Australia is a developed, highly urbanised and comparatively prosperous nation. It is relatively sparsely populated in low-density towns and cities which hug its coastline. These urban centres, mainly developed in the last 150-200 years, are generally sprawling, car-dependent places dominated by detached houses. Current urban design challenges include retrofitting cities to improve their sustainability and resilience to a changing climate, while also accommodating escalating housing demand fuelled by population growth, falling household size and an ageing population.

Australia has a three-tiered system of government: a Federal Government, governments for each of its eight States and Territories, and local councils.

Definitions

In Australia, urban design is generally taken to mean the three-dimensional design of parts of towns and cities. It usually refers to the overall arrangement of multi-building developments, policies and controls for the design of development in urban areas, and/or the design of public spaces.

Good urban design is considered to be that which benefits the public interest by creating places that are well connected, enjoyable to be in, safe and visually appealing, and which reflect cultural values and local distinctiveness. It is also expected to contribute to broader planning objectives relating to environmental sustainability, social inclusion and economic prosperity.

The draft Australian Urban Design Protocol developed by heads of planning from State and Territory Governments, the Federal Government, the New Zealand Government and Australian Local Governments Association defines urban design as follows:

*Urban design concerns the physical arrangement, appearance and functioning of towns and cities, and their relationship to the natural environment. Good urban design supports the social, cultural, economic and environmental well-being of communities that live in cities and towns, or that are affected by them. Urban design is as concerned with the process of change as it is with the actual product of development.*

(Urban Design Forum Quarterly issue 83: September 2008)
The Urban Design Charter for the State of Victoria defines urban design as follows:

Urban design is the practice of shaping human settlements to create practical, comfortable and delightful places for people to live and go about their daily lives. It is also about making well planned, logical connections between people, places and buildings.

Urban design focuses on the public environment, which includes all places, regardless of ownership, that are open, available and inviting to public use.

(www.dpcd.vic.gov.au/planning/urbandesign/urban-design-charter-for-victoria)

Professional place of urban design

In Australia, urban design is typically practised by specialist urban designers, architects, landscape architects and town planners. There is no formal registration of or institute for urban designers. However, there are a small number of informal groups that provide a network for the exchange of ideas on and the promotion of good urban design.

These include:

- Urban Design Forum
- Urban Design Alliance of Queensland
- Australian Council for New Urbanism

The professional institutes of architects, landscape architects and town planners also promote good urban design. All present annual awards for urban design at state and national level.

Urban design reached its apogee in Australia with the establishment of the Prime Minister’s Urban Design Task Force in 1996. One legacy of this initiative is the annual Australia Award for Urban Design.

Discipline

Urban design is taught at postgraduate level in most major cities in Australia, leading to Graduate Certificates, Diplomas and Master of Urban Design qualifications. These courses are generally provided by the architecture, landscape architecture or urban planning departments of universities, which also offer the elementary principles of urban design as part of their undergraduate degrees.

Australia’s academic urban design programmes have led to a body of original research. A recent example is a series of projects undertaken by staff and students at the University of Melbourne focused on resolving the apparent conflict between the need for suburban intensification to create more sustainable and liveable cities, and the desire for protection and enhancement of local character.

Legal status

Each Australian State and Territory has its own planning system, including legislation, policies, controls and processes.

The expression ‘urban design’ is rarely found in planning legislation in Australia, which tends to focus on environmental and land use planning matters, planning instruments and development approval processes. However, it is frequently emphasised in state and local plans and planning policies. Most State and Territory governments also promote best practice urban design through guidance documents.

Historical development

Urban design did not come of age in Australia until the 1980s. Prior to that, with few exceptions, urban design was essentially a by-product of the work of surveyors, planners, architects and traffic engineers, rather than a specific area of expertise or a discipline in its own right.

The rise of urban design was triggered by a number of factors. From the late 1960s, the sterility and placelessness of mid-twentieth century functionally-driven street and building design drew mounting criticism.

Outspoken architect Robin Boyd described post-war planning in scathing terms in his book, The Australian Ugliness:

The plans which emerged from the various bureaucratic design departments promised to alleviate the worst tangles of traffic and industrial growth, but they were no help against ugliness. They did not pretend even to scratch the surface of the problems of the violent visual confusion of the streets of competitive architecture or the slightly psychopathic pioneering attitude to the landscape. The corrective plans had no artistic aspirations. They made no attempt to restore unity and dignity or to curb the self-advertising instincts of so many ill-trained or un-trained designers. The other type of town-planning, the art, the sort of design which aims for a delightful total environment, is very rare; but it is not unknown.

