

Arbitrating Relatively Good Design: The Aesthetic Governance of Australia's Cities

Chris Beer

Economic Development Directorate, ACT Government [1]

Abstract: The proposition that the urban built environment can, and indeed should, be made more visually more attractive through public policy is a long-standing feature of the governance of Australian cities. In this vein, this paper examines how 'good design' in terms of visual aesthetics is currently pursued through planning and other governance practices. The paper begins by tracing the intellectual lineage of contemporary governance practice from long-standing ideas within Western thought around beauty and its value through to the urban design movement of today. Next, it considers in more detail specific possible political, socio-cultural, and economic rationales for aesthetic governance. It will then go on to discuss what might be better forms of regulatory practice, including in terms of balancing design expertise against other perspectives on value, and the management of the tension between providing regulatory flexibility versus certainty for communities and the development industry. In short, it will be argued that while there can be scope for regulation to deliver superior outcomes to what might otherwise occur, this practice must be sensitive to a high degree of contingency and relativity in what the public values in the appearance of our cities and that deliberate empirical inquiry into the latter for the purpose of shaping regulatory practice is desirable.

Introduction

Governments in Australia, from the Commonwealth, through the states and territories, to local governments treat the appearance of the built environment as a matter of public policy concern. In doing so, through regulation and other practices, they exercise what can be conceptualised as aesthetic governance.

Notwithstanding this assertion of a collective public interest in the visually attractive, what is aesthetically desirable can be highly controversial. While 'good design' in an aesthetic sense is not entirely subjective, it is inescapable that such value judgements have an element of relativity or contingency.

Against this background, this paper seeks to examine the contemporary practice of aesthetic governance of Australia's cities. It begins by outlining three broad currents from which such contemporary practice appears to intellectually derive. Next, two key issues are examined. The first is the extent of 'demand' for aesthetic governance and more specific political, economic, and socio-cultural rationales for regulation. The second issue to be examined is that of how such regulation might be best designed. My ultimate argument will be that the practice of aesthetic governance, in addition to not imposing unreasonable process costs, and balancing flexibility, certainty and accountability, should be carefully attuned to what the public values and that the latter should be identified through deliberate empirical inquiry (cf. Moore 1995; Benington and Moore 2011).

Reflecting current discourse within regulatory theory, the terms 'governance' and 'regulation' will be used more or less interchangeably (Baldwin and Black 2007; Braithwaite 1999). Thus 'regulation' here will refer to all forms of governments' attempts to shape the appearance of the built environment, including, but not limited to, formal development assessment. I acknowledge that this terminology may be less familiar for readers from town planning backgrounds, where a firm distinction is often made between 'regulatory' planning (in relation to the development assessment process and the zoning of land) and other aspects of the planning process orientated towards non-statutory 'strategic' plans.

Methodologically, this paper draws on the analysis of a wide range of Commonwealth, state government and local government policy texts. It is also informed by academic research within the disciplines of planning, architecture, public policy, and urban history, and the review of mass media commentary and reportage.

Practices of Contemporary Aesthetic Governance and their Intellectual Origins

At present, all three tiers of government seek to control the aesthetics of urban development through a mix of persuasion and mandating compliance via statutory development assessment and approval processes. While it is not the aim of this paper to undertake a detailed survey of these regulatory arrangements, some generalising observations can be made.

Persuasion takes place through the issuing of protocols, guidelines, policy statements, and such communicative devices (see, for example, Australian Government 2011). The work of government architects and their offices, and design review panels (with members drawn from the design professions) also typically seeks to influence through the provision of advice (Bleby 2012; Guy 2013; Hewett 2011). Development assessment and approval processes in contrast typically revolve around statutory planning codes which often contain a mix of controls that deal with aesthetic issues. These might be relatively explicit controls (such as, for example, requirements that a development be 'attractive', 'interesting', or of a certain 'character', or that certain colours or materials are used for certain surfaces). However, other controls which may serve multiple purposes (for example, requirements around building height or plot ratio) can indeed also be deployed for their aesthetic effects if not explicitly so. New South Wales' State Environmental Planning Policy (SEPP) 65, regarding the 'design quality of residential flat development', and its associated Residential Flat Design Code, provide good examples in this vein. Among their other goals, these documents explicitly seek to 'achieve better built form and aesthetics of buildings and streetscapes'. However, they also indirectly regulate the appearance of the built environment through articulating principles, for example, in relation to 'context', 'scale', and 'built form' (NSW Government 2011). In various jurisdictions, design review panels may also be statutorily involved within the regulatory process.

