Timber and Tin Revisited:

Modifications to the Queensland House using Burra Charter Principles

Preface

This paper sits within a broader body of knowledge, which can loosely be covered under the term 'Post Occupancy Modification'.

Although the pre-World War II, 'timber and tin' Queensland vernacular house has had a long tradition of adaptation, this practice is certainly not a localised phenomenon. In the lead-up to the research for this paper (which started its life as an investigation into User Participation in design and construction), the discovery of a seminal text by Philippe Boudon, which documents the modifications carried out upon a group of speculative mid-1920s Modernist dwellings in mainland Europe, was a pivotal point in the decision to research a contemporaneous example of Post Occupancy Modifications nearly halfway across the globe, in Brisbane Australia. Although the dwellings in Boudon's book are located in Pessac, a small town near Bordeaux, France, and were designed by Le Corbusier, an icon of the Modernist movement, there are significant parallels to be drawn between these Corbusian buildings, and their Queensland vernacular cousins. Additionally, the modifications to the Pessac houses exhibit interesting parallels with modifications to the 'Queenslander'.

These comparisons could form the basis for a future research paper, however neither Pessac nor Le Corbusier are the subject of this paper's research. Rather, it is from Boudon's 1969 publication, *Lived-in Architecture: Le Corbusier's Pessac Revisited*[1], that the following paper derives its title.

[1] Philippe Boudon, *Lived-in Architecture : Le Corbusier's Pessac Revisited* (London Lund Humphries, 1972).

Abstract

When modifying and adding to the pre-World War II 'timber and tin' Queensland house, the prevalent approach of 'matching existing' forms and materials, is stifling the opportunity to define a contemporary 'Queensland style' and weakening the legibility of Brisbane's original pre-war streetscapes. This paper aimed to show that, for the purpose of maintaining the cultural significance of the pre-war Brisbane streetscape, the application of an alternative approach to modifications - one which closely aligns with the principles of the *Burra Charter* - is a more appropriate response when modifying the existing Queenslander.

In order to prove this, the research investigated Queensland's architectural history, through existing texts, in order to discuss the possibility of an emerging Queensland vernacular. This historical investigation took into account the tradition of past modifications to the Queensland house and furthermore, outlined the existing recommendations for approaches to future modifications. In addition, the research investigated Brisbane's local government legislation, for its realised effects on existing pre-war housing stock.

These investigations found that, although 'timber and tin' is the most easily identifiable Queensland vernacular characteristic, there are other traditions, as well as contemporary examples of architectures, that can contribute to the discourse on defining a regionalist architecture for Queensland. Regarding this paper's research on modifications to the Queenslander, it was established that changes to the Queensland house were, and are, a widespread phenomenon, inherent to Brisbane's housing tradition. This characteristic of 'change' was offered as an enduring vernacular characteristic that could be celebrated as a defining attribute of contemporary Queensland style. It was found that the local government legislation is resistant to this change, and condones a 'match existing' approach to modifications to the Queensland house.

As a method of testing this paper's contention, (that the application of the principles of the *Burra Charter* is an appropriate way to maintain the cultural significance of the Brisbane streetscape) three case studies were chosen for investigation and documentation. As part of their selection criteria, these case studies were examples of modifications that had been carried out in a way that demonstrated the principles of the *Burra Charter*.

The case studies showed that, the 'contrast' approach to modifications, which is the widely accepted method for inserting new work within a heritage listed place, can be successfully applied to the pre-war Queensland house. This approach not only creates an opportunity to contribute to a definition of a contemporary Queensland vernacular, but clearly delineates the original built fabric from the new and, on a larger scale, heightens the legibility of the pre-war dwelling within the ever-changing Brisbane streetscape.

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Thanks also to Mark Hiley for his supervision of this dissertation.

Declaration of Authorship

I certify that the work presented here is, to the best of my knowledge and belief, original and the result of my own investigations, except as acknowledged, and has not been submitted, either in part or whole, for a degree at this or any other University.

Brant Harris

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Definitions and Abbreviations

For the purposes of this paper, these terms will be defined as follows :

Original	the state of the building (or element) 'as complete', before inhabitation.
Existing	the state of the building (or element) 'as found', including subsequent modifications
Modification	any work done to any part of an existing building
Renovation	similar to 'modification' except usually refers to the building as a whole. (ie "Modification *to* a building" and "Renovation *of* a building") In popular vernacular, it most commonly involves 'making new' (restoration of) the existing parts, as well as adding new parts.
Conservation	work done to preserve a building, or element of a building, in its existing state and/or condition.
Restoration	work done to a building, or element of a building, to return it to a former state and/or condition. (not necessarily the *original* condition)
Alteration	work done by removing or re-using an existing element or elements of a building
Addition	a wholly new part to an existing building, sometimes incorporating an existing element or elements of that building
Pre-war + **Post-war**	refers to the time periods prior to, and subsequent to World War II. Identification of pre-war housing, for the purposes of BCC legislation, is a via the 1946 aerial photograph of Brisbane.
BCC	Brisbane City Council
Burra Charter	The short from of *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 1999.* A document which "*provides guidance for the conservation and management of places of cultural significance (cultural heritage places), and is based on the knowledge and experience of ICOMOS members.*"[2]
ICOMOS	International Council on Monuments and Sites

[2] Icomos Australia and Sites International Council on Monuments and, *The Burra Charter : The Australia Icomos Charter for Places of Cultural Significance 1999 : With Associated Guidelines and Code on the Ethics of Co-Existence* (Burwood, Vic. : Australia ICOMOS, 2000).

PART 1

Chapter 1 - Introduction

Overview

A great proportion of Brisbane's inner city housing stock is comprised of pre-WWII single detached 'timber and tin' homes, commonly and affectionately referred to as 'Queenslanders'. These buildings contribute significantly to Brisbane's unique character, and occupy a special place in the collective Brisbane psyche.

Much has been written on the history and qualities of the pre-war Queensland house, however there is a comparative lack of discourse relating to appropriate ways of dealing with modifications to the extant building stock. For various reasons, including population increase, the changing family unit, dilapidation, and ease of modification, Queenslanders have been, and continue to be, demolished, renovated and added to. This continual modification is carried out independently by the building's occupants, or under the direction of professionals. While it could be argued that this layering of construction is a defining element of the Queensland House, it also raises issues of style and identity, and what it is that constitutes 'appropriate' development. This is a contentious topic amongst professionals and lay people alike, although most agree that current modification practices are causing an erosion of the city's character. The lack of discourse regarding their modification, has lead to some controversial interpretations of the 'Queensland Style' in practice, and continues to raise uncertainty amongst architects when approaching the problem.

Statement of the Problem

In order to simplify the problem, this paper recognises the existence of a dichotomous relationship, between those who believe that, when inserting new work amongst old, a 'match existing' approach is appropriate, and those who consider modifications to Queenslanders an opportunity to continue to re-define a contemporary, vernacular Queensland identity. Whilst there is some discourse which accepts the use of contemporary styles and materials as a valid response when modifying the Queenslander, most publications, including Brisbane's local government legislation, inadvertently condone the 'match existing' approach. This can lead to a mimicry of style in practice, which can make the identification of original building stock difficult to discern from new imitations, in turn weakening the unique character, and authentic built fabric, of pre-war streetscapes.

Although this is a Queensland-wide phenomenon, the rapid growth of the South-East corner of the state, reflected in tighter local government restrictions on demolition and modification of pre-war housing stock, indicates a greater pressure on the Brisbane area, in comparison with the rest of Queensland. For this reason, the scope of this research will be limited to the context of the city of Brisbane, as defined by local government boundaries.

This paper acknowledges that the pre-war Brisbane suburb needs to undergo modification in order to accommodate greater population densities and changing standards of living. However, it also recognises that pre-war streetscapes are culturally significant places, which should be dealt with appropriately in order to maintain their significance. In cases where particular structures exhibit a high degree of cultural significance, they are often entered on the appropriate Local, State or Federal Heritage lists. Buildings which are registered on one of these lists are subject to *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 1999.* This charter explicitly rejects imitation as a valid response when adding new work, and encourages that new work is identifiable as such.

Thesis Aim

Although this paper does not suggest that all pre-1946 Queensland houses should be registered on a Heritage list, the thesis aims to show that, when modifying such buildings, the application of the principles outlined in the Burra Charter is a more appropriate way to maintain the cultural significance of Brisbane's pre-war streetscapes, than imitating pre-1946 building forms and details.

Research Approach

To investigate the validity of this argument, Part 2 of the paper will summarise the existing literature by firstly outlining the extent of Queensland's brick and masonry tradition, followed by a review of Queensland's well documented 'timber and tin' tradition. It will then give a brief historical account of the pre-war development of the 'Queenslander', through the identification of its changing typologies, from the late 1800s through to the mid 1900s. In attempting to identify a contemporary 'Queensland Style', the research will then examine the post-war history of Brisbane architecture, in terms of its contribution towards defining an architectural regionalism.

Identifying a contemporary regionalism is not only relevant when designing new buildings, but equally important when modifying existing ones. The pre-war Queensland house has had a long association with modifications and, aligned with this paper's contention that 'change' is a defining characteristic of the 'Queenslander', the research will summarize the existing literature on the history of change in relation to the Queensland house. Additionally, there is a body of literature which offers advice on appropriate ways to modify Queenslanders. These advices will be examined within the framework of Typology, Conservation and Restoration, Alterations and Additions, with a particular focus on the 'match existing' versus 'contrast' approach, in relation to Material Selection and Detailing.

Despite the existence of such texts, the greatest determining influence on the outcome of proposed modifications by potential home renovators, is local authority legislation. The

current *Brisbane City Council City Plan (2000),* is particularly concerned with issues of character and streetscape in Brisbane's pre-war suburbs, and exerts a large influence on the design outcomes of built works. The relevant codes from this document will be examined, and their affects on the likely realised outcomes of built works will be outlined. The research will examine this document's intention, as distinct from the *Burra Charter* - the national legislation which provides guidance on management and conservation of places with cultural heritage significance. Although the *Burra Charter* only legally applies to buildings registered on a Local, State, or Federal Heritage list, its principles will be examined for their relevance regarding modifications to all buildings which contribute to Brisbane's pre-war housing stock.

Finally, this paper's original contribution to the already existing body of knowledge regarding modifications to existing pre-war Queenslanders, will be in the form of the documentation and investigation of three case studies. These case studies have been chosen particularly for their contemporary form and detailing, which align closer with the principles of the *Burra Charter,* than the rules outlined in Brisbane City Council's legislation. The approach outlined by the *Burra Charter* will be examined as it manifests itself throughout the chosen case studies, both internally and externally, but with a particular focus on the reading of these buildings within the Brisbane streetscape.

Part 2

Chapter 2: The History of the Queensland House

Brick and Masonry

Historically, Queensland's vernacular architecture has been predominantly associated with the 'timber and tin' tradition. Nonetheless, its buildings have also had a long association with brick and masonry construction. Although making up the great proportion of pre-war Brisbane housing stock, timber was not always so dominant. Don Watson points out that it was not until the introduction of saw mills, including that of William Pettigrew, on the corner of William and Margaret Streets in Brisbane, that timber became more economically viable than other materials.[3] *"…the proportion of dwellings which were of brick and stone dropped quickly from 34.5% within the original boundaries of Brisbane in 1859…to 21% in 1861, then to 15% in 1864."*[4]

Watson asserts that this trend was also due to timber's relative economic advantage over masonry, and not for the lack of supply of an alternative. He states,

> […] there is no shortage of suitable clays for brickmaking in south-east Queensland. In fact, it has been compared favourably with Staffordshire, a centre of clay-based industry in Britain. The many place names (such as Clayfield, Clay Street, Stafford, Brickfield, Brickworks, and Brickyard Roads) and their distribution all attest to activity in this area.[5]

Although this paper concerns itself mainly with the dominant housing aesthetic of 'timber and tin', the widespread misconception that all pre-war Brisbane dwellings fit into this category is worth considering, as it has had quite an affect on the loss of character houses from Brisbane's streets in recent times. It was not until its amendment of 1 January 2007 that the Brisbane City Council's *Demolition Code* recognised pre-1946 non-'timber and tin' dwellings as being worthy of retention. Prior to January 2007, all non-'timber and tin' buildings constructed after 1900 could be demolished without approval.[6]

Pre-war examples of masonry residential construction included derivative styles such as Spanish Mission, Mediterranean, Georgian, English, Kentish Gable and Functionalist.[7]

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[3] Donald Watson, "The Queensland House : A Report into the Nature and Evolution of Significant Aspects of Domestic Architecture in Queensland," (Brisbane: National Estate Program of the Australian Heritage Commission, 1981), 5.2.
[4] Ibid.
[5] Donald Watson, "An Overview of the Brisbane House," in *Brisbane: Housing, Health, the River and the Arts*, ed. Rod Fisher and Ray Sumner (Brisbane: Brisbane History Group, 1985), 13.
[6] The code contains a Performance Criteria which requires all pre-1900 to be proven "*structurally unsound*" prior to demolition approval
[7] Judy Rechner and Group Brisbane History, *Brisbane House Styles 1880 to 1940 : A Guide to the Affordable House* (Kelvin Grove, Qld. : Brisbane History Group, 1998), 49.

Although these styles are not considered vernacular, they do contribute to the pre-war streetscape, and should, along with all pre-1946 masonry dwellings, be considered as an important layer in Brisbane's housing history.

Timber and Tin

The origins of the pre-WWII Queenslander,[8] can be traced back to the 1860s. In his paper *A History of the Queensland House,* Peter Bell gives a detailed account.[9] He argues that, until the 1860s, "*there had been nothing distinctive about houses in Queensland*." Coinciding with increased settlement in the area, as land was released for sale or lease by the Brisbane administration when Queensland became a separate colony in 1859, the timber tradition of Queensland housing became popular due to timber being "*light, relatively cheap to transport, and quick to erect*."[10] Additionally, Don Watson in *The Queensland House* argues that "*if any single factor can be given credit for the Queensland house, it is the ready availability of softwood.*"[11]

Early examples of timber framed buildings were clad internally only, leaving the exposed frame externally. This differed from colder parts of Australia which "*required a second layer of boards on the outside to trap an air layer for insulation.*"[12] Watson claims that external sheeting was introduced to existing and new dwellings, to overcome problems with "*retention of water in the exposed joints between diagonal braces, and between studs and plates, and studs and heads to doors and windows.*"[13] Watson also points out that exposed framing continued well into the 1900s in some instances, mostly for internal walls but also for external walls which were protected by verandahs.

In addition to timber, 'tin'[14], or more accurately, galvanised iron is the other material which is strongly associated with the Queensland House. After being developed in England in about 1840, corrugated galvanised iron was available by the 1850s, and by the 1860s, "*began to dominate all the coastal settlements*"[15]. Up until 1921, all of Queensland's corrugated iron was manufactured overseas, (mostly in England) by which time "*93% of Queensland house roofs*

[8] Bell reserves the term 'Queenslander' for a style of Queensland House which came out of the 1920s. Differing from earlier designs, Bell distinguishes the Queenslander from other Queensland House architecture, by their asymmetrical street elevation, and low pitch roof which was "complex in form and dominated by gables".[8] Other historical sources tend to avoid the use of the term 'Queenslander' altogether, although common usage of the term tends to cover any timber and tin dwelling with a verandah and stumps, constructed up until 1946.
[9] Peter Bell, "A History of the Queensland House," (Peter Bell Historical Research Pty Ltd, 2002).
[10] Ibid., 8.
[11] Watson, "The Queensland House : A Report into the Nature and Evolution of Significant Aspects of Domestic Architecture in Queensland," 2.1-2.2.
[12] Bell, "A History of the Queensland House," 9.
[13] Watson, "The Queensland House : A Report into the Nature and Evolution of Significant Aspects of Domestic Architecture in Queensland," 5.10.
[14] Interestingly, the word 'tin' is a misnomer, given that the original roofing material was actually iron, however 'timber and iron' lacks the alliterative punch of the oft quoted phrase 'timber and tin'.
[15] Bell, "A History of the Queensland House," 10.

were of corrugated iron."[16] Corrugated roofing is still in wide use today, however "*galvanised steel has replaced galvanised iron*"[17]

Typology of the 'Queenslander'

Although the material palette of timber and tin was quite dominant from the late 1800s through to the mid 1900s, the typology and detailing of the traditional Queensland House changed markedly, over this time.

