscape* designed by Shinya Iwaki in 2010 and Paul Elliman’s *Bit Alfabet*, started in 1999, also

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<http://cdn.trendhunterstatic.com/thumbs/google-maps-typography-rhett-dashwood.jpeg>*

Figure 1.10. Dashwood, R. (2008-9). *Google map type*.

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<http://www.betweentheneonandthesea.com/wp-content/uploads/2010/07/alphabet-building-lisa-reinermann-typography.jpg>*

Figure 1.11. Reinermann, L. (2005). *Type in the sky*.

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cityscape_01.gif](http://shinyaiwaki.com/wp-content/uploads/2010/10/cityscape_01.gif)

Figure 1.12. Iwaki, S. (2010). *Cityscape*.

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[http://2.bp.blogspot.com/-HG0tpLo7dbU/TVlRLfhAkEI/
AAAAAAAAAw/pE-naBoH1gg/s1600/Paul+Elliman-Bits.bmp](http://2.bp.blogspot.com/-HG0tpLo7dbU/TVlRLfhAkEI/AAAAAAAAAw/pE-naBoH1gg/s1600/Paul+Elliman-Bits.bmp)

Figure 1.13. Elliman, P. (circa 2009) *Bit alphabet*.

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Figure 1.14. Churchward, J. (n.d.). *Churchward Roundsquare*.

use the interpretive strategy of identifying letterforms in found objects.

Iwaki focuses on well-known architectural features while Elliman, in contrast, collects “small letter-shaped pieces of industrial debris: hundreds of found “typographical” characters, whose random size and odd forms can never quite be standardized” (2008, para. 1). They have both used a process of simplification for their forms, through drawing them as silhouettes, rather than using photography. The addition of a variable element to Elliman’s typeface also extends the interpretive strategy of using found forms. I think it makes it more engaging than a standard single weight display font, as it shows the viewer a range of options and allows them to interact with the type by making choices around which forms they prefer. This approach relates to my *Build strategy*, discussed on pages 65-68.

Joseph Churchward takes a slightly more abstract approach to his *Churchward Roundsquare* typeface. It’s a geometric alphabet made by intersecting circles and squares. Rebecca Roke suggests that it can, “almost be read as an alphabetic interpretation

of Roger Walker’s Park Mews housing project (1975)” (Roke, 2009, p. 43). The buildings were a local architectural icon and “Churchward’s eye for distinctive form could hardly have missed ... its flamboyant amalgamation of cubes, Lego-like pitched roofs and port-hole windows” (Roke, 2009, p. 43). Although the reduction of forms is still fairly direct, this typeface achieves more of the balance I am looking for in my type outcomes. There is a sense of recognition between the source architecture and the typeface but the reference is subtler. The process of selecting forms and transferring them as abstract shapes within a letterform also relates to the transfer metaphor that forms the basis of my *Neighbourhood strategy*, as discussed on pages 61-64.

Eggers and Diaper designed *News Chaotic* for Buschow Henley architects. “The primary theme was architecture as abstraction; the secondary theme, the company’s constant problems with getting paid” (Rivers, 2005, p. 45). While the designers set out to create a typeface that would become increasingly abstracted, Diaper realised “it also had the potential to communicate the exasperation we feel when clients don’t pay, or ignore invoice reminders” (Rivers, 2005, p. 45). So instead of a typeface that has the traditional variety of weights, *News Chaotic* “comes in degrees of irritation ... ranging from Calm to Hostile, Agitated, Outraged and Schizoid” (Rivers, 2005, p. 45). This project indicates that the process of abstraction may have unexpected communicative potential.

Another approach to interpretative type starts to look at process. Hjärta Smärta designed the *Scandinavian sparks* exhibition pack with an idea based on the cut paper stars made by children.

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News-Chaotic-family-.jpg](http://www.eggert-diaper.com/img/myupload/News-Chaotic-family-.jpg)

Figure 1.15. Diaper, M. (n.d.). *News Chaotic*.

An actual cut out was used on the cover of the publication and a display typeface designed for use on the inside. The letterforms were created by “combining the ‘confetti’ left from cutting out these shapes” (Rivers, 2005, p. 45). This interpretive strategy uses the remnants of a process as elements to construct the letterforms. In my exploration the negative forms cut out from veranda scrollwork act as elements to use within letterforms, see Figure 3.19.

Toyota commissioned two typographers from plmd studio, and a racecar driver, Stef van Campenhoudt,

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sparks-1.jpg](http://www.hjartasmarta.se/data/scandinaviansparks/images/sparks-1.jpg)

Figure 1.16. Hjärta Smärta studio. (2004). *Scandinavian sparks* exhibition pack, cover showing diecuts.

to create a typeface based on the movement of their new IQ car. The letterforms were created by tracking the car as it drove, using custom software developed by interactive artist Zachary Lieberman (Galle, 2009). The *IQ font* they created maintains that sense of movement, as it traces the action of the car. This interpretive strategy relates to the movement of people through each of the houses I’m referring to as source material. I have not used digital technology to trace them but have looked at the circulation flow created by wall placement within the house. This is one of the analysis points I have adapted from *Architecture: form, space and order* (Ching, 1975/2007), as shown in Figure 3.22.

Another piece of interpretive type that focuses on an action is *Matryoshka*, designed by Peter Brugger. It was inspired by the traditional Russian wooden doll that has several layers of dolls, each hidden inside the next. “The design is based on an elaborate and complex grid, so each font fits perfectly into the other. With the *Matryoshka* family the typographer can create millions of new solutions” (Brugger, n.d.). This strategy of looking at how someone interacts

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sparks-2.jpg](http://www.hjartasmarta.se/data/scandinaviansparks/images/sparks-2.jpg)

Figure 1.17. Hjärta Smärta studio. (2004). *Scandinavian sparks* exhibition pack, spreads showing bespoke display type.

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Figure 1.18. plmd studio. (2009). *iQ font*, screen grab from the making-of video.

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hello_01.jpg](http://www.happiness-brussels.com/page_Toyota.be/images/hello_01.jpg)

Figure 1.19. plmd studio. (2009). *iQ font*, sample.

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681459/168be71728ca667f4e33bc426ef80b00.jpg](http://behance.vo.llnwd.net/profiles2/191050/projects/681459/168be71728ca667f4e33bc426ef80b00.jpg)

Figure 1.20. Brugger, P. (2009-10). *Matryoshka*, specimen sheet.

with an object and then recreating that experience in type links to the assimilation metaphor of translation. This also relates to my *Build strategy*, which developed from a similar focus on interaction, as discussed in pages 65-68.

Mary Huang's *Typeface* project relates to the 'the machine that makes the type' style projects reviewed on page 14. She has created software to translate facial proportions into type design. "In *Typeface*, letters are constructed from mathematically generated curves controlled by distinct variables that determine such parameters as x-height, slant, bowl curvature and pen stroke" (Huang, n.d.). I have already clarified that my research does not intend to create digital tools for generating typefaces. However, the way this project transfers the proportions of one form into the formal elements of type does link to the analysis involved in my *Neighbourhood strategy*. I have developed an interpretive design strategy that translates formal elements of architecture into the type parameters such as x-height, etc.

Interpretive type also sometimes draws on forms that have strong cultural significance. This can be done with the intention of associating a commercial client with a particular culture, or as a way to communicate something of a local or national identity.

Home, designed by Graeme Offord in 2009, was designed "to tell a nostalgic story of New Zealand through commercial typography and historic brand identities" (*Alphabets: A miscellany of letters*, 2010, p. 39). The combination of fragmented letterforms, korus and historical New Zealand brand logos is very literal in its references. It is this kind of surface interpretation of cultural forms that I am trying to

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Figures 1.21-23. Huang, M. (2010). *Typeface*, sample outcomes.

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Figure 1.24. Offord, G. (n.d.). *Home*.

avoid in my designs. I also think that the cultural elements are poorly integrated into the letterforms. While they are intended as ornamental characters, referring to the tradition of illuminated letters, I do not find the broken letterforms harmonious in relation to the detailed logos and dominating korus. There are opportunities for interpretive type to be more formally developed than this example.

A more refined example of interpretive type dealing with cultural signifiers is the *Black Grace* identity typeface designed by Shabnam Shiwan.

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Figure 1.25. Shiwan, S. (2006). *Black Grace*, in use in a poster.

Black Grace is a Pacific contemporary dance company and this display face reflects the art of Pacific tattoo. “The elaborate geometrical designs, representing both the male and female tattoo patterns are combined with typographic forms based on the geometric faces of the 20th century” (Valentine, 2009, p. 61). In this way the typeface represents the Pacific culture but also acknowledges the contemporary nature of the dance group. The formal qualities of the design are also thoroughly considered in relation to its use in promotional design. The type

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Figure 1.26. Yanone. (2009). *Amman*, in use on a promotional poster.

is placed over photographic images of the dancers, where it “reveals what is underneath. It is not just read – it is also looked through. Like the tattoo the typeface is just as much about making a mark as it is about the skin” (Valentine, 2009, p. 61). The negative spaces in the typeface are therefore activated in a considered way.

Interpretive type can also refer to a particular place. This can be done as part of a city branding project, as when Ahmad Humeid, Yanone and Hussein Alazaat collaborated to create the *Amman*

typeface for the capital city of Jordan. It was initially inspired by “the squarish, cubic architecture of Amman architecture and its hilly skyline” (Humeid, 2011, para. 20). In this case the reference to the original forms is very subtle in the final letterforms. They do have “an interesting angular quality to them” and “a certain quirkiness” which Humeid feels is “appropriate for a city that is best described as an informal and non-monumental collage” (Humeid, 2011, para. 20). This integration of visual and cultural reference in a considered rather than direct way represents a refined approach to interpretation.

The concept of a typeface communicating cultural values or reflecting place is a complex one. Designers hold a range of views as shown by the response to Lindsay Willis’ post on the Typophile forum. She asked, “... can the cultural diversity which contributes to New Zealand’s identity be expressed in a display typeface?” (Willis, 2008).

The replies included:

Lindsay, this is a stupid project ... If you get distracted by overt ethnic signifiers, ... you will get embroiled in touchy debates over authenticity and appropriation. That kind of face lacks range and is marginal at best. (Shinn, 2008)

A typeface for a ‘city’ was perhaps a silly endeavour, that it could not encapsulate the values of a place or culture but rather that it would complement it. (Woo, 2008)

I would say a designer can try to create a typeface to represent a city/culture/etc., but that is only intention on the designer’s part. The culture has to adopt the typeface as its own, and then it can

be seen as a reflection, but it doesn’t happen the other way around. (Dotin, 2008)

If a designer has grown up immersed in his or her culture and embodies that culture, he/she can reflect the culture in his/her work. He/she will simultaneously reflect his/her own individuality and be but a sample of one from his society. (Lozos, 2008)

I’m raising this issue as it could be presumed that by interpreting selected New Zealand suburban architecture into type, I am hoping to communicate something of New Zealand’s culture and place. As discussed in my positioning statement, I was inspired to begin this research by a personal experience of place – my surprise at finding, after a long time away, that the suburbs of Auckland felt both familiar and unfamiliar. However, this project investigates interpretation as a creative strategy; it doesn’t aim to communicate the identity of Auckland City. That said, interpretation in this context inherently involves a rendering of one thing into another. I have tried a range of interpretive strategies, each of which explored a different way to translate the source material, architecture, into type design. The two final interpretive type design strategies I have created refer to two different aspects of the source material. The *Neighbourhood strategy* creates sets of three typefaces, which refer to contrasting formal qualities of the houses. The *Build strategy* produces individual typefaces that have variable elements that allow the designer to experience a decision making process similar to that of the house owner or builder. An aspect of the source material is translated into the type through both strategies and would therefore

communicate something of the place and culture the architecture is from.

Karen Cheng (2005) suggests that, “in music, the quality of an individual singer can completely change the experience of a composition. In communication, type is the visual equivalent of an audible voice – a tangible link between writer and reader” (p. 7). Kris Sowersby also talks about his desire to see local content set in local typefaces, saying, “I saw typefaces as an accent. For example, reading a James K. Baxter poem set in Bembo is like listening to an Italian accent—and I thought this was rather inappropriate” (Valentine, 2009, p. 61). In response to this vocal metaphor, I intend my typefaces to have a subtle hint of an accent; I’m not aiming for the Lynn of Tawa style, broad New Zealand drawl, but more of a subtle inflection. I am aiming for an acknowledgement of place, not a direct transfer of culture.

2. METHODOLOGY

This project investigates how interpretation can act as a creative strategy within type design. It does this by exploring of a range of interpretive strategies for translating selected New Zealand (NZ) suburban architecture into type. I worked through four research phases, each of which explored a particular interpretive strategy and produced a range of experimental design processes and prototypefaces. In the final phase, all of my experimental design processes were reframed and reconciled through the adaptation of selected 'metaphors of translation'. I then developed and refined two processes into experimental type design strategies, which I called the *Neighbourhood strategy* and the *Build strategy*. These are presented through publications and prototypeface specimen sheets.

This section includes a chapter outlining the research methodology for this project.

2.1 Introduction

This chapter addresses the theoretical frameworks and research design of this project. Friedman (2002) suggests that methodology enables a consideration of the many aspects of how we engage in research. It provides a meta-narrative that places what has been done in a full research context. Methodology, he suggests, enables an explanation of choices, reasons and results (Friedman, 2002). This chapter presents a consideration of the choices made when selecting particular ways to conduct this research project. The results of the research are presented and discussed in Section 3.

As outlined in the introduction, this research aims to explore how interpretation could be used as a generative strategy for developing new experimental design processes, based on translating architecture into type.

Design can take several roles within research. Frayling (1993) identifies three modes: ‘research into’, where design is the subject of enquiry, ‘research through’, where design is the method of enquiry, and ‘research for’, where extending or assisting design is the focus of enquiry (Frayling, 1993, as cited in

Scrivener, 2010). My research is concerned with the process of developing a process. Therefore, within this project there are two distinct yet interconnected research frameworks. The theme of the project – the development of typefaces – locates the project within the field of graphic design and involves ‘research through design’. However, the main intention of this project is ‘research for design’ that is research into the process of developing a typeface.

This process of developing a process involves two distinct methodological registers. The first register is the methodological or procedural framework through which this project was conducted. This is the focus of this chapter. The second register is related to the outcome of this research: the development and evaluation of design processes for typeface development. Thus a distinction is made here between the research methodology used to conduct this project and the experimental design processes developed through this research.

2.2 Research design

The research design of this project does not follow a single established methodology. The aim and objectives of the project, combined with my basic understanding of the type design process, suggested that a reflective and exploratory methodology could work well. There are several components to consider, Mackenzie and Knipe (2006) say that “The most common definitions suggest that methodology is the overall approach to research linked to the paradigm or theoretical framework while the method refers to systematic modes, procedures or tools used for collection and analysis of data” (p. 198). The following diagram provides an overview of the research process for this project, including an outline of the methodology and methods.

Just as the literature review for this project has drawn from a number of areas, the methodological approach required the examination and adaptation of research frameworks and methods drawn from across different fields, including design, philosophy and linguistics. I will now discuss the considerations and choices made in developing the research design.

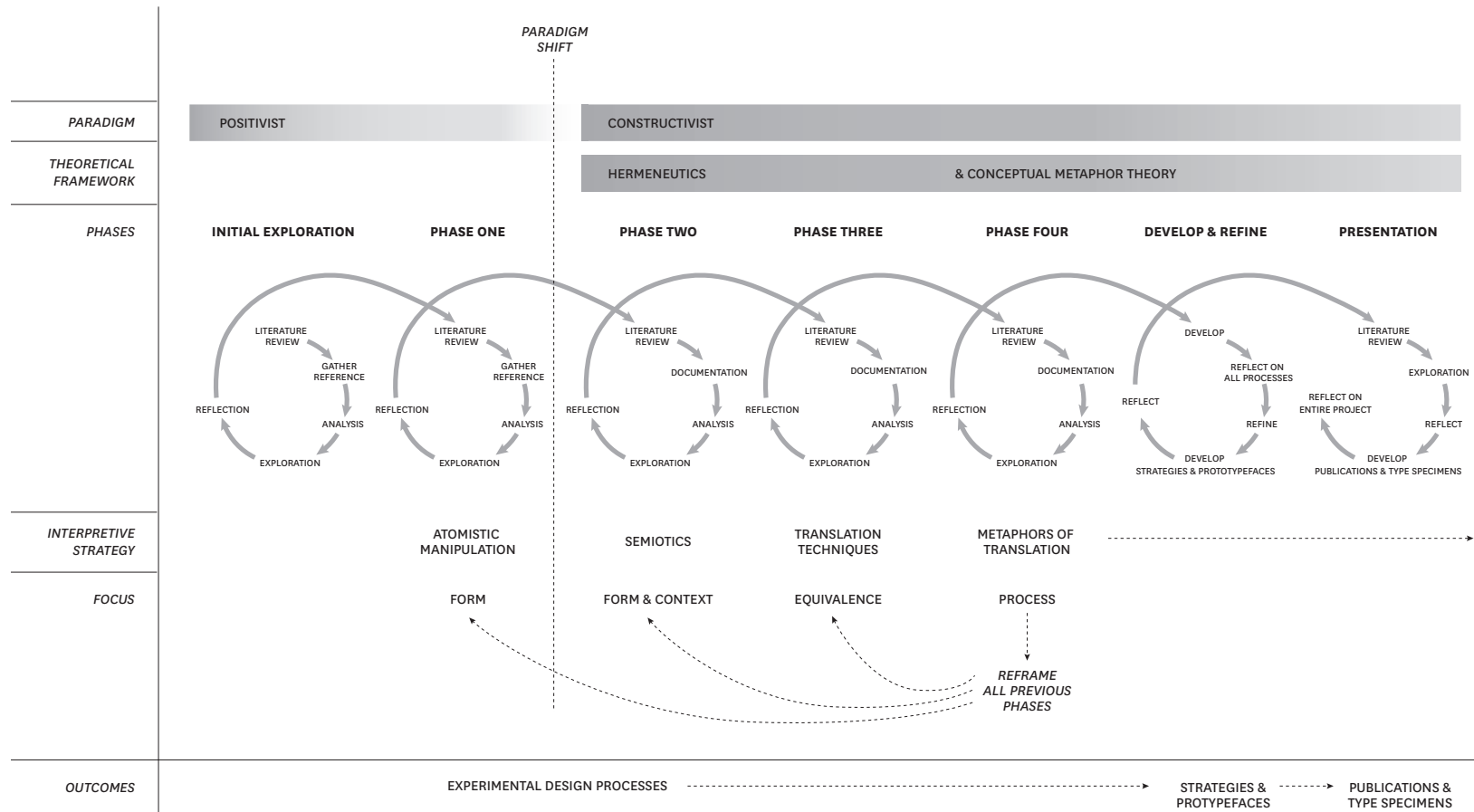


Figure 2.1. Diagram of all project phases, including paradigms, theoretical frameworks and outcomes.

One of the key developments in my research design happened after the initial exploration and first phase of research. It involved a complete paradigm shift and revision of my understanding of research within design. A paradigm is an overarching philosophical framework that “influences the way knowledge is studied and interpreted. It is the choice of paradigm that sets down the intent, motivation and expectations for the research” (Mackenzie & Knipe, 2006, p. 193). It provides a guiding philosophy for choices within research design.

I began my research without a clearly considered methodology. It had been several years since the completion of my Honours degree. During that course of study I had used a fairly simple methodology based on heuristics and reflection-in-action. My personal expectations of Masters level study and the words ‘research methodology’ brought to mind the iconic image of scientific research and its associated objectivity. Early feedback from a supervisor who said that I had to be able to justify every decision I made during my type design process reinforced this unconscious association of research with a science-

based, positivist paradigm (I realised later that this association was not his intention!).

From this position, I viewed design as a problem-solving exercise. Lakoff and Johnson (1980) suggest that, “At present most of us deal with problems according to what we might call the PUZZLE metaphor, in which problems are puzzles for which, typically, there is a correct solution—and, once solved, they are solved forever” (p. 144). My choice of a positivist paradigm, and viewing design as a problem to be solved meant that my first phase of research was limited to the manipulation of universal formal elements, with the intention of identifying one correct method for interpreting architecture into type. Dissatisfied with the depth and outcomes of this approach, as discussed on page 47, I stepped back and reviewed my overall assumptions about research.

There was a slippage between the interpretive process I was exploring and the positivist position I had assumed. Looking further into research frameworks, I read Snodgrass and Coyne’s (1997) suggestion that “Design does not fall within the domain of natural science with a base in formal logic,

but belongs rather to the domain of the human and hermeneutical sciences with a base in the processes of understanding and interpretation” (p. 1). This differentiation challenged my presumptions about design research and encouraged me to further investigate hermeneutics. Gray and Malin (2004) clarified the differences between the two paradigms:

The positivist paradigm of inquiry is characterized by a ‘realist’ ontology (reality exists ‘out there’), and an objectivist epistemology (the researcher is detached); methodology is therefore experimental and manipulative. In contrast, the constructivist paradigm is characterized by a ‘relativist’ ontology (multiple realities exist as personal and social constructions) and the epistemology is subjectivist (the researcher is involved); as a consequence, methodologies are hermeneutic (interpretive) and dialectic (discursive). (p. 19)

Making a shift towards a hermeneutic framework, within its associated constructivist paradigm, opened up my research and allowed me to develop an appropriate and coherent research design.

I also revised my project aims in response to this shift. Rather than develop a single process based on the manipulation of elemental forms, I opened up the research inquiry to explore a range of interpretive strategies for translating architecture into type. The research outcomes would not be a singular process with a resolved typeface, but became a mapping of possible processes with a range of 'prototypefaces' and publications to communicate the creative potential of these design processes. This shift is supported by Snodgrass and Coyne's (1997) suggestion that:

Whereas the use of logical methods is intended to arrive at a 'solution' of a design 'problem,' a design process that proceeds by way of question and answer can have no final end. The answers given to a question open up further questions for those who are open and receptive to questioning. (p. 30-31)

This revised aim firmly placed my project into the category of 'researching for design' and made the research more relevant to the field of experimental type design by offering an opportunity to expand existing practice.