Boyd’s criticisms paralleled the international rise of environmental concerns, heritage conservation and civic societies.

In the 1970s, increased overseas travel by city council bureaucrats and the advent of planners and architects with specialist urban design training from British and American universities brought a new awareness of both traditional urban design values and new urban design theories.

Urban design truly arrived as a recognised field in Australia in 1994, when Prime Minister Paul Keating established an Urban Design Task Force. This body was charged with reporting on the state of urban design in Australia and ultimately resulted in the annual Australia Award for Urban Design. To fully appreciate how remarkable this endorsement for urban design at the highest level was, it is necessary to understand the chequered history of urban design in Australia.
Permanent urban areas did not occur until British settlement in the late eighteenth century. Since then, the design of towns and cities has experienced four distinct eras whose primary influences can be characterised as Colonialism, Idealism, Modernism and Placemaking. Each of these eras represented a pendulum swing between the importance attached to function and to delight.

The British brought a formula for town design applied uniformly in their colonies the world over. Its defining feature was the orthogonal grid, adopted because of its efficiency. Sensitivity to place was limited to occasional twists of the alignment off due north in response to topography.

A unique set of dimensions gradually evolved for the components of these towns which continues to characterise older urban areas today. Road widths were standardised at 20 or 30 metres, generous by European measures. Minimum lot sizes were established which led to Australia’s continuing love affair with the ‘quarter-acre block’. Front setbacks for residential buildings were set at 4m, creating a New World suburban character.

The colonial towns were almost entirely designed to meet functional requirements, with no room for experiential aspirations. The only significant exception to this was the ‘parkland towns’, a distinctly Australian contribution to model town planning involving a frame of parkland around the urban core, demarcating it from surrounding suburbs.

In the late nineteenth century, Australian town planning entered a new idealistic phase, strongly influenced by the garden city and city beautiful movements. Whilst order and efficiency remained key objectives, this was overlaid by a desire for more attractive urban places.

The distinguishing characteristic of idealistic town plans in Australia was formal radial street patterns, offering the potential for decorous curved streets and boulevards focused on landmarks. The pinnacle of this era was the new city and national capital of Canberra, which resulted from an international competition. Conceived as a city in the landscape, the Walter Burley Griffin design was based on interlocking radial geometries rooted to major landforms.
By the 1920s, Modernism’s quest to define new ways of living had begun to introduce concepts such as the neighbourhood unit, land use zoning, road hierarchies, and segregation of cars and pedestrians. Function took precedence again over beauty.

The mid-twentieth century was a low point in urban design in Australia, as its cities began to sprawl with little thought to place-specific design or visual appeal. The cul-de-sac emerged to become an icon of twentieth century suburban development, cemented by the long-running and widely exported Australian soap opera, Neighbours.

Australia was largely spared the excesses of large-scale Modernist urban renewal projects such as those which assailed other cities around the world. However, the skylines of the larger metropolises are punctuated by clutches of 1960s public housing towers set in unloved open space.

Ultimately, the failures of Modernist planning and architecture led to the rise of urban design in Australia in the final decades of the twentieth century. The creation of unique and attractive places re-emerged as an influential factor in the development and management of urban areas.

From the 1980s, Australia hosted a series of international events that led to major urban renewal projects, including the America’s Cup in Fremantle, World Expo in Brisbane and Sydney Olympics. In these and other projects, the potential was recognised for post-industrial waterfront developments to be a key asset in the new age of competition between cities. This provided a high-profile canvas for the newly remembered practice of urban design.

At the same time, rising recognition of the importance of urban design led to programs to improve the quality of the public realm within Australia’s older city centres. These ranged from the incremental introduction of higher quality footpaths, street trees and street furniture, to more significant interventions such as new public squares and the revitalisation of service lanes as intimate pedestrian links and spaces.

The 1980s also marked the beginning of a new phase of suburb design, primarily at the ever-expanding urban fringe. Improvements included better integration of local shops, schools and open space, a more sensitive response to nature, improved housing choice (including forms of medium-density accommodation such as row housing) and more pedestrian-friendly streets.

These innovations were triggered by a combination of private developers wanting to create a point of difference in the housing market, often borrowing ideas from the USA, and the imposition of higher environmental and development standards by authorities. They culminated in the emergence of comprehensively conceived master planned communities.