Judy Gale Rechner's *Brisbane House Styles: 1880 to 1940 – A Guide to the Affordable House*[18], is perhaps the most referenced text used for the identification of pre-war housing. She explains that, early examples of the Queensland House were simple in plan form and elevation. They appeared symmetrical from the street with a simple hipped or gable sided roof. Usually they included a narrow verandah across the full width of the house, at the front and the back.[19] The earliest examples contained two rooms, however, by the 1880s and 1890s, the "*steeply-pitched pyramid or short-ridge roofed four-room house with stepped verandah became the dominant Queensland form."*[20] These simple house forms are often referred to as the 'worker's cottage'.

Bell explains that it was not until the 1880s that verandahs became universal to the Queensland House.[21] He points out that, in fact, some earlier examples of Queensland houses had verandahs added to them subsequent to their initial 'completion'.[22] Verandahs were a popular device used for the shading of external walls, as well as the protection from rain, while still permitting breezes. Nevertheless, Bell argues that "*their social functions were more important than their role in climate control*."[23] This, he explains, is exemplified by the tendency, almost without exception, of the vernadah being located at the front of the house. This planning decision was irrespective of the orientation of the house in relation to the sun's movement, prevailing breezes, or the most likely direction of approaching rains.[24]

By the 1890s, a variation on the single, full width verandah had started to emerge, whereby one side of the house was pushed forward into the verandah space and topped with a gable.[25] This common style is often referred to as 'asymmetrical'. Sometimes the remaining verandah was extended down the side of the house to form an 'L' shaped verandah. The stepped verandah became less popular into the 1900s, replaced by examples where the verandah was roofed by extending the pitch of the main roof down to meet the verandah

[16] Ibid., 11.
[17] Ian Evans and National Trust of Queensland, *The Queensland House : History and Conservation* (Mullumbimby, NSW Flannel Flower Press, 2001), 72.
[18] Rechner and Brisbane History, *Brisbane House Styles 1880 to 1940 : A Guide to the Affordable House*.
[19] Ibid., 2.
[20] Ibid.
[21] Bell, "A History of the Queensland House," 11.
[22] Ibid.
[23] Ibid., 12.
[24] Ibid.
[25] Rechner and Brisbane History, *Brisbane House Styles 1880 to 1940 : A Guide to the Affordable House*, 2.

plate, rather than using a separated, sometimes bull-nose, roof. This style became known as the 'Bungalow'. Other variations on style developed into the 1930s, with more complexity in planning forms and additional gables and ornamentation.[26]

Prior to the 1900s, Bell argues that the architectural influence on the Queensland House was mostly from England, however with the re-appropriation of the Californian Bungalow Style, amongst others, the influence of American styles dominated the 20th century.[27] Common to all these examples, is the method of supporting the houses elevated above the ground on 'stumps'. Mostly these stumps were made from timber, although "*by the 1920s the concrete stump had already taken on its modern square form with chamfered corners*".[28] Additionally, the Californian Bungalow influence saw stumps replaced with weatherboard lined tapered blade pylons. Regardless of their style, there are varying explanations for this elevated method of construction type, including "*flooding, hillslope sites,* [and] *defence against mosquitoes or termites* […]."[29]

Despite their year of construction, defined 'style', or specific detail attributes, for the purpose of this paper, the term 'Queenslander' will encompass all timber and tin dwellings which were constructed up to 1946. Most texts agree that the Queensland house contains all or some of the following elements, as listed by Bell:[30]

- The house was detached on its own allotment
- The house was single storeyed
- The house was build entirely of industrialised materials
- Its roof was almost certainly of corrugated galvanised iron
- The house walls were probably of sawn timber
- Its wall construction technique was most likely the light stud frame
- The frame was very likely left exposed on the exterior walls
- The house was raised on timber posts at least a short distance above the ground
- The house was perhaps elevated to a height of up to three metres
- The general form of the house probably followed a common design
- The core of the house probably conformed to one of two simple plans
- The front elevation and general floor plan of the house were symmetrical
- The house's ornamentation was simple, conventional and mass produced
- The house has at least one verandah, and possibly verandahs all round

[26] Ibid., 3..
[27] Bell, "A History of the Queensland House," 31.
[28] Ibid., 19.
[29] Ibid., 18.
[30] Ibid., 22.

Although not all of these attributes can be identified in all 'Queenslanders', the combination of the majority of the above elements, make pre-war timber and tin Brisbane housing, a geographically unique dwelling type, giving them cultural heritage significance worthy of retention and appropriate consideration, when embarking on renovation or modification.

This claim is heightened when considering the differences between past practices and contemporary construction materials and building typologies. According to Watson, after the First World War the local forests were becoming depleted, and the price of timber rose. Industrialisation brought materials such as fibro-cement, fibrous plaster and art metal.[31] With the introduction of these new materials in the interwar period, and the decline of timber supplies, Watson poetically states, "a *tradition had passed."*[32]

Contemporary Queensland Style

After World War II, new styles emerged, which began to abandon the Queensland tradition of timber and tin. Jennifer Taylor's *Australian Architecture since 1960*[33], gives an historical account of the significant developments of Australian architecture (including Queensland) up to 1990. Immediately post-war, she begins by discussing the influence of Karl Langer (an Austrian architectural import) who was critical of the pre-1946 Queensland house, and particularly, its relationship with the ground due to its elevated floor level.[34] Taylor notes that Langer's practice of designing garden spaces for living, (in lieu of the traditional verandah) was aided by *"the floor area restrictions during the fifties."*[35] In referencing Langer's 1944 paper *Sub-tropical housing*, Wilson and Reilly state, "*He criticised the Queenslander for its deep dark plan and encouraged the use of long shallow plan configurations so that every room could be naturally lit."*[36] Peter Newell notes, "[his] *work had a considerable influence on post-World War II students of architecture at a time when reinforced concrete floors were being introduced."*[37]

Taylor points out that among Langer's students at the University of Queensland, were Edwin Hayes and Campbell Scott. They later formed Hayes & Scott Architects, and produced many well-regarded domestic buildings, particularly in Brisbane's western suburbs. Their houses generally had low pitched roofs, used brick and concrete in combination with lightweight sheeting, and had a considered approach to their relationship to the ground. Wilson and Reilly

[31] Watson, "The Queensland House : A Report into the Nature and Evolution of Significant Aspects of Domestic Architecture in Queensland," 2.8.
[32] Ibid.
[33] Jennifer Taylor, *Australian Architecture since 1960*, 2nd ed. ed. (Red Hill, A.C.T. : Royal Australian Institute of Architects, National Education Division, 1990).
[34] Ibid., 117.
[35] Ibid.
[36] Andrew Wilson and Angela Reilly, "Reflections on an Enduring Partnership," in *Hayes & Scott : Post-War Houses*, ed. Andrew Wilson (St. Lucia, Qld.: University of Queensland Press, 2005), 5.
[37] Peter Newell, "The House in Queensland : From First Settlement to 1985" (MArch thesis, University of Queensland, 1988).

argue that a number of Hayes and Scott's project's "*have the potential to inform future rethinking of housing solutions in south-east Queensland and beyond*."[38]

Taylor gives particular prominence to architect John Dalton (1927-2007), who was a student of Campbell Scott at the University of Queensland and later an employee of Hayes & Scott.[39] Taylor argues that Dalton's work in housing (particularly through the 1960s and 70s) exemplifies a regional architecture, with his own house of 1960 being *"strongly conditioned by considerations of climate control."*[40] With regard to material use, Taylor points out the common use of *"white expanses of textured, cement washed masonry."*[41] Often these heavier elements were used in combination with "*dark stained timbers."*[42]

Equally notable for their contribution to Queensland architecture during this period, although better known for their public and institutional work, were the separate practices of James Birrell and Robin Gibson. (Gibson had also been an employee at Hayes and Scott,[43] while Birrell was an import from Melbourne.[44]) Although the use of concrete and masonry is a distinct feature of much of Gibson's early work, it is Birrell who is particularly notable for his use of these materials. Exemplified by his many public and institutional buildings, his penchant for patterned concrete and expressive brickwork, mark a distinct contrast to Queensland's pre-war predominant domestic architecture.[45]

Much of South-East Queensland's architecture throughout this period stemmed from the influences of Modernism. Taylor notes that it was *"not until the seventies that the Queensland architect consciously turned his attention back to relearn the lessons exhibited in the indigenous building types."*[46] In *New Directions in Australian Architecture*[47]*,* Philip Goad explains that, "[s]*ince the 1970s, the houses of Russell Hall, Rex Addison, and Lindsay and Kerry Clare have epitomised the close knowledge of timber construction, and the formal and expressive qualities of the corrugated iron roof."*[48] Taylor adds Gabrielle Poole to this list, claiming that, *"*[t]*he finest examples of this revisionist architecture"*[49] are to be found in his work. In *Australian Architecture Now,* Davina Jackson notes, "[Poole's] *protégés, Lindsay and Kerry Clare and John Mainwaring, sometimes anchor their buildings with emphatic walls of masonry but are mainly committed to the skeletal aesthetic possibilities of timber and steel."*[50]

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[38] Wilson and Reilly, "Reflections on an Enduring Partnership," 15.
[39] Taylor, *Australian Architecture since 1960*, 117.
[40] Ibid., 118.
[41] Ibid., 119.
[42] Ibid.
[43] Ibid., 117.
[44] Ibid., 122.
[45] Andrew Wilson and John Macarthur, eds., *Birrell : Work from the Office of James Birrell* (Melbourne: NMBW Publications, 1997).
[46] Taylor, *Australian Architecture since 1960*, 131.
[47] Philip Goad and Patrick Bingham-Hall, *New Directions in Australian Architecture* (Balmain, N.S.W. : Pesaro Publishing, 2001).
[48] Ibid., 15.
[49] Taylor, *Australian Architecture since 1960*, 132.
[50] Davina Jackson and Chris Johnson, *Australian Architecture Now* (London Thames & Hudson, 2000), 13.

Collectively, these architects are most readily identifiable as a group whose work epitomises South-East Queensland's domestic architecture. Goad says, their *"belief in an ontology or essential nature of construction, is pervasive."*[51] He expands on this, stating that,

> Brit Andresen and Peter O'Gorman [et al] […] continue to refine this way of making and its associated honesty. Careful attention to the construction joint, and careful framing, both structurally and in terms of placement on the site, inform these works. The palette is almost always exposed light timber and/or steel framing with infills [sic] or cladding of sheet fibre cement or corrugated iron.

Finally, the internationally recognised practice of Donovan Hill, has, in more recent times, made a significant mark on Brisbane's architectural landscape.[52] Although well recognised for their public and institutional work, their domestic work has also been particularly influential on architectural discourse in Brisbane over the last decade or so. And, as Goad argues, Birrell's work from the 1960s and 70s, has had an influence on their practice.[53] Timothy Hill, who worked under Brit Andresen of Andresen O'Gorman on the Stradbroke Island House (1986),[54] together with Brian Donovan *"have capitalised on Birrell's hybrid and idiosyncratic monumentality. Their work constantly crosses between the opposites of mass and lightness, open and closed form. In their hands, a new tradition is made possible for Brisbane."*[55]

Conclusions

Although masonry construction was used extensively in domestic Queensland architecture up until the mid 1800s and, after a brief hiatus, has had a resurgence in the second half of the 20th Century, it is clear that the timber and tin 'Queenslander' is considered to be the dominant pre-war vernacular building type. Moreover, it remains the defining regional architecture. The volume of literature dedicated towards the history and identification of these original buildings, signifies a local affinity for this typology, and confirms that the 'Queenslander' should be regarded as an important contributor to Brisbane's regional identity.

Since World War II, it is evident that that the range of influences on Brisbane's domestic architecture has created an eclectic mix of built works.[56] There are few prevalent regionalist attributes which can be claimed to be inherent to these post-war buildings. Certainly the

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[51] Goad and Bingham-Hall, *New Directions in Australian Architecture*, 45.
[52] Donovan Hill's modifications and extensions to the Queensland State Library (located in South Brisbane - original building designed by Robin Gibson) recently won the *Royal Australian Institute of Architect's – Brisbane Building of the Year (2007)* award.
[53] Goad and Bingham-Hall, *New Directions in Australian Architecture*, 16.
[54] Ibid., 91.
[55] Ibid., 16.
[56] This paper acknowledges that the comparison between the dominant pre-war housing stock (the Queenslander) and post-war, architect designed 'one-offs' seems inequitable, in consideration of Brisbane's dominant contemporary housing type; the brick and tile project home, found in the sprawling outer suburbs. However the consideration here is in the search for a regionalist identity, absent in the modern day 'Queenslander' equivalent

current Brisbane architectural community has gone some way towards identifying a 'Queensland style', however industrialisation, international publications, and the ease with which information is shared across the globe, has had a major influence in reducing the natural and local forces (and limits), which are necessary to produce a truly regional vernacular Queensland architecture.

In a recent interview broadcast on ABC radio,[57] architectural writer and historian, Kenneth Frampton, in reply to a question regarding Critical Regionalism, contextualizes this worldwide phenomenon.

> One of the dilemmas that face modern architects and modern builders is the enormous option of material choice and the universal international character of modern building materials. The kind of unity that used to exist, […] because the range of building materials were much more limited than they are today, gave, […] in vernacular building, a particular unified character, spontaneously, because there was no other way of building. […] This choice of materials creates a kind of problem, […] it creates a kind of cultural cacophony. Some societies and some cities have tried to regulate this by insisting that one builds out of a particular material. […] So it *is* possible to legislate certain materials and thereby restore a unity to the fabric."[58]

The issue of legislation will be addressed later in the paper, however the question of defining a contemporary regionalist architecture is worth considering here. The particular forces at play during the late 19th and early 20th Century, out of which the 'Queenslander' was born, no longer exist. Construction techniques have changed, technology has advanced, and, as designers, we are better educated about how to respond to our social and environmental circumstances. So rather than imposing a Queensland vernacular 'style' on new buildings, this paper takes the position that we need to draw from, not mimic, our vernacular past, in order to attempt to re-define a new Queensland domestic architectural identity.

In his paper *In search of the Brisbane House*[59], Rod Fisher recognises the importance of the re-invention of an identifiable Brisbane 'style', in favour of a practice of mimicry in the following statement:

> For Brisbane to retain its identity, the vernacular tradition must be resurrected, not merely by restoring what happens to remain, but particularly by designing structures which continue to keep that tradition alive. For the sake of Brisbane,

[57] Kenneth Frampton, "Regional Architecture (Interview with Alan Saunders)," (ABC Radio National - by Design, 19 June 2004 (re-broadcast 16 June 2007)).
[58] Ibid.
[59] Rod Fisher, "In Search of the Brisbane House," in *Brisbane: Housing, Health, the River and the Arts*, ed. Rod Fisher and Ray Sumner (Brisbane: Brisbane History Group, 1985).

> as distinct from Sydney, Melbourne or anywhere else, this is the challenge of the later twentieth century."[60]

Here, Fisher is reacting against new houses in particular, being *"designed within the traditional idiom,"*[61] although the same reaction is valid for modifications to existing pre-war houses where the approach is to 'match existing'. Since Fisher's 'call to arms' was published, legislation has slowed the demolition of Brisbane's inner city pre-war housing stock, bringing into focus, not only the question of a vernacular identity for our *new* buildings, but significantly, the question of maintaining the identity of our *existing* pre-war streets. Importantly, it is the concern of this study to better understand this challenge of maintaining identity, through the appropriate modification of our existing buildings, to accommodate the changes, needs and desires of their occupants, into the 21st Century.

[60] Ibid., 51.
[61] Ibid.

Chapter 3: Modifications to the Queenslander

Introduction

External pressures on Brisbane's inner-city suburbs, such as increasing population density and the changing family unit, has meant that our pre-war housing stock has undergone, and continues to undergo, significant alterations. This, in turn, has impacted on the shape of our pre-war streetscapes. The Queensland House has a long tradition of modification, and this tradition does not seem to be ending in the near future. With very few examples of 'Queenslanders' still in original condition, this paper contends that this widespread phenomenon of 'change', is indeed a defining characteristic of the Queensland house, and should be celebrated and embraced as such.