This paradigm shift also meant I focused and structured my research methodology and methods to encourage a dialectical process and to provide space for reflection. Snodgrass and Coyne (1997) suggest, "We assess the validity of interpretations by entering in to a 'dialectic of guessing and validation.' The projection must be perceived to be open to error and must be constantly recast, which is to say, reinterpreted" (p. 17-18). I wanted to structure my research methodology and methods to allow for multiple perspectives, shifts in focus and reframing of the research question. A reflective practice-led methodology offers this scope. Schön (1983) notes:

In each instance, the practitioner allows himself to experience surprise, puzzlement or confusion in a situation which he finds uncertain or unique. He reflects on the phenomena before him, and on prior understandings which have been implicit in his behaviour. He carries out an experiment which serves to generate both a new understanding of the phenomena and a change in the situation. (p. 68)

I will further unpack the theoretical framework (hermeneutics) and methodology (reflective practice-led research) in pages 28-31.

As stated earlier in this chapter, my project does not use an established set of methods from a single research methodology. Instead, I have used multiple methods tailored in response to my research aim and theoretical framing. They were utilised to maximise potential insights in to the design situation and to allow for reflection, reframing and further developing my understanding of the research question. Combining methods doesn't mean I've made a Frankenstein out of existing research methodologies. A researcher using a multi-method approach can be described as a 'bricoleur' (Denzin & Lincoln, 1994, as cited in Gray & Malins, 2004). Gray and Malins (2004) support this claim, saying that this approach:

does not mean that the researcher is in anyway an amateur, haphazard or is any less rigorous than a counterpart undertaking quantitative study, but that the researcher '... produces a bricolage, that is, a pieced-together, close-knit set of practices

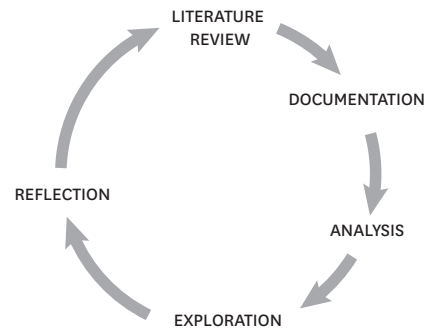


Figure 2.2. Simplified diagram of the research cycle.

that provide solutions to a problem in a concrete solution'. ... The various methods chosen, adapted or invented are related, often forming a developmental set, which is coherent. (p. 74)

The set of methods developed for this project formed a cyclical structure that loops through several phases of development. Each cycle includes all, or most, of the following methods: literature review, documentation, analysis, exploration and reflection. The full range of reflection throughout all of these phases was also supported by the use of a research journal. The basic research cycle structure is shown in Figure 2.2.

Following some initial exploration, I worked through four of these cycles. Each cycle had a different interpretive strategy and focus and therefore represents four distinct phases of my research project. Schön (1983) says that when a designer cannot convert a difficult situation into a manageable problem, "he may construct a new way of setting the problem – a new frame which, in what I shall call a 'frame experiment,' he tries to impose on the situation" (p. 63). Each of my four phases can be

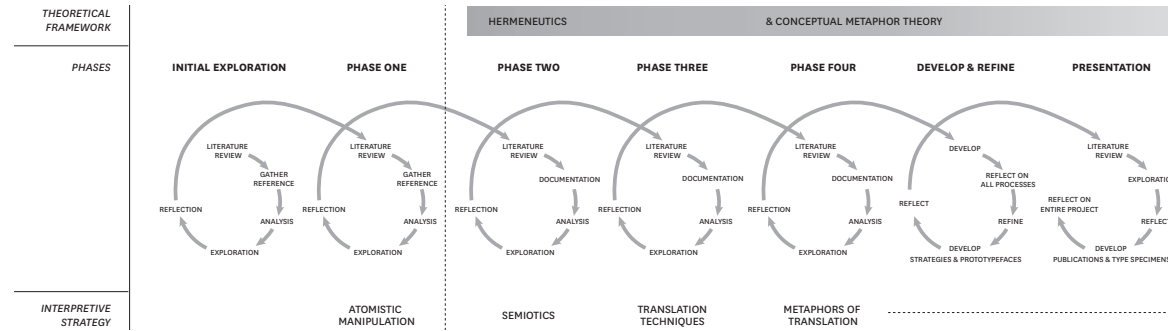


Figure 2.3. Diagram of the research phases.

viewed as one of these "frame-testing" experiments. Figure 2.3 shows a summary of these phases.

All of the phases, after phase one, sit within a hermeneutic framework. During phase four, the research was also reframed in relation to conceptual metaphor theory. The fourth phase of my research explored 'metaphors of translation' as an interpretive strategy for translating architecture into type. This approach was developed from a paper by Celia Martín de León (2010) titled *Metaphorical models of translation*, where she suggests that:

According to the principles of cognitive linguistics, it can be hypothesised that the way in which a person translates might be associated with the way in which that person conceptualises translation. Since metaphor is an important tool for conceptualising complex domains, conceptual metaphor theory offers a coherent theoretical frame for both a systematic study of metaphorical models of translation and research into the relations and potential interaction between those models and translation practice. (p. 75)

This idea that the metaphorical concepts that someone brings to the translation process could affect how they went about doing the translation transformed my understanding of my previous research. It opened up my thinking to include a deeper consideration of the preconceptions that were influencing my choices of interpretive strategies and guiding the actual translation process. This new theoretical framework and interpretive strategy provided me with a way to completely re-frame previous exploration and reconcile the different experimental design processes I had created.

As outlined above, the theoretical elements of my research design developed and evolved as the project progressed. Both of the main theoretical frameworks (hermeneutics and conceptual metaphor theory), along with my selected research methodology and methods will be unpacked further in the following sub-chapters.

2.3 Hermeneutics

Within this project I am referring to contemporary hermeneutic philosophy, which explores the question: how does understanding arise? Snodgrass and Coyne (1997) refer to Martin Heidegger and Hans-Georg Gadamer's writings when they say:

Philosophical hermeneutics answers that when we understand ... it is because of the working of the hermeneutic circle. The hermeneutical circle has to do with the circular relation of the whole and its parts in any event of interpretation. We cannot understand the meaning of a part of a language event until we grasp the meaning of the whole; and we cannot understand the meaning of the whole until we grasp the meaning of the parts. ... The whole and the part give meaning to each other; understanding is circular. (p. 11-12)

Hermeneutics in this sense is not a methodology that can be applied to a research project, but a theoretical framework that provides support to research process. It is particularly relevant to this project in two ways: interpretation (in relation to my interpretation of architecture into type) and design as a hermeneutical process (in relation to practice-led research).

Heidegger (1927) suggests that, "An interpretation is never a presuppositionless apprehending of something presented to us" (Heidegger, 1927 as cited in Snodgrass & Coyne, 1997). This implies that an interpretive design process would also be grounded in prior experience and understanding, so any interpretation would incorporate a complex web

of expectations, perspectives and prejudices of the participant, who is not expected to stand objectively outside of the subject, but is integrally involved in the interpretation. Snodgrass and Coyne (1997) suggest that interpretation is, "the working out of possibilities projected in understanding, that is, it is the working out of how something figures in the context in which it stands" (p. 11). The cyclical process of projection and response, with the participant placed inside the hermeneutic circle, provides a framework for my practice, where I am actively exploring how to interpret architecture into type design.

The theory that interpretation occurs through a hermeneutic circle can also relate to the design process itself. Bernstein (1983) describes the hermeneutic circle as a "continuous dialectical tacking between local detail and global structures... a sort of intellectual perpetual motion" (Bernstein, 1983, as cited in Snodgrass & Coyne, 1997). This description was familiar to me as a design practitioner and seems to reflect the nature of the design process. Snodgrass and Coyne (1997) expand on this connection by saying:

The hermeneutic act of designing follows a dialectical structure of question and answer. The designer projects an anticipated completion of the work, and then enters into a dialogue with it, questioning its validity in the light of the particular factors that make up the design situation. The designer then allows the design situation to ask questions in its turn. The answers given by the situation and the questions it raises evoke further answers and questions, and the design proceeds by a back-and-forth, to-and-fro movement of query and response. (p. 24)

This idea of design as a dialogue, working through cycles of question and answer, with the intention of expanding one's understanding, and therefore possible interpretation of a situation, guided the design of my practice-led methodology. It led me develop a structure that allowed me to work through several phases or cycles, each of which explored a new perspective on the design situation. These phases had a dialogical structure and included a mix of methods that encouraged the anticipation and revision of understanding throughout the process.

2.4 Conceptual metaphor theory

While hermeneutics provides the theoretical framework for the research project as a whole, conceptual metaphor theory provides the theoretical framework for reconciling and developing all of my experimental design processes. As discussed on page 27, exploring the ‘metaphors of translation’ as an interpretive strategy in my fourth phase of research provided a new way to perceive and engage with my previous exploration. I will outline two key ideas of conceptual metaphor theory and how they relate to my project here. I will discuss the specifics of the ‘metaphors of translation’ in Section 3 Project phases.

Metaphor is for most people a device of poetic imagination and the rhetorical flourish – a matter of extraordinary rather than ordinary language. Moreover, metaphor is typically viewed as characteristic of language alone, a matter of words rather than thought or action. ... We have found, on the contrary, that metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature. (Lakoff & Johnson, 1980, p. 3)

While conceptual metaphor theory is a linguistics-based theory, it has relevance across a wide range of fields. Metaphors are essentially a way to understand one kind of thing, in terms of another. When a concept is complex and has many variable factors and outcomes, like translation does, metaphors can provide a way of understanding the situation.

Metaphors can aid understanding by structuring the more complex field in terms of a simpler, often physical or spatial, experience. In this case it can involve structuring translation as a process of transferring objects, following in someone’s footsteps or aiming for a target (Martín de León, 2010). Martín de León (2010) suggests that “Metaphor plays a key role in the way we structure our abstract thinking and, hence, in the way we reason and act in the world” (p. 76). This implies that the metaphors we use to understand a situation affect how we respond. Therefore, metaphors are more than a linguistic form, they are a means of structuring our conceptual systems, which “affect how we perceive the world and act upon those perceptions” (Lakoff & Johnson, 1980, p. 146).

In this project I am not using metaphors as a way to understand architecture in terms of type, or type in terms of architecture. Conceptual metaphor theory is relevant to this research in relation to the process of translation. Martín de León’s (2010) hypothesis is that the metaphors we use to understand translation affect how we go about doing that translation.

For example, if we apply a ‘transfer’ metaphor to translation, we will approach the process with the idea that meaning is an object that can be moved from one container (the source language or field) to another container (the target language or field). Therefore, in this project, this metaphorical understanding of translation would affect how I translate architecture (source) into type (target).

On reflection, I found that several of the metaphors outlined by Martín de León (2010) had links with my previous interpretive strategies. For example, the ‘transfer’ metaphor outlined above, stems from a positivist understanding of language and reflects the approach I took to developing a design process during the first phase of my research. While I had consciously been exploring different interpretive strategies, I had also been unconsciously applying certain metaphors to my translation process within each exploration. Reading about the metaphors of translation revealed these underlying conceptual systems and allowed me to completely re-evaluate my understanding of translation and reconcile several different experimental design processes within one framework.

2.5 Hermeneutics and conceptual metaphor theory in a practice-led research project

At a deeper philosophical level hermeneutics and conceptual metaphor theory may not completely mesh. Both are concerned with understanding, and both suggest different frameworks for approaching interpretation. The hermeneutic circle of unfolding understanding does not rely on a generalised conceptual structure, as suggested by Lakoff and Johnson's (1980) explanation of conceptual metaphor theory. However, within this project I have chosen to use elements of conceptual metaphor theory to understand how I have approached the translation process and develop my experimental design processes, while hermeneutics is the overarching framework for the entire investigation.

I suggest that there is room within hermeneutics to work with conceptual metaphor theory. As discussed in 2.1.3 Hermeneutics, Snodgrass and Coyne (1997) present Heidegger's concept that, "interpretation is grounded in something we have in advance, a preunderstanding. We have a fore-conception. Meaning gets its structure from these preunderstandings, which render the thing intelligible" (Heidegger, 1927, as cited in Snodgrass & Coyne, 1997).

Potentially one aspect of our "fore-conception" could be conceptual structures based on metaphor. Lakoff and Johnson (1980) acknowledge that, "the meaning a metaphor will have for me will be partly culturally determined and partly tied to my past experiences" (p. 142). Therefore, the metaphors themselves fall into a larger context and could be one of the many 'preunderstandings' that structure meaning.

The questioning of these 'preunderstandings' and their role in design is a key part of understanding design as a hermeneutic process. Snodgrass and Coyne (1997) say that:

If the design process is a dialogical cycle of question and answer, who or what does the design situation question? It questions all the prejudgments, preunderstandings, values and attitudes which the designer brings to the design situation, preconceptions which are taken for granted since they are for the greater part unconscious. (p. 24)

The main role conceptual metaphor theory has played in my research was to provide a framework

for questioning my unconscious presumptions about the translation process. The process of re-evaluating and reconciling all my previous practice through this framework also clearly links with Schön's (1980) outline of what is involved in being a reflective practitioner. "When a practitioner reflects in and on his practice ... He may reflect on the tacit norms and appreciations which underlie a judgement, or on the strategies and theories implicit in a pattern of behaviour" (p. 62). This indicates a link between these two theoretical frameworks and my practice-led research project.

2.6 Practice-led research

As discussed in the introduction to this section, the overall theme of my project is the type design process. This is “research for design”, as I am aiming to enlarge the field of experimental type design. I have also done this by “research through design” (Frayling, 1993, as cited in Scrivener, 2010). Snodgrass and Coyne (1997) provide some validation for these choices, saying, “In the hermeneutical event theory cannot be divorced from practice. The theory, such as it is, only comes into consciousness, is only clarified, disclosed, in the process of its application. Theory and practice coalesce in the act of interpretation ...” (p. 28-29). Due to the prominent role practice plays in my research, I have identified this project as a practice-led research project. Gray (1998) talks about “practice-led” research as:

Research which is initiated in practice, where questions, problems, challenges are identified and formed by the needs of practice and practitioners; and secondly, that the research strategy is carried out through practice, predominantly through methodologies and specific methods familiar to us as practitioners in the visual arts. (Gray, 1998, as cited in Scrivener, 2010)

Including practice within research can “be seen to serve two purposes: firstly to facilitate the inclusion of existing personal/tacit knowledge in research; and secondly, to facilitate the creation and communication of new knowledge” (Neidderer, 2007, pp. 9). As discussed on page 28, hermeneutics places the designer within the hermeneutic circle

of interpretation, engaged in a dialogue with the design situation. This accepts the role an individual’s previous experience and tacit knowledge plays in a research situation, allowing “research through design” to be a valid choice.

The second purpose of including practice within research reflects the need to generate and communicate some form of original or new knowledge. Neidderer (2007) says “The creative use of research for developing a new reality is quite unlike the understanding of traditional (scientific) research in that it investigates what could be rather than what is” (pp. 8). Exploring “what could be” through practice gives a researcher/designer an opportunity to expand contemporary design practice and create new knowledge of the design process, as well as produce new design artefacts. In this project, practice-led research offers a pathway to fulfil the aim of developing new experimental design processes for creating interpretive type.

One key element of practice-led research is the act of reflection. In his book, *The Reflective Practitioner*, Schön (1983) discusses two kinds of reflection within

professional practice: reflection-in-action and reflection on action. Gray and Malins (2004), say reflection-in-action “involves thinking about what we are doing and reshaping it while we are doing it” (p. 22), and Schön (1983) describes it as “central to the art through which practitioners sometimes cope with the troublesome “divergent” situations of practice” (p. 62). This dynamic process of evaluating and responding while in action is a key element of the design process and has been a continual feature of my practice for this project. While reflection-in-action largely occurs in the moment, reflection on action is a retrospective review, evaluation and analysis of practice (Gray and Malins, 2004, p. 22). Reflection on action is a critical research skill and was clearly structured into my cycle of research methods.

2.7 Research methods

Following the paradigm shift during the first phase of my research, I developed a set of methods to structure and focus my research. I decided to explore a range of interpretive strategies for translating architecture into type. Therefore, I required a set of methods that allowed me to work through several phases of frame-testing experiments:

In order to see what can be made to follow from his reframing of the situation, each practitioner tries to adapt the situation to the frame. This he does through a web of moves, discovered consequences, implications, appreciations, and further moves ... These are local experiments nested within larger ones. (Schön, 1983, p. 131)

As discussed on page 35, I put together a mix, or bricolage of methods, which encourage a hermeneutical dialectic and reflective practice. I will now discuss each of the processes used in this project: literature review, documentation, analysis, exploration, reflection and research journal. I will define each method, provide examples of use and discuss its intended purpose within the research project.

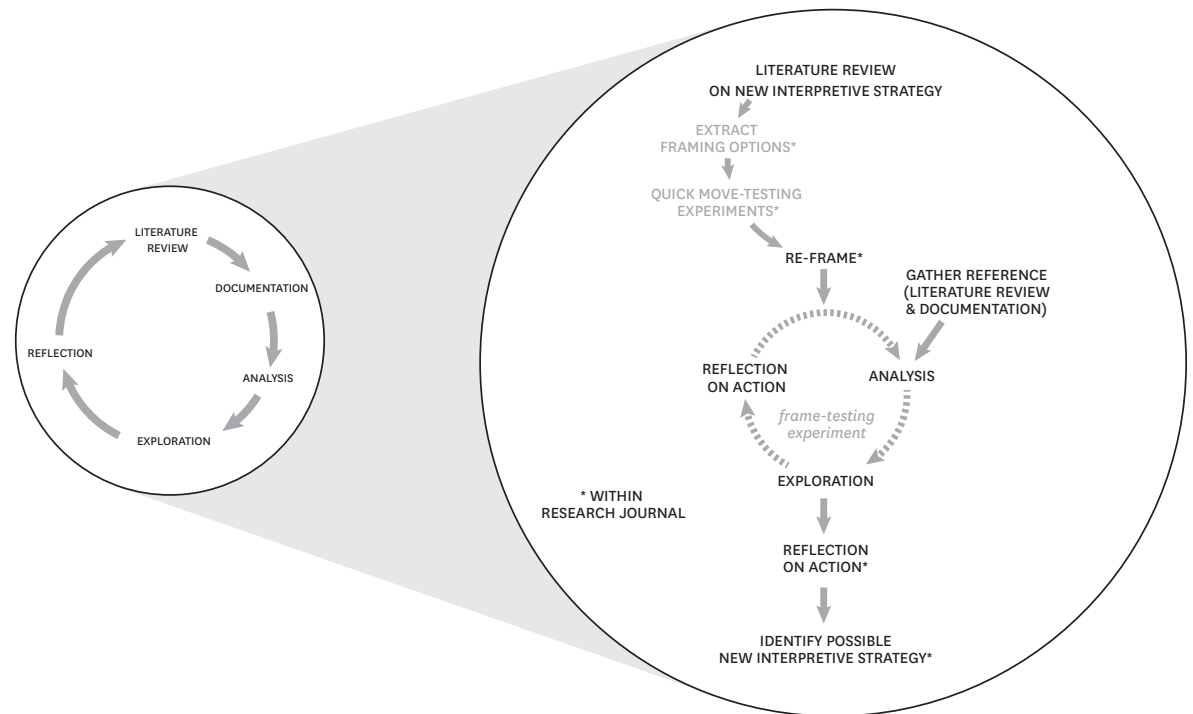


Figure 2.4. Expanded view of the cycle of research methods.



Figure 2.5. A selection of books from my literature review.

2.7.1 LITERATURE REVIEW

A traditional literature review occurs at the beginning of a research project and is aimed at increasing the researcher's understanding of the field and identifying gaps in the existing knowledge that indicate areas for research. I did engage in such a review, but I also worked through several phases of literature review at key points throughout my research project.

Since one's own empirical ability to encounter multiple points of view is limited, part of the material from which to build such understanding will be derived from reading, and from a 'process of imaginatively thinking from standpoints not one's own; thus forming what Kant called an 'enlarged mentality' ... whose 'condition of possibility is not the faculty of understanding, but imagination'. (Engels-Schwarzpaul, 2008, p. 5)

I consciously chose to use reading from a range of fields as a source for inspiring ideas.

Each review was intended to provide insight into a particular area of my research. In some cases, like the type design formal elements, it was related to the visual outcomes I was creating. In others, such

as reading about the specific houses, it was about understanding the source material for my interpretive process. The literature reviews at the start of each phase of research were intended to provide a new perspective on the interpretive process and help generate new design processes.

These reviews included a range of data sources and forms. While there was a large amount of text-based information, I also found and reviewed existing photos, film, drawings and plans. The reference material was collected from a wide range of sources, including websites, databases, libraries and personal purchases.

These reviews varied in size and depth, depending on the requirements of each stage of research. Some consisted of two or three key texts, while others involved over 25 sources. The specifics of each review are discussed in Section 3 Project phases.

2.7.2 DOCUMENTATION

In this project, documentation acts as part of my research method. It was a process of gathering a wide range of visual reference to use as source material for interpretation. There was a good range of secondary data available on the selected houses, through existing photos and plans in published books, which was collected as part of my literature reviews. However, I also required primary data in the form of my own photos, rubbings and sketches. These were needed to provide a good variety of visual reference to draw on when engaged in the type design process.

The documentation took place over several photographic expeditions to key areas of Auckland where a large number of villas, bungalows and state houses still exist. Initially, it was done informally and treated as an attempt to get some kind of overview of all the formal elements of each kind of house. Later documentation had a more defined focus, as I was usually attempting to gather a particular range of information I needed for the next round of interpretive exploration. All images were stored in dated folders and a highlighting system used to identify key examples for reference.

2.7.3 ANALYSIS

There were several points of analysis during each phase of research but the key analytical moment is tied into the frame-testing experiment's cycle of analysis, exploration and reflection on action. The reference material was collected through literature review or documentation and included a wide range of sources and formats. This particular analysis was focused solely on the architecture and played a key role in developing the design processes. Since each research phase explored a different interpretive strategy, I used different analysis techniques for each phase.

