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Current Planning Issues and Opportunities**

Bajracharya, Bhashna; Kumarasuriyar, Anoma; Demirbilek, Nur

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Vernacular Architecture in Queensland, Australia: Current Planning Issues and Opportunities

B. Bajracharya, A. Kumarasuriyar, and F.N. Demirbilek

School of Design and Built Environment
Queensland University of Technology,
2, George Street, 4001 Brisbane, QLD, Australia
Telephone: 61 7 38641577, Fax: 61 7 38641528
b.bajracharya@qut.edu.au, a.kumarasuriyar@qut.edu.au, and n.demirbilek@qut.edu.au

Abstract

The distinctive timber and iron house of Queensland, has evolved over time reflecting the culture of the local people and the climate of the region. These houses are currently facing major pressures due to gentrification and development in the older inner city suburbs of Brisbane.

The key objective of the paper is to examine the major planning issues and opportunities for the continuation of vernacular traditions. This paper first discusses the historical development of 'Queenslander' house focussing on some of its key architectural features and their suitability for the local climate. It then reviews policy documents of the Brisbane City Council (BCC) to identify the key planning issues relating to vernacular architecture. Lastly, it identifies the key opportunities to enhance the vernacular architecture in Brisbane.

While there is generally a good community and council support for protection of vernacular architecture, there are issues relating to perceiving them as a hindrance to development. There are also concerns about social equity, as renovating old Queenslanders may be a cost burden to long-term owners with limited income. With proper maintenance and remodelling 'Queenslanders', owners have significantly enhanced the value of their property. This has often benefited the relatively wealthy in the community.

The initiatives taken by BCC have provided unique opportunities for maintaining and enhancing the vernacular architecture of Queensland. Furthermore, it has given a distinctive character to the city and provided an opportunity to promote local architecture as part of the marketing of the city.

1. Introduction

'A region can often be clearly recognised by the character of its housing. ... House design reflects critical factors such as climate, materials, economics and cultural background' (Hutchinson, 2002, p.44). Vernacular architecture in Queensland, Australia has evolved since mid-nineteenth century reflecting the culture of the predominantly British migrants and addressing the climate of the region. The traditional 'Queenslander' house of timber and iron has been called "the closest Australia ever came to producing

an indigenous style” (Freeland, 1968, p.209). These houses provide a strong sense of local identity and character to the older suburbs of Brisbane, the capital of Queensland. They are facing major pressures due to gentrification and urban development in the older suburbs of Brisbane. Furthermore, the new houses that are being built do not address the local climate. The Brisbane City Council (BCC) has taken initiatives to protect the existing ‘Queenslander’ houses through measures such as classifying older suburbs as ‘character residential areas’ with controls on demolition of historic buildings.

The key objective of the paper is to examine the major planning issues with the timber vernacular architecture in the present context of Brisbane. The paper will first discuss the characteristics of the ‘Queenslander’ house focussing on some of its key architectural features and historic development. It will review the current planning and urban design initiatives being undertaken in Brisbane to protect the character of older suburbs and buildings. The paper will lastly identify the planning opportunities for vernacular architecture in the present context exploring further ideas to enhance the vernacular traditions in Brisbane.



Figure 1. Typical Queenslander ((Saini, B. and Joyce, R., 1982, p.16)

2. The ‘Queenslander’

2.1 Key Characteristics of ‘Queenslander’

Vernacular architecture, for the purpose of this paper, refers to the Queensland timber house commonly known as 'Queenslander'. Adapting to climate, it “faces outwards more than inwards. It is not fixed or confined. Nor anchored into the earth, but is fluid and free – movable, almost transient” (Woolley, 1997, p.10). It is light and open with many doors opening to verandas providing freedom. The traditional ‘Queenslander’ houses not only serve the function of providing the shelter but also are a strong expression of their owner's identity (Fisher and Crozier, 1994).

Extensive literature exists on the development of this house and its distinctive features (Evans and National Trust of Queensland, 2001; Rechner, 1998; Kumarasuriyar, 1996;

Fisher and Crozier, 1994; Bell, 1984; Saini, 1981). The distinctive features of the 'Queenslander' can be summarised as; a floor plan of four or six core rooms, symmetrical about a central corridor which provides access, and shaded by verandas; a light timber framed structure elevated on stumps (stilts) to suit the terrain; roofed with a steeply pitched iron roof; a combination of decorative features such as cast iron or timber balustrades, pediments, column brackets, timber screens, fretwork, battens between stumps; and a paling fence in front (Kumarasuriyar, 1996).