A companion advance of the 1990s was the introduction by State and local governments of guidelines to promote higher residential development standards. These established minimum benchmarks for residential amenity, streetscape character, energy-efficient siting and design, and public open space. Over time, they have become entrenched as mandatory planning controls in most jurisdictions, although they are typically performance-based guidelines which provide flexibility in how their objectives can be achieved.

The New Urbanism movement which emerged during this time proved to be another important stimulus for improved urban design in new residential communities, particularly through its promotion of walkable neighbourhoods as a structuring device, interconnected streets, mixed use and good street frontages.

Urban design is now a well-entrenched consideration of planning, architecture and landscape architecture. This is reflected in the promotion of good urban design in state and local planning documents, policies that require specific urban design qualities to be considered in the assessment of planning applications and controls that establish minimum standards.
Practice and concerns

Urban design work in Australia is mainly commissioned by State governments, local authorities and private developers. The Federal Government has been notably silent on urban planning and design with rare exceptions.

Urban design work is undertaken by a wide range of different organisations, including State Government and local authority planning departments, multi-disciplinary consultancies that also offer architecture, town planning and/or landscape architecture services, and a number of very small (1-2 person) specialist urban design practices.

Current issues of concern to urban designers in Australia are summarised below:

- Australian cities and towns are dominated by relatively low-density suburbs (less than 10dw/ha). Planners and urban designers have long recognised the need to intensify these suburbs to minimise urban sprawl and create more sustainable and liveable cities. However, there is significant community resistance to the change of character that goes with the introduction of denser housing. This position largely holds political sway, hindering the introduction of policies and controls to promote intensification. Urban designers in Australia’s growing cities are seeking to address this by promoting the benefits of greater density and developing clever designs for medium-density housing that achieve higher densities in a form that fits comfortably with the prevailing low-density character.

- Australia is susceptible to extreme weather events – particularly bushfire, flooding and cyclones on a catastrophic scale. It is feared that climate change is increasing the frequency of such events and will add sea-level rise into the bargain. Urban designers are typically included as key members of teams focused on the adaptation of towns and cities in response to these events. This is seen as critical given the tendency for bureaucrats to choose quick practical solutions after traumatic events, relegating concerns about the quality of the public realm to minor importance or an unaffordable luxury. Particular concerns include engineering solutions for sea-level rise or flood mitigation that may have significantly adverse impacts on the quality of adjoining streets and spaces.

- The dominance of the car during the second half of the twentieth century, when Australia’s cities experienced significant growth, has left a large proportion of their suburbs with a legacy of traffic-dominated and pedestrian-unfriendly streets. This includes convoluted and impermeable street networks, a lack of footpaths, streets lined by high fences and limited landscaping. Urban designers are involved in the repair of these suburbs so that they are more inviting to pedestrians.

- Increasing road congestion in Australia’s major cities has led to a massive increase in the use of bicycles for the daily commute to work (although it is still a very low proportion of journeys compared with many European countries). Urban designers have been at the vanguard of efforts to persuade the powerful roads lobby to release its stranglehold on the use of roads for cars and find more space for cycle lanes.

- Australia has belatedly realised that it must conserve its water resources. This has led to a new area of interest for urban designers: water sensitive urban design. Collaboration between urban designers and hydraulic engineers has developed urban stormwater drainage systems that rely less on engineered solutions and instead use more natural techniques to retard and filter rainfall, at the same time creating valuable and distinctive recreational and education spaces for their communities.

- The increasing sprawl of Australia’s major cities has obliterated valuable agricultural areas and pushed food production further from its customers, increasing the environmental costs of distribution. Urban designers are addressing this issue in urban renewal plans undertaken for government agencies by investigating innovative ways for food to be produced within urban areas. This has become known as Food Sensitive Planning and Urban Design (FSPUD).

- Australia has one of the highest levels of obesity in the world. Urban designers have recognised the link between the design of urban environments and public health, and are now using this to bolster their arguments for better-connected and higher quality public realms for pedestrians and cyclists.

- Like many other countries, Australia has for some time promoted ‘green’ buildings through rating systems. However, a new development currently involving urban designers is the creation of a tool for measuring the sustainability of whole urban areas. This will encompass social, economic and environmental sustainability, along with design excellence, and leadership and governance (http://www.gbca.org.au/green-star/green-star-communities/).