Miles and Huberman (1994) define “three concurrent flows of activity” in analysis – data reduction (sort, select, focus, order, simplify data), data display (present data in an organised, compressed way to gain an overview and show links/relationships) and drawing conclusions (interrogating the displayed data for themes, patterns, frequency and relationships) (Miles & Huberman, 1994, as cited in Gray & Malins, 2004). I drew on all three kinds of analytical activities in my research, selecting whichever was most appropriate for the interpretive

strategy I was exploring in each phase. Each activity also suggested different techniques.

The analysis techniques used in my project included visual typology, comparison, matrices and networks. As an example, when I was working through phase one, developing a single design process focussed on the manipulation of formal elements, I used a small-scale typology set as the start of analysis of angle, shape and negative space, analysis points I developed from Ching's (1975/2007) book titled *Architecture: Form, space and order*. The results are shown in Figure 3.19.

As a contrasting example, when I was working through phase two which focused on exploring context as well as form, I developed a series of network diagrams to map out a range of topics that I then used to sort the textual reference I had found. This is shown in Figure 3.33. Once I had sorted the information into these different areas I pulled out key words and ideas and developed themes to work with in my design process.

In this way the analytical techniques I chose for each phase drove the visual exploration. The analysis techniques also became embedded in the design processes I developed as research outcomes for this project. The analysis applied in each phase is discussed in more depth in Section 3 Project phases.

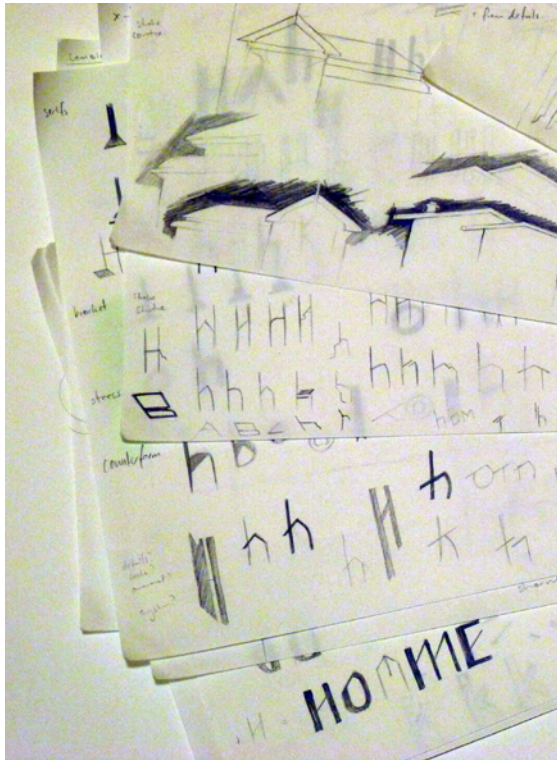


Figure 2.6. A selection of sketches from my exploration.

2.7.4 EXPLORATION

There are two levels of exploration within my research process, all of which draw on Schön's (1983) definitions of experimentation within a reflective practice. Within each phase there are 'move-testing experiments' and 'frame-testing experiments'. Move-testing experiments were done quickly, in response to ideas that arose when engaged in the literature review for each new interpretive strategy. They usually consisted of a series of quick sketches in my research journal, next to the written notes from the literature review. They helped define the new interpretive strategy and establish a clear framework for starting more focused visual exploration.

This allowed me to move on to the frame-testing experiment where "The practitioner then takes the reframed problem and conducts an experiment to discover what the consequences and implications can be made to follow from it" (Schön, 1983, p. 131). The frame-testing experiments formed the core of each research phase and usually consisted of several cycles of analysis, visual exploration and reflection on action. They were intended to fully explore the creative potential of the new interpretive strategy.

I separated these larger frame-testing experiments from my research journal partly to distinguish them from the quicker move-testing experiments. I also wanted to free up my visual creativity, as well as focus my thinking and reflection. My exploration consisted of a lot of pencil sketching, of both architecture and type forms, and took place on A3 Zeta paper. Working on large individual sheets for visual exploration provided freedom in scale and allowed me to use

tracing to develop letterform options. Creating designs across multiple pages, that were all viewable at once, also offered opportunities for reflection-in-action as I created a range of different design options.

I chose to work through the early, generative explorations through sketching. Cross (2006) describes sketching as a key tool for design thinking, "It seems to support and facilitate the uncertain, ambiguous and exploratory nature of conceptual design activity. Sketching is tied in very closely with features of design cognition such as the generation and exploration of tentative solution concepts" (p. 92). Once I had reflected on the initial hand-drawn outcomes I would then move on to digital exploration in Illustrator. These were still experimental in nature but much more focused on the development of the ideas already generated by hand, rather than generating completely new processes or concepts.

2.7.5 REFLECTION

As discussed in 2.1.5, reflection, both in-and on action, are key components of practice-led research. Reflection on action was built into the frame-testing experiment structure to provide a chance to reflect on each set of visual exploration. Once several rounds of this exploration had been completed I then also reflected on all the type and design processes developed in that phase. While I have highlighted these two key moments within each phase of my research, the reality is that I also engaged in reflection-in-action throughout the process. I captured a lot of reflection on action through the use of a research journal.

Reflection-in-action is inherently hard to capture as it occurs while in the flow of designing. The documentation of my reflection-in-action was fairly informal overall, with most of it occurring while sketching out a range of initial design options during the frame-testing phases. In some cases I wrote notes in a stream of consciousness manner as I worked. I also attempted to codify some responses through a system of simple highlighting, rating and discounting, shown by basic circling, ticks and crosses next to particular design options as I worked. The criteria for these evaluations varied as the focus for each phase changed.

My reflection on action was more in depth and formalised. After each round of analysis and exploration that formed the heart of each 'frame-testing' phase, I would reflect on both the experience and the outcomes. This would include a review of my original intentions and expectations for the

interpretive strategy being explored, and a review of the generative ability of that strategy to produce new design processes. I tried to identify positive elements of the process that could be developed, as well as identify slippages, dead zones and areas of potential that had been missed. I also considered the aesthetic success of the type produced and the relevance of the reference material I had referred to.

The reflection happened through written analysis and critique. I also used concept mapping to clarify the ideas and pathways that had been generated. Concept mapping is "a technique for externalising concepts and propositions" (Novak & Gowan, 1984, as cited in Gray & Malins, 2004) through visual mapping of a range of ideas, including identifying connections and evaluating areas for further research. In some cases I also used an informal semantic differential analysis to map my responses to the type design outcomes. Semantic differential analysis is a technique where a personal opinion is expressed by giving it a rating on a scale between two extremes, for example literal < > abstract or generative < > dead (Gray & Malins, 2004, p. 198). There are examples shown in Figures 3.1-3.13. All of these techniques were employed to enhance the dialectic between my practice and myself.

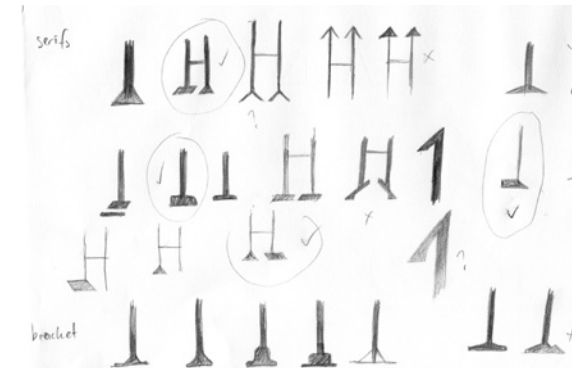


Figure 2.7. A selection of letterform sketches with basic ratings, from my exploration.



Figure 2.8. An example of concept mapping, from my research journal.

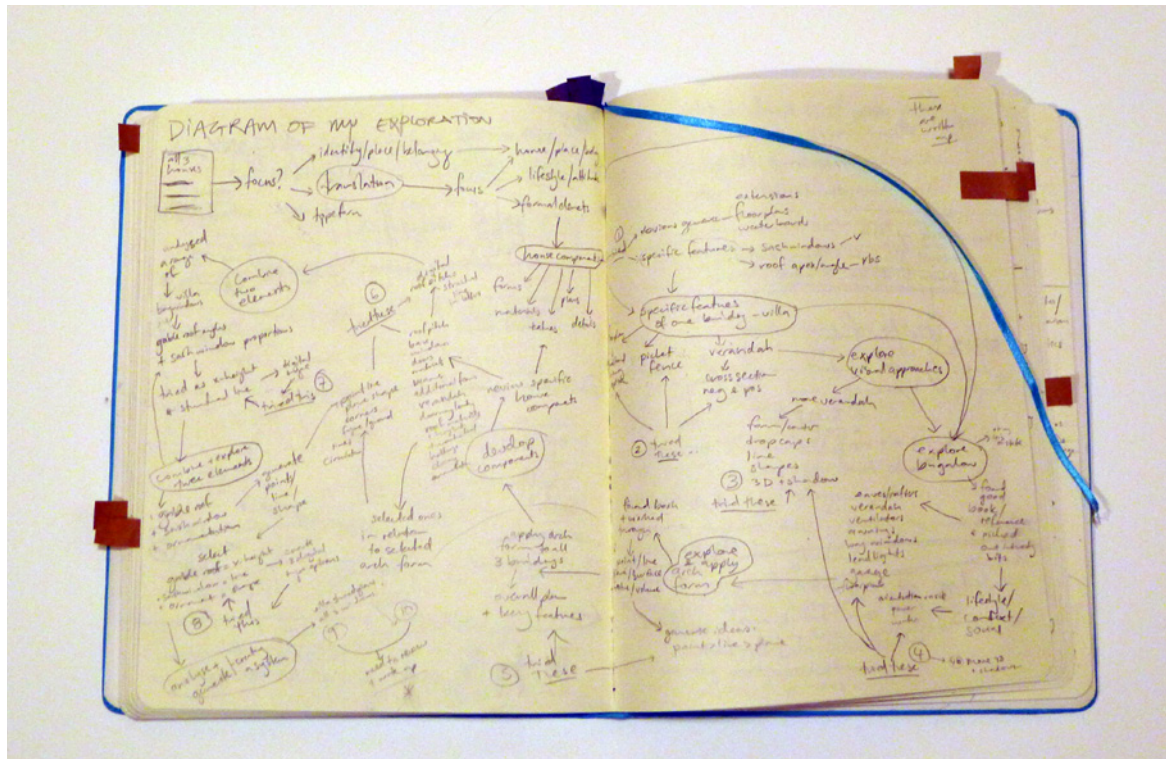


Figure 2.9. An example of an overall diagram of my practice, from my research journal.

2.7.6 RESEARCH JOURNAL

I have used a journal as a research tool throughout the process of this project. Newbury (2001) suggests:

There are considerable benefits for the researcher who chooses to keep a research diary. Perhaps, most important of these are the role the diary can play as a coherent central record of project ideas, information and activities, and its use as a stimulus for reflective thinking. (pp. 8)

From the start of my research I made a conscious decision to separate my visual exploration (created on individual pages stored chronologically in working folders) and my development notes and reflection (written in bound research journals). Using a separate research journal provided a clear space to write through my process: reviewing my designs, reflecting on my project development, making links to key readings, and generating questions to motivate further research and design.

My set of four research journals are not a purely linear record of my project. While they were written chronologically, their content moves in and out of the visual and conceptual development process and returns to key issues in a cyclical manner. Newbury (2001) says that a research journal “should capture something of ‘the real inner drama’ of research with its intuitive base, its halting time-line, and its extensive recycling of concepts and perspectives” (Bargar & Duncan, 1982, as cited in Marshall & Rossman, 1995, as cited in Newbury, 2001). I would often return to key issues and repeatedly review certain approaches, thereby making links and moving my research forward.

3. PROJECT PHASES

This section discusses my practice. It presents my initial exploration and four research phases in a chronological order. Each phase will include a break down of how the research methods were applied, a discussion of the intentions of each interpretive strategy and reflection on action. It also includes an overview of the development and presentation of the outcomes of this research project.

3.1 Initial exploration

Once I had decided to research how to translate selected NZ suburban architecture into type design, I began generating letterforms. I did not start with a particular interpretive strategy in mind; I was simply testing the waters with a few exploratory experiments. This was not a fully structured phase of research, but it did help me define some limitations for my project and identify the key issues for further research.

LITERATURE REVIEW

I started the project with a literature review of contemporary type design, focusing on interpretive type design. This review consisted of printing web sources and copying publications and sorting them into loose categories, based on their approach to interpretive type. Informal critique notes were written about key examples. Initially, my focus was on how forms had been transferred from one object into type. As the project went on, I constantly added examples, developed new categories and wrote further critiques.

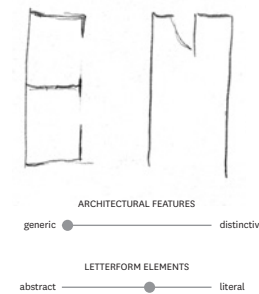


Figure 3.1. Experiments referring to a plan view of buildings.

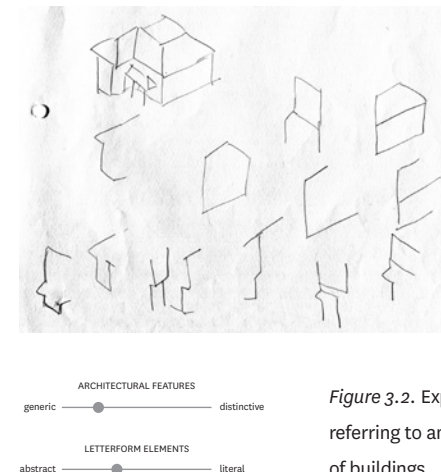


Figure 3.2. Experiments referring to an isotype view of buildings.

EXPLORATORY EXPERIMENTATION

My early exploratory experiments included testing the scale and kind of features I would refer to, considering the range of viewpoints I might refer to (plans, iso-view, etc.) and an exploration of 3D techniques to create letterforms. When I reflected on them I used a semantic scale to mark where I thought they fell on two spectrums (these are shown next to each example).

I found the letterforms created by all these spatial-based approaches to be too abstract and not specific to a particular kind of house. So I moved on to developing letterforms from specific architectural features, starting with small elements found in images I had sourced from publications.

After these experiments I thought I needed to base my choice of architectural features on more knowledge of each kind of house. Therefore, I started another literature review.



Figure 3.3. 3D photographic experiments using light and shadow.

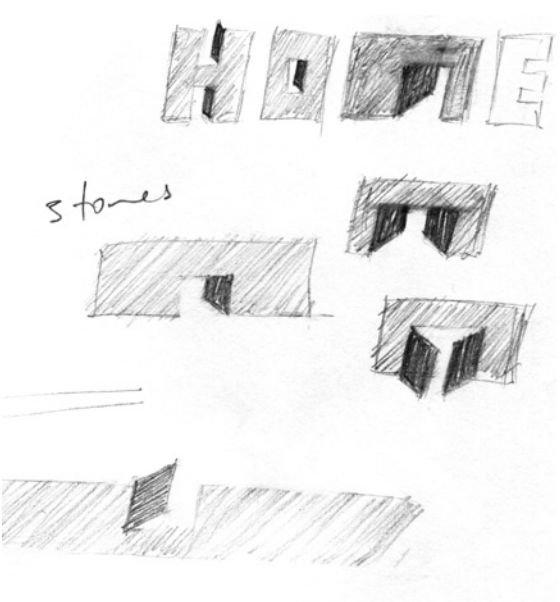


Figure 3.4. Experiments with 3D form, light and shadow.

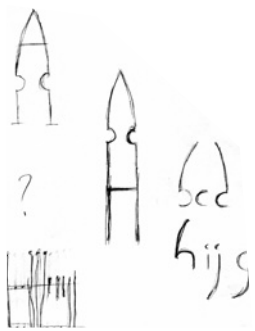


Figure 3.5. Experiments referring to villa picket fences.

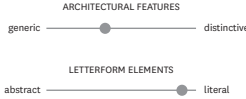
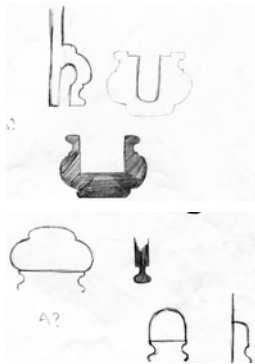


Figure 3.6. Experiments referring to villa veranda bollards.

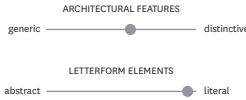


Figure 3.7. Experiments referring to villa hallway ornamentation.

LITERATURE REVIEW

This second review focused on each of the three kinds of houses: the villa, the Californian bungalow and the state house. From my personal experience of growing up in the Auckland suburbs in the 70s and 80s, I already had a basic understanding of the key forms of each building. However, for this project I needed to know more and have a wide range of visual examples to draw on. I also wanted to clarify which versions of these houses I was actually going to refer to as source material. I found several books discussing villas and bungalows in New Zealand, and found mentions or chapters in books that discussed state houses. This review was also extended in later research phases.

EXPLORATORY EXPERIMENTATION CONTINUED

The architectural literature review increased my awareness of the distinctive features of each kind of house, so I moved on to experimenting with designs based on more specific architectural forms. I looked at several distinctive Californian bungalow forms.

These letterforms seemed much more engaging than the first round of more spatial experiments. I continued on to another round of exploration that was more focussed on how I could use the negative and positive space of villa ornamentation within the letters.

I then decided to try exploring something other than form and created a range of experiments based on key advances made by Californian bungalows. For example, they were the first wave of suburban houses to be built with power and drainage provided.

However, these letterforms seemed to return to being too generic and not specific enough to the kind of house. Even though the advances related to the bungalow, the visual elements had too many contemporary associations to be clearly linked to the Californian bungalow. At this point, I decided to review my initial exploration.

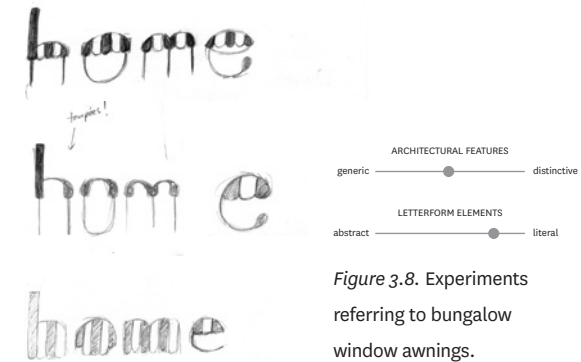


Figure 3.8. Experiments referring to bungalow window awnings.

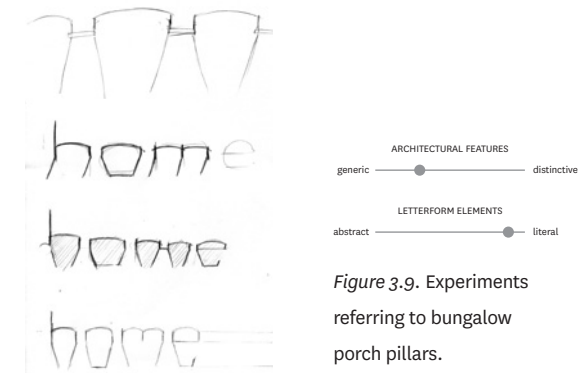


Figure 3.9. Experiments referring to bungalow porch pillars.

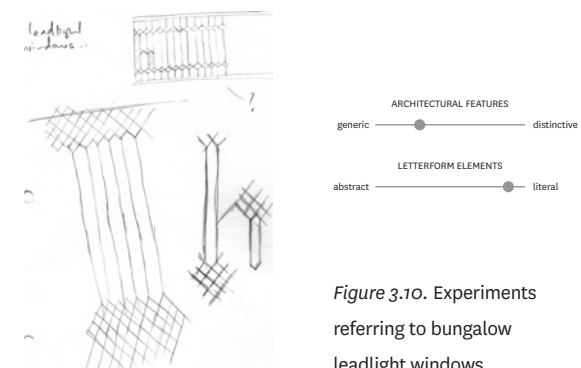
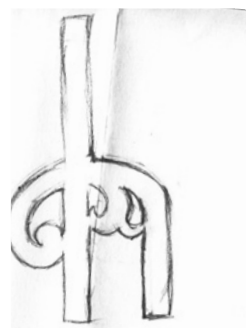
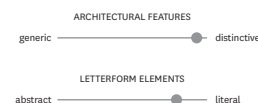


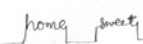
Figure 3.10. Experiments referring to bungalow leadlight windows.



respond to topography...



first houses to be
wired up for electricity
from the start...



first houses built
with drainage into street
sewer etc...

Figures 3.11-3.12. Experiments referring to villa veranda ornamentation.

REFLECTION ON ACTION

These early experiments clarified several things. I had decided from the start of the project to refer to only the external aspects of the buildings. The internal features (furniture, wall and floor coverings, ornaments) were too individual to each house and more susceptible to change over time. Having explored letterform ideas based on fences and garages, I also decided to limit my project to the actual house, not any additional features on the property.

POSSIBLE NEW INTERPRETIVE STRATEGY

Applying my criteria at this point indicated that the experiments that dealt solely with form, especially distinctive features of the buildings resulted in more engaging results than those working with 3D or technical advances. This led me to begin the first phase of my research with the interpretive strategy of using only form and developing a way to transfer it from architecture to type, while balancing the literal and abstract aspects.

Figure 3.13. Experiments referring to the technical advances made by the Californian bungalow.

3.2 Phase one



Figure 3.14. Experiments using entry and exit points within strokes.

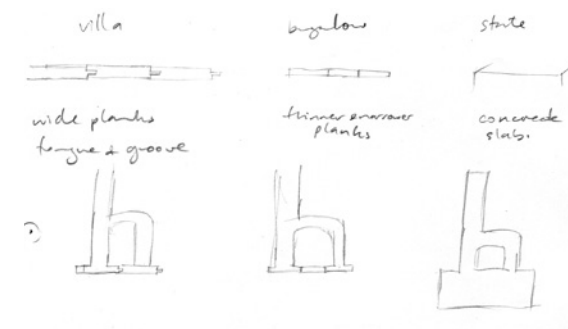


Figure 3.15. Experiments using base planes as serifs.

INTERPRETIVE STRATEGY

As discussed in my methodology section, I started my project with assumptions around the value of a positivist paradigm for research. This led me to begin the first phase of my research with the intention of finding a single, logical process for translating architectural form into type.