Vernacular architecture is not only a function of form and function but also a reflection of social, cultural, economic and political influences. Craik (1990) suggests that vernacular architecture provides identity, status and place as well as specifies the relationship between the house and its occupants. The traditional houses in Queensland were primarily single detached houses on a separate block of land. The ready availability of land and hot climate of Queensland, and legislation such as the *Undue Subdivision of Land Prevention Act* can be attributed to the detached houses that dominated the Brisbane landscape (Fisher and Crozier, 1994). The rich were often located on the hilltops with views and cool breezes, while the small workers' cottages were in the low-lying areas with potential for flooding. The techniques of construction of the 'Queenslander' rested primarily on timber, which grew in abundance, and corrugated iron. The availability of milled timber and ease of handling and transporting over long distances made it the preferred material. Corrugated iron, later replaced by galvanised iron, was the obvious choice as roofing material because it was durable, fire resistant, waterproof, light and easy to transport (Kumarasuriyar, 1996). Ease of transport was significant factor as the distances were vast and sometimes the houses were literally moved from one site to another.

The verandas with large overhangs were an integral part of the 'Queenslander' because they were a refuge from the intense sun and rain; acting as wind scoops to direct breezes to the house, which otherwise would flow over it. Awnings, timber lattice panels, canopies, and slatted sun louvers helped to provide privacy for the occupants as well as cutting the intensity of the summer solar radiation while letting the breezes pass through. The doors and windows could stay open to let the breezes in, in order to carry the hot and moist air of the interior spaces out. This was a necessary precaution against mould growth. Horizontally pivoted louvers, rather than sliding panels, helped to direct the moving air onto the occupants to blow away and evaporate moisture on the skin. Winter sun, coming at a low angle, was invited from north to make the indoors warm. Verandas did more than keeping the sun and rain out. They played a multipurpose function as they

were often used as extension of living spaces; acted as a sleep out area, space for relaxation, and play area as well as providing area for storage and hanging the laundry on. After the Second World War they were enclosed to provide extra space for relocated relatives and friends. The veranda in the “Queenslander” can be attributed to British colonial traditions elsewhere, such as India and the Caribbean.

Roof overhangs on the veranda-less facades were usually narrow, which did not offer much weather protection. Application of window hoods made of timber and sheet metal helped to provide shade and divert rain away from timber window frames and sills (Hutchinson, 2002). Side fins of these hoods had punctured decorations for letting the rising hot air out, which otherwise would stay trapped and stagnant and then in turn heat the interiors.

The early houses in Queensland were built on the ground, however by 1870s the raising of houses on stilts was common (Kumarasuriyar, 1996). This change is attributed to protecting the timber from white ants, catching the higher level prevailing breezes, getting a flat floor on a sloping site without excavation and hence not changing the nature of the landscape, flexible use of the ‘under house’ space, ventilating the ‘under house’ area, and providing a cool air pool beneath the floor.

2.2 The Development of the Queenslander

The early migrants in ‘Queensland’ were willing to live in primitive bark shelters until they had secured a regular source of income and tenure of land. Later, when the families joined the men they built slab huts.

The next stage of development was the two-roomed house or cottage, which made its appearance in the 1860s. The plan of this house consisted of two unequal rooms, the larger for living and the smaller for sleeping (Fig. 2). The living room had an entrance door and a back door directly opposite creating a passage way through the house to outside –‘to liberty’ and to instant freedom (Woolley, 1997). There were a front and a rear veranda, which according to a prominent Aboriginal artist, provided space ‘so you can be together when you like or on your own when you like’ (Woolley, 1997, p.49). Cooking and washing were in detached structures in the backyard, which not only helped the heat and moisture to be kept away from the living spaces but also decreased the risk of fire. The house, elevated on stumps, was constructed of timber with a corrugated iron gable or hipped roof over the core rooms. The veranda had a lean-to roof.