- Despite its resurgence under Prime Minister Keating in the mid 1990s, the promotion of good urban design is still subject to the vagaries of local, state and federal politics in Australia. Therefore, a movement was begun in 2010 to establish a national organisation to promote good urban design using England’s Commission for Architecture and the Built Environment (CABE) as a starting point. At the time of writing, widespread support for the Australian Urban Design Initiative (AUDI) has been garnered from across Australia, although it is yet to be taken up by governments or an alternative funding body.
Urban design is playing a key part in ensuring urban renewal projects in Australia are sustainable and liveable and have a distinctive sense of place. A notable example of this is Claisebrook Village, a major urban renewal project in Perth, Western Australia.

The Claisebrook Village project commenced in 1992, following the establishment of the East Perth Redevelopment Authority (EPRA). EPRA is a state government agency responsible for the redevelopment of underutilised inner urban land. EPRA’s approach emphasises the importance of place making – the art of creating distinctive and enjoyable places that will attract people and investment.

Western Australia’s largest urban renewal project at the time, Claisebrook Village is built on 137.5 hectares of former industrial land on the Swan River immediately east of Perth’s CBD. It involved extensive environmental rehabilitation, for which it has won awards.

The design of Claisebrook Village is based on the concept of an urban village. It contains a broad mix of uses, including 1500 homes, employment space for 6000 workers, shops, tertiary education and parks, creating opportunities to live close to work and facilities. The residential development takes the form of attached townhouses, low-rise apartment buildings and garage-top studios, providing a diverse range of housing opportunities, contributing to a socially balanced community and achieving a compactness that can support local services at a comfortable urban scale. EPRA has mandated the inclusion of approximately 10% social and affordable housing, high by Australian standards.

Non-motorised travel modes are encouraged through good pedestrian and cycle links, and the extension of the CBD’s free and high frequency Central Area Transit (CAT) bus system into the Village. The CBD’s street network has also been extended into the development in the form of a modified grid to ensure a well-connected, permeable and legible place.

This is enhanced by the employment of a diverse range of street types, from narrow lanes to tree-lined boulevards, which add to the distinctiveness of each part of the development. The streets have been designed to create a low-speed environment, inviting to pedestrians and cyclists.

A key feature of the project is the level of public investment in the quality of the public realm, including attractive streetscapes and extensive parkland. The parkland engages the community through a wide range of passive and active recreation opportunities. A series of parks and water bodies runs centrally through the Village, culminating in Claisebrook Cove which leads into the Swan River. The Cove is activated by cafes, bars, restaurants and boating activity. This forms the centrepiece of the development and maximises access to waterside and waterborne recreation opportunities. Another linear park runs along the river’s edge, connected across The Cove by a pedestrian and cycle bridge. Advance tree planting in the streets and parks created an instant and attractive character, which appealed to prospective residents and investors alike.

At the core of the Village is a local retail and commercial centre focused on Royal Street. Rather than the sanitised and controlled enclosed shopping malls surrounded by a sea of car parking that characterise late-twentieth century retail development in Australia, this is a street-based centre, focused on a genuinely public domain where social exchange is unconstrained.
Shop-top apartments help to enliven the centre, while the design of the street creates an inviting pedestrian environment that co-exists comfortably with the kerbside parking and slow-moving traffic necessary for the viability of small centres. A series of pedestrian plazas along the street provide focal points for the social life of the Village.

Detailed design guidelines were prepared for each stage of the project to prescribe the overall form and detailed design of individual developments. Key aims of the guidelines were to promote a contemporary architectural character rather than superficial stylistic reference to historical design periods, and to achieve a coherent character for each part of the Village while allowing freedom of design expression for individual buildings. This has been largely successful, with unity achieved through consistent scale and building typology, and a narrow palette of materials, and visual richness achieved through varied façade compositions and use of materials.

The site’s Indigenous heritage and industrial past has been recognised in the design of the project through the restoration and refurbishment of a number of historic buildings and the expression of historic activities in public artworks. An art walk has been developed using recycled materials from demolished buildings, which pays homage to the site’s history.

The development also incorporates a community-run City Farm, which promotes organic and sustainable food production practices, provides gardening and healthy cooking classes, and hosts a farmers market (http://perthcityfarm.org.au/).

Claisebrook Village is a flag-bearer for urban design in Australia. Its vibrant mix of uses and high quality and genuinely public streets and open spaces, structured around the site’s natural setting and incorporating numerous detailed design features rooted in its history, has resulted in a sustainable, liveable and distinctive place.