LITERATURE REVIEW

I entered this phase of research looking for a way to break down the formal elements of architecture. I identified a key architectural text by Francis D.K. Ching (1975/2007), called *Architecture: Form, Space, & Order*. The author acknowledged the role of the context in architecture, but had chosen to focus solely on the formal aspect for this publication. The book presents a structured overview and analysis of the basic elemental forms of architecture. Viewing architecture through universal categories of form, space and order fitted well with the positivist paradigm I was initially working within.

EXTRACTING THE FRAMING OPTIONS AND QUICK MOVE-TESTING EXPERIMENTS

I made quick sketches as I read through the book, testing how the formal elements discussed in the text could be understood in relation to each kind of house and how that might initiate letterform ideas. For example, the first chapter begins by examining how two points can represent an entrance way, so I tested out how the different entry and exit points for each kind of house could look within letterforms, as shown in Figure 3.14. This focused on the comparative differences between the villa, bungalow and state house. I quickly worked through about fifteen different formal elements, linking them with whichever architectural elements I thought appropriate.

DOCUMENTATION

I needed more visual material to refer to so I went on several photo shoots around Auckland. I took a range of photos, with no specific elements in mind. My intention was to capture a broad spectrum of architectural features so that I could begin to grasp

the variety of forms within each kind of house. The digital photos were organised into three folders, one each for villa, bungalow and state house.

FRAME-TESTING EXPERIMENTATION: CYCLES OF ANALYSIS > EXPLORATION > REFLECTION-IN-ACTION AND ON ACTION

From the move-testing experiments I realised *Architecture: Form, Space, & Order* (Ching, 1975/2007) had potential as an analytical framework. Essentially, each of the formal elements outlined in each chapter could act as a starting point for a comparative analysis of selected forms across the three different kinds of buildings. The graphic forms generated by this analysis could then inspire letterform elements. I began my exploration by using the angle of the roof pitch from the buildings as an angle for selected strokes within the letterforms.

On reflection, I realised I had been transferring only one form and that all the other letterform elements were not based on any justifiable decisions. Within the positivist paradigm I was working with

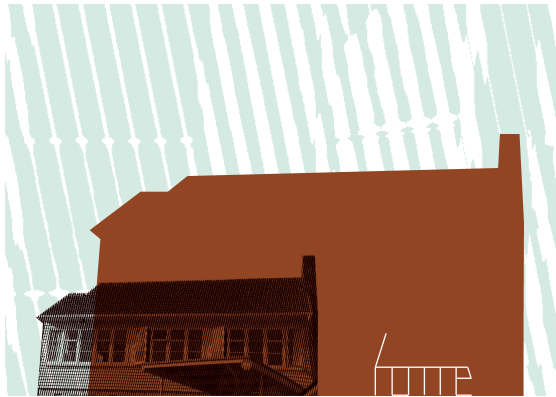
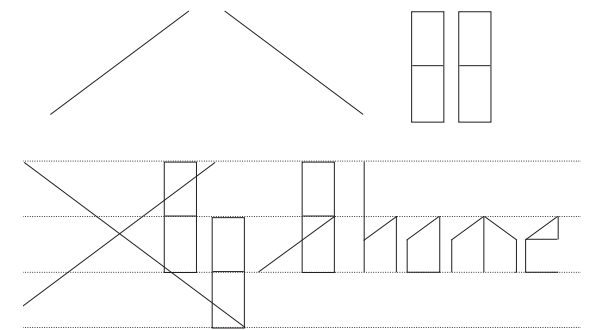


Figure 3.16. Experiments using roof pitch as an angled stroke.



Figure 3.17. A visual summary of the process of developing an experiment using proportions of the main window frame as the reference for the x-height and the roof pitch as the diagonal strokes



at this time, each decision needed to fit within some form of logic and could not be simply a 'subjective' choice. Snodgrass and Coyne (1997) say that for something to be meaningful in a positivist understanding of language the "combinations of verbal tokens or word atoms must be assembled according to the rules of formal logic. If they do not conform to these rules they are meaningless and the statements they convey are false" (p. 1-2). So I tried to develop letterforms with two elements sourced from the analysis of a villa. I referred to a range of

villa window frames and traced their proportions and took the roof pitch from a villa bay window roof. I choose to use the window frame as the x-height and the roof pitch as a stroke angle.

This exploration raised questions around the documentation and selection of reference material. A basic typology set had been created as part of the analysis process, to compare the range of options available for one architectural feature. At this point the selection of one specific house as reference was partly based on frequency, partly based on aesthetics.

	stroke structure	x-height	serif	stress	stroke joints	counterforms
foundations						
roof						
exterior walls						
front door						
windows						
overall structure						
porch/verandah						
ornamentation/ other distinctive forms						

Figure 3.18. A matrix of architectural features and letterform components.

Since there are obviously more than two elements within every letterform, I started to develop a table that placed the analysed architectural features on one axis and a range of letterform elements on the other.

In the next exploration I tried using a basic version of this table to analyse three different architectural features. I referred to the roof of the bay window, the main window and a piece of veranda ornamentation. I analysed all three features through three of the categories outlined in *Architecture: Form, Space, & Order* (Ching, 1975/2007): angle, axis and negative space.

This produced a set of nine graphic elements to work with. I then choose to use the axis from the roof, the negative space from the ornamentation and the angle from the window and combine them in the letterforms. I tried combining these elements in three different ways. For example I used axis to establish the x-height and the angle as either the terminal for each stroke or to create an italic angle.

Following this exploration I was concerned by the aesthetics of some of these letterforms, they

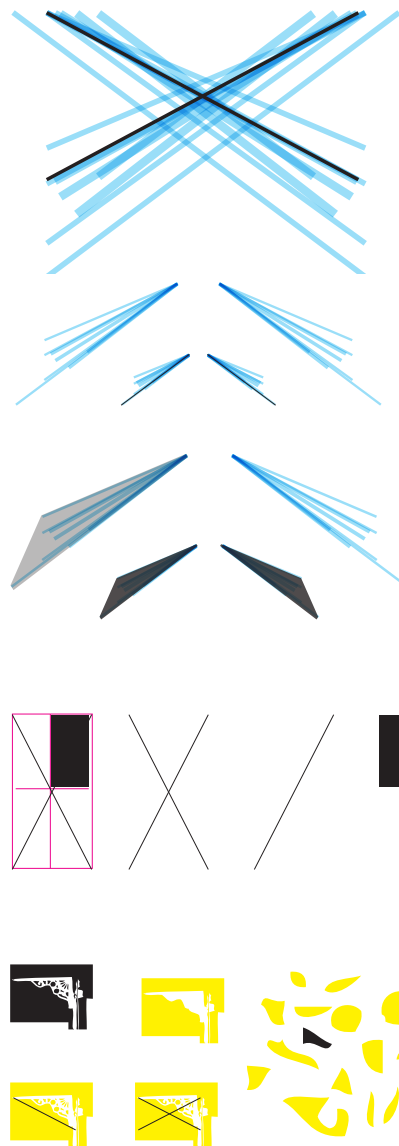


Figure 3.19. A visual summary of the analysis of a villa bay window roof pitch, window proportions and veranda ornamentation to produce angles, axis and negative space, which were then used to create letterforms.



appeared clunky and somehow expressive of things that I did not associate with a villa. I tested out another version of this design process, based on a villa bullnose veranda roof shape for serif and terminal shape, window framing for high stroke contrast and the hallway width within the house as the x-height. However this time I consciously aimed for a more conservative letterform by limiting the impact of distinctive formal elements.

After this exploration I decided the design process should be split into two distinct steps. The first step (analysis) consisted of analysing a range of architectural forms through a defined set of elements and producing a range of graphic elements. The second step (generation) involved exploring how to transfer those formal elements into a range of different letterform elements. I developed three maps of components to work with, shown in Figures 3.21, 3.22 and 3.23. The choice of architectural forms was based on reflection on my previous exploration work. The analysis points were based on a simplification of the key points made in *Architecture: Form, Space, & Order* (Ching, 1975/2007). The letterform element breakdown was partially based on a description of letterform elements found in *Designing Type* (Cheng, 2005) and other readings.

Creating these diagrams sparked an overarching idea about how I could structure a three-step design strategy. It would start with a comparative analysis of the selected architectural forms, like in my experiments with entry points and base planes (Figures 3.14 and 3.15). This analysis would produce a range of contrasting visual elements that were related in form but varied across all three houses,

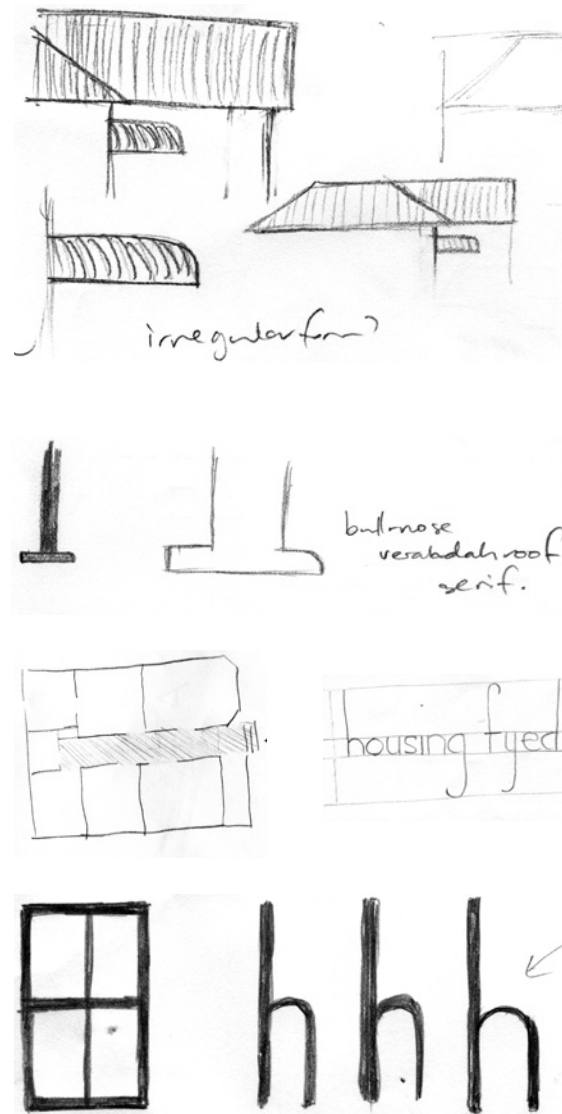


Figure 3.20. Experimentation using the roof shape as stroke terminal, window framing as stroke width variation and hallway width as x-height.

l hous

as shown in Figure 3.44. I would then select interesting visual elements and use them to generate a range of letterform elements. Finally I would choose a range of letterform elements and combine them into one prototypeface, as shown in Figure 3.44. I would use the same architectural elements, combined in the same way in each set of letterforms, so the type for each kind of house would share the same recipe for analysis and construction. Therefore this design strategy could create typefaces that reflected each kind of house but would also function as a cohesive set. Eggers and Diaper's *News Chaotic* typeface for Buschow Henley architects, shown in Figure 1.15 was available in different levels of irritation rather than weights. In this case my strategy would produce another kind of family of fonts, a typeface that included a neighbourhood of fonts, each one based on a different kind of house.

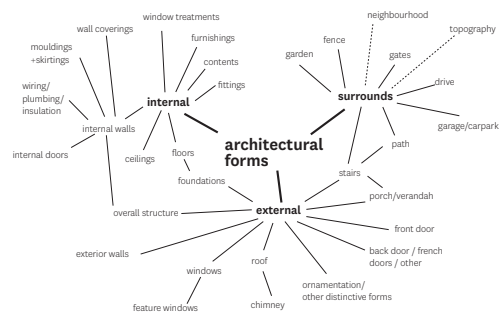


Figure 3.21. Mapping of architectural forms.

REFLECTION ON ACTION – ALL EXPLORATION

After reflecting on this phase of exploration I came to some negative and positive conclusions about this approach. I found *Architecture: Form, Space, & Order* (Ching, 1975/2007) to be a useful guide to the formal elements of architecture and it had given me a lot of insight into my selected houses. Having clear limits and structure for my analysis also helped generate a lot of visual ideas. The three-step design strategy I had begun to develop seemed satisfying and generative, and seemed to sit well within the positivist framework. Snodgrass and Coyne (1997) discuss parallels between a positivist understanding of language and design. They describe a design model where:

The process can be described in terms of primary tokens (for example, geometric shapes) which equate words; and that these primary elements can be manipulated according to grammatical rules so as to build up coherent structures in the same manner that words can be combined in accordance with the rules of logic to form meaningful sentences. (Snodgrass & Coyne, 1997, p. 2)

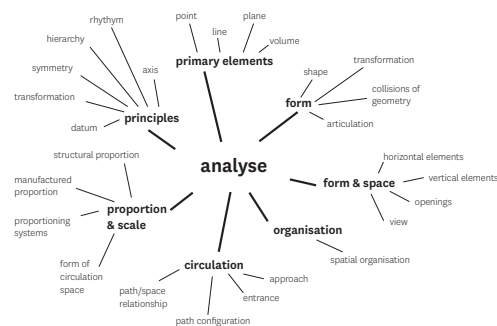


Figure 3.22. Mapping of analysis, adapted from Ching (1975/2007).

The strategy I was developing clearly follows this model of atomistic manipulation.

However, several things concerned me. First was the potentially exponential number of visual elements generated by the deconstruction and abstraction of architectural form. The process could multiply out into thousands of variables. It also seemed very machinistic – the steps were very delineated and sequential and possibly lacking room for play. Both of these factors made the process seem like something that could be a completely computational formula, rather than an interpretive process. While I could appreciate the ‘machine creates the type’ approaches developed by Letterror (Figures 1.7-8) and Mary Huang (Figures 1.21-23) I wanted to create a strategy that was more of a guide that allowed designers to work with their own aesthetics and requirements, rather than a code that generated type.

I was also concerned by the very abstract nature of some of the type design outcomes. The degree to which the forms were broken apart or abstracted had a relationship to whether the typeface had any clear visual link back to the architecture that

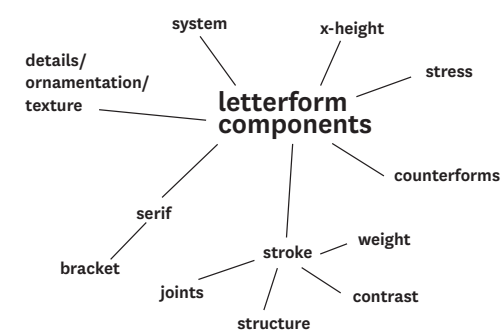


Figure 3.23. Mapping of letterform components.

inspired it. While I had started the project wanting to develop interpretive type from being just a literal transfer of forms, at this stage of the research I was still interested in creating typefaces that would communicate something of the individual nature of the architecture. I was looking for a balance between literal and abstract and it seemed to me that the letterforms were becoming too distant from the source.

POSSIBLE NEW INTERPRETIVE STRATEGY

These thoughts led me to review my approach to this project. I began to read about hermeneutics and that triggered the paradigm shift described in the methodology chapter. This shift opened up my understanding of what interpretation could be and I started to consider ways to integrate context into the next phase of the project.

3.3 Phase Two

INTERPRETIVE STRATEGY

Phase two was led by my paradigm shift from a positivist to a hermeneutic framework. This opened up possibility of creating more than just one 'scientific' and logical process. I began this phase looking for an interpretive strategy that could broaden my exploration beyond an atomistic manipulation form, and also provide structure for developing multiple design processes.

LITERATURE REVIEW

I started searching for another interpretive strategy, one that could offer a range of ways to understand, and therefore interpret, architecture. I looked at a range of approaches, including phenomenology, artefact analysis and semiotics. I decided to focus on semiotics, in particular Pierce's (1868) *On a new list of categories*. The three layers of Pierce's categories seemed like a possible source structure for some experimentation. I engaged with Pierce's writings by creating mindmaps that tried to unpack his thinking. I also selected key quotes, two of which that resonated with me were:

Since no one of the categories can be prescindied from those above it, the list of supposable objects which they afford is,

What is.

Quale – that which refers to a ground,

Relate – that which refers to a ground and correlate,

Representamen – that which refers to ground, correlate, and interpretant.

1st. Those whose relation to their objects is a mere community in some quality, and these representations may be termed Likenesses.

2nd. Those whose relation to their objects consists in a correspondence in fact, and these may be termed Indices or Signs.

3rd. Those the ground of whose relation to their objects is an imputed character, which are the same as general signs, and these may be termed Symbols. (Pierce, 1868, §13, §14)

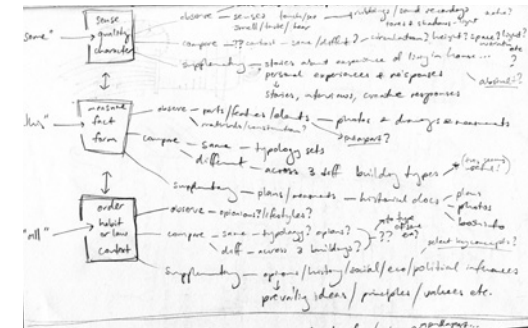


Figure 3.24. Mindmap exploring the relevance of Pierce's ideas.

EXTRACTING THE FRAMING OPTIONS AND QUICK MOVE-TESTING EXPERIMENTS

While Pierce's thinking is mostly applied to language I could see the potential for it to also aid the understanding of architecture. I adapted the three categories outlined by Pierce to work as a structure for this project and defined them as:

1. Quality / experience
2. Fact / form
3. Character / context.

Whether this was a reasonable adaptation of Pierce's theory is open to question. This was to later become a cause of concern in the reflection stage of this research phase. However, at this point I began to mindmap from my understanding of these categories to explore their possible scope and relevance.



Figure 3.25. Studio wall, showing the sorting of villa related quotes into themes.

LITERATURE REVIEW

Once I had mapped the scope and elements involved in using ‘experience’, ‘form’ and ‘context’ I realised I needed to find more references on each of the houses. This was an extension of my existing architectural literature review. I already had a good range of books on villas and bungalows, but expanded my search into more online resources, including the New Zealand Film Archive. I also made a particular search for material relating to state houses. This review included highlighting key passages and quotes, with a focus on the contextual associations, rather than the details of formal elements.

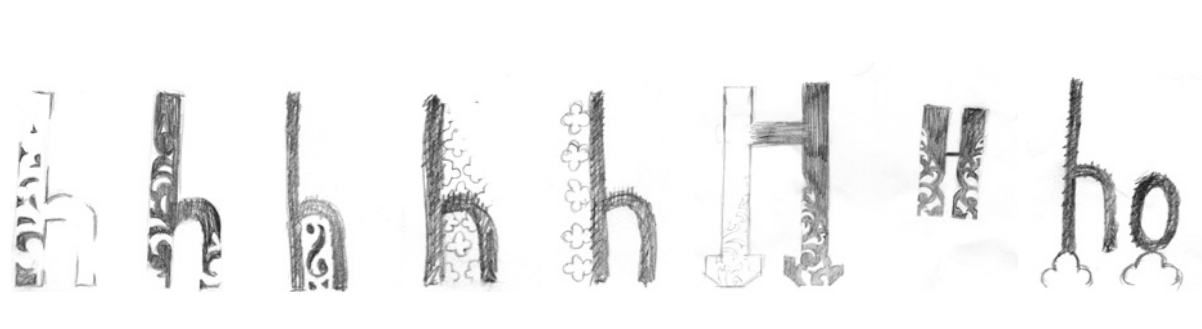


Figure 3.26. Experiments with ornamentation.

FRAME-TESTING EXPERIMENTATION: CYCLES OF ANALYSIS > EXPLORATION > REFLECTION-IN-ACTION AND ON ACTION

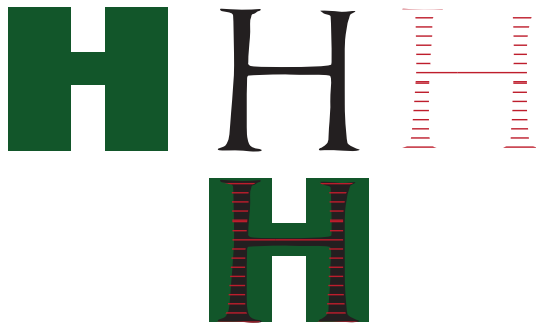
I began my experiments by analysing the contextual information I had gathered in my latest literature review. The analysis was done through identifying the most engaging quotes and definitive ideas that had been highlighted in my review. I started with a small range of the villa references. I rewrote the quotes by hand onto post it notes and used my studio wall as a space for sifting through and sorting them into key themes.

I selected several of these key ideas and explored how they could be used as a starting point for developing type. I began by referring to the value Victorian society placed on presenting a show of wealth through the use of complex ornamentation. At the time the villas were built, “simplicity came to represent poverty, while complexity represented wealth and social standing” (Stewart, 1992, p. 18). So I started experimenting with ornamentation.

I picked up on a variation of the theme of ‘wealth=complexity’, which was the idea that, “The



Figure 3.27. Experimentation with ornamentation facing outwards.



Figures 3.28. Experimentation with layers or ornamentation.

Victorians turned their best face to the world in their houses” (Salmond, 1986, p. 89). I extended some of my initial experimentation and explored how to emphasise the ‘front’ of the letterforms. I tried both the left edge and the base as the ‘front’. The left edge because it is the first side we see when reading left to right, and the base because it looked to me like the front of a house facing the road.

The next experiment also involved ornamentation, but this time it was the idea that villas were, “kitset houses ... where a basic plan was supplied by the owner, builder or the catalogue could be clothed in any of the optional extras illustrated” (Salmond, 1986, p. 89). This also meant that “The bay villa illustrated vividly the feelings of that social group about its own confidence, prosperity, and perhaps surprisingly to us now, the individual expression of its members” (Stewart, 1992, p. 18). After thinking about these quotes I came up with the idea of a typeface that had multiple decorative elements that could be combined and layered in different ways by the user. At this point I had not seen anything like that, although once I extended my ongoing type design literature review, I

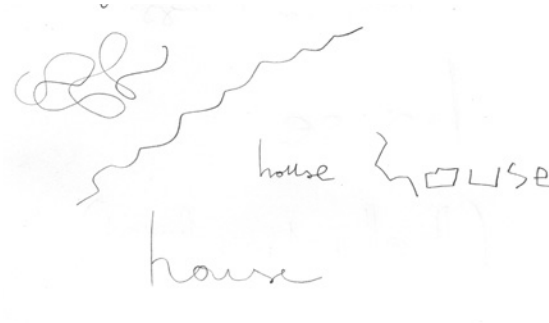


Figure 3.29. Experimentation referring to ‘rambling’.

realised it was a technical and creative reality through the use of OpenType. Peter Brugger’s *Matroyshka* typeface shown in Figure 1.20 is an example of how OpenType allows designers to combine variations of the same letterform into different combinations.