With this in mind, it is important to examine the changes which Queenslanders have undergone in the past, and to research the advice which current literature provides for prospective home renovators. This examination will be organised in terms of recommended modification Typologies, and then broken down into approaches towards Conservation, Restoration, Alterations and Additions. Following this, Materials and Detailing are then addressed, where the 'match existing' versus 'contrast' approach to modifications is most evident.

History of 'Change'

Watson gives weight to the assertion, that 'change' is a defining characteristic of the 'Queenslander' when he states,

> The significance of many Queensland houses is bound inseparably with the changes they have undergone. Widespread alterations and additions have always been undertaken and, although present elsewhere, they were deceptively easy with timber construction.[62]

Watson points out that some buildings were designed with likely future changes in mind. As an example of this quality which was "*generally true of Queensland houses*"[63] he cites the September 1875 issue of the newspaper, *The Queenslander*. "*A plan has been prepared by Mr. Tiffin for an inexpensive building which could be added to from time to time.*"[64] As a further example, he points out that "*with steeper roof pitches, another course of action was possible, as indicated in this advertisement for a house at Petrie Terrace in 1863: 'Anyone who becomes the purchaser can add two rooms by finishing the attic which only requires floor laying'.*"[65]

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[62] Watson, "The Queensland House : A Report into the Nature and Evolution of Significant Aspects of Domestic Architecture in Queensland," 12.1.
[63] Ibid.
[64] Ibid., 12.10.
[65] Ibid., 12.6.

Bell explains that, boosted by the relative prosperity of the times, many early houses were replaced in the 1880s and 1890s due to damage by fire and termites, while some of the remaining houses underwent various changes due to climate. [66] " […] [T]*he first generation of Queensland houses often had verandahs added later. Sheetmetal hoods were replaced over windows to remove glare. Verandahs were shaded with latticework, with blinds of canvas or drop-down wooden laths wired into rolls, or with wooden louvres."*[67]

Other early modifications were more stylistically driven. Watson points out, that issues of style were a marketable commodity prior to the outbreak of World War II. He asserts that, regarding their 'Building Revival Scheme', the State Advances Corporation boasted "*It was even a fairly simple matter to convert a colonial bungalow into a Californian one."*[68] Additionally, he explains that private industry,

> […] had similar schemes during the 1930's. James Campbell and Sons promised 'New Homes from old houses' in a brochure announcing the establishment of their Home Modernising Service. The possibilities were considerable: 'The old home is not completely made new until the lines of the out-of-date roof are recast. A poor roof made a poor looking house. For instance, just compare the harsh lines of the old home illustrated above [not attached] with the pleasing, graceful lines of the modern home. It is really wonderful what can be done to an old home.[69]

Other modifications were brought about by modernisation. Peter Bell points out that "*the gradual wider adoption of technological innovations such as reticulated water, septic tanks and cast iron stoves"* were made possible due to "*the greater flexibility of floor plans in the early twentieth century"* and allowed *"the incorporation of functions from the periphery into the house core."*[70] Specifically,

> […] over the last few decades of the nineteenth century and the first two of the twentieth, progressively the kitchen, the bathroom, the laundry and finally even the toilet were incorporated into the core of the house. Backyard outbuildings became a thing of the past. In the delightful phrase of Robin Boyd, they had knocked timidly at the posts of the rear verandah and been 'allowed to step up.'[71]

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[66] Bell, "A History of the Queensland House," 21.
[67] Ibid.
[68] Watson, "The Queensland House : A Report into the Nature and Evolution of Significant Aspects of Domestic Architecture in Queensland," 12.7.
[69] Ibid., 12.8.
[70] Bell, "A History of the Queensland House," 26.
[71] Ibid., 27.

Traditionally, one of the more common drivers for modifications was the need for additional space. Watson outlines the various ways in which

> [a]dditions to the main section of the dwelling were made […] by duplication of the original form (for example, a second gable); by elongation of an existing gabled roof; by the addition of or extension of existing wings to the house; by the addition of an asymmetrical gable to the main façade using a section of the front verandah or by changing the entire roof.[72]

Typology

There are several relevant and popular typological models which are used for the modification of existing 'Queenslanders' today. These include, but are certainly not limited to, the 'build-in-under' model, extensions to the rear (including pavilion additions), enclosure of existing verandahs, utilization and extension of the existing roof space, and extensions to the side.[73]

The 'build-in-under' model is a popular option, due to its ability to effectively double the floor area of the existing dwelling, whilst not reducing the amount of usable land. However, some writers challenge this model. For example, Ian Evans cautions against this method when he states, "*Enclosing under the house often is not the best solution.* […] [R]*ooms have to be kept back from verandahs.* […] *These rooms may be dark and dingy."*[74] Critically, the defining characteristic of a Queenslander, as a house "*raised on timber posts at least a short distance above the ground"*[75] seems to be threatened by the 'build-in-under' option. Evans warns that to do so, *"may destroy its proportions"*[76] and that *"*[a] *house on a box looks unbalanced."*[77] But he goes on to say that, "*houses where the land slopes steeply down towards the rear are an exception. In these circumstances it may be possible to build rooms underneath which are not obtrusive from the street, have adequate headroom and provide a pleasant garden aspect."*[78] The Brisbane City Council Heritage Unit in conjunction with the 1997 Queensland Heritage Festival, through the publication *Looking After the Queensland House* echoes this sentiment. "*The success of building-in underneath a house can be measured by the difficulty of detecting the alteration from the street."*[79] It reinforces the importance of streetscape when it elaborates, *"Buildings raised inappropriately also might conflict with the surrounding houses and disrupt the existing streetscape."*[80]

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[72] Watson, "The Queensland House : A Report into the Nature and Evolution of Significant Aspects of Domestic Architecture in Queensland," 12.6.
[73] The overwhelming majority of Queensland houses are used as Single Unit Dwellings, (as opposed to multiple dwellings in one building) There are exceptions to this, including boarding houses and houses with additional granny-flats, however this investigation will generally only deal with the Single Unit Dwelling typology.
[74] Evans and Queensland, *The Queensland House : History and Conservation*, 122.
[75] Bell, "A History of the Queensland House," 22.
[76] Evans and Queensland, *The Queensland House : History and Conservation*, 122.
[77] Ibid., 66.
[78] Ibid., 122.
[79] "Looking after the Queensland House," in *1997 Queensland Heritage Festival* (Brisbane: Brisbane City Council Heritage Unit, 1997), 24.
[80] Ibid.

Rear extensions (and particularly pavilions) have gained more popularity in recent years, in reaction to the introduction of character legislation in the mid 1990s. Modifications to the rear of the dwelling tend not to affect streetscapes, thus avoiding the need to assess building work against local government planning codes. In *Looking After the Queensland House*, this method is encouraged. "*The pavilion extension is a highly recommended way of increasing the size of a traditional house.* […] [I}*t allows the retention of the original form, relationship to the ground, and streetscape character of the earlier house."*[81]

The enclosure of a front verandah has been a popular way of increasing space in the past, and while it is true that current thinking cautions about opening up a previously enclosed verandah, there seems to be little to support for the enclosure an existing verandah which is in original condition. On this point, Evans states, *"Raising the house and enclosing verandahs can spoil the front entrance."*[82]

Similarly, the utilization of an existing roof space can alter the shape of the roof, perhaps diminishing its traditional geometry. Evans cautions against this, also suggesting to *"retain* [the] *roof shape when adding on. As a general rule, avoid adding dormers. The clean lines of a simple pyramidal roof will be spoilt and the space inside will probably be hot and uncomfortable."*[83] Stylistic issues aside, it must be said that, readily available insulation products, when used correctly, can usually offset the differences in external temperatures, to delivery a perfectly habitable space internally.

Conservation and Restoration

As a general guideline for appropriate conservation practices, *Looking after the Queensland House* states, "*Important principles of building conservation are: Do as much as necessary, as little as possible. Repair where possible, and replace only if necessary."*[84] It goes on to explain,

> Keeping change to a minimum protects the evidence of history and is more economical. This minimalist approach is different from the popular understanding of 'restoration' as an act of heroic change, intended to 'return a place to its former glory'. Minimal changes can also bring about a dramatic transformation without destroying the value of a place as a complex, layered and genuine entity.[85]

There is a large volume of literature on recommended construction practices for restoration of the Queensland House. The 1990s saw a surge in the general interest and appreciation of

[81] Ibid., 31.
[82] Evans and Queensland, *The Queensland House : History and Conservation*, 66.
[83] Ibid., 75.
[84] "Looking after the Queensland House," 21.
[85] Ibid.

Brisbane's pre-war housing, and has even spawned a significant home renovations market. Additionally, there is ample information on identification of particular houses, and recommendations for the correct detailing for balustrades, window hoods and even front fences, in order for owners to 'get it right' when restoring their dwelling. However, the extent of restoration work which one should undertake on an existing dwelling is less clear.

Evans is a proponent of an approach which reveals the layers of change to an existing dwelling. "*Back to the original' is not always the best answer. An appreciation of the past life of a house enables alterations showing interesting stages in its evolution to be identified and understood."*[86] *"Alterations can give a home texture and character – keep them if they are useful."*[87] He continues, pointing out that, "[h]*ouses change, and it is important to admit the overlays of history.* […] *'Returning to the original' can remove interesting aspects of the story of the house and take away practical and useful rooms or features."*[88]

Although the common practice of enclosing the front verandah can have a distinct impact on the aesthetic qualities of an individual house, and a potentially adverse affect on the occupant's social interaction with the street, Evans cautions against its restoration.

> Often one of the first decisions you will make as a new owner of a Queensland house is to open up enclosed verandahs. Before making this decision, think about the history of the house and how the verandahs were used in the past. Verandahs usually were enclosed for practical reasons and from the 1920s it was common for enclosed verandahs to be part of the original design."[89]

He seems to preference the opening up of the *front* vernandah, over the *side or rear* when he states, "[i]*f verandahs originally were open but have since been enclosed, you can retain closed verandahs at the side and rear if the spaces they provide are useful"*[90]*,* perhaps acknowledging the important role the verandah plays in the streetscape.

However, not all past alterations to Queenslanders have been completed with the building's best interests at heart. For example, the replacement of original fenestration with aluminium framed doors and windows in order to reduce the necessity for maintenance, is generally seen to have a negative impact on the original building. Additionally, some bricked-under residences tend to have compromised head room, inadequate natural light levels, and problems with moisture seepage and odours if perimeter retaining of the surrounding earth has not been dealt with properly. The over-riding attitude to restoration seems to be, that each dwelling should be looked at on a case by case basis. Comprehensive research on a house's

[86] Evans and Queensland, *The Queensland House : History and Conservation*, 86.
[87] Ibid., 121.
[88] Ibid., 122.
[89] Ibid., 76.
[90] Ibid., 77.

history via archival documents and photographs is an essential step in deciding which alterations add to the story of the existing house, and which alterations should be reversed.

Fisher outlines the importance of researching the history of an individual dwelling, before embarking on any building work.

> Instead of commencing with personal needs or preconceptions, the first principle (after finance) might be to consider the character of the structure itself, its form, style, location and history. Much of this may be found in title deeds, post office directories and old photographs, in addition to talking with local people and reading about pre-war housing. […] The feeling of the place however, can only come from living there, in a slum perhaps, looking touching, hearing and experiencing before doing anything hasty.[91]

Alterations and Additions

The majority of texts convey a respect for the pre-war Queensland House, recommending a 'light touch' approach when altering the existing. Watson points out that past changes have not always achieved this. He explains that "*subsequent changes to buildings,* [are] *another aspect of Queensland houses which* [are] *deserving of particular consideration* […]*. These changes again distort regional character and, without careful observation, can confuse the interpretation of individual buildings."*[92]

Continuing with this idea, Evans explains,

> "[t]imber houses are very easy to change but sometimes work is damaging because it does not suit the house. Work should be carried out in a way that preserves the special features and acknowledges the history of the house. An appreciation of the scale and age of a house identifies work which does not suit." [93]

Although Evans does not offer any specific advice regarding the material and form recommended for new work in this statement, there is a clear understanding that the existing dwelling should be respected.

As already identified, there tends to be two schools of thought when approaching additions to existing dwellings; the 'match existing' approach or the 'contrast' approach. Likewise, the existing body of literature regarding additions, seems quite polarized in its view on how to

[91] Rod Fisher, *Brisbane: Housing, Health, the River and the Arts*, ed. Rod Fisher and Ray Sumner (Brisbane: Brisbane History Group, 1985).
[92] Watson, "The Queensland House : A Report into the Nature and Evolution of Significant Aspects of Domestic Architecture in Queensland," 12.1.
[93] Evans and Queensland, *The Queensland House : History and Conservation*, 58.

approach the problem. This is best exemplified in the following statement by Evans, where he draws a distinction between two approaches, depending on the chosen form of modification. He says,

> *It is usually more important to match the original style when extending an existing structure than when building a separate one. A separate block is often best designed in a modern style that is sympathetic to the old one. A good designer may be able to create additions that are very different to the original house yet still allow the old house to have its say.*[94]

The idea of 'playing down' new additions and prioritising the original building over the new is a recurring theme in the existing literature. This is evident when Evans says, "*The scale of a large extension can be reduced by designing it in smaller parts to avoid overshadowing the original house. The floor level of a new block may be made lower than the original house to reduce the overall height of the new work."*[95]

He recommends the same approach in relation to roofs. "*Because the shape of the roof is so important to the style of a house, avoid making extensions which alter the roof shape. A huge gable attached to the side of a small pyramid roof can look very clumsy."*[96] And furthermore *"Extensions that involve low-pitched additions to the main roof and which overshadow the roof or add large gables always look uncomfortable."*[97]

Materiality and Detailing

It is in the detailing and material selection where the 'match existing' philosophy is most distinct from the 'contrast' approach to new work. Traditional materials may include weatherboards, timber balustrades and filigree, whereas contrasting materials may include masonry, sheet cladding, steel, glass and industrialised components.

Importantly for this study, it appears that when it comes to using new materials which contrast with the original, there is distinct lack of support in the current literature. Watson seems to argue that contemporary materials have been used without much success in the past, when he explains, *"The process of change has continued since the Second World War, though the tradition has changed and new materials and methods are often at odds with the original."*[98] Here, Watson is not specific about which materials, or the way in which they are used, but it may be the case, that the problem lies in the detail execution of the new work, rather than the materials themselves, contributing to this incongruence.

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[94] Ibid., 126.
[95] Ibid., 125.
[96] Ibid., 126.
[97] Ibid., 75.
[98] Watson, "The Queensland House : A Report into the Nature and Evolution of Significant Aspects of Domestic Architecture in Queensland," 12.9.

There is no doubting that the BCC publication *Looking after the Queensland House* is a proponent of the 'match existing' philosophy when it advises, *"DO maintain* [the] *original appearance of* [the] *building; DO retain external front steps and extend in a traditional manner; DO build with materials and elements relating to the era of the building."*[99] However is does not dismiss the use of modern materials entirely and, in relation to a 'build-in-under' approach, it recommends, *"If brickwork or masonry is used in the underneath work, it blends in better if it is painted to match or be compatible with the upstairs timber work."*[100]

However, Ian Evans seems to make a concession for modern materials if they are lightweight. He says, *"It is usually best to build with lightweight materials such as wood, galvanised iron and fibrous cement or plywood, to maintain consistency."*[101] This lack of support for the use of masonry most probably stems from the widespread misconception that timber has always been such a dominant material for construction in pre-war Queensland. This has lead to 'timber and tin' being embraced as the definitive design aesthetic. Contemporary Queensland architecture is not so easily pigeon-holed, with many post-war architects using more solid elements. These two facts add weight to the argument that masonry is in-fact an appropriate material for use in additions and modifications to 'Queenslanders'.