While typically being very technical, the above methods of aesthetic governance have their origins in certain 'bigger' ideas. Specifically, it would appear that the contemporary practices of Australian governments have important sources in three related intellectual currents: 1) the idea that beauty within the built environment is a virtue; 2) the idea that how the built environment is designed in an aesthetic sense can affect behaviours or socio-economic outcomes ('social environmentalism'); and, 3) what can be conceptualised as 'the design movement'.

The idea that beauty is a virtue is long-standing in Western thought and culture, both in general and in application to cities and buildings, with theorisation of beauty in relation to built form dating back to the Classical era (de Botton 2006). Following on from the Romantic movement, the nineteenth century saw considerable intellectual attention given to aesthetic questions (Francis 2007), and aspects of contemporary Australian aesthetic governance can be directly traced to debates on the aesthetic development of cities within the wider politics of nineteenth century urbanisation (Freestone 2010: 210-216; cf. Lubbock 1995). Perhaps the most well known point of this intersection between urbanism and aesthetics was the 'City Beautiful' movement that arose in the United States, and which was fundamentally premised on the belief that cities could indeed be made beautiful by deliberate public action. As a product of 'Progressive Era' of American history, its proponents sought to argue that beauty and utility were not mutually exclusive, and that policy could and should seek to achieve both within the built environment. In physical terms, this typically meant programs to construct ornamental park networks, boulevards, and civic centres lined with neoclassical public buildings. However, the movement also saw the rise of new administrative arrangements in parallel to the concurrent emergence of the discipline of town planning more generally. At this time, 'municipal art commissions' and like institutions sprung up to guide the development of the built environment in cities across the United States (Wilson 1994).

While the 'City Beautiful' eventually dissipated as a coherent movement, this formative period has nonetheless had ongoing influence on subsequent urban governance and the professional bodies of knowledge of planners, architects, urban designers, and landscape architects. Locally, Freestone (2007; 2010) and others have identified the many influences of the City Beautiful on the shaping of Australian cities in the early twentieth century including, notably, in the planning of Canberra, as well as various schemes to 'beautify' the state capitals and other cities. Although more recent social research into taste formation has problematised universalising approaches to beauty (see, classically, Bourdieu 2010), and twentieth century architectural theory and practice saw a fundamental rethinking of values around the appearance of buildings (Serle 1995; Frampton 2007; Boyd 2012), the idea that

beauty exists, is of normative worth, and may be pursued continues to have currency (de Botton 2006).

This pursuit of beauty, however, is now intertwined with the intellectual tradition of 'social environmentalism'. In particular, debates began to coalesce across the social and biological sciences during the 1800s on the importance of genetic or inherited characteristics relative to environmental or acquired characteristics in accounting for the behaviours or outcomes of individuals or groups (cf. Francis 2007; Fukuyama 2011). With time, the built environment became an important terrain of such intellectual discourse including around 'architectural determinism', whether this might be, for example, in terms of the effects of building design in relation to criminality and perceptions of safety, health and well-being, or the cohesiveness of groups and organisations. Consequently, the appearance of buildings or public spaces is now often seen as a matter of public policy concern in such terms (see, for example, Parliament of Victoria Drugs and Crime Prevention Committee 2013).

Finally, social environmentalism itself further intersects with what can be characterised as the 'design movement' and certain of its specialised offshoots and fellow-travellers. In short, the design movement's central premise is that 'good design' can induce desirable effects from objects above and beyond those arising from 'ordinary design' or 'bad design' (Lubbock 1995). Although there has never been anything approaching consensus on what substantively or procedurally constitutes 'good design', the appearance of things remains a core consideration of the design professions. More specifically in relation to the built environment, the discipline of architecture of course has a long history in Australia (Serle 1995; McGregor 2011; Boyd 2012), and in recent decades 'urban design', as such, has also become thoroughly institutionalised as a distinct school of theory and practice within Australian urban governance. While the idea of 'urban design as public policy' can be traced to shifts in 1960s North American urbanism (Punter 2004), Robert Freestone (2010: 39) suggests that locally the establishment of the 'Urban Design Task Force' during the Keating Government provided a critical local threshold moment of the movement's institutional legitimation.