The two-roomed house was modified into the four or six roomed house (Fig. 2) during the economic boom period of the 1870s. This house, although similar in the use of materials and construction, had more rooms, wider verandas on two, three, or four sides, and a pyramid roof. The decorative features were more elaborate than the two-roomed cottage.

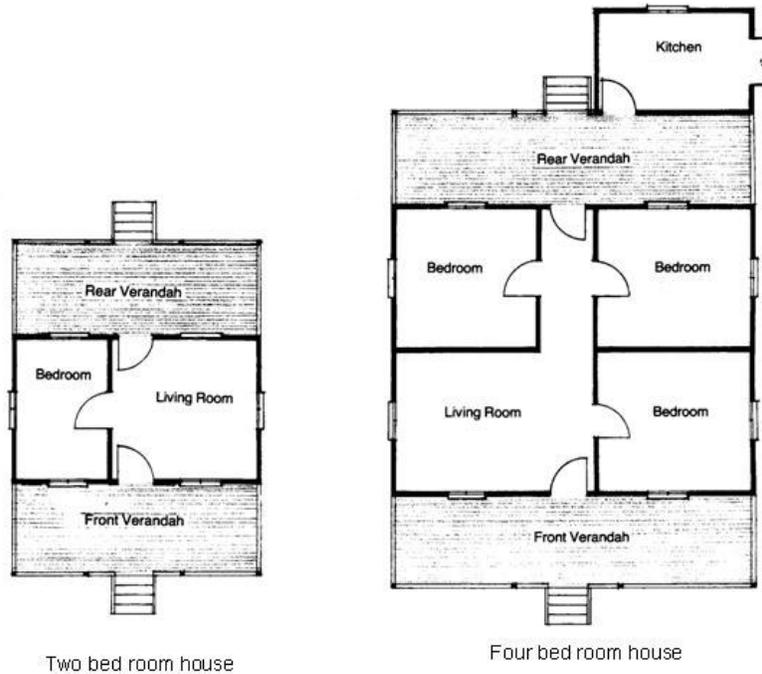


Figure 2 The two-roomed & four-roomed house plans (Saini, B. and Joyce, R., 1982, p.13)



Photo 1 Typical Queenslander (Saini, B. and Joyce, R., 1982)

2.3 The 'Queenslander' Today

The traditional 'Queenslander' is under pressure today due to gentrification and development in the older inner city suburbs of Brisbane. Some old 'Queenslanders' have been demolished to redevelop the land for new housing or office buildings. However, in recent years, there has been a trend in maintaining and restoring old and rare 'Queenslanders' as they have begun to fetch premium values in the real estate market. Some new owners have restored the house as near as possible to the original design.

Some local architects have also taken innovative approaches to remodelling and renovating the old houses to accommodate 20th century living while keeping the distinctive features intact. They have often kept the external shell of the buildings while finding new uses for internal spaces. Craik (1990) argues that some of the new trends in renovation of 'Queenslanders' combine "new notions of domestic architecture with (re)vised notions about tropical architecture". These include increasing the amount of natural light in every room by adding new windows, replacing coloured glass with clear glass, adding skylights, removing walls, and by choosing light colours in paint, wallpaper and furnishings". Renovation include 1) (re)modelling the kitchen and bathrooms, 2) structural renovation (re-stumping, re-roofing, re-wiring, re-painting), and 3) restoration of existing verandas for "deck" as new outdoor spaces which have larger, latticed platform better suited for group entertaining.

3. Planning Issues

There are a number of planning issues with the vernacular architecture in the present context. They include debates about its relevance in the present context, suitability for the local climate, community perception about conservation, social equity and concern about imitating vernacular architecture. Each of these issues will be discussed briefly.

Relevance in the Present Context

One of the major planning issues relating to vernacular architecture is their relevance in the present milieu of demographic, economic and technological changes. Demographic and life style changes in Brisbane have contributed to the modifications and renovations to the Queenslander to suit the needs of the present generation of users. As many old houses are relatively small and lack modern facilities, there is often a demand for increased space and upgrading of services and facilities. There are also issues relating to costs of ongoing maintenance in the old Queenslanders.

Suitability of Iron Roof for Local Climate

There are also debates about the suitability of iron roof in a hot climate. Corrugated iron/steel does not have the right colour to reflect solar radiation. Also it provides very little protection from solar gains due to its highly conductive character. Lack of insulation proves the house to be quite hot in summer and cold in winter.