After exploring these contextual themes, I decided to try ‘experience’ as a starting point for developing type. I started with the same analytical approach I had used for the ‘context’ experiments. I pulled out key quotes from my literature review, although this time I selected quotes that related to the experience of living in a villa. For example, Patrick Reynolds (Hansen et al, 2009) describes villas as “rambling, generous, textured, every room off the hall another possibility of surprise, but also familiar and inviting” (p. 7).

I really struggled to generate ideas based on the evocative words people used to describe their experience of villas. ‘Rambling’ went nowhere, and I thought I would try ‘textured’, but in relation to the texture of the wood on the outside of the house. I made some rubbings of an external villa wall and used the texture as a component within the letterforms.

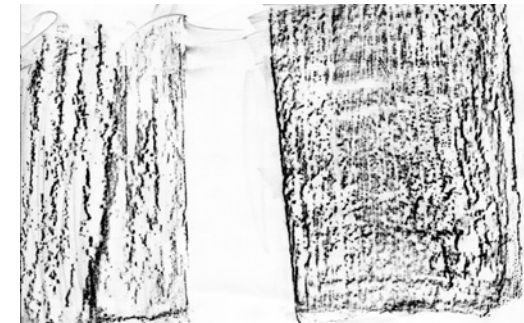


Figure 3.30. Charcoal rubbings of villa weatherboards.

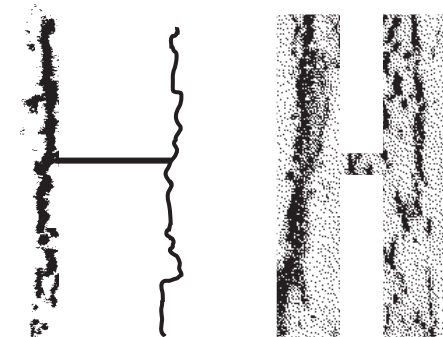


Figure 3.31. Experimentation with texture.

On reflection, I did not find either of these two experiments successful. The process was not generative and what it did produce was too visually unrelated to a villa. I decided to drop ‘experience’ as its own category and merge it into the ‘form’ and ‘context’ categories instead.

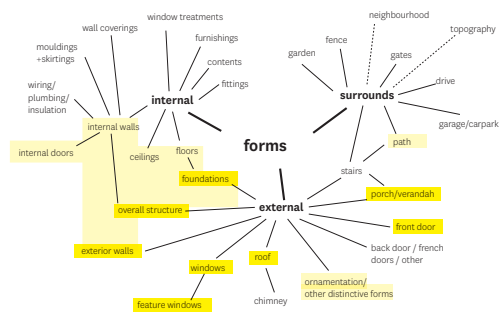


Figure 3.32. Diagram mapping the relevant formal elements.



Figure 3.34. Printed files showing sorted documentation and reference material for each kind of house.

REFLECTION ON ACTION – ALL EXPLORATION

I developed my previous mindmaps into two network diagrams. The form diagram showed the elemental breakdown I would use to analyse each architectural form. The context diagram showed the overarching themes I could use to sort all my quotes and define key ideas.

Following this I completely reviewed all the information I had highlighted in my literature review and documentation for all three houses. I created nine digital documents (three sets of three files). Each set of three files included one file with all the contextual references I had highlighted, sorted into their overarching themes. Another file held all the written references relating to distinctive formal feature and factual information. The other file had a selection of the clearest photos I had taken, which were sorted into groups showing a range of options for each of the main features of that kind of house.

This created an overview of all the pieces of reference information and imagery that I had highlighted as being particularly relevant or interesting. I printed them all out, which made all the

information very easy to access and cross-reference. It also helped clarify the design processes I had been developing for form and context. I created two tables to outline all the steps involved in the two design strategies I had developed to interpret architecture into type. I wanted them to be specific enough to possibly be useful for other designers, but also open enough to be enjoyable to work with and produce multiple typeface outcomes.

I was pleased that this second phase of research had produced a second experimental design strategy that extended my research beyond being positivist and machinistic. In that sense, the second phase had answered my concerns from phase one.

However, I was worried about the theoretic base of my two processes. I had started out inspired by Pierce's *On a new list of categories* (1868) and had ended up working with a clear form/context dichotomy. In practice, I found it hard to separate context from form. I had struggled to transfer any sense of meaning or experience without an associated transfer of form. It seemed that contextual ideas and values were expressed through forms and

therefore the split didn't seem to be entirely clear. I started to question the dichotomy and started to wonder if there was not another way to frame the research and design processes, something that could perhaps support multiple interpretive pathways.

POSSIBLE NEW INTERPRETIVE STRATEGY

I reconsidered what I was aiming to do and realised that I had been entirely focused on the source material. So far I had been looking at different ways to analyse and understand the architecture and had used form and context as a starting point for experimentation. I wondered what would happen if I looked at the actual translation process itself?

form

GATHER DATA	PROCESS DATA	ANALYSE & COMPARE		GENERATE	TRANSLATE
Have restricted the range of architectural features to be researched and used within the process... Includes: porch/verandah, front door, main window, feature window, roof, overall structure and exterior walls, foundation	Sort data in to typology sets (mainly visual data) Establish a range/ spectrum of the variety within each selected architectural feature... Can then use either 'average' or range for analyse & compare Review data and find and definitions or established parameters/elements for each selected architectural feature Can then use this specific version for analyse & compare	ANALYSE Analyse one selected architectural feature from an specific kind of house by itself Identify key elements for that feature in that kind of house	PRIMARY ELEMENTS point, line, plane, volume FORM shape, transformation of form, collisions of geometry, articulated form, surface articulation (including colour), orientation FORM & SPACE horizontal elements, vertical elements, openings, qualities of architectural space (light, view, sound, etc.) ORGANISATION spatial organisation CIRCULATION approach, entrance, path configuration, path/space relationship, form of circulation space PROPORTION & SCALE structural proportion, manufactured proportion, proportioning systems PRINCIPLES axis, symmetry, hierarchy, datum, rhythm, repetition, transformation	visual elements... point/line/plane/ etc. organisational elements... axis/symmetry/ hierarchy/ etc. proportional ratios visual elements colours/ textures/ etc.	Translate the elements, ratios and ideas in to letterform components... with a focus on... stroke structure stroke contrast stroke joints counterforms x-height weight stress serif bracket details/ texture/ ornamentation but also... system/ concept existing fonts with similar contexts?

Figure 3.35. Table outlining the form-based type design process, analysis points adapted from *Architecture: form, space and order* (Ching, 1975/2007).

context

GATHER DATA	REVIEW & SORT	GENERATE	TRANSLATE
news... radio/tv/ newspapers academic/ critical writing magazines advertising real estate promotion fiction... stories/poems/ etc. interview/ questionnaire catalogues policy documents/ law photos	There are two possible steps for processing the contextual data as outlined below.. one reviews the data and sorts it in to a range of contextual categories, while the other focusses on reviewing and sorting the data in to a range of different key themes for each kind of house. CONTEXTUAL CATEGORIES: CULTURAL values including: ownership, privacy, wealth, families, morals, work ethic, resources, etc. SOCIAL lifestyle, family structure, neighbourhood, community, etc. POLITICAL community, local council laws, government policies, party agendas ECONOMIC ownership, who paid for it, what its worth, etc. TECHNICAL resources, means of production, sales, components, design, construction methods, architect/builder/owner responsibilities PERSONAL EXPERIENCE/ REACTION response to space, materials, proportion, etc. personal narrative and associations	Review the data for each kind of building and look for related ideas... Sort into themes... identify key ideas/values/ principles for each kind of building key trends... colours, materials, etc. identify key trends, production and construction methods expressive words + phrases	key values, ideas, principles at the time of construction and how they manifest in each of the three kinds of buildings with a focus on... system/ concept stroke structure but also... stroke contrast stroke joints counterforms x-height weight stress serif bracket details/ texture/ ornamentation existing fonts with similar elements?

Figure 3.36. Table outlining the context-based type design process.

3.4 Phase three

INTERPRETIVE STRATEGY

I started this phase of research with the intention of exploring translation studies, to see if it could offer some structures or strategies for interpreting architecture into type. Stuart Hall (Hall & Maharaj, 2003) talks about how creativity “draws on something which is already there; it moves from one space to another and the creative act is that movement” (p. 36). The distance between my two fields (architecture and type) provided room for the creative ‘act’, the movement from one space to another. It also made me feel I needed some kind of structure to support that creative process. So, rather than continue to explore within a framework based on how to understand architecture, I decided to focus on the act of translation.

I understood that taking a more language-based approach might not be the best fit for design practice. However, in this project the design process itself was the focus of the research and the process was all about translating from one field (architecture) into another field (type). I also thought that since several of the other theories I was working with

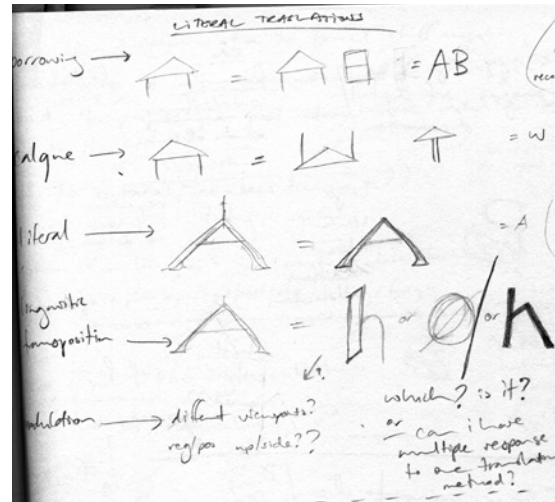


Figure 3.37. Experimentation referring to translation techniques: borrowing, calque, literal transposition, linguistic transposition, modulation, pragmatic translation, adaptation or cultural transposition (Vinay & Darbelnet, 1995, as cited in Munday, 2001).

(hermeneutics and semiotics) both had their roots based in the study of language, perhaps translation could also offer something to design.

LITERATURE REVIEW

I found and read a wide range of books about contemporary translation studies. I chose books that dealt with the process and concepts around translation, rather than practical guides on specific languages. As I read I pulled out ideas, techniques

and concerns, by writing them as quotes into my research journal and then annotating them with comments about their potential relevance.

EXTRACTING THE FRAMING OPTIONS AND QUICK MOVE-TESTING EXPERIMENTS

There were two approaches that stood out from the literature review. One dealt with translation techniques to apply when working on a difficult translation; the other was the discussion around equivalence.

The translation techniques were ‘the seven methods of translation’, developed by Vinay and Darbelnet. I was interested to see if any particular techniques could be transferable to a design process. The seven methods are in Figure 3.37, along with the quick move-testing experiments I did in my research journal as I wrote out the key points for each method.

I found some of these methods more accessible and generative than others. They also raised several questions around the notion of equivalency, the level to which a text can be rendered in an equivalent way in another language. I decided to explore that idea in a more developed round of experimentation.

FRAME-TESTING EXPERIMENTATION: CYCLES OF ANALYSIS > EXPLORATION > REFLECTION-IN-ACTION AND ON ACTION

I identified one text dealing with equivalency that I thought had potential as a structure for my processes and could hopefully generate more process ideas.

This was Koller's five frameworks of equivalence. It consists of: formal, denotative/referential, connotative, text-normative and dynamic/pragmatic (Koller, 1979, 1976/89, as cited in Munday, 2001). I took the villa verandah ornamentation as my source material and explored how each of Koller's frameworks could be applied as a design process and outcome.

REFLECTION ON ACTION

Overall, I found the specific translation techniques too language-specific to be transferable to design; they were not a productive approach for my design processes. The focus on equivalence seemed like a more relevant and applicable strategy.

I could easily see my existing form process fitting with the denotative equivalence from Koller's five frameworks. However, the equivalence framework did not generate any further design strategies. I had started my research concerned with notions of equivalence between the source (architecture) and the target (type) and had tried to find a balance between literal and abstract visual references. I realised after this phase that I was more concerned with developing experimental design strategies that could produce a range of visual outcomes. The flexibility to be more or less equivalent to the source material was something I wanted to include scope for within my experimental design strategies.

After all my reading about translation I realised that here were several parallels between the fields of

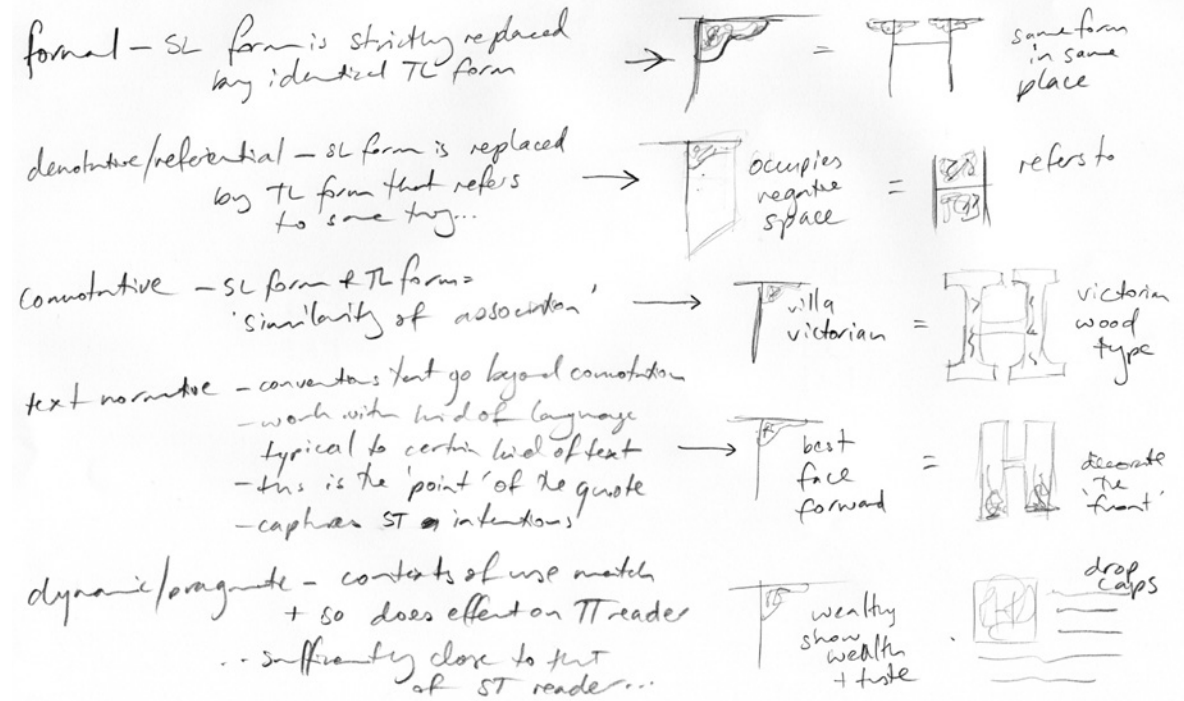


Figure 3.38. Experimentation referring to Koller's five frameworks of equivalence: formal, denotative/referential, connotative, text-normative and dynamic/pragmatic (Koller, 1979, 1976/89, as cited in Munday, 2001).

translation studies and design research. Both fields have only fairly recently emerged as a serious academic field. Both have a 'big brother', well-established field that looms over them; for translation that is literature studies and for design that is fine arts. Both fields are working to establish their own research methodologies and draw on a range of other fields for methods and theoretical frameworks. There was also obviously a focus on process and communication as a vital component of each field.

POSSIBLE NEW INTERPRETIVE STRATEGY

So, while the experiments in this phase did not go well, I decided to continue looking at translation studies as an interpretive strategy for the next phase of my research. This time I thought I would move up a level, away from the practical and specific techniques of translation and up to the level of more theoretical concerns. I hoped to find something there that would be easier to transfer to a design situation and also act as generative framework for developing more design processes.

3.5 Phase four

INTERPRETIVE STRATEGY

In this phase I was looking for a translation-related theory that could act as an interpretive strategy and could make the design situation more coherent. I started by reading *Thinking through translation with metaphors*, an edited collection of papers discussing the various metaphors through which we understand the process of translation. A particular paper, *Metaphorical Models of Translation* (Martín de León, 2010) drew my attention as it focused not only on a range of metaphors applied to the act of translation, but also discussed how these metaphors could affect the process a translator chose to follow. Martín de León (2010) says:

The concept of ‘translation’ refers to a very complex activity (or set of activities), which depends on multiple factors and whose results can not be completely predicted. Conceptual structures have been borrowed from different source domains to elaborate this concept metaphorically ... The systematic study of these metaphors can shed some light on assumptions

about language and communication and different theoretical approaches to translation. (p. 78-9)

This link between metaphor, translation, choice of process and the criteria for assessing the outcomes seemed to offer a potentially useful framework.

LITERATURE REVIEW

As outlined above, I had already identified my key text for this phase of research. This text was grounded in conceptual metaphor theory and I engaged in a basic literature review of this field. I mainly followed up the references in the Martín de León paper, so that I could get a deeper theoretical understanding of the framework she was working with. Further information about conceptual metaphor theory is discussed on page 29. The relevance of metaphor for this project is outlined by Lakoff and Johnson (1980):

Metaphors may create realities for us, especially social realities. A metaphor may thus be a guide for future action. Such actions will, of course, fit the

metaphor. This will in turn, reinforce the power of the metaphor to make experience coherent. (p. 156)

In this phase I’m attempting to use selected metaphors of translation as an interpretive strategy to make my type design processes coherent.

EXTRACTING THE FRAMING OPTIONS AND QUICK MOVE-TESTING EXPERIMENTS

My key reading for this phase, *Metaphorical Models of Translation* (Martín de León, 2010), provides an overview of several frequently applied metaphors of translation. The author has structured the paper so that the metaphors are grouped together to reflect systematic mappings between translation and the other experiential domain. Martín de León (2010) outlines several of these metaphorical mappings, including transfer, footsteps, target, assimilation and reincarnation, and projection. The description of these conceptual metaphors and “their implicit assumptions about communication and translation” (Martín de León, 2010, p. 82) form the basis of the

author's hypotheses about how each metaphor could influence the translators process and outcomes.

I could instantly see how these metaphors could guide the development of design strategies. They were metaphorical mappings that mainly used physical actions as a reference for understanding the complex process of translating. Since they were discussing the process at a metaphorical level, rather than at a practical technique level, I could see how to apply them in a design situation. I started with quick sketches in my research journal and found that a castle analogy, outlined under the transfer metaphor, mapped out a process similar to my existing form-based type design process. I decided to move on to exploring some of the other metaphors.

Figure 3.39. Summary of hypotheses (Martín de León, 2010, p. 104).

Please note: ST is an abbreviation of source text and TT is an abbreviation for target text.

Metaphorical mapping	Model of communication	Relation between ST and TT	Translators' tendencies
TRANSFER	Coding – decoding	Partial identity	Search for semantic equivalents Disregard of pragmatic elements Focus on micro-strategies
FOOTSTEPS	Inference	Similarity	Imitation of the ST as macrostrategy Avoidance of changes
ACTION	Inference	Depends on goal	Elaboration of macrostrategies Account of pragmatic aspects Adaptation to target audience
ASSIMILATION REINCARNATION	Inference/ empathy	Difference	Changes with respect to ST Adaptation to target audience
PROJECTION	Inference/ empathy	Depends on view hypothesized	Attention to different points of view

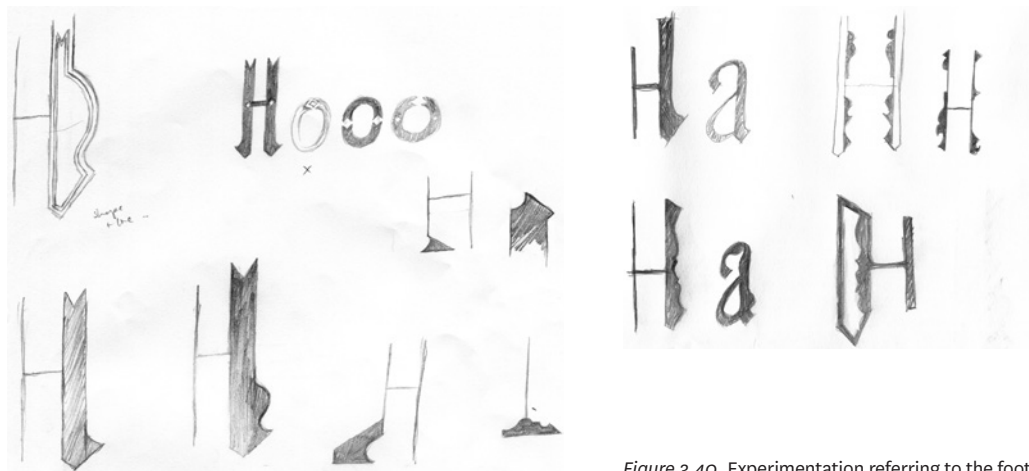
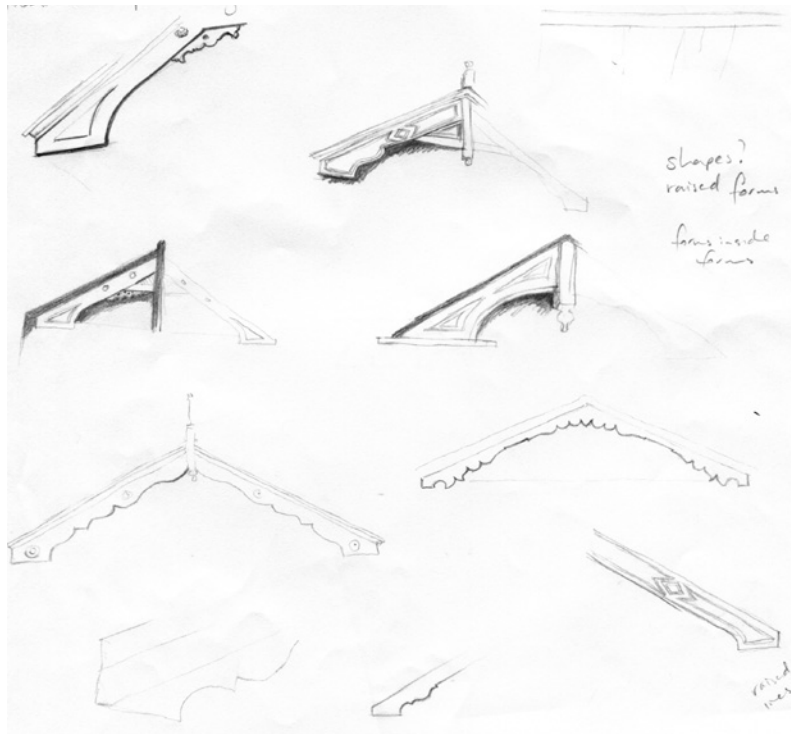


Figure 3.40. Experimentation referring to the footsteps metaphor.