Conclusions

The extent of modifications which have been carried out, and continue to be carried out on the Queensland house, supports the argument that 'change' is an important characteristic of the 'Queenslander'. While much of the literature seems concerned with preventing further 'inappropriate' modifications to Brisbane's existing pre-war building stock, it also seems naïve to expect that the majority of pre-war streetscapes could forevermore remain as an articulated row of single storey detached 'timber and tin' dwellings. The reality is, that there are very few examples of Queensland houses which have not changed markedly since World War II. Rather, Brisbane's detached houses are frequently moved closer together to accommodate additional houses and higher densities in the inner suburbs. Hence, our streetscapes are changing. Contrary to many writers, this paper contends that we do not only *accept* this change, but *embrace* it as a vernacular Queensland tradition. The question then becomes not, "how do we preserve our existing dwellings?" but "how do we incorporate our existing dwellings into an ever-changing streetscape?"

When selecting the appropriate typological response, the literature certainly preferences modifications which are undetectable from the street, indicating a position which does not accept the inevitability of change. The alternative response - one which embraces change - would be to select the appropriate typology based not on the degree to which it impacts the

[99] "Looking after the Queensland House," 26.
[100] Ibid.
[101] Evans and Queensland, *The Queensland House : History and Conservation*, 126.

existing streetscape, but rather by the solution which most appropriately suits the particular brief for the particular site. The challenge is to design 'the new Queenslander', in a way which embraces this change as an emerging vernacular tradition.

As opposed to the issue of typological responses, the existing literature's recommendations for the Conservation, Restoration and Alterations to existing dwellings, are not nearly as untenable. An attitude of minimal intervention, a considered approach when revealing past layers, and a light touch when alterations *are* necessary, would seem to be the best way to retain what existing pre-war built fabric remains. Evans' recommendation to keep modifications which are useful, is an approach accepting of the fact that Queenslanders have been inextricably linked to change, and seems incongruous with the literature's reluctance to celebrate future modifications.

The recommendations of the existing literature for Additions, and particularly Material selection, are not clear cut. The 'match existing' philosophy does not to align with an approach which clearly identifies new work from old, muddying the identification of the original building, and making future possible restoration work more difficult. Unlike the 'contrast' approach, which uses contemporary forms and materials, the continuation of a bygone vernacular tradition of pyramid roof forms, and timber and tin, stifles the chance to discover a contemporary vernacular tradition.

Fisher calls for a more holistic, yet site specific approach, which argues for a less dichotomous notion than the 'match existing' vs. 'contrast' proposition to the problem of modification. He says, *"Both extremes have their adherents, but neither might be appropriate. If actual structures were considered first and then modern requirements, these buildings might be more characteristic, more habitable and more marketable now and in the future."*[102] This seems to suggest that modifications should be particular to a specific site, brief and context. It may also follow that appropriate responses to these conditions can contribute to a regional architecture, including the characteristic of 'change', which supports and helps define the current discourse concerned with a Queensland architectural identity.

[102] Fisher, *Brisbane: Housing, Health, the River and the Arts*, 8.

Chapter 4: The role of Legislation in Modifications to the 'Queenslander'

Introduction

The influence of various texts on realised modifications to the Queensland House is difficult to discern, as owners and designers may not be aware of the existence of such publications, or may choose to ignore the advice nevertheless. However, government legislation is not so easy to avoid. Currently, the majority of pre-war Brisbane houses are protected under Brisbane City Council legislation, however this was not always the case.

The following will outline a short history of legislative affects on pre-war housing, followed by a detailed examination of current Brisbane City Council Codes. This legislation is primarily focused on issues of streetscape, and it will be shown that, although accepting of contemporary alternatives, the legislation condones a 'match existing' approach when modifying existing dwellings.

The *Australia ICOMOS Burra Charter, 1999* will then be summarized, and offered as an alternative model for approaching modifications to the 'Queenslander'; a model which rejects imitation as a valid approach, and encourages new work to be identifiable as such.

Legislative History

Modifications to pre-1946 Queensland homes are currently governed by the *Brisbane City Council (BCC) City Plan*[103] as well as the *Queensland Development Code*[104]. Additionally, where listed as a Heritage Place at a Local, State or National level, modifications to a building must also comply with the *Burra Charter*, the national legislation which provides guidance on management and conservation of places with cultural heritage significance.

The current *BCC City Plan* has strong protections in place for retention of pre-1946 housing, however this was not always the case. According to Brisbane City Council Heritage Architect, Laurie Jones,[105] demolition controls for wider Brisbane, similar to those which exist today, were introduced in October 1995. These controls only covered houses which were constructed up until 1940. This date was later changed to align with comprehensive aerial photography, which was undertaken in 1946, for ease of identification of houses which were built prior to this time.

The lack of protection prior to 1995, resulted in the demolition of some pre-1946 housing stock for the provision of new housing, impacting on existing streetscapes and density. Of note is the infamous 'six-pack' unit, which was prevalent in the late 1970s, '80s and early '90s. These budget driven unit blocks were usually situated on a 100link wide (20.117m)

[103] *Brisbane City Plan 2000*.
[104] *Queensland Development Code (2003)*.
[105] Laurie Jones, email, 4 June 2007.

allotment and consisted of ground floor car parking, with 2 levels of units above. Prior to 1995, the BCC city plan did not legislate on matters of 'style' including massing, articulation and material selection, as it does today. Owners of pre-1946 houses were able to demolish all or part of their houses, and make modifications as they pleased, providing they complied with other current building legislation, and that the construction techniques were in-line with the building codes of the day.

During this time, another dominant piece of legislation, the *Queensland Building Act 1975* similarly contained no protection for existing buildings, but *did* contain regulations for boundary setbacks, and these remain largely unaltered today. This document has now been superceded by the *Queensland Development Code*. (QDC) Like the previous legislation, the QDC has little effect on demolition of, or modification to, extant buildings, however it does legislate for the allowable boundary setbacks for new construction, differentiating between allotments *over* 450m^2, and allotments *under* 450m^2.[106] This seemingly innocuous document is relevant mainly due to the fact that it re-enforces the sentiment of the *BCC City Plan*, encouraging a streetscape of Single Detached Dwellings in lieu of attached, row or terrace housing.

Although only applicable to buildings which have been listed on Local, State or Federal heritage lists, this research suggests that the *Burra Charter*, which was first adopted in 1979, is becoming increasingly relevant, as fewer original examples of 'Queenslanders' remain, and more examples of these are added to the relevant list. The *Burra Charter* is specific to Australia, and follows a list of international charters including the *Venice Charter (1964)* and the *Moscow Charter (1978)* which both succeeded the *Athens Charter for the Restoration of Historic Monuments (1931).* The *Athens Charter* was the first charter of its kind. The current revision of Australia's equivalent is referred to as the *Australia ICOMOS Burra Charter, 1999*.

Brisbane City Council Legislation

In 1997, the Queensland State Government passed the Integrated Planning Act (IPA) which required the Brisbane City Council to review its existing Town Plan. The new *City Plan (2000)* was submitted to the State Government for approval in the year 2000. This plan has undergone various amendments, the latest of which were released in July 2007.

This legislation contains strong rules in relation to the protection of extant pre-1946 single detached housing. For the purpose of this paper, investigation into typologies of modifications to extant dwellings have been limited to variations on single detached houses only, due to the

[106] For lots under 450m^2 see the BCC City Plan, Residential Design – Small Lot Code. In this case, for houses within the jurisdiction of the Brisbane City Council, the BCC City Plan takes precedence over the QDC. For lots over 450m^2, with a street frontage <15m, the QDC specifies front boundary setbacks to be 6m, or within an average of the setbacks of the adjoining lots. For side boundary setbacks, the QDC allows a minimum 1.5m setback for buildings up to 4.5m high, 2.0m setback for buildings between 4.5m and 7.5m high, with an extra 0.5m setback for each additional 3m of building height over 7.5m. Single Detached Dwellings have a maximum height of 8.5m on lots with a slope of 15%, and 10.0m for lots exceeding this slope.

fact that current legislation tends to limit multi-unit dwelling solutions. It should be noted that current legislation encourages subdivision of existing lots over 600m^2, into a front lot / rear lot configuration.[107] Recent trends in housing affordability, increasing travel time and rising petrol prices, point to a need for increased density in inner suburbs, however current legislation gives home owners only limited options for increasing density. Investigation into alternative housing models, including multi-unit dwellings, while utilising existing housing stock, is therefore needed, but is beyond the scope of this paper.

The current *City Plan*, is broken up into 5 Chapters, two of which are particularly relevant to the Queensland House. *Chapter 2 – The Strategic Plan*, sets out the broad policy of the plan, keeping in mind a timeline which extends until 2011. *Chapter 5 – Codes and Related Provisions*, contains three Codes which directly affect existing pre-1946 housing stock; the *Demolition Code*, the *Residential Design – Character Code*, and the *Residential Design – Small Lot Code.* Each of these is discussed below.

BCC Strategic Plan

The *Strategic Plan* specifically addresses the issue of maintaining character. In this chapter the City Plan states that "*In older suburbs, the unique character is derived mainly from the topography, urban layout and 'timber and tin' architecture."*[108] It goes on to suggest that "*new development will reflect traditional design elements while allowing for innovative design responses."*[109] It is arguable whether or not the relevant codes encourage 'innovative design responses' and this will be examined in reference to the chosen case studies later in the paper.

The Strategic Plan explains how Demolition Control Precincts were identified during the late 1990s. Specifically, "*Demolition Control Precincts are those locations in older suburbs that contain pre–1946 housing with distinctive traditional architecture. A precinct contains either: • a minimum group of 3 houses, and at least two thirds of the precinct contains pre–1946 houses OR • a building built prior to 1900."*[110] If a dwelling is located in a Demolition Control Precinct, the City Plan requires that modifications must comply with the Demolition Code, as well as the Residential Design – Character Code.

BCC Demolition Code

Amongst other aims, the purpose of the Demolition Code is to "*protect the residential buildings that give the Residential Areas in the Demolition Control Precinct their traditional*

[107] At the time of writing, Brisbane City Council had embarked on an investigation of alternative typologies available for development of sites under 450m^2, including "Fonzie Flats"[107], (named after the tv series *Happy Days* character) which are aimed at allowing secondary dwellings on Small Lots. Source - *Back yard 'flats' on city agenda* City News, Issue 189, 31 May 07, p37.
[108] *Brisbane City Plan 2000*, Chapter 2, Page 17.
[109] Ibid.
[110] Ibid., Chapter 2, Page 17-18.

character and amenity."[111] For the purpose of this investigation, elements of this code which relate to demolition and/or removal of entire buildings will be ignored. The more relevant sections to this code relate to partial demolition. Specifically, the code states "*Partial demolition involving parts of the pre–1946 elements of the front elevation of the building must not diminish 'traditional building character*."[112] The code goes on to propose that, as a solution, "*The building does not lose integral components (e.g. side verandahs) that contribute to its streetscape character"*[113] Additionally, that *"Partial demolition does not result in a narrow building which has a width to height proportion out of character with pre–1946 houses in the streetscape.*"[114]

BCC Residential Design – Character Code

The Residential Design – Character Code nominates two distinct approaches for new construction; the use of traditional materials, OR the use of contemporary materials with character elements. Buildings which use traditional materials ("*most likely painted timber walls and tin roofing*"[115]) are required to have "*roof forms which complement the roofing styles of pre-1946 houses* […] *including sloping roofing with eaves of similar proportions to pre–1946 houses nearby in the street."*[116]

Additional requirements for buildings which use contemporary materials include, the construction of a building form which "*includes a solid core with attached or integrated lightweight verandah or balcony structures."*[117] It goes on to reinforce a desire that "*The ground floor of the building gives the appearance of a lightweight support to the upper floor and reflects the layout of upper floor verandah or balcony structures."*[118] This prescriptive categorisation of form does not seem to condone the use of heavy massing of elements and goes on to clarify that, "*Where masonry is used it is* […] *used in conjunction with other more lightweight materials* [and that] *these lightweight materials predominate."*[119]

Additionally, the code makes comment on permissible treatment of building elements. *"External elements such as lightweight verandahs and stairs, eaves, overhangs, sunhoods, lattice screens and batten panels are evident to reflect those of pre–1946 houses nearby in the street and are sufficient to cast shadows and provide three–dimensional effects."*[120] In line with the code's focus on issues which affect the streetscape, it also specifies the appropriate

[111] Ibid., Chapter 5, Page 69.
[112] Ibid., Chapter 5, Page 71.
[113] Ibid.
[114] Ibid.
[115] Ibid., Chapter 5, Page 148.
[116] Ibid.
[117] Ibid., Chapter 5, Page 149.
[118] Ibid.
[119] Ibid., Chapter 5, Page 150.
[120] Ibid.

treatment for street fences. "*Any front fences* [should be] *compatible in materials, height and transparency with other fencing on sites of pre–1946 houses nearby in the street.*"[121]

BCC Residential Design – Small Lot Code

Although applicable only to houses on lots with an area of <450m^2, or with a street frontage of <15m, the *Residential Design – Small Lot Code* is particularly relevant to this investigation. Its relevance stems from the fact that great swathes of Brisbane's inner city suburbs are subdivided into lot sizes which fit within this criteria or, alternatively, are sized so that they could be subdivided into Small Lots at a later date.[122] The Small Lot Code contains guidelines on boundary setbacks and heights, which have a direct result in the bulk and massing of the proposed building, as well as the streetscape. One of the purposes of the code is to "*ensure that the size and bulk of houses are not overbearing on, or incompatible with, surrounding development.*"[123]

The Small Lot Code limits the height of the building to 8.5m, with a maximum 7.5m at the boundaries. This apparently aesthetically benign regulation also has implications for the design of roofs, favouring hipped or gabled structures over flat roof alternatives. Additionally, the code limits built-to-boundary walls to 9m in length for the non-habitable rooms on the lower story of the building only. This rule has a tendency to maintain a streetscape of single detached dwellings, rather than row or terrace houses, however, in reality, the built to boundary rule is invariably utilized, producing a streetscape of dwellings whose lower storeys tend to be continuous. The code stipulates that front boundary setbacks are to be within 20% of surrounding buildings, whilst side boundary setbacks are to be a minimum of 1.5m to walls and 0.9m to eaves or window hoods. It is worth noting that many extant pre-1946 dwellings on Small Lots do not comply with these side boundary setbacks, and therefore, raising and building under these dwellings triggers assessment against the Small Lot Code.

The Burra Charter

At present, the *Australia ICOMOS Burra Charter, 1999,* only legally applies to buildings registered as a Heritage Place at a Local, State, or Federal level. Nevertheless, an architect, owner or builder can choose to apply the principles outlined in the document, to any modification or restoration work, upon a dwelling as they see fit. It is this practice that is supported by this paper.

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[121] Ibid.

[122] Watson explains that the Undue Subdivision of Land Prevention Act (49 Vic. No 15) of 1885 prescribed a minimum lot size of 16 perches. (405m^2) This lot size was derived using units of measurement called Links and Chains. (Chain = 20.1168 metres, 100 Links in 1 Chain) A standard lot size usually had a road frontage width of 50 links (10.058m) and a depth of 200 links (40.2237m) giving an area of approximately 405m^2. Additionally, sometimes lot frontages could be 100 links (20.117m). This allows for houses to be moved to one side, and the lot to be subdivided into two, therefore creating two lots, each now being defined as a 'Small Lot' within the City Plan.

[123] *Brisbane City Plan 2000*, Chapter 5, Page 156.

The *Burra Charter* contains 34 Articles, 6 of which have particular relevance to the subject of this research. These are as follows

Article 15. Change

This article concerns itself with minimising changes which contribute to the reduction of cultural significance of a building, when undergoing partial demolition or when adding new interventions. It specifies that these proposed changes should be reversible, and past changes should be reversed if possible. With specific reference to demolition, *Article 15.3* states, "*Demolition of significant fabric of a place is generally not acceptable. However, in some cases minor demolition may be appropriate as part of conservation. Removed significant fabric should be reinstated when circumstances permit."*[124]

Article 18. Restoration and reconstruction

This article states, *"Restoration and reconstruction should reveal culturally significant aspects of the place."*[125]

Article 19. Restoration

This article states, *"Restoration is appropriate only if there is sufficient evidence of an earlier state of the fabric."*[126]

Article 20. Reconstruction

This article reiterates the sentiments of *Article 19*. Additionally *Article 20.1* states, *"Reconstruction should be identifiable on close inspection or through additional interpretation."*[127]

Article 21. Adaptation

This article is particularly relevant to the Queensland house in a Brisbane streetscape, as rapid population growth in the inner suburbs puts pressure on single detached dwellings to accommodate more people, with the possibility of accommodating multiple families on single allotments. Specifically, *Article 21.1* states, *"Adaptation is acceptable only where the adaptation has minimal impact on the cultural significance of the place."*[128] *Article 21.2* goes on to say, "*Adaptation should involve minimal change to significant fabric, achieved only after considering alternatives."*[129]

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[124] *The Burra Charter: The Australia Icomos Charter for Places of Cultural Significance 1999* 6.
[125] Ibid., 7.
[126] Ibid.
[127] Ibid.
[128] Ibid.
[129] Ibid.