Community Perception about heritage conservation

Conservation of historic character of suburbs is not easy in a community with diverse interests and needs. Although there is general support for preservation of vernacular architecture in Brisbane, some owners may not share this view. They consider heritage listing of their properties as a hindrance to their freedom to make changes or demolish to make way for new constructions (Brown, 1994). There is clearly a need for a mechanism for education and consultation in order to address these issues pertaining to owners' negative view of heritage and conservation.

Equity

The issue of equity is also a major concern, as renovating old Queenslanders is a cost burden to long-term elderly owners with limited income. With proper maintenance and remodelling of large Queenslanders, some owners have significantly increased the value of their property. This has often benefited the relatively wealthy in the community.

Social Displacement

Extensive literature on gentrification suggests that this process has displaced the low income groups living in these older suburbs. The renewed interest in maintaining the old Queenslanders has resulted in social displacement while maintaining the physical character of the place (Hsu, 2000). The kind of people living in the traditional workers cottages in the inner suburbs are changing rapidly with more affluent people moving in.

Concern about Imitating Vernacular Architecture

In order to maintain the character of historic areas with Queenslanders, many new buildings in these areas are built copying or mimicking vernacular aesthetic. Some critics argue that these large scale imitations with façade of traditional decorative elements result in creation of 'theme park atmosphere' with replicas of Queenslanders from historic past rather than creation of 'honest' new buildings reflective of the present context.

Having discussed the planning issues of vernacular architecture the paper will give an overview of current planning and urban design initiatives in Brisbane which address these issues.

3.1 Planning and Urban Design Initiatives

Strategic Planning and Development Control

BCC has taken a number of initiatives to protect the Queenslanders through its planning schemes and local area plans. The Council has also developed a local government register to list places of cultural heritage significance in a particular area. Through their strategic planning document they have identified suburbs with character areas. These areas have development controls to halt demolishing Queenslanders built before 1946. If a property is in a "Character Protection Area" or on the "Heritage Register" the owner is required to obtain a permit from Council before the building can be demolished or removed to another location. City Plan 2000 has also developed Heritage Place code and associated Heritage Register Planning Scheme policy for the protection of heritage places (BCC City Design, 2002).

Under the Brisbane city plan 2000 new buildings will have to be sympathetic to traditional character of these places. Heritage places will be conserved to retain their significance for the benefit of the present and future generations. Likewise, the council's Heritage Advisory Committee consisting of professionals and community representatives gives policy advice to the council on range of heritage issues such as heritage policy development, development applications involving heritage places and promoting community awareness of heritage places.

Spring Hill Development Control Plan

One of the earliest initiatives in Brisbane to preserve the Queenslanders was in an inner suburb of Springhill through the preparation of the development control plan (DCP) in 1982. Due to the location of Springhill close to the CBD, there was continuous pressure for commercial development in the area, with many houses being converted into office blocks. The city council with the involvement of local community representatives (Spring Hill Progress Association) prepared a highly prescriptive DCP for the area with controls on the use of site and design codes to regulate building envelope and bulk. Some of the aims of the DCP were: 1) to retain the existing scale and character of the area; 2) to control the development of high rise structures; 3) to limit the amount of commercial intrusions; 4) to prevent dispersion of commercial activities into residential areas; and 5) to reintroduce residential living in the area (Hsu, 2000). This DCP identified heritage and

character protection precincts where attempt was made to retain or reinstate the original character of housing as much as possible. The new houses were required to be sympathetic to the original houses in terms of scale, character, building façade, colour etc. This DCP paved the way for citywide attempt at conserving the iron and timber architecture of Brisbane.

Home Renovators Guide

The City Council has also developed a home renovators' guide to provide advice to residents on maintenance of the old houses. It suggests that some of the modern requirements are for increasing the space and upgrading the services and facilities. Some options being identified are: 1) raising and building underneath the house, 2) extension in the roof space, 3) internal re-arrangement of partitions, and 4) additions to the house either as an extension to the original or as a separate pavilion" (BCC website).