FRAME-TESTING EXPERIMENTATION: CYCLES OF ANALYSIS > EXPLORATION > REFLECTION-IN-ACTION

I experimented with most of the metaphors outlined in *Metaphorical Models of Translation* (Martín de León, 2010). Several of them inspired new processes or linked back to previous processes in a productive way.

I explored the footsteps metaphor, which is based on the movement of tracking someone else's footsteps, usually through imitation and aiming to find similarities. I experimented with one of the more variable and interesting villa features, the gable boards. I explored a range of following distances, by varying the emphasis and scale of the board forms within the letterforms. This is one aspect of the footsteps metaphor – you can follow very closely or ease back a little and not be so direct in your imitation.

I also wanted to explore this metaphor in a way that worked with a mix of visual forms from each house. So I tried structuring the imitation on a basic spatial division. I selected a distinctive element from the base, centre and roof of each house and imitated



Figure 3.41. Experimentation referring to the footsteps metaphor and using a basic spatial division.

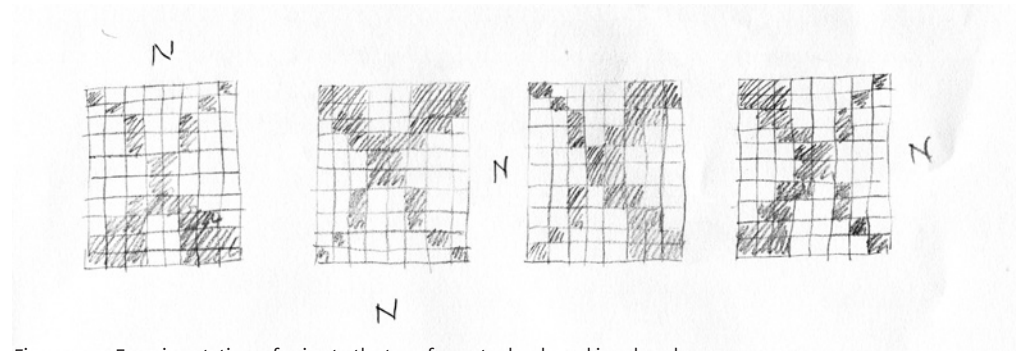


Figure 3.42. Experimentation referring to the transfer metaphor based jewel analogy.

the forms within the base, centre and top of leach letterform. I worked with different elements for each kind of house, which made the process different to my existing form-based design strategy.

I also tried the transfer metaphor again, but focussed on the jewel analogy and the transfer of meaning. I worked with the idea that state houses were designed to be healthy and therefore their larger blocks of windows orientated towards north. I generated a few ideas in response to this, one being a digital font that aligns to north constantly and another being to make letterforms with light with the larger forms being nearer the light source. On reflection, these ideas also seemed like they could fall into the footsteps metaphor of imitation.

At this point in the exploration I realised the assimilation metaphor seemed to reflect the approach developed in my context-based strategy. The reincarnation metaphor also seemed to fit with one of the ideas from my earlier experiments with equivalency, see Figure 3.38. The projection and action metaphors were less generative and I decided not to continue with them.

REFLECTION ON ACTION

Lakoff and Johnson (1980) suggest that, “Metaphorical definitions can give us a handle on things and experiences we had already categorized, or they may lead us to a recategorization” (p. 124). In this project, the metaphorical mappings outlined in *Metaphorical models of translation* (Martín de León, 2010), provided a way of reconciling all my previous exploration. Several of the existing design processes were reframed through the metaphors of translation discussed in this paper. I reviewed everything I had created and developed a basic table to outline some of the experimental design strategies I had developed and their relationship to the metaphors.

I was satisfied that I had found a way to make translation relevant to design, within this project. Martín de León (2010) says, “How can conceptual metaphors be identified and described? Although they are reflected in language, they are not linguistic structures, but patterns of conceptual mappings” (p. 78). Conceptual metaphor theory provided a framework open enough to work across both translation and design. I had identified an interpretive

Metaphorical mapping	Model of communication	Relation between ST and TT	My experimental type design processes
TRANSFER (CASTLE ANALOGY)	Coding – decoding	Partial identity	Figure 3.35. Form-based process.
TRANSFER (JEWEL ANALOGY)	Coding – decoding	Partial identity	Figure 3.42.
FOOTSTEPS	Inference	Similarity	Figures 3.40-41.
ASSIMILATION	Inference/ empathy	Difference	Figure 3.36. Context-based process.
REINCARNATION	Inference/ empathy	Depends on view hypothesized	Figure 3.38. Dynamic equivalency-based.

Figure 3.43. Table of hypotheses adapted from Martín de León (2010, p. 104) and showing the reframing of my design processes through each metaphor.

strategy that could act as a creative source for translating architecture into type. It also reconciled my experimental design processes into a coherent design situation.

I discounted the transfer-based jewel analogy because one of the processes I had explored was based on existing type. While it could work as an experimental type design strategy, it didn't sit well with my definition of interpretive type as something created in reference to another object, rather than existing type. The footsteps metaphor generated several design processes, but I was concerned by the focus on imitation of form. One of the weaknesses I had identified in existing interpretive type examples was a lack of refinement when transferring formal elements. The footsteps metaphor could be developed into a strategy used varying levels of imitation as an alternative to different weights in a typeface. This could be successful but seemed to lack a level of experimental flexibility that I was looking for in my strategies. The reincarnation metaphor had potential but, like some of the jewel process examples, it relied on trying to find equivalency between architecture and existing type. It also didn't produce a clear process, it was an approach but wasn't really a strategy that other designers could experiment with.

The two processes I thought could be developed into engaging and experimental type design strategies were those framed by the transfer metaphor (castle analogy) and the assimilation metaphor. Both of these design processes were generative and adaptable but also had a clear structure. Now that I had identified a successful interpretive strategy and reflected on my design processes, it was time to develop the two selected strategies and communicate them clearly.

3.6 Development

After reflecting on all the design processes I had developed during the four phases of my research, I had decided to develop and present two design strategies. I started to develop them by doing a complete run through of both processes. This refined and clarified each step of the design strategy and resolved their relationship with their associated metaphors. I also named each process, so that I could discuss them clearly – the *Neighbourhood strategy* was the transform-based (castle analogy) process and *Build strategy* was the assimilation-based process. I have outlined both strategies over the next few pages, including an overview of the ideas framing each strategy, along with a visual summary of the trial designs and a table showing the steps involved.

Neighbourhood strategy

MODE OF COMMUNICATION:

Coding & decoding

RELATIONSHIP BETWEEN SOURCE AND TARGET:

Partial identity

TRANSFER

“The transfer metaphor can be described as a mapping from the domain of movement onto the domain of translation, according to which to translate is to carry objects from one place to another” (Martín de León, 2010, p. 82).

TOWERS ANALOGY

[The process described by this analogy]
Involves penetrating the surface of language A to reach the deep structure, the core, almost universal, elements. The analysed material is transferred from language A to language B and then restructured again in language B, emerging again to the surface. (Nida & Taber, 1969/1982, as cited in Martín de León, 2010)

Think, by analogy, of individuals living in a series of tall closed towers, all erected on a common foundation. When they try to communicate with one another, they shout back and forth, each from his own closed tower. It is difficult to make the sound penetrate even the nearest towers, and communication proceeds very poorly indeed. But, when an individual goes down his tower, he finds himself in a great open basement, common to all towers. Here he establishes easy and useful communication with the persons who have also descended from their towers. (Weaver, 1955, as cited in Martín de León, 2010)



Villa.



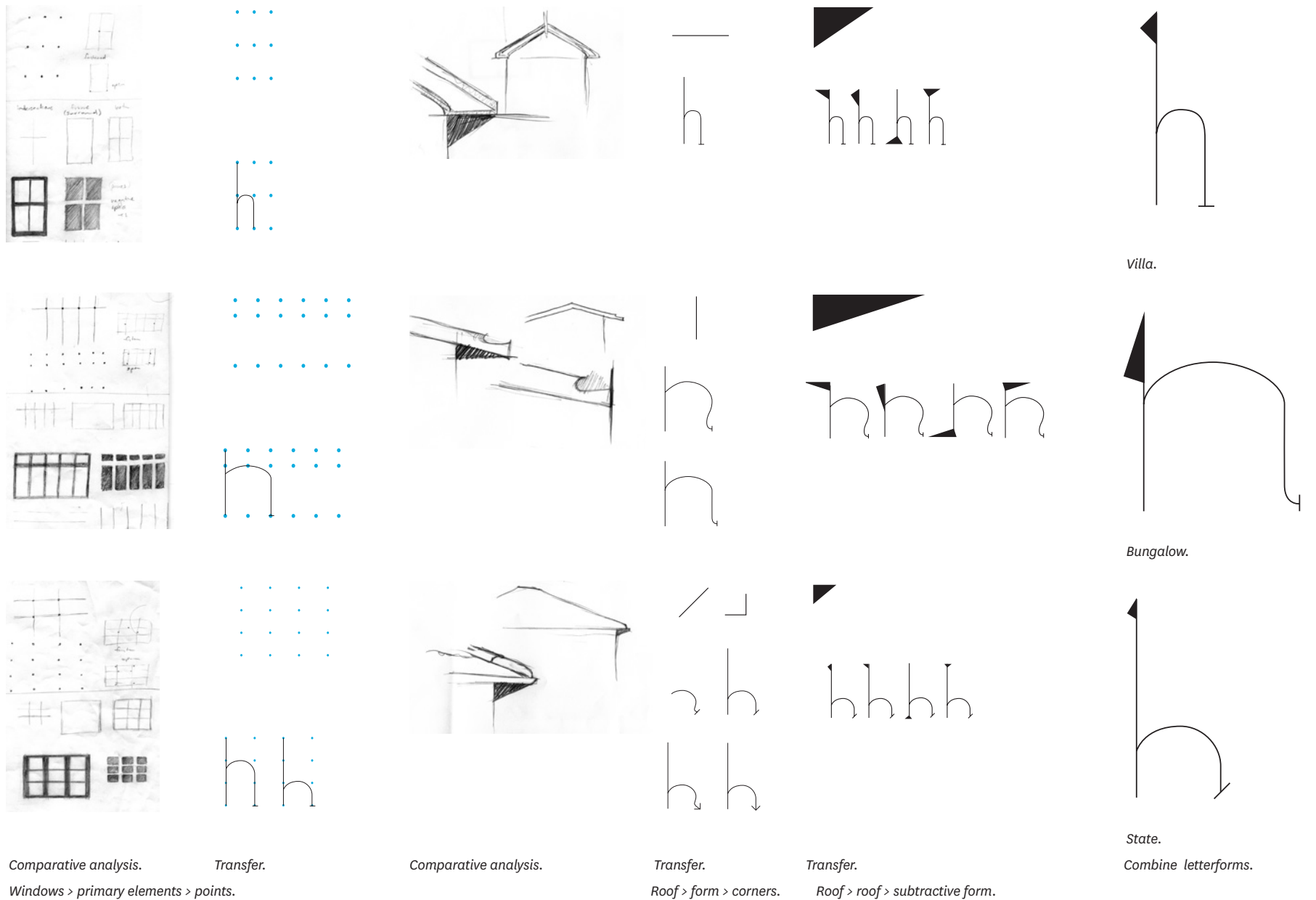
Bungalow.



State.

Defined architectural forms.

Figure 3.44. A visual summary of a trial run of the *Neighbourhood* strategy.



Neighbourhood strategy

1. GATHER

Gather a range of data for each kind of house.

Architecture features to focus on:

- _windows
- _roof
- _facade
- _structure.

Formats to collect:

- _photos
- _plans
- _written descriptions.

Sources to draw on:

- _publications
- _real estate promotion
- _magazines
- _digital archives
- _generate own material from observation.

2. REVIEW

Review written descriptions:

- _identify any established definitions or standards.

Review visual data for each architectural feature:

- _review the variations within each selected architectural feature
- _sort in the visual data into either typology sets or a range of different viewpoints.

3. SELECT

Define each architectural feature by selecting one of the following:

- _the most frequently appearing form
- _an average of the range of forms collected
- _the definitive version of a feature (as specified in written descriptions)

4. COMPARATIVE ANALYSIS

Analyse one selected architectural feature across all three houses at the same time.

Identify key differences between the features of all three houses.

Do the analysis by hand drawing from visual reference and generate a range of visual elements.

Work through one of the categories for each architectural feature.

The categories are adapted from *Architecture: Form, Space, & Order* (Ching, 1975/2007)

PRIMARY ELEMENTS – *analyse window*
point, line, plane, volume.

FORM – *analyse roof*
contour, regular form, irregular form, articulation of form, surface texture.

PRINCIPLES – *analyse facade*
symmetry, hierarchy, datum, rhythm,.

FORM & SPACE – *structure*
position, orientation, approach and entrance, circulation configuration.

Figure 3.45. A table outlining each step of the *Neighbourhood strategy*.

5. REVIEW + SELECT	6. TRANSFER	7. REVIEW + SELECT	8. COMBINE	9. REVIEW + DEVELOP	10. PROTOTYPEFACE
<p>Review the visual elements generated. Consider which sets could be transferred into letterforms.</p> <p>Sets where the three visual elements are clearly different from each other are more likely to be successful.</p> <p>Sets that are distinctive or aesthetically pleasing can also have potential.</p>	<p>Transfer the selected sets of visual elements into letterform components.</p> <p>Transfer each set into a selection of the following letterform components: _x-height _stress _counterforms _stroke (structure, weight, contrast, terminals) _serifs & bracketing</p> <p>Try to transfer each of the three visual elements in each set in the same way.</p> <p>Sketch the first round of ideas before moving on to digital media.</p>	<p>Review the sets of letterform components generated. The evaluative criteria will depend on the design context and designers aesthetics.</p> <p>Choosing a variety of sets, some subtle and some more distinct, will aid combinations in the next stage.</p>	<p>Combine a range of sets of letterform components. Each set should have a component for each house that has come from the same architectural source, analysed and transferred in the same way.</p> <p>Explore different ways to combine these letterform components. Each exploration should combine the same components in the same way for all three kinds of house. Try to combine components generated from a mixture of architectural features.</p>	<p>Review the sets of combined letterforms generated. The evaluative criteria will depend on the design context and designers aesthetics.</p> <p>Look for combinations that generate successful letterforms for all three kinds of house.</p> <p>Also select combinations that reflect the difference between the three kinds of house while retaining a coherent visual feel across all three letterforms.</p>	<p>Develop the selected letterforms digitally and extend the number of letters.</p> <p>All three fonts will share the same recipe for development.</p> <p>The three sets of letterforms will establish a prototypeface, consisting of one font for each kind on house, that together function as a neighbourhood of fonts.</p>

Build strategy

Figure 3.46. A visual summary of a trial run of the *Build strategy*.

MODE OF COMMUNICATION:

Inference/empathy

RELATIONSHIP BETWEEN SOURCE AND TARGET:

Difference

TRANSFORM

“texts, meanings, even translators are transformed by the translation process. ... transformation can be considered metaphorical, in so far as the source text is not literally transformed during the translation process” (Martín de León, 2010, p. 101).

ASSIMILATION

The assimilation metaphor highlights the identification process which often accompanies imitation: when imitating someone, we do not limit ourselves to mechanically follow his/her movements, but we live an experience similar to that of our model; we feel like him/her, we put ourselves in his/her place. (Martín de León, 2010, p. 98)

INDIVIDUAL EXPRESSION

The classic bay villa offered plenty of opportunity for individual expression in the variations on the combination of bay windows and verandahs ... Significantly, such adaptations and variations were shaped not by architects but by speculative builders and the manufacturers of the many machine-made components that made up the typical bay villa. (Stewart, 1992, p. 32)

A considerable degree of uniformity with one's neighbour was accepted in the common man's house ... But there was the opportunity to make a house distinct by individual choices from the wide range of mass-produced woodwork items available from timber merchants' yards. (Stewart, 1992, p. 20)

Individuality of expression now relied on choosing and combining the standard, mass-produced decorative details in different ways. (Stewart, 1992, p. 25)

Response: create a typeface with optional elements to allow the user to make their own aesthetic choices.

VISUAL STYLES – CLASSICAL AND GOTHIC

While the form of the villa was largely determined by the roof structure, window and verandah combinations, such considerations took second place with new house owners who were preoccupied with decorative potential of their buildings. Ornamentation was a middle-class expression of its position in society, its love of home and family and its confidence in material achievement and prosperity. Architectural detail and embellishment was borrowed freely from both the Gothic and Classical schools of architecture and were typically combined to create the desired “picturesque” effect. (Stewart, 1992, p. 36)

With the increasing use of applied ornamentation, patterns inspired from Gothic or Classical origins were mixed without thought for historical consistency. A shift had occurred world-wide towards more eclectic attitudes by which a designer felt free to choose any detail or style from any periods which he considered suited to his project. (Toomath, 1996, p. 150-151)

Response: create a typeface with a range of stylistically different visual elements, based on gothic and classical forms from the villa ornamentation.

BASIC PLAN AND A CATALOGUE OF PARTS

In this democratic architecture, owners of a property could choose for themselves from a plethora of plans and parts and then hire a builder to put the pieces together. (Toomath, 1996, p. 98)

... were “kitset” houses, where a basic plan supplied by the owner, the builder, or the catalogue, could be clothed in any optional extras illustrated (or produced to order). (Salmond, 1986, p. 98)

Once prospective home builders had decided on a house plan, almost all of the stock items for the construction of the villa could be selected from catalogues and a builder employed to put them together “kitset” style. (Stewart, 1992, p. 24)

Response: create a typeface with a core form that would provide a base and supplement this with a catalogue of decorative elements.

DESIGN SYSTEM AND A CATALOGUE OF PARTS

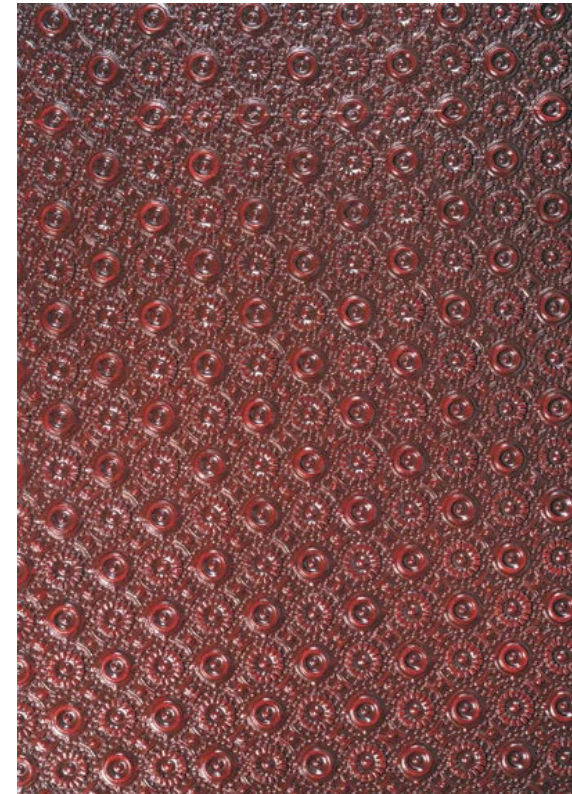
A greatly increased variety of patterns and items became available. The choice of weatherboard profiles, mouldings and hundreds of fretwork patterns filled the pattern books and catalogues through which the timber companies sold their goods. (Stewart, 1992, p. 24)

An impressive range of well-tried decorative elements, consistent in style and scale was available for the builder to use within an easily understood design system. (Toomath, 1996, p. 150)

When it came to producing plans for a villa most builders proved to be as able with a pen as a hammer; everyone has known what it looked like and how it was built, for, even with many variations of decoration, they were all pretty much the same. (Ashford, 1994, p. 28)

Local woodworking mills, making increased use of steam-driven machinery, entered production of pattern-book components – doors, windows, mouldings and turnings, decorative fretwork in brackets and panels, staircase balustrades and so on – thus expanding the available design vocabulary into a house style for the community. (Toomath, 1996, p. 82)

Response: create a typeface with a clear system and catalogue of decorative parts.

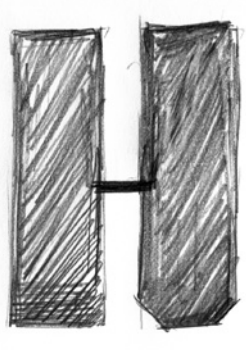
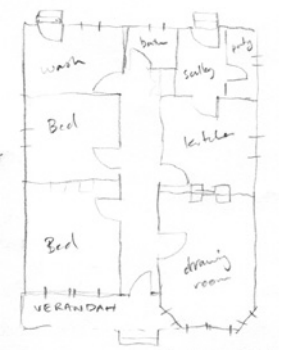
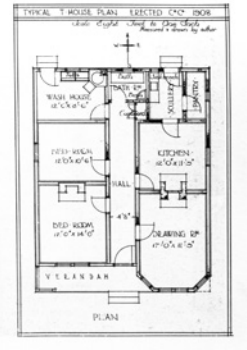


“The combination of ornate gable above a bay window became a prime field for expression of Victorian taste, reaching heights of ingenuity and using a fascinating variety of decorative devices” (Toomath, 1996, p. 141).