Specific Rationales for Aesthetic Governance and the Design of Regulation

Against the above background, two key issues in contemporary Australian urban governance deserve further examination. First, if the above three currents provide broad ideational sources for public policy's engagement with the appearance of the built environment, the practice of regulation will typically be shaped by the local politics of places and more specific concerns. Accordingly, several more particular rationales for aesthetic governance that recur within contemporary public discourse will be examined. Second, once particular rationales for regulatory intervention have been established, this then raises the question of what particular regulatory arrangements might be preferable to others.

Contemporary Rationales for the Governmental Regulation of Aesthetics

While the idea of beauty as a virtue, and the arguments of social environmentalism and the design movement all have currency within the popular imagination, it is of note that superficially, aesthetic issues in themselves do not occupy as prominent a place in contemporary public discourse on Australia's cities in comparison to other issues such as, say, housing affordability or transport planning. For example, a recent major Productivity Commission (2011) study of the performance of planning in Australia did not address aesthetics directly, nor have the Commonwealth's recent *State of Australian Cities* reports. Similarly, among the general public, a recent large-scale opinion survey on urban issues reported that 'look and design' was, at least at the metropolitan level, generally of less concern than other aspects of 'liveability' such as personal safety and employment opportunities (Auspoll 2011).

However, the aesthetics of particular development proposals in specific locations nonetheless routinely raise significant public controversy. This might be in relation to sites of metropolitan significance (think, for example, of the debates around the aesthetics of Barangaroo), or more prosaically, in a suburban street currently predominated by detached houses but identified within local planning policy for a higher level of residential development. Across Australia's major cities, passionate debates are taking place on around the 'character' of suburbs and the values associated with particular places (see, for example, Woodcock et al 2010; Dovey et al 2005), often featuring

contending positions about the heritage value of the built environment of the past (Freestone 2010; Dobbin 2013).

If there is not then boiling demand for beautiful cities in the abstract, there are several practical rationales for aesthetic governance that recur in various forms within contemporary urban politics and policy discourse.

First, conflict over urban character and other aspects of appearances potentially establishes a political rationale for aesthetic governance in so far as it is a general role of governments to proactively arbitrate or otherwise manage conflicts over values within their polities in the interest of maintaining civil order. The emphasis on public consultation within Australian planning since the 1970s can be seen as a manifestation of this impulse, whereby it is intended that 'heat' in planning and development issues is ameliorated through the institutionalisation of opportunities for members of the public to 'have their say' (see, for example, NSW Department of Planning 2013).

Second, economic-cultural rationales may exist for aesthetic governance to the extent that ungoverned markets may threaten things that the public values or the exchange value of real property. Development that is not aesthetically well-regarded by significant numbers of people could potentially be treated as 'visual pollution', with its control being a matter for public concern as would other forms of pollution. Regulation may then focus on preventing the loss of relevant market values (such as, for example, quantifiable losses to property values, and consequently property-based tax revenue), and other collective values (such as, for example, widely shared heritage values) threatened by aesthetically flawed development (cf. Carmona et al 2001; McIndoe et al 2005).

Third, an alternative positive economic rationale is that there is a public interest in maximising the benefits that might be realised from aesthetically well-regarded development. While precise local effects will again always be an empirical question, it can be sensibly reasoned that aesthetically attractive development will, for example, have a tendency to increase property values, benefitting both the property owner, as well as governments who collect taxation based on such values. Alternatively, urban aesthetes have long argued that a key public benefit of attractive environments is their capacity to attract desirable categories of residents away from other competing cities or suburbs, whether these might be high-net worth consumers, or the cultivated and aesthetically-sensitive 'creative class' whose labour underpins the post-industrial economy (cf. Wilson 1994: 29; Berry 2005: 383; McIndoe et al 2005). More abstrusely, it may be suggested that there is public value, and indeed economic value, in the capacity of beautiful built objects to create 'delight' and 'inspiration' (Lubbock 1995).

Fourth, the political-cultural claim is sometimes made that ensuring 'high quality design' in an aesthetic sense is essential to realising the urban intensification ambitions of the current crop of strategic spatial plans for Australia's capital cities (cf. Australian Government 2011a; Infrastructure Australia 2013). Specifically, it is argued that visually attractive higher density housing which is aesthetically sensitive to 'local character' is needed to overcome resistance to intensification, whether in terms of general fears around change and its uncertainties, or folk anxieties about the potential return of the Victorian-era slums.