Establishment of Centre for Subtropical Design

BCC is in the process of establishing a Centre for Sub-Tropical Design at the School of Design and Built Environment, Queensland University of Technology in Brisbane. The Centre will research and promote sustainable planning and design that responds to the City's cultural, landscape and climatic characteristics. The Centre aims to enhance cultural identity and respond to the subtropical environment of Brisbane which could mean promoting climate responsive building design while maintaining and enhancing the unique character of Brisbane.

The proposed centre will communicate to government, industry and community the appropriate subtropical design initiatives and "best practice" principles. Likewise, it will advise the Council on regulatory provisions for achieving appropriate subtropical design outcomes.

Other Initiatives by State Government

Besides the local council initiatives, there are also relevant State government programs such as Queensland Heritage Registers and legislation such as *Queensland Heritage Act 1992* to protect the cultural heritage of local communities (Alpin, 2002). This Act, administered by the Heritage Council and the Cultural Heritage Unit of the State

Government's Environmental Protection Agency, provides a mechanism for conservation of cultural heritage of state significance rather than that of local significance.

The review of policy initiatives of the government suggests that a strategic framework already exists in Brisbane for protecting vernacular architecture and historic character of older suburbs. However, much of the council initiative is based on enforcing development control and technical advice on maintaining the Queenslanders through their websites and publications. There are very little financial incentives being offered to the community by the council and state government to protect the vernacular architecture. Much of the financial responsibility for maintaining the vernacular architecture lies solely with the owners themselves.

The review of these initiatives by the council, state government and non-governmental organisation provide the context for identifying the planning opportunities for vernacular architecture in the present context.

3.2 Planning Opportunities

A number of opportunities exist to promote vernacular architecture in Brisbane. Following section discusses some of these opportunities in further detail.

7.1 Creation of Distinctive Character

The timber and corrugated iron vernacular architecture of Brisbane along with its hilly terrain provides a distinctive appearance different to other capital cities in Australia. In the context of increasing uniformity and internationalisation of architecture, vernacular architecture provides some relief to the monotony of cities and provides unique characteristics. They are not only an important component of a city's cultural heritage but also provide an opportunity to promote local architecture as part of the marketing of the city for investments and as tourist attractions.

Although recent gentrification trends have contributed to making the inner city living more expensive displacing the lower income groups by the more affluent ones, one of the positive impacts of gentrification is restoration and renovation of the many Queenslanders in inner city areas maintaining the character of the city. There is an important role of artists, entrepreneurs and professionals in rediscovering the value of vernacular architecture and understanding the benefits of conservation rather than demolition of old Queenslanders.

Promotion of Subtropical Architecture

Vernacular architecture can make major contribution in the search for promotion of subtropical architecture in Brisbane. As Malcolm Middleton, a heritage council architect suggests, “history and the architecture of the past can provide insights into contemporary design problems” (Time and Place, 2001). One aspect of vernacular architecture is its human scale and suitability for subtropical living and provides the sense of place. A challenge for the contemporary architects and planners is to develop ideas for new developments, which are sympathetic to local architectural traditions. Some of the ideas being tried in renovation of old Queenslanders by contemporary architects include use of louvers for light, timber and iron extensions, indoor/outdoor rooms with views, raising the Queenslanders to build underneath, integrating subtropical garden design and retaining the street character.

Comparative Studies on Vernacular Architecture, Urban Design and Planning

Rather than focussing on just the houses, it would also be important for the architects and planners to look at the vernacular subtropical city planning and urban design. There is still a paucity of literature on subtropical city planning and urban design. There is a potential to do a comparative research on vernacular architecture in subtropical cities such as Brisbane, Hawaii, Florida, and cities in the South East Asian countries to learn from each others’ experiences.

4. Conclusion

Vernacular architecture of Brisbane provides a unique character to subtropical Brisbane. With recent interest of BCC to promote subtropical architecture, there is much that can be learned from the vernacular architecture, link past and present, and making them relevant for the present demographic, economic, cultural and technological context. This can be and has to be done not by copying/faking the old designs but drawing lessons, recognising the values, and reinterpreting them in the present context. There is a strong need for community consultation and education on ways to preserve the historic character of the city. These need to be backed up by relevant legislations, advice and financial incentives by the councils and state government. This way, Brisbane City Council in collaboration with the local communities can provide unique opportunities for maintaining and enhancing the vernacular architecture in Brisbane.

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