Article 22. New work

This article is the most relevant section of the Burra Charter when considering infill under, over or between houses, contributing additional layers to a streetscape. *Article 22.1* states, "*New work such as additions to the place may be acceptable where it does not distort or obscure the cultural significance of the place, or detract from its interpretation and appreciation.*"[130] And *Article 22.2* concludes, *"New work should be readily identifiable as such."*[131] In the explanatory notes of the document, the Charter adds, "*New work may be sympathetic if its siting, bulk, form, scale, character, colour, texture and material are similar to the existing fabric, but imitation should be avoided."* [132]

A companion document, *The Illustrated Burra Charter,* is an expanded version of the *Burra Charter*, and gives expanded explanations and examples of buildings throughout Australia. With reference to new work, *The Illustrated Burra Charter* adds, "*Designing an addition or new building in a modern manner is desirable, but not an excuse to make the new work dominate, or draw attention away from the existing place and its features."*[133]

Conclusions

The over-riding theme presented in the BCC *Demolition Code, Residential Design - Character Code, and Residential Design – Small Lot Code* is a notion that new work must 'fit in' with the surrounding streetscape. The *Demolition Code* cautions about modifications being 'out of character' with their surroundings, while the *Residential Design - Character Code* uses words such as 'complement' and 'similar proportions' in reference to new roofs, as well as the words 'reflect' and 'compatible' in reference to building elements and material selection. The *Small Lot Code* is aimed to ensure that new construction is not *"incompatible with, surrounding development."*[134]

Although these codes do allow for contemporary interpretations of a 'Queensland Style', inevitably the majority of proposals for modifications to existing dwellings, which fall within the jurisdiction of the relevant codes, choose not to challenge the legislation, and as such, 'match existing' pre-war building forms and materials. Not only does this 'match existing' approach, fail to contribute to the redefinition of a contemporary Queensland vernacular, but additionally, the net result of this legislation contradicts accepted professional and academic thinking on approaches towards modifications of buildings with cultural significance.

The *Burra Charter* encourages restoration only where the earlier state of the fabric is known, and discourages alteration of the existing fabric. Most importantly, and as a point of difference

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[130] Ibid.
[131] Ibid.
[132] Ibid.
[133] Meredith Walker et al., *The Illustrated Burra Charter : Good Practice for Heritage Places*, Exp. and updated ed. (Burwood, Vic. : Australia ICOMOS, 2004).
[134] *Brisbane City Plan 2000*, Chapter 5, Page 156.

between it and the relevant BCC Codes, the *Burra Charter* discourages imitation, and states that, *"New work should be readily identifiable as such."*[135]

However, to accept the *Burra Charter* as an alternative model for dealing with the pre-war Queensland *House*, it is imperative that the pre-war Brisbane streetscape is accepted as a place of *"cultural significance including* […] *historic places with cultural values."*[136] As a way of reasoning this position, this paper has shown that the 'Queenslander' is an important symbol for maintaining a Brisbane identity. The volume of literature on its historical significance and recommendations for its conservation and modification, are testament to this, and support the argument of its cultural significance. The demolition of, and changes to these buildings, over time, driven by external forces, highlight a need for legislative protection of Brisbane's pre-war housing stock. The Brisbane City Council has recognised this, and has implemented controls which conserve individual dwellings, and have focused particularly on modifications which impact on the pre-war streetscape.

Despite this, modifications to the Queensland house continue to redefine the Brisbane streetscape. The enclosure of front verandahs and the infill of the ground floor area between its stumps, have reduced the lightweight qualities of these buildings. The raised height of dwellings, has markedly changed the scale of the street. Where streets were previously comprised of almost solely single storey dwellings, some are now predominantly made up of two storey dwellings. With the increased popularity of the car since WWII, garages and carports have been added to the sides of some dwellings. Additionally, existing allotments have been subdivided, houses moved sideways and additional infill housing has been added. These factors have already reduced the dominance of a streetscape of many single detached dwellings, to a streetscape of dwellings joined at their hips.

The argument of this paper is that, if 'change' is accepted as a defining characteristic of the Queenslander, and in-turn as a defining characteristic of the Brisbane streetscape, then the principles outlined in the *Burra Charter* are better suited to maintaining the identity of Brisbane's pre-war streetscapes, by differentiating original buildings from new work, while encouraging to help define a contemporary Queensland vernacular.

[135] *The Burra Charter: The Australia Icomos Charter for Places of Cultural Significance 1999* 7.
[136] Ibid., 1.

Part 3

Chapter 6 – Case Studies

Selection Criteria

The following three case studies have been selected, based on their common approach when dealing with modifications to the existing buildings. In all cases, contemporary materials, forms and details have been used, as opposed to employing a 'match existing' approach. This commonality aside, the case studies were also chosen based on the variation of approaches evidenced between them. This variation occurs in their existing conditions (including land size, building type, orientation and topography), the proposed brief, as well as the chosen typology of the modification. The existing buildings include an 1875 colonial gable, an 1880s workers cottage and a 1910s asymmetrical bungalow.[137] The proposed briefs include a home office for a single occupant, a bedroom extension (with allowance for future additions) for an expectant couple, and a multi-use 'pod' extension for a young family. Proposed typologies include an existing house which has been raised and built-under, a house which has been raised with internal alterations plus a rear pavilion, and a house with an extension to the side. All of the following case studies can be seen from the street. [138]

Applicable Legislation

The modifications to be examined in the case studies have all been undertaken within the last 10 years (one within the last 6 months) , and are each located within one of Brisbane City Council's Demolition Control Precincts. This means that, at the time of their design, they were assessable under Demolition, Character, and House Codes (or their equivalent) as a minimum.

It has already been discussed that generally, the City Plan condones a 'match existing' approach to additions and modifications. As the following case studies will show, these codes do not exclude contemporary approaches to modifications, however, it could be said, that proposals which take this kind of approach, may undergo greater scrutiny than ones which comply with a 'match existing' approach. It is not the purpose of this dissertation to critique the Brisbane City Council nor their processes, merely to comment on the legislation as it currently exists, and the implications it has when undertaking a design for the modification to extant pre-1946 housing stock.

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[137] These dates are estimates made by the author, based mainly on secondary sources. Extensive research into the history of the existing dwelling, in order to establish its original elements, is recommended before embarking on restoration or modification work.

[138] As discussed, the Brisbane City Council City Plan is particularly concerned with modifications which can be seen from the street, and if proposals manage to avoid this condition, they can often avoid a Development Application altogether, meaning less scrutiny of the design, fewer fees, and a quicker documentation process. All three of the following case studies contain modifications which are visible from the street, have therefore had an impact on the existing streetscape, and have been assessed against the *City Plan.*

Case Study Structure

For ease of direct comparison the case studies have been ordered within a particular, loosely chronological framework. Firstly, details of the site will be explained; orientation, land size and topography are discussed, regarding their impact on subsequent modifications to the house. (Although, these factors have had seemingly little affect on the chosen typology of the original house.) The original typologies of the houses will also be identified and explained for each case study. Subsequent modifications will then be outlined, reinforcing the attribute of 'change' as a defining characteristic of the 'Queenslander'. These modifications have lead to an 'as found' building, around which the current owner and/or architect has formulated their brief. This brief will be outlined in terms of Typology, Conservation and Restoration, and Alterations and Additions. (This structure also parallels this paper's chapter on Modifications.) Finally, the legislative impact on each house will be examined, and each case study's relevance to the *Burra Charter* will be summarized.

Case Study 1 – Ewart Street House, West End – 'Nanna's Verandah'[139]

Site

This house is located on a 544m^2 site in Highgate Hill, an inner-city Brisbane suburb, south of the Brisbane River. The size of the allotment is relatively large for its location. The land slopes down gently to the north along the street elevation, but is a little steeper towards the rear of the site. The site has twice the street frontage of a typical 'Small Lot', at a little over 20 metres.

Original House

There is some conflict of opinion regarding the exact age of the house, however the detailing of window hoods, original doors, chamferboard cladding (as opposed to weatherboards) and the building's typology, places the time of construction at somewhere between the turn of the century and the beginning of World War I. The building is a Colonial Asymmetrical Pyramid, with an attached verandah to the front, and a porch to the rear. Many of the windows are double hung including a single window to the street-facing gable end, above which is a one-piece, metal window hood, consistent with houses of this period. Typically, this type of building had a centrally located stair to the front, with a central hallway and 2+2 plan form. This particular example has a 5th room to the rear, which would have (and still does) contain the kitchen.

Existing House

The size of the site has allowed some unusual modifications to be undertaken to the dwelling. The majority of these previous modifications have taken place during the mid 1990s, with very little change occurring to the house prior to this. Before its 21st century addition (the subject of this case study) a previous architect had enclosed the house's front verandah as a bedroom, redirecting occupants and visitors to the rear of the house, to enter via a new back deck. At this time, the existing front bedroom's side window was removed and replaced with French doors. These unusual steps gave priority to the 'back door' as the main entrance, usually reserved for familiar acquaintances, and left the house with only one other external door (from the main bedroom to the side yard).

An existing children's cubby house was also built by the current owners prior to the most recent modifications. This cubby house is located towards the south-east corner of the site, breaking the side yard from the back.

[139] The project is named after the client's own grandmother. Jeremy (the architect) tells the story, of which an abridged version is attempted here. - The client's young daughter was keen to have the proposed study space as her own bedroom. She wanted the bedroom painted pink – which wasn't really in line with the architect or owner's sensibility of going about things lightly – leaving the natural or 'as found' material to be expressed. Jo (the client) had fond memories of staying in here nanna's country bush house. She pulled out some pink plates for morning tea one day (these had previously belongs to her grandmather), and Jeremy suggested that they paint the wall the same pink as the plates. Jo took the plate down to Dulux, got it colour-matched, and the name 'Nanna's Verandah' was born.

Proposed Modifications

The addition to the existing dwelling was designed by Architect Jeremy Salmon for a young family. It is affectionately called 'Nanna's Verandah'. The proposal was to create a multipurpose space to one side of the house, containing amenities for the main bedroom, a reading nook, and a separate TV room, the last of these in order to prioritise the existing living space for social interaction.

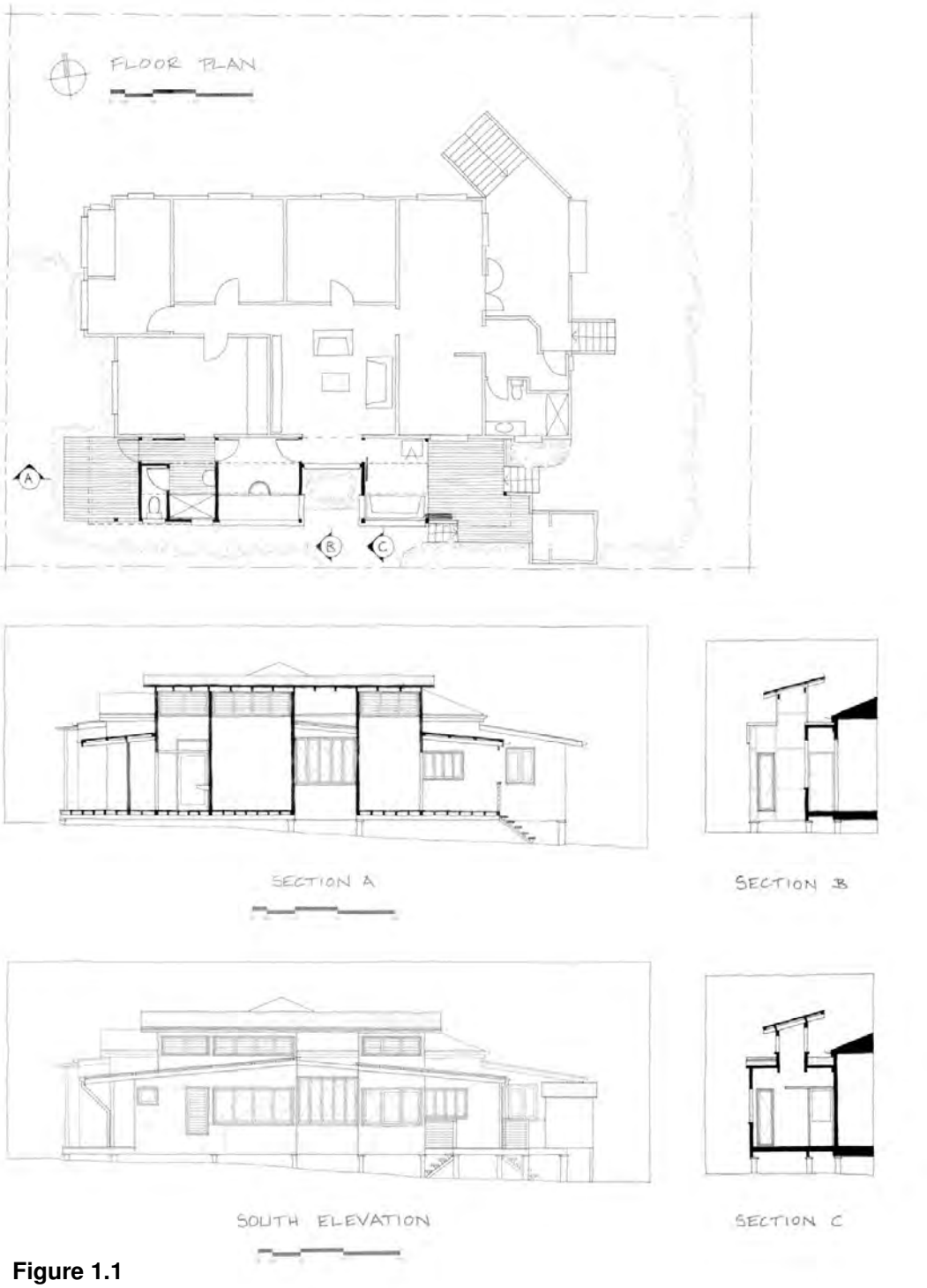


Figure 1.1

Proposed and Existing Plan (together), as well as Sections and South Elevation

Courtesy of Jeremy Salmon Architect

Conservation and Restoration

The existing dwelling has remained relatively untouched by this latest intervention. The original house had been well maintained and no restoration work was part of this project. The subsequent modifications, prior to this latest addition, have been left in place for practical purposes. The house worked well, and there was no need to reverse any of these changes at this time.

Although the new work was confined to a small addition only, where the new extension joined the old building, there was some scope for conservation. At this interface, the existing external chamferboards, which have become internalised, have been preserved in place. Often with extensions to existing Queenslander's it is impossible not to disrupt the existing roof form and gutters. In this case, the new extension 'tucks-in' under the eaves of the existing house which has allowed for the roof form to be preserved in place.

Figure 1.2

Side Yard Before(2004)
Looking towards Ewert Street
Courtesy of Jeremy Salmon Architect

Extension in Side Yard After (2005)

Alterations

As is the case with many home renovations, budget restrictions dictated that minimal intervention to the existing dwelling would help to control costs, therefore there were very few alterations to the existing fabric. Where there were alterations, these were for necessity, and were carried out with a deft touch. For example, the existing French doors from the main bedroom, which were not part of the original fabric, were no longer functional in their swinging format. Due to space restrictions, these two doors were joined end to end, fitted with new hardware and converted to a single sliding door.

