

type is, as zoning laws prescribe particular urban forms. New York's set back skyscraper type emerged out of the 1916 zoning resolution as a means of controlling building bulk to ensure access to light and air. This is distinct from London's view corridors, which control bulk to preserve certain views of St Paul's Cathedral, and Paris's zoning which limits building heights in the historical centre but is more permissive at the perimeter. The in-depth analysis of local zoning codes explains so much of the urban morphology of high-density cities, and underscores the fact that distinct urban fabrics owe more to the genetic structure of regulatory codes than to the individual authorship of architects.

Exterior conditions, such as zoning regulations, govern the maximum extent of a tower's form; the interior is governed by the informal codes of leasing cultures, floor-plate sizes, core-to-perimeter dimensions, and industry preferences for open plan or perimeter offices. The residential tower, made up of a granular structure of individual units, is distinct from the open-floor plate of the office tower. The slender shafts of many French tall buildings are a result of labour laws that insist that workers sit within 5 m of a glazed exterior wall. The leasable depths of many tall buildings in Tokyo reach 18-20 m, resulting in deeper floor plates and bulkier towers. These internal and organizational conditions are equally determining of the tower's form, but are underemphasized in this book. Indeed, the tower could be defined by the intense calibration of space and performance both internally and externally; where the compactness of the elevator core, the optimization of its leasing depth and its maximization of its building envelope are all equally important factors in its overall efficiency, and its ultimate success.

The final chapter, entitled 'High-rise and sustainability', addresses the building type relative to questions of sustainability and energy. The author, Philippe Honorat, a mechanical engineer with WSP Flack + Kurtz, acknowledges the tall building as an energy intensive building type. He notes the trend towards urbanization in both the developed and developing world as urban populations continue to grow. From a land-use point of view, the tall building is a key component of urban networks that share resources, such as public transportation, and encourage collective use of space, such as parks and recreation spaces. Given its inherent density and shared resources, tall building is a key component of our urban future.

The urban towers handbook is an extremely well researched, clearly illustrated, and beautifully

written resource. The larger agenda of the book – to understand the tall building as a figure within a wider urban field – is important and underappreciated. The role of the tall building in our rapidly urbanizing and energy conscious urban future demands more attention and this volume makes great strides towards achieving it.

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The life and death of the Australian backyard by *Tony Hall*, CSIRO Publishing, Collingwood, Australia, 2010, 176 pp. ISBN 978-0-643-09816-9.

This finely researched and well presented book provides a compelling account of how powerful social and economic forces, in conjunction with ineffective and often archaic planning controls, have combined to dramatically affect Australian suburban form since the 1990s. The book's primary aim is to trace the disappearance of the Australian backyard – a resource that, Hall argues, offers multifarious benefits for both individual households and wider society – in order to generate discussion and debate on this often ignored, yet highly significant, phenomenon. Hall also draws on his extensive experience as an urban designer, town planner and former local councillor in the UK, to illustrate how this phenomenon could be reversed through simple regulatory changes, more proactive design guidance and a return to traditional Australian values.

The book commences with a lucid exposition of the suburban backyard, including commentary on its genesis, and its aesthetic, ecological, environmental, social and utilitarian values. Hall argues persuasively that retaining substantial backyards will enhance the wellbeing of individuals and the community – a point that is reinforced throughout the book – although he launches almost immediately into a detailed analysis of the form of older Australian suburbs that would, perhaps, have been better left for a later chapter. As a consequence, the reader has to wait until the book's second chapter to reach crucial introductory material, including a definition of the backyard. Despite this, Hall's examination of the form of older Australian suburbs, which includes data on average lot sizes, setbacks, dwelling footprints and

backyard areas, supplemented by numerous photographs, establishes a sound empirical basis for his analysis of Australia's newer suburbs.

Hall's analysis of a selection of post-1990 residential developments from across Australia is the central focus of the book's key chapters, and arguably its greatest strength. He seamlessly integrates the findings of painstaking and methodical research with high-quality aerial photographs that give the reader an unparalleled, birds-eye view of contemporary suburbia. The data and photographs reveal a ubiquitous trend towards larger dwellings that consume almost all available land within their lot, leaving little room for backyards, which are often well below 100 m². This contrasts dramatically with Hall's earlier analysis of older residential areas defined by smaller dwellings and substantial backyards in the order of about 150 m² to 400 m². In addition, Hall points to accompanying changes in housing design. In newer suburbs, houses 'frequently have a deep, square shape creating large internal spaces without natural light and ventilation' (p. 41). Added to this is 'a trend towards fewer and smaller windows' (p. 41) – a consequence of small side and rear setbacks, high opaque fencing, and a desire to minimize building costs – which reduces outlook and opportunities for households to benefit from natural climatic control. The dominance of integral garages and driveways at the front of dwellings also reduces the aesthetic quality and safety of local streets, providing yet another reason for people to insulate themselves from the outside world and the communities in which they live.

Taken together, Hall's account of these changes to Australian suburban form paints a bleak picture. The absence of substantial areas of private open space, especially to the rear of dwellings, will inevitably have an adverse impact on the health of people and the natural environment. Of particular concern to Hall is the absence of natural vegetation and pervious surfaces to absorb rainwater, remove pollutants, protect biodiversity and modify the microclimate. Smaller backyards also limit the potential for households to use these spaces for recreational, social, and utilitarian purposes, including clothes drying, water collection, waste disposal and home food production – all of which epitomize sustainable lifestyles.

In the second half of the book, Hall explores the forces behind Australia's changing suburban form, questioning why the planning system has done little to halt the decline of backyards in newer suburbs, and suggesting measures to improve the current situation. In particular, he provides evidence to

support the view that obvious 'suspects', such as policies for urban consolidation and higher densities, are not in fact the cause of the trend towards smaller backyards, noting that large backyards can be accommodated at densities well in excess of Australian standards. Instead, Hall points to troubling socio-economic trends – namely, longer working hours and a reclassification of the house as a financial, rather than lifestyle, investment. He notes: 'in the current mind set, the backyard is not perceived as having any financial value as an investment, whatever its advantages may be' (p. 94). This results in housing forms that maximize floor area at minimal cost: typically single-storey, deep-plan dwellings with integral garages, few windows and no eaves. Given this scenario, minimal land remains for backyards. Of notable concern is that Australian planning regulations have done little to prevent the backyard's disappearance. Hall attributes this to the lack of requirements for private open space, which stems from insufficient empirical evidence on both the dimensions and use of backyards. Encouragingly, he suggests that existing planning regulations could overcome the problem by specifying rear setbacks of 8–10 m and limiting the size of dwelling footprints to no greater than 40 per cent of the lot. Hall also argues cogently for the value of design guides and site-specific design briefs, in conjunction with dialogue between planning authorities, developers and political representatives. Finally, he closes with a call for a broader discussion of the social values and attitudes that lie behind the backyard's demise in Australia's newer suburbs: a discussion that properly demands the attention of all Australians.

The life and death of the Australian backyard is an excellent book, and a worthy recipient of this year's Planning Institute of Australia's 'Cutting Edge Research and Teaching Award'. Although the book's primary audience is Australian, it contains valuable lessons for everyone interested in suburban residential form, housing design, environmental sustainability, public health and social change. Despite occasional typographical errors, Hall's book is a fascinating analysis of suburban design and planning in an Australian context, and a significant contribution to scholarship in the field.

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