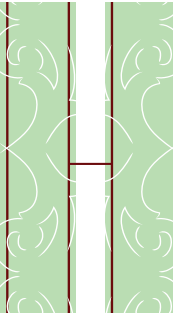
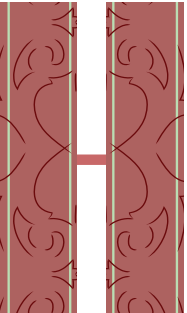
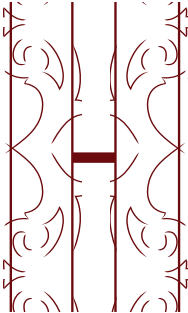
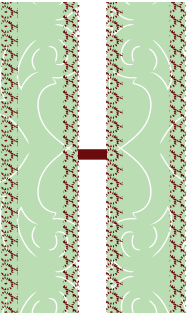
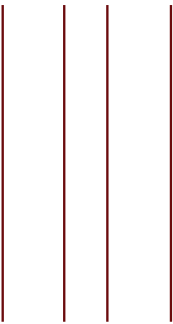
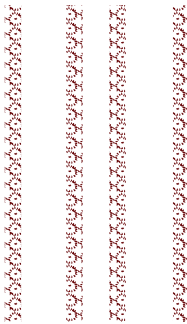
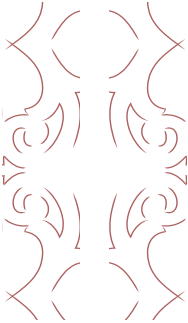
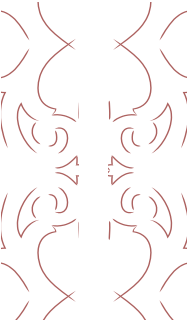
“The coloured glass found on porches, doors and windows was considered a luxury item, reserved for windows in the best rooms, front doors and stairways. All imported, came in various styles” (Hansen, Reynolds & Salmond, 2009, p. 68).

Identifying relevant architectural features and creating visual elements.

Figure 3.46. A visual summary of a trial run of the *Build* strategy, continued from previous pages.



Analysing floorplan for basic proportions.



Prototypeface responding to key quotes and ideas.

Build strategy

CONSTRUCTION	1. GATHER Gather a range of written information about the construction: _materials used _technological advances _variety and options _key decisions _influences	2. SORT Review the written material and sort into categories: _materials _technology _variable elements _decisions _influences	3. DEFINE Review sorted material and identify themes that emerge. Themes should be a simple, singular concept. Categories may have multiple themes and themes may crossover.		4. EXPLORE Explore how each theme could be experienced by someone using a typeface. Consider: _modularity _layering _fragmentation _variables or alternates.	
FLOOR PLAN	6. GATHER Gather a range of information including: _a range of floor plans _written descriptions of overall plan or structural layout		7. DEFINE Review all the material gathered. Identify the most common or definitive structural layout.	8. ANALYSE Analyse the selected floorplan by drawing simplified versions: _outline _verticals +horizontals _house / room shapes.	9. EXPLORE Explore how the forms could be used as core letterforms elements: _x-height _character width _stroke weight.	
VARIABLE FEATURES	10. GATHER Review variables seen in construction and gather material: _photos _sketches _rubblings _written information.		11. DEFINE Sort all visual material into typology sets, arranged by: _scale _style _texture _placement, etc.		12. EXPLORE Explore techniques to simplify the material: _outline _repetition _negative form _deconstruction. Use a range of media.	

Figure 3.47. A table outlining each step of the *Build* strategy.

<p>5. SELECT</p> <p>Review the exploration and identify ideas to develop further. Criteria is up to the designer but consideration should be given to ideas that most closely reflect the construction process.</p>	<p>13. DEVELOP</p> <p>Explore ways to integrate the visual material with letterform components. Try variations based on the typology sets and letterforms that work with the ideas from the construction process. Use components from the floor plan to provide continuity.</p>	<p>14. REVIEW</p> <p>Review exploration and select letterforms to refine. The criteria partly depends on the designer, but the chosen approach should provide variables and work successfully with the ideas from the construction process.</p>	<p>15. REFINE</p> <p>Refine both the letterforms and the process for using the typeface. Resolve how the interaction reflects the ideas from the construction process and how the variable elements relate to the typology sets.</p> <p>Remember the aim is to create a typeface where the user gets to experience something similar to the decisions made while designing or building the house.</p> <p>Create a limited range of letters to act as an initial prototypeface.</p>

3.7 Presentation

Once I had developed both the *Neighbourhood strategy* and the *Build strategy* I began exploring how to communicate them clearly. Scrivener (2010) suggests that at this stage of a project, the researcher is, “concerned with how knowledge is made explicit, i.e., definitive, clear, unambiguous and objective, or external to the mind of the researcher, using artistic or designerly forms” (p. 76). I considered a range of formats to present my research, including an interactive site or video documentation. These would have had the benefit of demonstrating the design process in action, but also the disadvantage of making my particular approach and role in the process very explicit. Instead I decided to work across a number of print-based presentation formats, with the intention of using each presentation format to communicate a specific aspect of the project.

I created two sets of printed material: one for the *Build strategy* and the other for the *Neighbourhood strategy*. Both sets included a large-format poster, a perfect bound publication, a fold out plan print and a set of card inserts. These sets were designed to work as a coherent whole for the exhibition, but also

to potentially function as separate pieces in a more limited environment in the future.

The large format posters act as type specimens that present selected prototypefaces generated during my experience of both type design strategies. I chose the type specimen format because it is a traditional and recognisable format for presenting type. I also believe that seeing type printed at a large scale on paper helps the viewer truly see its forms. These large format posters aim to communicate on two levels. They clearly show the selected prototypefaces as proof of concept for each strategy but also hope to engage the viewer and inspire them to try the strategy out for themselves.

The perfect bound publications present a full overview of my attempt to use both the *Neighbourhood strategy* and the *Build strategy*. There is an established field of self-publishing for graphic designers and I thought the publication format would work well with the experimental nature of my type design strategies. The two publications I designed include comprehensive documentation of the process I worked through for each strategy. They begin with



Figure 3.48. Powley, C. (20011). *Building type*, exhibition.



Figure 3.49. Powley, C. (20011). *Building type*, exhibition.

a brief overview of the relevant strategy and then show all the steps involved, including the range of letterform options generated and key decision points. This is intended to give the viewer insight into the flexibility of both strategies. The publications do not include a structured set of guidelines for how to recreate the strategy but do offer a thorough visual overview. The steps need to be made clear but I also wanted to communicate the fact that each time the strategy is used it will create something different. I was hoping that by showing the decisions I made along the way the publications would offer encouragement and guidance to any other designers attempting to use either strategy.

The fold out plan print and set of card inserts are designed to work together. I chose to produce a large folded plan print on trace paper as the materials and format could reference architectural plans. This was intended not only as a nod to the architectural source material for this project, but also as an indication that these prints presented a clear blueprint for each experimental type design strategy. They provide a summary of each design strategy and make each of the steps involved clear to the viewer. Essentially they aim to provide the viewer with all the basic information and structured steps required to use the type design strategies that have been created through this research.

I also created a small set of cards to be inserts into the front of the folded plan prints. These were intended to provide both visual stimulation and guidance if the plan print guidelines were seen in a situation without the large format type specimen posters or bound process publications. The front of the cards present the same prototypefaces shown

in the large format posters. On the back there is a brief summary of my process for generating these prototypefaces through using each type design strategy. This condensed visual summary in the inserts is intended to act as a support to the very specific text-based instructions included in the plan print guidelines. Together these two formats should be enough for another designer to follow the steps of each strategy. The inserts and the plan print guidelines are comparatively cheap to produce and have potential in the future to be used as a small, stand alone guide to using the *Neighbourhood strategy* and the *Build strategy*.

Overall the selection of print-based formats within each set aims to provide access to the research on several levels. In combination the posters, publications, plan prints and inserts intend to both inspire and guide other type designers to attempt to use one, or both, of these experimental strategies. The viewer should hopefully feel that the strategies could be a successful way to create interpretive type but also leaves room for their own personal flavour.



Figure 3.50. Powley, C. (20011). *Building type*, exhibition.

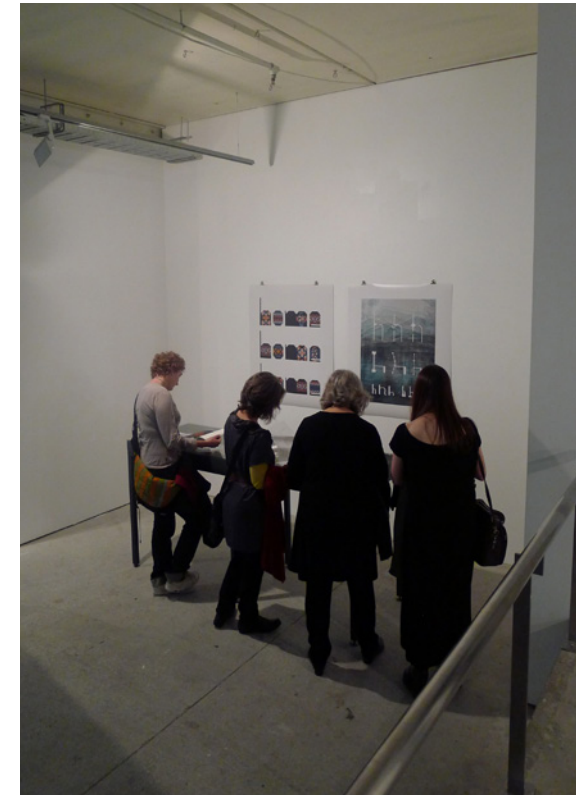


Figure 3.51. Powley, C. (20011). *Building type*, exhibition.

EXHIBITION STATEMENT

The following text is the statement presented within the exhibition space to contextualise the project.

BUILDING TYPE

This project explores interpretation as a creative approach for developing experimental design strategies that translate architecture into type.

I have approached the act of interpretation through two metaphors of translation. When a concept is complex and has many variable factors and outcomes, like translation does, metaphors can provide a way of understanding the situation. Framing each strategy through a different metaphor makes the design situation more coherent and acknowledges that our prior understanding of translation affects how we go about interpreting one form (architecture) into another (type).

The *Neighbourhood strategy* works within a transfer metaphor where a form is decoded, or broken down, into basic elements that are then moved across and recoded into the new form.

I have chosen to refer to three New Zealand suburban houses (single-bay villa, Californian bungalow and state house) as my source material. They were the dominant domestic house forms found in Auckland's suburbs before 1970 and each represents a shift in New Zealand's societal values, influences and lifestyles.

I have created four prototypefaces through using this experimental type design strategy. Each prototypeface has three fonts that have started with the same combination of architectural features, that were decoded through the same set of analysis points and transferred and recoded into letterform components in the same way. Therefore they share the same recipe for their development but are as different as the three different houses used as source material. Instead of having a roman, bold and italic weight, the prototypefaces I have created in this project consist of a villa, bungalow and state font.

The *Build strategy* works within a transform metaphor, where the translator assimilates themselves with the creator of the source form. This strategy produces a typeface, for one kind of

house, that has variable elements that allow the designer to experience a decision making process similar to that of the house owner or builder.

For this strategy I have selected one New Zealand suburban house – the single-bay villa. I have created a single prototypeface where the designer can select from eight variable decorative elements when using the typeface. This ability to select from a range of decorative patterns to embellish a basic form relates to the experience of a villa owner selecting ornamentation from a catalogue to decorate the front of their villa. Instead of having roman, bold and italic weights, the prototypeface I have created from this strategy consists of four italicate and four gothic fonts.

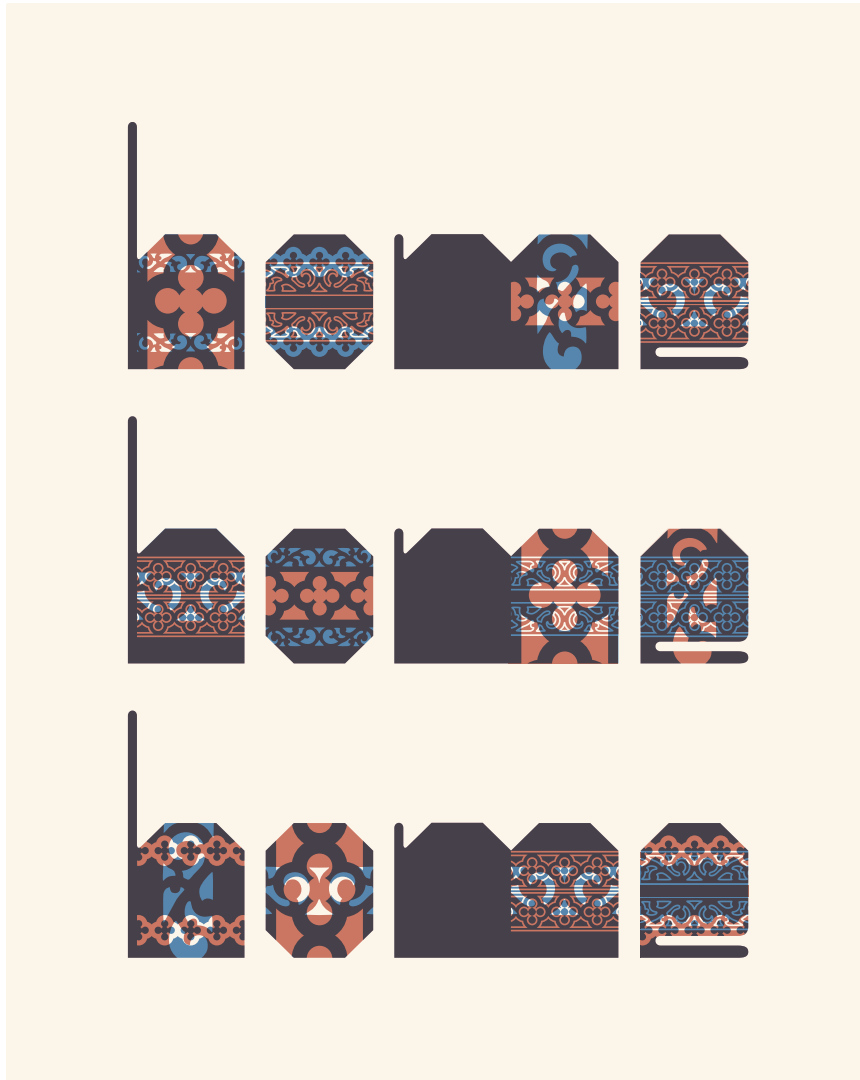


Figure 3.52. Powley, C. (2011). *Build strategy*, large format poster.



Figure 3.53. Powley, C. (2011). *Neighbourhood strategy*, large format poster.



Figure 3.54. Powley, C. (2011). *Build strategy*, plan print guidelines, card inserts and bound process publication.



Figure 3.55. Powley, C. (2011). *Neighbourhood strategy*, plan print guidelines, card inserts and bound process publication.

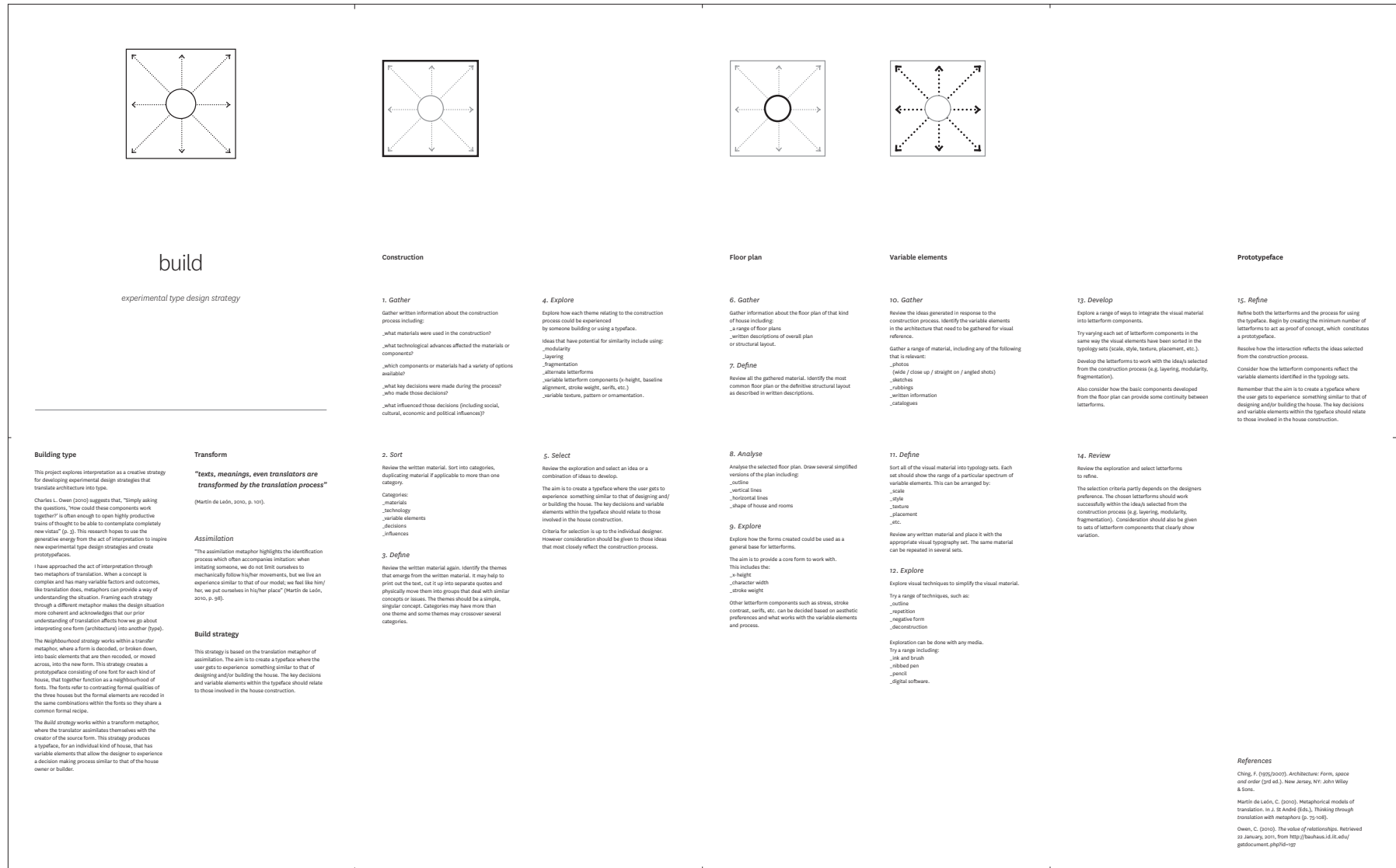


Figure 3-56. Powley, C. (2011). *Build strategy*, plan print guidelines.



Figure 3.57. Powley, C. (2011). *Build strategy*, set of three card inserts.

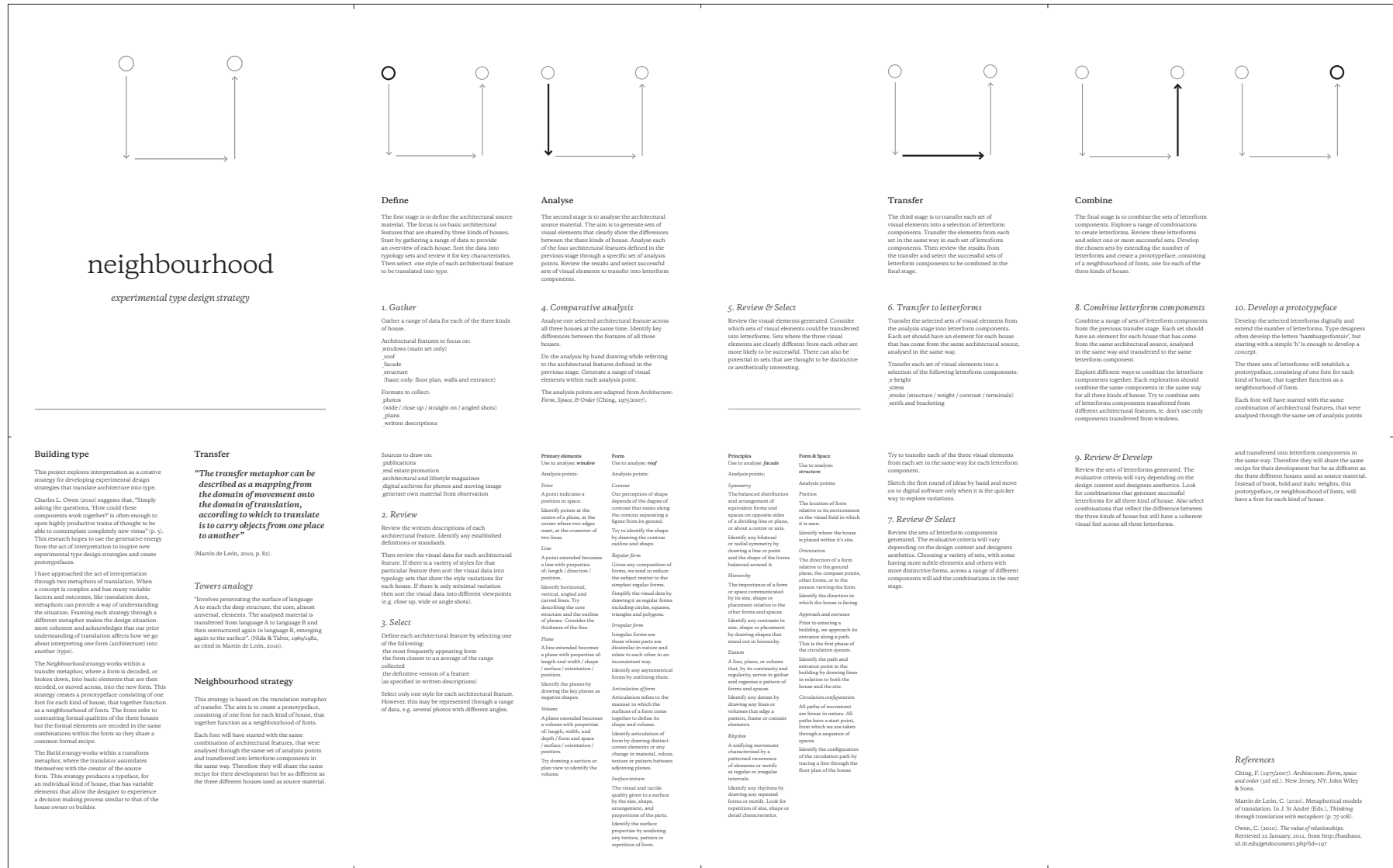


Figure 3.58. Powley, C. (2011). *Neighbourhood strategy*, plan print guidelines.