The project was initially funded by a combination of Federal Government money from the Building Better Cities Program and State Government investment, totalling A$127 million. It has since attracted A$685 million in private investment.

EPRA was the planning authority during the life of the project. Planning control has now largely returned to the City of Perth, with the remaining stages to be returned on completion. In addition to its environmental awards, Claisebrook Village has won three awards from the Urban Development Institute of Australia.
The future

Urban design has a relatively healthy profile in the creation of urban environments in Australia. Its importance is recognised in state and local government planning documents, in the assessment of planning applications, in the development of new infrastructure and in the redevelopment of ageing streets and spaces. The architecture, planning and landscape architecture institutes all confer urban design awards, and there is a national one sponsored jointly by them all. However, good urban design is not yet ubiquitous and it is constantly under threat from competing agendas.

The traditional city centres have fared best: blessed with a sound 19th century structure, they have survived well the rigours of the twentieth century to offer a robust framework for the continual evolution of the property market. At the same time, city bureaucrats' recognition of the importance of a high quality public realm has led to the gradual development of more inviting streets and spaces, and the replacement of obsolete precincts with vibrant new places.

The rise of the conservation movement came just in time to save much of Australia’s inner-urban Victorian-era neighbourhoods from destruction. Urban designers have played a key role in identifying ways in which these places can evolve to respond to contemporary needs while respecting their architectural heritage.

Less successful have been the larger urban renewal precincts at the fringe of Australia’s city centres, whether waterfront redevelopments or the regeneration of redundant industrial areas. Urgent desire for economic renewal and a lack of experience in designing mid-rise environments by architects and planners has led in many cases to sterile mono-functional zones containing chaotic clusters of ‘look-at-me’ towers placed haphazardly in uninviting streets. Despite the relatively young age of some of these developments, there is already a recognised need to repair their poor quality street environments and lack of diversity.

The middle-ring suburbs in Australia’s larger cities, mainly built in the inter-war and immediate post-war periods, have matured into much sought-after residential neighbourhoods due to their characterful architecture, mature landscape and, in many cases, relatively good local facilities and public transport connections. However, they have also become a battleground as developers seek to introduce denser housing in response to their desirability and planning policy support for urban consolidation, raising the ire of existing residents.

The reality is that these suburbs are environmentally, economically and socially unsustainable at their current densities, relying on the car for access to employment, shops and community facilities. To date however, urban designers have been largely unsuccessful in overturning resistance to change in these areas.

The pressure for additional housing has led most of Australia’s cities to expand their boundaries to accommodate new suburbs. At the same time, concern about housing affordability has led to the design of these suburbs being driven by cost-effectiveness as much as the creation of healthy and resilient communities with a unique identity.

In a return to the efficiency-driven layout of colonial townships, street networks designed to create a sense of place have been ruled out in favour of rigidly rectilinear grids, irrespective of local topography or features. In a continuation of Modernist principles, local centres are being relegated to traffic-dominated main roads on the edge of the neighbourhood, resulting in sterile, car-dependent dormitory suburbs. And, in the final blow, the houses are allowed to take the form of deeply unsustainable ‘McMansions’ – eave less boxes reliant on air-conditioning and separated just enough to ensure unsustainable densities.

The desperate need for more affordable housing and governments’ unwillingness to invest in alternative solutions has led to a misconception that, given the ability to build cheap suburbs, the housing industry will provide affordable housing. Not only have increasing house prices and transport costs demonstrated that this is folly, but in the meantime, the opportunity to create genuinely attractive, vibrant, sustainable suburbs is being lost.

In short, urban design has come a long way in Australia in the last thirty years. It has made its mark with successes to be proud of in the city centres and inner suburbs. It appears here to stay with urban design issues frequently a subject of popular debate and widespread coverage in the media. Since the re-election of a Labor Federal Government urban planning has even come back onto the national agenda with the creation of a Major Cities Unit, whose remit is to advise the Government on issues of policy, planning and infrastructure that have an impact on Australia’s cities and suburbs.

However, the big challenge of retro-fitting Australia’s low-density suburbs to be resilient in an uncertain low-carbon future has not yet been solved. Nor has the urban design community made itself heard loudly enough at the urban fringe, the last bastion of functionalist town design. This is Australian urban designers’ final frontier.

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