The main alteration was made to the existing living room casement windows. The new plan dictated that this opening would become the main access into the new addition. The lintel remained in place, the sill was removed, and the existing jambs were extended to the floor. A new hallway was created by building the new external wall a metre out from the old, and the existing casement windows were placed in this wall. They have been stripped of paint, and stained, as part of the restoration process.

Figure 1.3

Existing Living Room Windows

Living Room Windows within new wall

Courtesy of Jeremy Salmon Architect

Additions

The addition is located on the south side of the house, making solar access an issue for both the new addition as well as the existing south facing rooms. For this reason, the new addition contains a high 'chimney' which runs the length of the building, and scoops light from above the existing dwelling's roof, into the new extension. The new addition thins out half-way along its length, to a single hallway, in order to maximise the solar access and the connection to the outside, for the existing, somewhat land-locked, living room.

With the exception of the new bifold doors to the rear, many of the doors and windows used in the new extension are recycled, having been collected from various sources around Brisbane. Similarly, many of the internal linings to the extension are recycled tongue and groove (T+G) boards. The original lead paint has been left on the boards, and these have been preserved with a clear finish. The remaining linings, both internally and externally, are predominately oiled plywood. The architect points out that this will allow the plywood to 'grey' with age. The roof sheeting is Zincalume Custom orb, with matching gutters and flashings.

Figure 1.4

Oblique street elevation (from South West over adjoining neighbour's fence)

Courtesy of Jeremy Salmon Architect

Legislative Impact

According to the architect, the Development Approval process went particularly smoothly, due to the selection of lightweight materials; plywood ('timber') for the wall linings and zincalume ('tin') for the roofing material, which comply with the *Residential Design - Character Code*'s requirement that, "*Buildings use traditional materials.* […] *Traditional materials are most likely painted timber walls and tin roofing.*"[140]

Where the proposal does not strictly adhere to the intent of the Character Code, is in the expression of the form of the building from the street. Here, the proposal is more experimental, particularly with the form of the roof. The *Residential Design - Character Code* states, "*Predominant roof forms will include one or more of a combination of pyramids, hips or gables of a similar pitch and proportions to those of pre–1946 houses nearby in the street.*"[141] The proposal does not seem to comply with this, but according to the architect, the fact that the building is mostly obscured from the street by dense foliage, and is fairly low to the ground, most probably worked in its favour.

Interestingly, the design of the roof structure was derived from a combination of 3 requirements. First, the desire to respect the original dwelling, second, as an environmental response for gathering natural light, and third, in order to comply with the setbacks outlined in the *Queensland Development Code.* In the architect's words, "*Three one metre bands run side by side along the house. The first is low to fit under the existing eaves. The next high to gather light and exhaust hot air. The third low again to merge with the boundary and balance the form.*"[142]

Figure 1.5
Street Elevation and Plan - showing the contrasting roof form of new extension
Photograph: Jeremy Salmon Architect, graphics: Brant Harris

[140] *Brisbane City Plan 2000*, Chapter 5, page 148.
[141] Ibid., Chapter 5, page 150.
[142] http://www.architecture.com.au/awards_search?option=showaward&entryno=20064011

Burra Charter Compliance

This case study contains several examples where the principles of the Burra Charter are at work. Firstly, in the conservation of the existing dwelling, previous modifications have been retained, showing the layering of construction over time. This layering, is an example of how 'change' is a prevalent characteristic of the Queensland House. The retention of the external weatherboards in their existing state, as internal linings for the new extension, is an example of where as little 'as possible and as much as necessary' has been disturbed, in order to identify the original fabric of the dwelling.

More generally, the use of recycled windows, doors, and T+G cladding fits in with a holistic attitude to preservation and conservation principles. Although the re-used elements are of the same era as the original dwelling, the context in which they are used (as part of an unmistakably contemporary addition) does not cause confusion of the reading between new and old.

The re-use of the bedroom French doors as well as the living room windows, are an example of how the existing building's individual elements have been adapted to suit the necessary changes, but have been modified in a way to continue the on-going story of the building.

The form of the new extension is such that it can be read as a completely separate element from the original dwelling. The extension has been sensitive in its treatment towards the existing house, by sitting under the existing eaves and not disturbing the existing roof form. The new skillion roof contrasts with the hip and gable form of the existing building, further reiterating the 'contrast' approach of the new work. Although the materials used in the new extension could loosely be termed 'timber and tin', the natural finished flat sheet of the plywood cladding, is quite different to the painted chamferboard finish to the existing dwelling.

Overall, these small gestures exemplify a philosophy which aligns with the principles of the *Burra Charter*. The presence of the existing dwelling is enhanced and emphasized by the new addition, and as a result, the streetscape can be more easily read as a layering of elements over time.

Case Study 2 – Isaac Street House, Spring Hill

Site

The existing house is located on a South facing site on a quiet street in inner-city Brisbane. The topography has a moderate slope down to the West, with about a 1 metre fall across its 10 metre wide frontage. The area of the land is 202m^2.

Original House

According to the present owner, (who is also the architect) the existing dwelling was built immediately after the land was subdivided in 1875. The typology of the building could be described as a Colonial Gable, with attached verandah roofs both front and rear. There is a possibility that the original roof may have been an example of timber shingle construction, evidenced by the close spacing of roof battens under the sheeting. The attached verandah roof is a little unusual, as stepped verandahs were more common in pre 1900s houses. Interestingly, there were no gutters. The sides of the building were clad in wide-format softwood chamfer boards (rather than hardwood weatherboards) which suggests that the building is more likely 19th Century. (or at least pre-WWI) This cladding continues to the underside of the eaves to form the gables on both sides. It is unclear weather the finial posts to the top of the gables were original or added at a later date. There were large louvre openings in these gable ends, perhaps to allow for ventilation of the roof space, which may have been used for storage, or possibly even as a habitable space at one time. There is evidence that the original building had a brick chimney, (which has since been demolished) due to the existence of porphyry footings under the east side of the house, as well as indications of new timber framing where the chimney would have penetrated the floor and roof.

Existing House

The new owner bought the house in 1998, by which time there had been a number of changes to the building. As is common, the rear verandah had been enclosed to contain the kitchen and bathroom. At this time, new chamferboards were continued along the sides of the house to clad the rear enclosure. The front verandah had been enclosed by a previous owner, but had been re-opened before the present owner purchased the property. The existing balustrade, added by the prior owner, consists of a bread loaf handrail, timber rails and broomstick balusters, with a simple verandah bracket atop the timber verandah posts. These details are more consistent with a pre-WWI rather than a 19th Century house, and may not be an accurate representation of the original detailing. (These kinds of common inconsistencies can make dating of the Queensland Houses confusing at times.) The existing stair was off centre, located to the east side of the house. Given the evidence of the replaced balustrade, it is reasonable to assume that this was not the stair's original location, as it was more common for stairs to be centrally located, in line with the centrally located front door.

Internally, one side of the hallway had been demolished, along with the adjoining perpendicular wall, which would normally divide the front room from the rear. Within this new shared living / dining space, a new internal stair was added to gain access to the roof space, whose floor had been lined with chipboard and carpet, and may have been used as a loft bedroom, or for extra storage. Generally, the internal walls, along with the raking ceiling of the loft space, had been plasterboard lined.

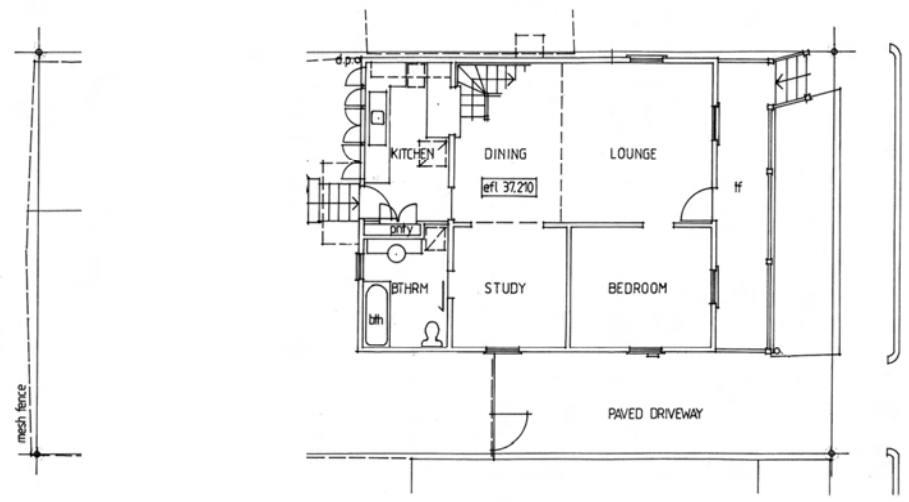


Figure 2.1

Floor Plan - Existing House - as found (2002)

Proposed Modifications

The most recent modifications were designed by architect and owner, Brian Steendyk. Brian is a sole practitioner, who required a separate space within his existing home to run his practice. (Marked as 'library' in Figure 2.2 below) Additionally, his brief called for a 2 bedroom, 2 bathroom building, with an increased living / dining / kitchen space, having better access to the north facing backyard. Due to the limited length of the block, the raise and build-in-under typology was a more desirable option, keeping the floor plate to a minimum, and maximising the open area to the rear. The simple plan separates private spaces (bedrooms and bathrooms upstairs) from semi-public spaces (home office and living spaces downstairs) with a new internal staircase.

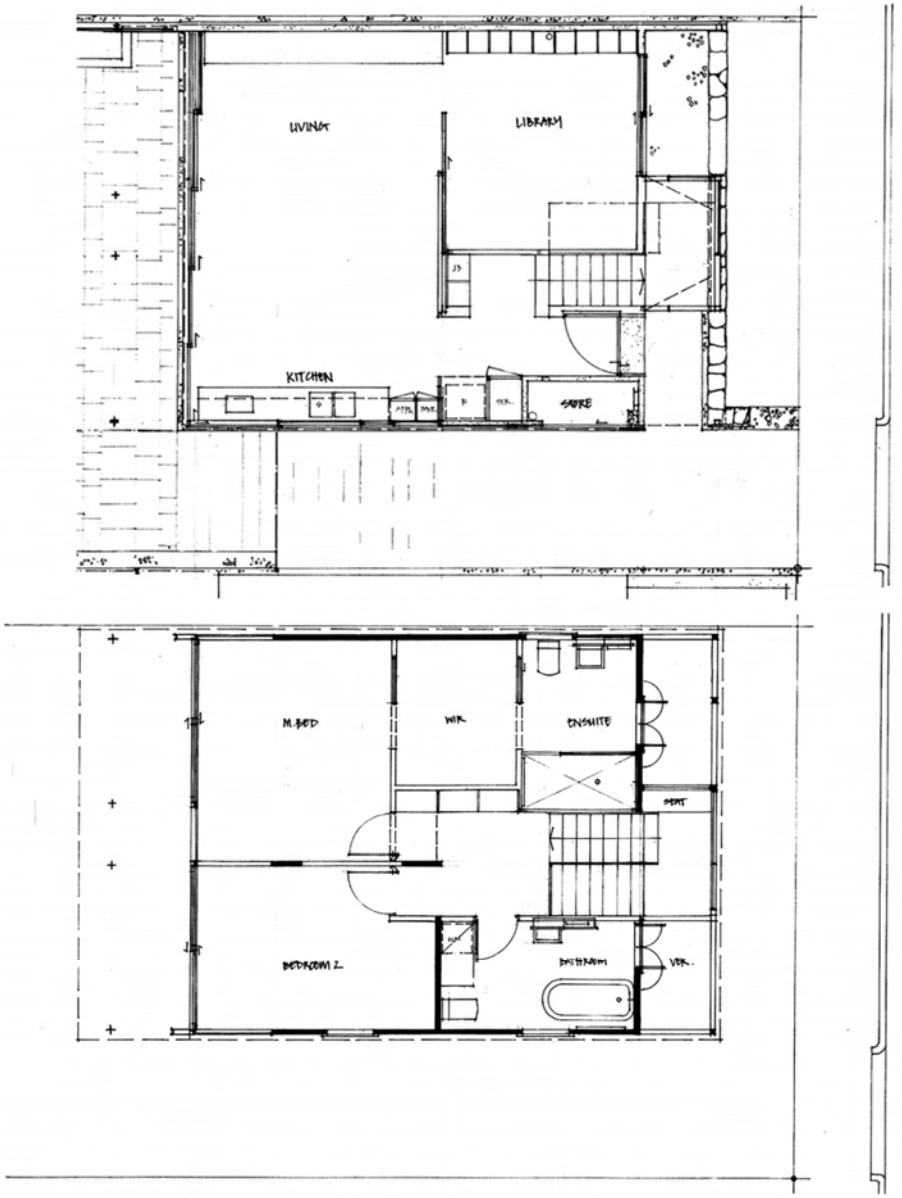


Figure 2.2

'As Built' Floor Plans – Ground floor (above) and Upper Floor (below)

Courtesy of Brian Steendyk Architect

Conservation and Restoration

The existing dwelling had, for the most part, been insensitively dealt with over its lifetime, with a 'match existing' approach being applied to the enclosure of the rear vernandah. Additionally, cheaply detailed internal fittings and fixtures, as well plasterboard lining throughout. The approach to this most recent renovation has prioritised the restoration of the original house, and removal of most subsequent modifications, over the retention of the previous layers. This approach has allowed the building to be read within two distinct periods of construction; the original Colonial Gable building, and the new modifications.

The exception to this, is the retention of the verandah balustrade. Despite its dubious historical accuracy, it was felt that there was no clear indication of what the balustrade would likely have been, and therefore, this layer of history was allowed to remain.

Additionally, the existing pine Finial Posts had been damaged by crows. These were removed, replicated and replaced by turned hardwood equivalents. There had also been substantial damage to the existing pine floor boards, which were replaced with Blackbutt as part of the renovation process. The existing steel roof sheeting was replaced with Zincalume custom orb.

Figure 2.3

Existing front and rear elevations (2002) and New front and rear elevations (2007)

Existing photos: Brian Steendyk Architect, New photos: Brant Harris

Alterations

There have been significant internal alterations to the existing building. Most internal walls, as well as the original rear external wall, (which had previously become internal due to the enclosure of the rear verandah) have been demolished, in order to accommodate the necessary programme. The new rear wall has been located within the line of the original verandah, and the existing chamferboard walls which once enclosed this space have been reclad in a charcoal stained plywood, which contrasts with the lightly coloured, painted chamferboards of the original house. These plywood blades extend past the rear wall of the house as if to suggest the previous location of the end of the verandah.

Figure 2.4 - Plywood in place of existing chamferboards to rear verandah
Photograph: Brant Harris

The previously attached verandah roof to the rear has been re-built as a similarly proportioned butterfly roof, in order to allow solar access to the upper floor in winter. This type of environmentally responsive detailing was also the driving factor for locating the bathroom and ensuite to the front (South) of the property, in order to give the bedrooms, being habitable rooms, priority for the desirable northern aspect. The new internal stair dissects the existing verandah, punching out towards the street. The horizontal detailing of this element reflects the linear nature of the original front verandah.

Additions

Downstairs, the detailing is deliberately contemporary and heavy-weight, contrasting with the traditional, lightweight nature of the original house above. Coloured off-form concrete is the dominant material used for the lower storey walls. Although massive, these elements have been textured using rough sawn boards for formwork, creating a patterned scale reminiscent of the softwood chamferboards of the original dwelling. An externally sliding gate to the side of the lower floor walls, is detailed with timbers which reinforce the patterning on the masonry.

Figure 2.5
Off form concrete adjacent timber gate
Photograph: Brant Harris

Emphasizing the obvious ‘contrast’ approach between the original structure and the new additions, a narrow band of glass at lower ceiling level circumscribes the perimeter of the dwelling. This glazed element is integrated with a steel-channel ring beam which supports the original dwelling. The ring beam replaces the original timber bearers, and lowest row of chamferboards, and is a clear demarcation between new and old.

Figure 2.6

Detailing showing the glazed band which surround the perimeter of the house. (Note the view through the house to the same detail at the rear) - *Photograph: Brant Harris*

With the previous fireplace long gone, excavation of the site during construction revealed its porphyry (Brisbane Tuff) foundations. Although the fireplace was not re-built as part of these modifications, the re-use of this material in the front wall of the house is an example of true regionalist material use. Brisbane Tuff is a locally quarried stone, used in much of the kerbing for inner city Brisbane, and taken from nearby deposits such as Kangaroo Point, the remains of which now are an identifiable Brisbane icon.