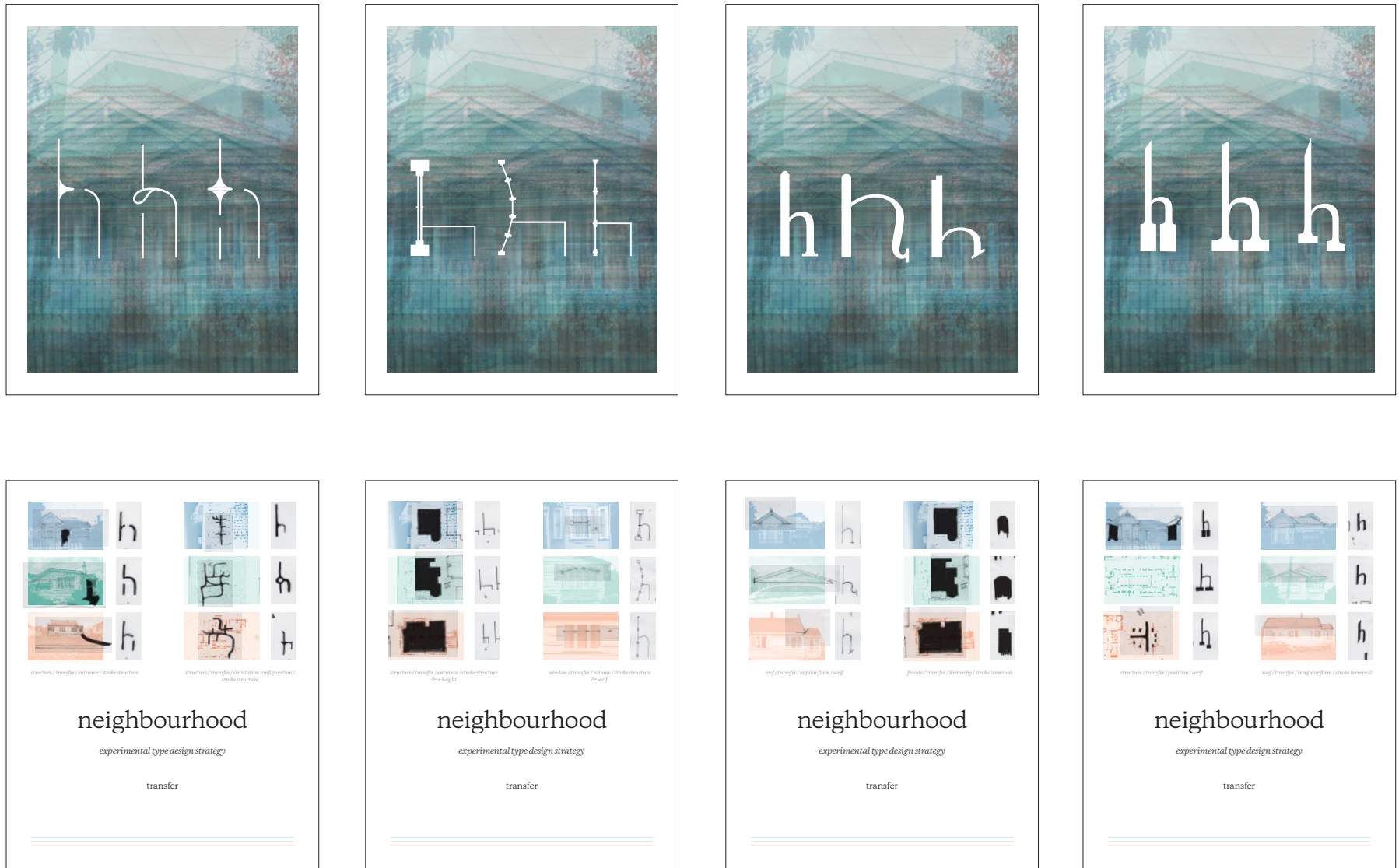
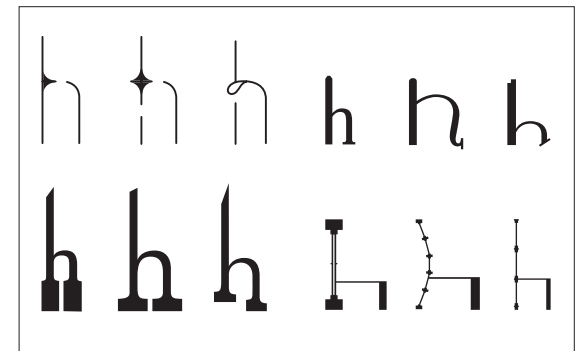
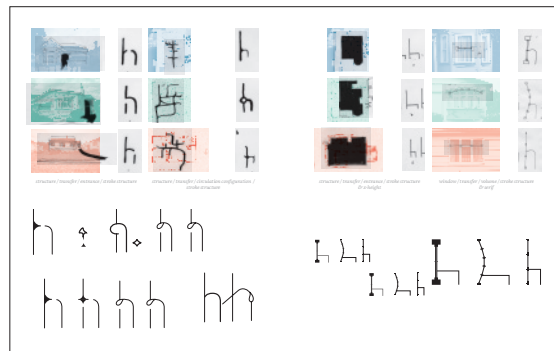
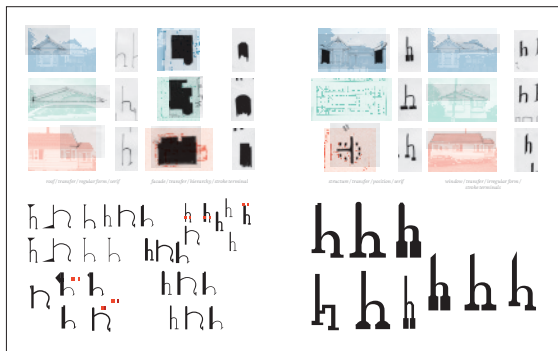
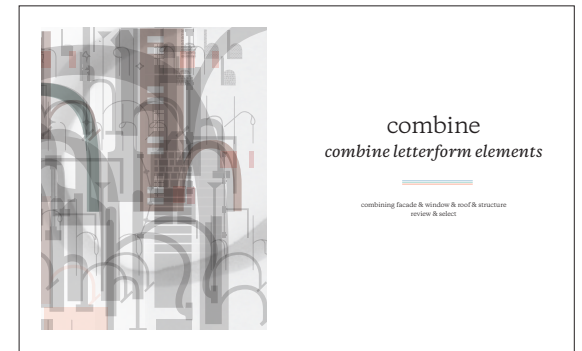
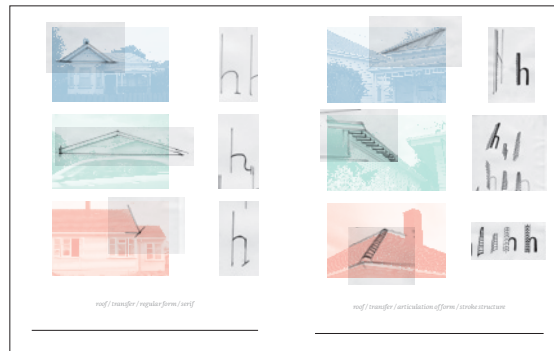
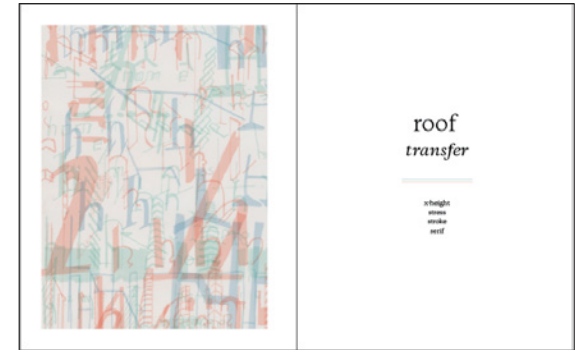
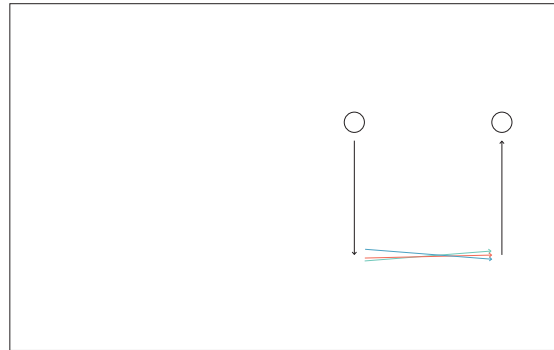
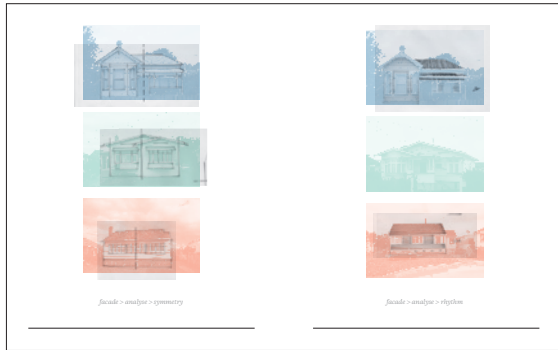


Figure 3.59. Powley, C. (2011). *Neighbourhood strategy*, set of four card inserts.



Figure 3.60. Powley, C. (2011). *Build strategy*, selected spreads from the bound process publication.



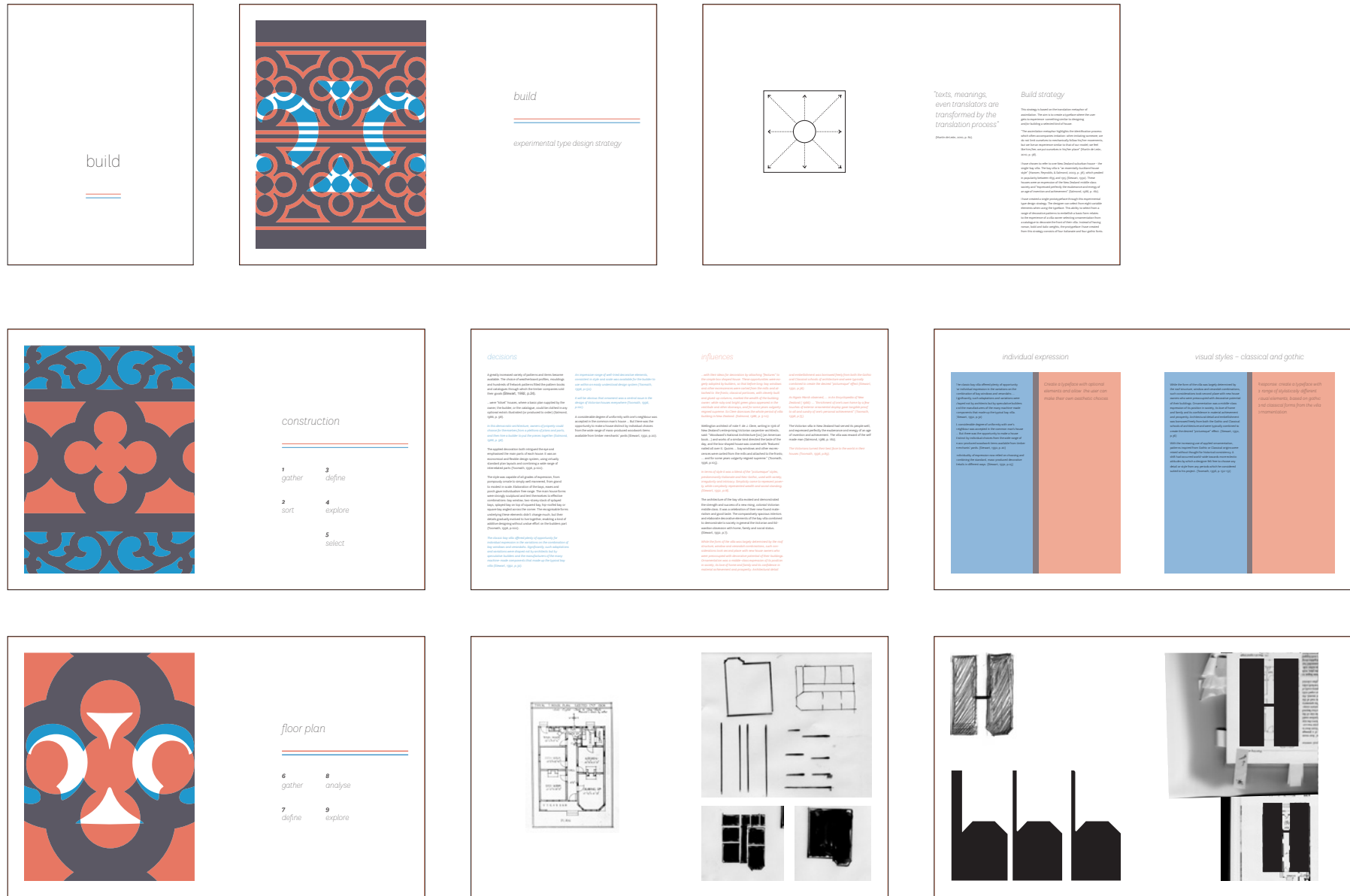
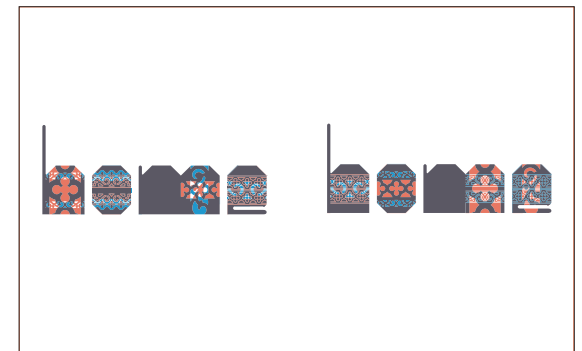
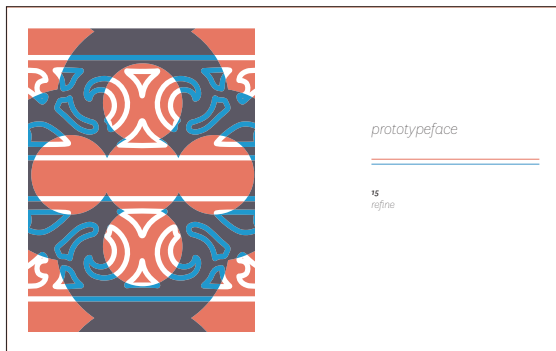
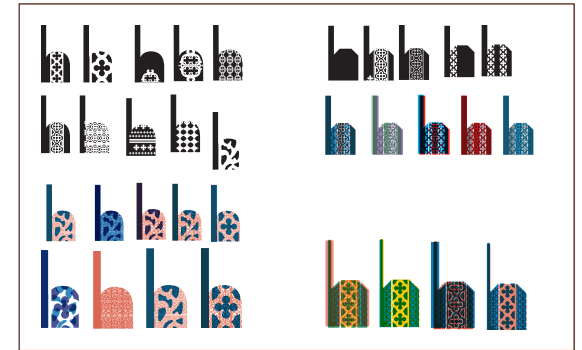
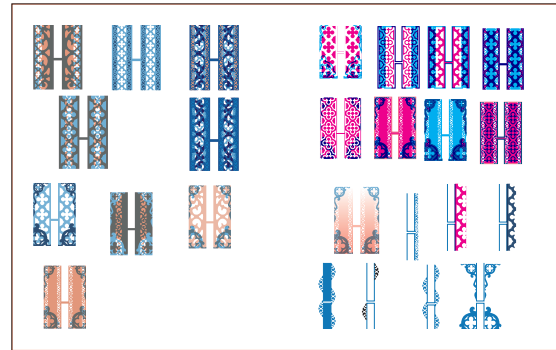
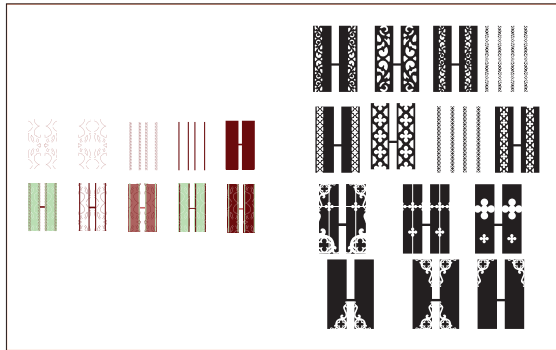
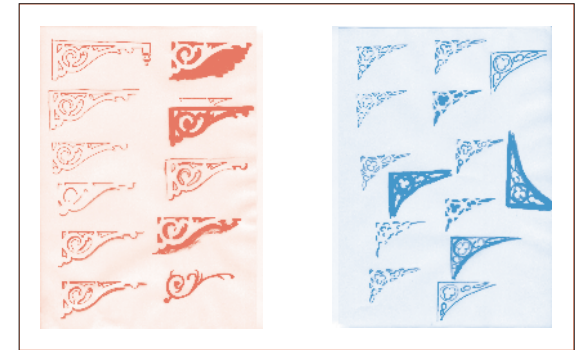
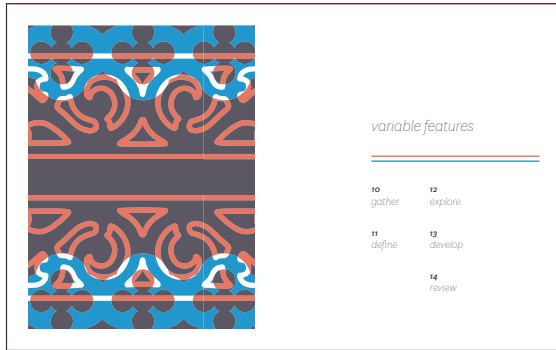


Figure 3.62. Powley, C. (2011). *Neighbourhood strategy*, selected spreads from the bound process publication.



CONCLUSION

This conclusion reviews my intentions for this research and reflects on the research methodology and outcomes for this project. I also discuss the extent to which I have fulfilled my objectives and outline areas for further research.

MY RESEARCH QUESTION WAS:

How can interpretation act as a creative strategy for developing experimental type design processes that translate architecture into type?

My intentions and evaluative criteria developed throughout the research process. I explored a different interpretive strategy in each research phase, and each of these helped refine and resolve relevant criteria for this research.

These can be summarised as:

_develop a research methodology that is structured and rigorous, but also appropriate for a creative and interpretive research question

_identify an interpretive strategy that provided a clear but productive framework for creating and reconciling a range of type design processes

_create experimental type design strategies that have clear steps and guidelines but are flexible enough to be used by other designers

_create experimental type design strategies that are generative and produce a range of type outcomes

_create interpretive prototypefaces that communicate something of their source architecture without being a literal transfer of forms

Snodgrass and Coyne (1997) describe design as a disclosure in two senses:

Firstly, it is a disclosing of the artefact that is being designed; and secondly, and simultaneously, it is an unfolding of self-understanding, since it reveals one's preunderstandings. It uncovers the preconceptions that are constitutive of the design outcome, and at the same time brings to light the prejudices that are constitutive of what we are. The design process is an edification in two senses: it builds up the artefact and edifies the designer. (p. 24-25)

I certainly found the development of my research methodology to be revealing and transformative. The paradigm shift from positivist to hermeneutic framework opened up my understanding of both research and design. It was also a much more relevant framework for a project exploring interpretation. Working through my research over four phases gave me a chance to reflect on outcomes, reframe my thinking and investigate different interpretive strategies. The set of research

methods I brought together for each phase of my research worked well as a structure. They supported a reflective practice and enabled me to engage in a hermeneutic cycle of question and answer. On reflection, the addition of a more rigorous external testing could also have been beneficial. A chance to test my processes with other designers could add a layer of information to respond to.

This also indicates a potential area for further research, in that it would be interesting to investigate what happens when other designers use or adapt my experimental type design strategies.

One of the revealing discoveries for me was how conceptual metaphor theory could relate to design practice. It is one of those connections that seem obvious once you make it: that if metaphors can influence how you perceive a situation, then they can also affect how you act in that situation. Therefore the metaphor you bring to a design or research project will influence the process you apply. In this research the metaphors of translation described by Martín de León (2010), were both a creative strategy and a way of making a complex situation coherent.

They helped generate potential design processes but more importantly they clarified all my thinking and reframed my earlier experimental type design processes. Using a metaphor to describe a process makes it more accessible to others. Therefore the strategy of thinking through design processes with metaphors has potential for further research and application.

The two experimental type design strategies presented as outcomes fulfil most of my intentions. Since I haven't formally tested them with other designers I cannot judge if they are easy to follow and adaptable to another designer's preferences or requirements. On the other hand the *Neighbourhood strategy* is clearly very productive and can be used to create type that references its source architecture in a refined rather than explicit way. The *Build strategy* is also generative, but more in the sense of producing a flexible typeface that has multiple options for combining the same letterform. There is the possibility of extending this research through trying to use these processes on other kinds of architecture or different fields such as car or furniture design.

The prototypefaces created throughout my research are secondary outcomes. I was looking for a balance of direct reference and abstraction when translating the architecture into type. As discussed on page 21, I wanted to evoke the source architecture rather than let it dominate the letterforms. My ability to achieve this improved as I developed my design strategies and I am satisfied with the level of balance shown in the prototypefaces presented. I would like to continue to develop the villa-based typeface from the *Build strategy* into a fully functioning OpenType typeface in the future.

In conclusion, I think interpretation proved to be a successful creative strategy for designing type. The range of design processes and prototypefaces produced during this research process show it can be a productive approach. There is scope for it to be investigated in other ways and with source material other than architecture. Overall, 'What if that becomes this?' is an engaging starting point for experimental type design.

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