Legislative Impacts

During the Development Application process, there was some debate regarding the location of bathrooms and the stair towards the front of the house. This proposition is contrary to Brisbane City Council Codes, which preference habitable rooms to the front, in order to activate the street. However, in this case, it is arguable that the new internal staircase, which dissects the original verandah, is a highly active element, carrying occupants between floors throughout the course of the day. This sense of movement is visible through a fixed glass strip window stretching the full width of the verandah.

There were no objections to the use of masonry to the lower floor. This may have been helped by setting the front wall of the house back from the street, and continuing the lightweight detailing of the upper floor balustrade, onto the lower floor as screening.

Burra Charter Compliance

The over-riding approach here, was to contrast the new work from the original. This is most clearly articulated in the separation of upper and lower floors by the band of glass which encircles the perimeter of the building. The clear demarcation is a very good example of the principles of the *Burra Charter* at work.

Additionally, the use of plywood to the rear of the upper floor to delineate a previous modification, is a sensitive way to communicate the history of the dwelling. This deliberate play with form and materials is in line with the principles of the *Burra Charter,* strongly identifying new work as such and alluding to the previous changes which the dwelling has undergone.

Furthermore, the decision to retain the existing balustrade, rather than attempt to replace it with a 'best guess' at what would have been there originally, is consistent with the *Burra Charter* guidelines on restoration and reconstruction.

The extent of the previous internal modifications to the dwelling, had left very little of the original building fabric intact. With this in mind, most of the internal linings were removed, meaning that the interior of the dwelling is almost entirely new. This decision further emphasised the external shell of the building as the original fabric, clearly delineating it from the contemporary alterations. This approach is in line with the *Burra Charter* guideline that, "*New work should be readily identifiable as such."*[143]

[143] *The Burra Charter: The Australia Icomos Charter for Places of Cultural Significance 1999* 7.

Case Study 3 – Petrie Terrace

Site

This existing house is located on a steeply sloping site (which is a condition common to many Queenslanders, due to Brisbane's hilly topography), and faces west. In addition to its main street frontage, it also has rear access, via a small back lane. The site has a slope, down to the South, of 2 metres in parts, across its 9 metre width. The area of the land is 191m^2, significantly less than a traditional 'Small Lot', which is typically 405m^2.

Original House

According to the owners, the original Workers Cottage was built in the 1880s. (Rechner's, publication claims this popular type of Queenslander was built at least into the 1910s. The dwelling's central Brisbane location and the presence of a brick chimney tend to put the age of the dwelling into the earlier bracket, rather than the later.[144]) The Workers Cottage typology was a typical 2+2 plan form with a central corridor. Typically the planning of the rooms would have been around this corridor however, the building's owners assert that the lack of a hallway in this particular house, is part of the original planning. This variation has helped to make a more efficient use of space, claiming the hallway as part of the kitchen and living areas. The original entry way would have been via a centrally located front stair. The original house had weatherboard lining externally to the sides, with the front and rear wall being constructed in the tradition of exposed framing externally and internal linings only. The roof was made from a single pyramid form which covered the internal areas, with a detached bull-nose roof to the front verandah. As was common with this type of house, a lean-to structure to the rear, which was present at the time of the owner's intervention may have previously been a verandah and perhaps housed the kitchen at some stage.

[144] Rechner and Brisbane History, *Brisbane House Styles 1880 to 1940 : A Guide to the Affordable House*, 2.

Existing House

Prior to the present owner's acquisition of the property, there had been a number of modifications to the house. The bathroom and laundry had been accommodated within the rear lean to, and an additional narrow deck had been added to the rear. To the street, there had been a partial enclosure of the south end of the front verandah, whilst the north end of the same vernadah had been extended to the street boundary. The typical front stair had been moved to the north side of the verandah, so that occupants entered to the house from the high side of the property.

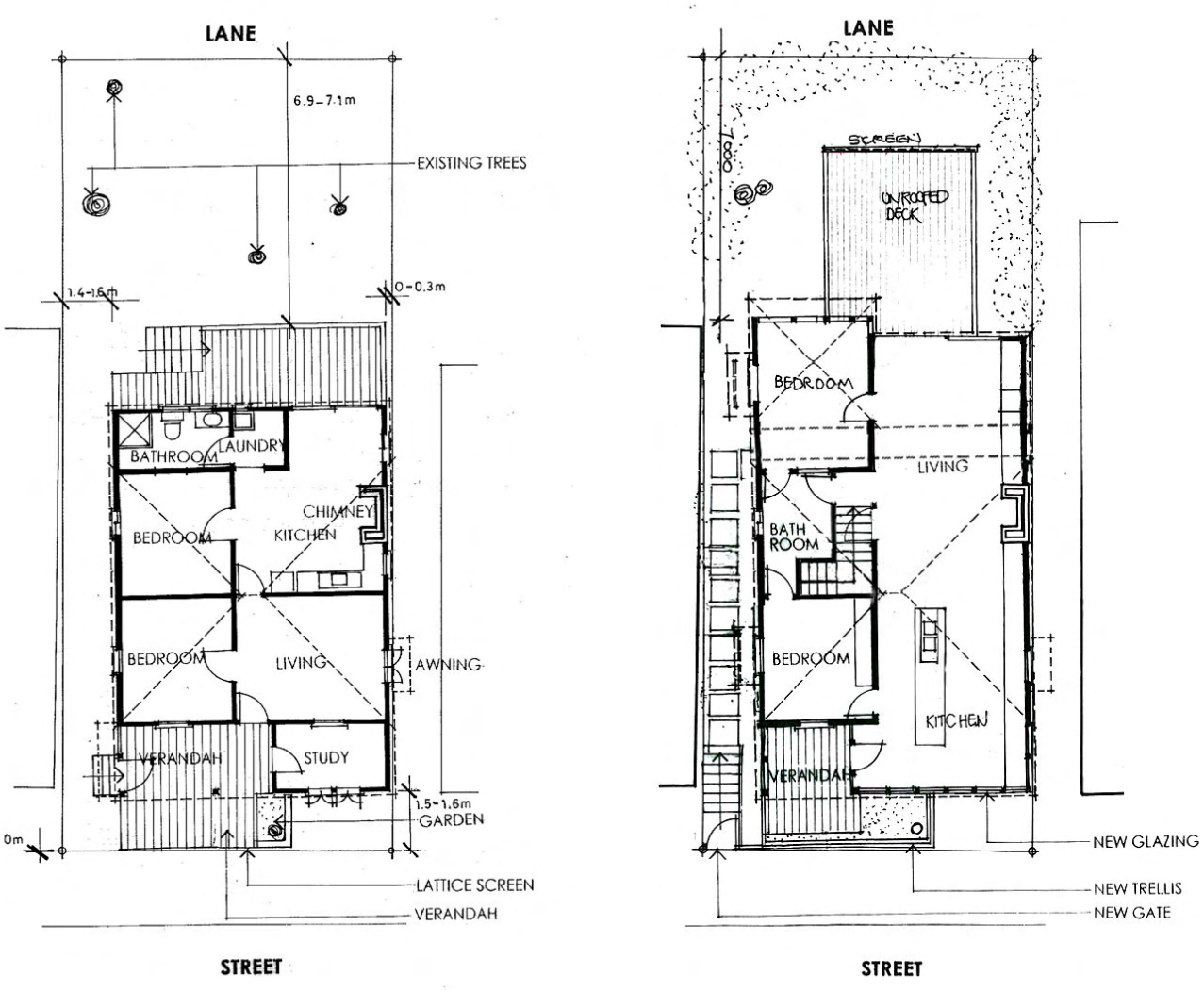


Figure 3.1

Floor Plan - As found (1999)

Floor Plan - As Built (2003)

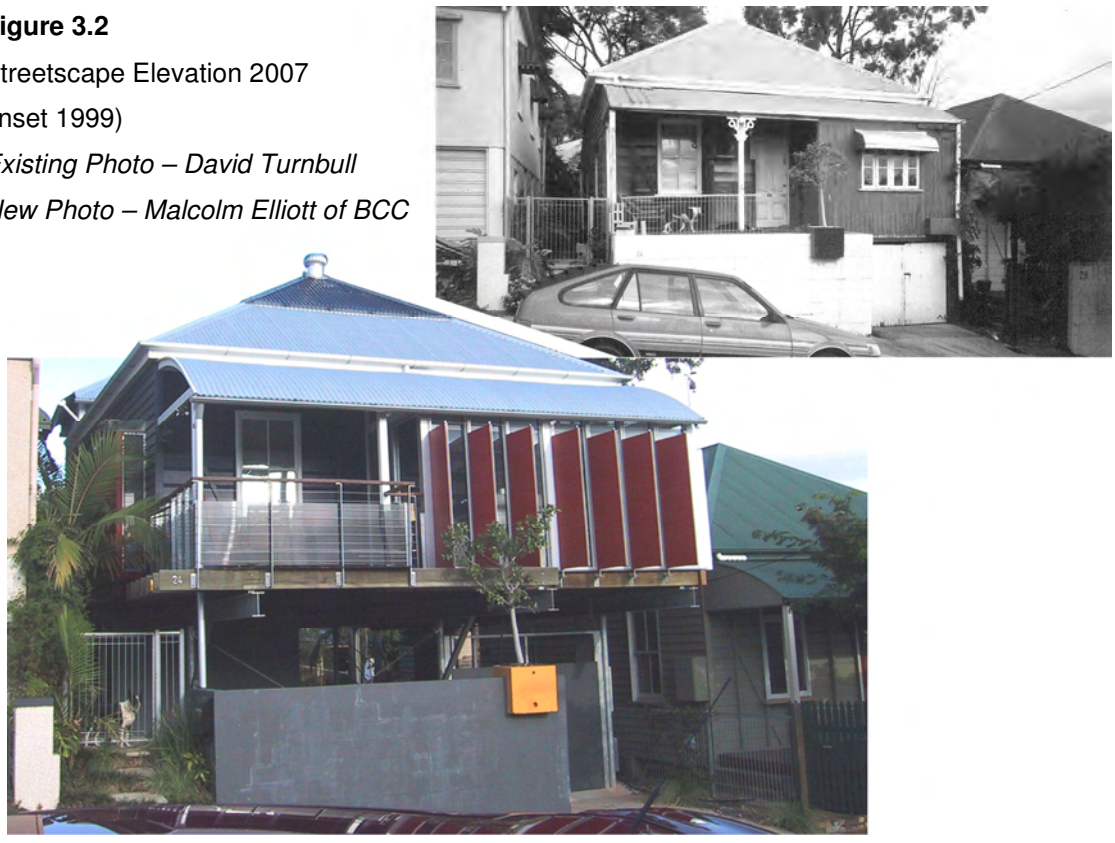
Courtesy of David Turnbull Architect

Proposed Modifications

The most recent modifications were designed by Architect David Turnbull, and undertaken from the years 2000 to 2003 (including design, approvals, documentation and construction). The interventions have been extensive in their treatment of the existing dwelling, encompassing internal modifications, external changes to the front and rear, as well as minor modifications above and below the existing home. The project has been designed to be undertaken incrementally, keeping in mind possible future accommodation needs. In particular, the raising of the existing dwelling allows for a possible future enclosure underneath the house, perhaps for a granny-flat, or similar style accommodation. Additionally, the peak of the roof has been replaced with translucent sheeting, to allow for the roof space's future use as a habitable room. This kind of forward planning is a significant step, considering the need for increased density in Brisbane's inner-city suburbs.

The removal of the original stumps, in order for the dwelling to be raised, has given the architect an opportunity to re-examine the traditional post and beam support structure in a contemporary way. Due to the Queenslander's lightweight nature, there is a long history of raising these buildings or moving them sideways. (and in some cases transporting them to other locations.) Often this is done using 'Jenga-like' stacked towers of sleepers, topped with temporary oversized steel 'I' beams. With this in mind, the new permanent supports have been similarly detailed in steel, as a reference to this continuing tradition.

Figure 3.2
Streetscape Elevation 2007
(inset 1999)
Existing Photo – David Turnbull
New Photo – Malcolm Elliott of BCC



Conservation and Restoration

In line with the Burra Charter, there are a number of past modifications which have been maintained, in order to allow the layers of history of the dwelling to be easily read. Specifically, the partial enclosure of the front verandah has been preserved as part of the house's internal area, yet re-detailed with glazing and pivoting screen 'blades' (important on a west facing wall) in order to allow this enclosure to read more like a permeable verandah space. The previous extension to the north end of the verandah, out towards the street, has also been retained. This has allowed the deck space to fulfil its role as a useable entertaining area, helping to activate the street, as well as reinforcing the intended social nature of the Queenslander's verandah. With the original balustrade long gone, the transparent nature of the new wire balustrade allows for the exposed framing of the original wall behind to be clearly visible from the street.

Alterations

Often, the raising of an existing Queensland house, means the demolition of their associated brick fireplaces. In this case, the fireplace has been retained, and measures have been undertaken in order to maintain the continuing use of the fireplace in the raised building. The floor level has been raised about a metre, meaning the original hearth needed to be built up to suit. However, the extent of the raised height means that the new floor level is not far enough below the fireplace lintel to create an adequate sized firebox. For this reason, a small section of the floor, where the outer hearth normally would be, has been lowered around the fireplace. A removable hatch covers this area, and is lifted out to reveal a dropped fireplace seat during the winter.

Figure 3.3
Fireplace View from below
Photograph: Brant Harris

A new internal stair has been added to the building. Pedestrians enter the property down the northern side of the house, before entering the building and making their way up to the main living area, or down to a concrete slab under the house. The placement of the stair aligns with the wall of an original bedroom. A door within this wall, about two-thirds of the way up the stair is un-usable (as a door), however, it has been maintained in its current location despite its practical redundancy. The remainder of the original bedroom has been converted to a bathroom which has shared access between the two current adjacent bedrooms.

Figure 3.4
Door at top of stair
Photograph: Brant Harris

The new main bedroom 'pavilion' extension to the rear is joined to the existing house. A small door allows access to the shared bathroom. Adjacent to this door, an existing rear window has been internalised. This window would normally allow a visual connection to the bathroom from the bedroom. For reasons of privacy, the clear glazing has been replaced with mirrors. A more conventional approach would have been to sheet over the existing opening. Instead, the sensitive realised approach recognises the significance of the existing dwelling, and adds another layer of history, which could be easily reversed should the need arise.

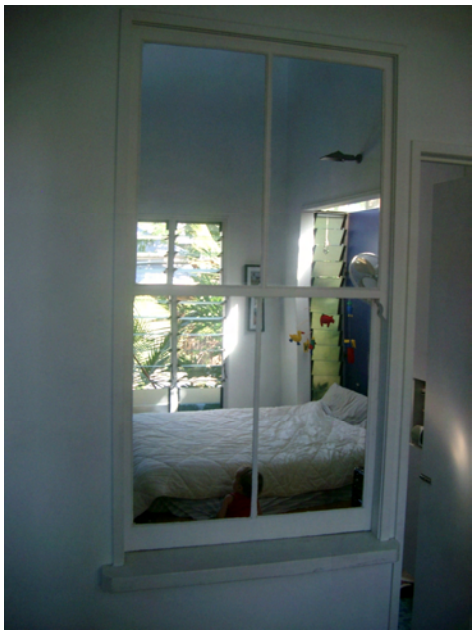


Figure 3.5
Mirrored existing rear window
Photograph: Brant Harris

Additions

The new additions comprise a new bedroom pavilion, a slight extension to the main body of the house and a new rear deck. The materials used for these new additions are predominantly lightweight. Steel framing for the structure and aluminium for the glazing frames again help to distinguish new from old. Weatherboard cladding has been used for the pavilion extension, however its massing, although reminiscent of a traditional pyramid form, conveys a proportion which is undoubtedly contemporary.

Legislative Impacts

Generally, the Brisbane City Council Codes did not restrict the intentions of the project. The design did not seek to challenge side boundary setbacks, and although the previous extension of the front deck was not in compliance with required front boundary setback, it was allowed to remain in place. (with a small reduction in size) The lightweight materiality and detailing would have been looked on favourably, as would the degree to which the streetscape elevation of the existing residence remained intact. Brisbane City Council Codes do not restrict the use of colour, and this was used to the buildings advantage in order to highlight the contemporary detailing.

Burra Charter Compliance

The three instances of Modifications (the fireplace, the door to the stair, and the rear window) are excellent examples of the type of approach which is encouraged by the Burra Charter. These modifications do not prioritise the replacement of new for old, and the honesty and subtlety of the detailing allow the past layers of the building to be easily read. These are an example of alterations which involve the minimal change to the building's fabric, and are in line with the *Burra Charter's* article on *Adaptation.*

Importantly, the streetscape has been enhanced by the measures taken in this intervention. The original building's massing and form strongly convey its colonial past. Where possible, the original building's defining elements have been maintained, but these have been balanced with a desire to retain the important elements which have layered over time. Prioritising these changes as an important aspect of the building's history, give weight to the argument that 'change' is defining characteristic of the Queensland House.

Part 4

Chapter 6: Discussion and Conclusions

Defining a Queensland Architectural Identity

An investigation into Queensland's architectural history yields some interesting results. While it is true that Brisbane's early 'timber and tin' tradition was the dominant domestic architecture, it is interesting to note that the history of masonry construction in Queensland, pre-dates the Queenslander's formative years of the early 20th Century. Furthermore, the use of concrete and masonry since World War II, sometimes in conjunction with lightweight materials, has certainly contributed to a definition of a contemporary Queensland style that does not align with the popular 'timber and tin' aesthetic. Although it is true that there are those who actively engage in attempting to make an original, regionalist contribution with their buildings, there are also those who resort to historicist imitation. Specifically, the sentimental attraction of imitating the more easily definable architectural styles of the pre-war Queensland house, does not help to clarify a contemporary equivalent. Frampton's writings on critical regionalism, place this idea within an international context. He says,

> One of the problems that faces modern societies altogether, is this often repressed feeling of uprootedness, homelessness in a way, encouraged, of course, by globalistation […] And I think the reaction against that of course, has been a somewhat nostalgic, perhaps over sentimental, reaction, that by using certain kinds of images […] which would convey an instant identity or would help to overcome this underlying feeling of uprootedness, is what is a response, maybe a spontaneous response on the part of late modern society. And, I think, one of the failures in a way of the architecture profession of course, is that failure to recognise this problem of identity and to provide a modern expression which is unequivocally modern but also accessible to the society. And that's a very subtle challenge.

In the case of modifications to Queenslanders, the 'nostalgic reaction' to which Frampton is referring, is manifest in the mimicry of the Queenslander tradition of 'timber and tin'. Rather than strengthening a Queensland identity, this practice leads to an unclear reading of the Brisbane streetscape, making it difficult to separate the identification of original building stock from their 'match existing' additions. Instead, modifications to existing pre-war vernacular buildings should present an opportunity for designers to re-define a Queensland architectural identity, by, both literally and metaphorically, building on the strong vernacular framework of the past.

'Change': the enduring characteristic of the 'Queenslander'

While this paper does not support the reproduction of the physical characteristics of the Queenslander, it does encourage the continuation of another, less tangible, pre-war building tradition. This tradition is 'change'. Not only is this enduring characteristic self evident in built examples of modifications to Queenslanders, but is also supported by the historical literature, which cites fashion, modernisation, and the need for more space, as the main drivers for its occurrence. Today, with the pressure on Brisbane's pre-war housing to accommodate people's demands for alternative standards of living, as well as increased population densities, changes to Queenslanders are occurring at a greater rate than ever before.

Although these changes are affecting individual dwellings, they are equally evident in the massing and form of the pre-war streetscape. Queenslanders have been, and continue to be, raised, built behind, added to the side, and moved closer together, in order to accommodate more built fabric. These changes are altering the makeup of the pre-war suburb from consisting of streetscapes of single storey, detached dwellings, to containing streetscapes of two storey, semi-detached, terrace-like equivalents. This paper proposes that, rather than attempting to curb the modification of Brisbane's pre-war streetscapes, the attribute of 'change' should be recognised as a distinctly regionalist, Queensland characteristic, and celebrated and embraced as such.

The problem with current legislation

The Brisbane City Council has recognised that the pre-war Brisbane streetscape is changing, and has responded with legislation which limits the expansion of the Queensland house, attempting to 'control' the changes which are inevitably occurring. The failing of this legislation is on two counts; firstly – in being unable to retain the inherent characteristics of the pre-war streetscape, and secondly – in not maintaining the legibility of the original Queenslander, within the changing pre-war streetscape. The first of these, the changing form of the pre-war streetscape, is due to external forces. These have been outlined previously, and are beyond the control of legislation, however the second, the legibility of the original Queenslander, is completely within the scope of legislative control. It is the contention of this paper that legislation should protect the uniqueness of the pre-war Queensland house, by prohibiting a 'match existing' philosophy for new built fabric within the pre-war streetscape. Currently, this is not the case.

On this point, and as previously cited in this paper, Frampton has explained that, *"*[…] *cities have tried to regulate* [for a particular unified character] *by insisting that one builds out of a particular material.* […] [And] *it* is *possible to legislate* [for the use of] *certain materials and thereby restore a unity to the fabric."*[145] On examination of the BCC Codes, it would appear that it is this philosophy which the legislation is trying to promote. The 'match existing'

[145] Frampton, "Regional Architecture (Interview with Alan Saunders)."

approach to modifications, which the legislation condones, is a reaction to the popular, nostalgic view of Queensland vernacular architecture, designed to prolong the 'timber and tin' tradition. Nevertheless, by striving for a *"unity to the fabric"*[146], it is undermining the legibility of the original building fabric, by valuing the imitation of a vernacular 'style' equal to the original building. At the same time, it is suppressing the potential expression of a new Queensland style, by discouraging the use of contemporary, contrasting materials.

The layered Brisbane streetscape: a sum of its individual parts

If we accept that the cultural significance of the Brisbane pre-war streetscape is diminishing alongside the legibility of the Queenslander, then it follows that preserving the character of these individual dwellings will, in turn, serve to maintain the legibility of the character of the streetscape. The central argument of this paper, that the legislation for the protection of the Queensland house should be based on the principles of the *Burra Charter,* a document which is designed to preserve buildings of cultural significance, relies heavily on the assumption that the pre-war Brisbane streetscape is worthy of preservation. The existing BCC Codes' focus on streetscape issues, however misguided, is a significant indicator that this is the case.

Application of the *Burra Charter*

To briefly summarize its principles, the *Burra Charter* is strongly focussed on the conservation and preservation of buildings, and the restoration of the original fabric if the *"*[r]*estoration and reconstruction* [..] *reveal*[s] *culturally significant aspects of the place"*[147] Importantly, the significant difference between the *Burra Charter* and the BCC legislation, is with regard to new work. While the BCC Codes condone, a 'match existing' approach, the *Burra Charter* rejects imitation, and insists that *"new work is readily identifiable as such"*[148]

Testing the three case studies against the principles outlined in the *Burra Charter*, was designed to evaluate the success of the theory that modifying individual dwellings using *Burra Charter* principles, would, in reality, maintain the legibility of the pre-war Brisbane streetscape. In order to judge the success of this theory, the outcomes of the built works must firstly be discussed in terms of their individual outcomes, before this can be extrapolated to include the their streetscape. It should be noted that the case studies are not contained on any Local, State, or National Heritage lists, and were therefore, not required to be designed in compliance with the *Burra Charter*. Nonetheless, these buildings were chosen for investigation, due to the appearance that there was substantial conservation of the original building, as well as their apparent use of a 'contrast' approach, evident in their appearance from the street.

[146] Ibid.
[147] *The Burra Charter: The Australia Icomos Charter for Places of Cultural Significance 1999* 7.
[148] Ibid.

As the research and documentation of the three case studies has shown, in practice the application of the principles of the *Burra Charter* strongly delineate between the new interventions and the existing building. The use of contemporary materials and detailing sit comfortably next to the 'timber and tin' detailing of the existing fabric, heightening the legibility of the original building.

The proposed brief, which met the changing needs of the building's occupants, while managing to be environmentally responsive in all three cases, was accommodated within the existing dwelling, with varying degrees of alteration to the significant original fabric. Nonetheless, each dwelling has maintained the clarity of the original structure as separate from the new modifications. This approach has given each dwelling an opportunity to express its own unique vernacular, in response to its particular set of existing conditions. This response is not only driven by the philosophy of a 'contrast' approach, but is also a response to the layering of modifications which have occurred to each building over the last Century. This response is encourage by Fisher, as per his previously quoted statement, "*If actual structures were considered first and then modern requirements, these buildings might be more characteristic* […] *now and in the future.*"[149]

[149] Fisher, *Brisbane: Housing, Health, the River and the Arts*, 8.

Conclusions

The research has confirmed that, although Queensland has had a strong tradition of 'timber and tin' pre-war vernacular architecture, a contemporary equivalent is more difficult to define. One characteristic of the Queenslander which continues to have relevance for defining a contemporary 'Queensland Style', is the enduring tradition of 'change'. The current Brisbane City Council legislation is resistant to this change, stifling the opportunity for the expression of a regionalist Queensland architecture, and confusing the legibility of our original vernacular housing stock. The evaluation of the case studies has proven that, when applied to individual buildings, the application of the principles of the *Burra Charter*, provide an opportunity to define a contemporary regionalist style, building on the framework of Brisbane's 'timber and tin' tradition.

In conclusion, it is important to make a distinction between prolonging a past tradition of construction and maintaining the cultural significance of the streetscape. It is the contention of this paper that the prevalent practice of the imitation of a 'timber and tin' vernacular when modifying the Queensland house, weakens the cultural significance of the Brisbane streetscape. As an alternative, the application of the principles of the *Burra Charter*, as the case studies have shown, clearly articulate previous modifications and additions, allowing the layering of the built fabric to be easily understood, and improving the legibility of the original buildings within the streetscape. In the face of change, if we purport to value Brisbane's pre-war streetscapes, it is essential that we legislate for an approach which aligns with the principles of the *Burra Charter*, in order to ensure the preservation of their future cultural significance.

Appendix

Case Study Data Sheets

Case Study 1

Site

Address	18 Ewart Street, Highgate Hill
Site Area	544m^2
Road Frontage	20m
Orientation	West Facing
Topography	1 metre fall towards the West

Original Dwelling

Year	Pre WWI
Typology	Colonial Asymmetrical Pyramid – Detached verandah roof
Floor Area Internal	90.5m^2
Floor Area External	33.3m^2
Site Cover (Building Footprint)	23% (123.8m^2)
Plot Ratio (GFA)	0.17 (90.5m$^{2)}$
Significant Features	

Existing Dwelling

Typology	Enclosed front and rear verandah, new rear deck
Floor Area Internal	136.4m^2
Floor Area External	17.3m^2
Site Cover (Building Footprint)	28% (153.7m^2)
Plot Ratio (GFA)	0.25 (136.4m^2)
Significant Features	No front door, rear entry via back deck only.

Proposal

Architect	Jeremy Salmon
Client	Jo Clifford + Stuart Cunningham
Year	Development Approval 2004, Construction 2004/05
Typology	Extension to South Side of Building
Floor Area Internal	164.0m^2
Floor Area External	37.0m^2
Site Cover (Building Footprint)	37% (201.0m^2)
Plot Ratio (GFA)	0.30 (164.0m^2)
Budget	$110,000.00
Applicable Codes	BCC Demolition, Character and House Codes

Detail Design

Conservation	Retention of External Chamferboards as new internal linings Existing Roof untouched by new extension
Restoration	None
Alterations	Existing Living Room Window re-used in new wall adjacent existing. Existing French Doors combined as a single sliding door
Additions	Recycled T+G boards, clear finished as internal linings Oiled plywood used for most other linings (including externally) Recycled doors and windows for the majority of openings

Awards

Regional	RAIA Regional Commendation (Brisbane) 2006
State	RAIA Harry Marks Sustainable Architecture Award (Queensland) 2006

Case Study 2

Site

Address	27 Isaac Street, Spring Hill
Site Area	202m^2
Road Frontage	10m
Orientation	South Facing
Topography	1 metre fall towards the West

Original Dwelling

Year	1880s
Typology	Colonial Gable – attached verandahs to front and rear
Floor Area Internal	49.8m^2
Floor Area External	27.4m^2
Site Cover (Building Footprint)	38% (77.2m^2)
Plot Ratio (GFA)	0.25 (49.8m$^{2)}$
Significant Features	Brick Chimney, Shingle Roof.

Existing Dwelling

Typology	Colonial Gable, enclosed rear verandah
Year of Purchase	1998
Floor Area Internal	66.5m^2
Floor Area External	10.6m^2
Site Cover (Building Footprint)	38% (77.2m^2)
Plot Ratio (GFA)	0.33 (66.5m^2)
Significant Features	Recently re-opened front verandah with pre-WWI balustrade. This is an incorrect detail considering the house is 19th C. Roof space had been opened, plasterboard line and ceiling joists sheeted with chipboard and carpet for habitation.

Proposal

Architect	Brian Steendyk
Client	Brian Steendyk
Year	Development Approval 2002. Construction 2004 – 2007
Typology	Raised and restumped, new internal stair, internal alterations
Floor Area Internal	121.6m^2
Floor Area External	6.9m^2
Site Cover (Building Footprint)	35% (71.0m^2)
Plot Ratio (GFA)	0.60 (121.6m^2)
Budget	$400,000.00
Applicable Codes	BCC Small Lot, Demolition, Character and House Codes

Detail Design

Conservation	Replaced Pine Finial Posts with replica hardwood
Restoration	Replaced termite damaged pine boards with Blackbutt
Alterations	Internal Stair dissects existing front verandah Plywood lining replaced existing chamferboards to previously enclosed rear verandah
Additions	Timber boarded formwork to Off-Form concrete walls to new lower level.

Case Study 3

Site

Address	Petrie Terrace
Site Area	191m^2
Road Frontage	9m
Orientation	West Facing
Topography	up to 2 metre fall towards the South

Original Dwelling

Year	1880s
Typology	Workers Cottage - Pyramid Roof, detached bull-nose verandah to street, central stair, lean-to verandah to rear
Floor Area Internal	51.5m^2
Floor Area External	25.1m^2
Site Cover (Building Footprint)	40% (76.6m^2)
Plot Ratio (GFA)	0.27 (51.5m$^{2)}$
Significant Features	Brick Chimney, Exposed Framing to front and rear

Existing Dwelling

Typology	Workers Cottage – partially enclosed front verandah, kitchen and bathroom to rear verandah, new rear deck added.
Floor Area Internal	68.9m^2
Floor Area External	20.5m^2
Site Cover (Building Footprint)	47% (89.4m^2)
Plot Ratio (GFA)	0.36 (68.9m^2)
Significant Features	Demolition of one wall of the hallway changing dwelling to an open-plan typology, front verandah extended out to street, entry stair moved to side of front verandah, swing doors added for single carport beneath dwelling

Proposal

Architect	David Turnbull
Client	Turnbull Family
Year	2000-2003
Typology	Raised and restumped, new internal stair, bedroom pavilion extension to rear, new deck to rear, internal alterations
Floor Area Internal	86.4 m^2
Floor Area External	27.7m^2
Site Cover (Building Footprint)	59% (114.1m^2)
Plot Ratio (GFA)	0.45 (86.4m^2)
Budget	$180,000.00
Applicable Codes	BCC Small Lot, Demolition, Character and House Codes (or equivalent)

Detail Design

Conservation	No Conservation plan in place, however brick chimney was retained despite the raising of the dwelling.
Restoration	Some termite damaged flooring replaced
Alterations	Operable shutters to street (West) elevation, existing external window to rear bedroom extension has been conserved with removable mirrored glass inserted, internal stair has existing bedroom wall and door conserved, aluminium glazing to existing front balcony enclosure, wire balustrade to front verandah
Additions	Pavilion to rear – double height space, exposed roof framing to underside of pyramid roof, weatherboard clad externally, aluminium glazing. Deck to rear – timber framed, retractable canvas roof

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