The Better Design of Aesthetic Governance: Modes of Regulation

It is not the role of this paper to critique the arrangements currently in place in individual jurisdictions. Instead, some broad observations will be made about what might constitute 'better' forms of regulation. In the language of contemporary public administration discourse, such aesthetic regulation should seek to create 'public value' through delivering upon the reasons for such regulation existing in the first place, that is, collectively shared value judgements (cf. Moore 1995; 2013; Benington and Moore 2011). Ultimately, aesthetic regulatory frameworks should be consistent with the political, socio-cultural, and economic contingency of 'good design'.

First, given that engaging in regulation is not costless, for many forms of development the marginal public value in undertaking regulatory oversight of aesthetics is likely to be limited. Put otherwise, the process costs of regulation may often potentially exceed the value realised from such regulation.

While consideration of the costs of regulation should always be considered against its perceived benefits, the inherent difficulty in quantifying the benefits arising from an attractive built environment

gives rise to the possibility of particular disconnect between the value of a public interest intended to be advanced through regulation, and the costs of doing so. To give examples, the value of the sentiments satisfied by heritage regulation, or the degree of pacification of opponents of urban infill achieved through design guidance, net of the costs of such guidance, are extremely contingent questions. Indeed, a general weakness of the 'value of urban design' literature is establishing causality in terms of the value effects of particular architectural or design interventions compared to other possible interventions, or even relative to 'bad design' (cf. Carmona et al 2001; Mulgan 2011).

However, the risks of under-regulation cannot be discounted. The inverse of the above contingency problem in relation to costs and benefits is also true – because the benefits arising from aesthetic regulation can be so nebulous, there is a risk that under-regulation may occur. Again, while there may not be generally agreed principles of good aesthetics or taste in their detail, the idea of 'ugliness', and the notions that places have distinct 'characters' or be more or less visually attractive, continue to have wide political circulation. While assessing costs or impacts can be difficult, regulation may nonetheless have a role in controlling development widely perceived as 'ugly' or detracting from the 'character' of a place where there is agreement on the nature of such character and its value.

In general, regulation is probably best spatially restricted to areas of particular aesthetic sensitivity (that is, areas where there is entrenched aesthetic conflict over character), or very large scale development proposals that by their nature will be seen by significant numbers of people (cf. Venturi 1977: 164-165). Aesthetic apathy should not be discounted as a legitimate view or indeed as a basis for deregulation if it is the primary view held within a community.

Second, the integration of design expertise within the regulatory process should be balanced by other assessments of aesthetic value. If it is accepted that 'good design' in an aesthetic sense is an observable phenomenon it is nonetheless inherently plural (de Botton 2006). It therefore follows that establishing what is good design is primarily an empirical rather than a theoretical question. In practical terms, while roles might be given to architects or other design professionals within the regulatory process in recognition of their technical design expertise, this knowledge should not crowd-out other perspectives on aesthetic questions. These include most importantly the aesthetic values of the 'lay' public, as well as potentially other forms of socio-economic analysis (cf. Nimmo 2003; Haden 2005). It is of note that some of the strongest criticisms of the privileging of architectural aesthetic perspectives have historically come from within the architectural profession itself. These include arguments that the values of architects and architectural theory can significantly diverge from those of the broader community, and further, there will rarely be value consensus within the architectural community itself on most aesthetic questions (see, classically, Venturi 1977; also Frampton 2007). More broadly, accountability concerns will often be present where influence or discretionary decision-making power is given to individuals or small committees without appropriate balances. While de Botton (2006) may be correct in saying that buildings 'speak' to us and in doing so can stir powerful responses, buildings will say very different things to different people who will invariably comprehend the idioms of architectural design in different ways.

Third, any regulatory framework must strike an effective balance in the tension between flexibility and certainty. Planning controls (whether aesthetically-focused, or otherwise) are often criticised for being too prescriptive, or alternatively, too flexible or ambiguous. While on one hand a pluralist approach to good design is likely to be generally inconsistent with prescription, too much flexibility potentially can raise questions around the value of regulation if this regulation does not appear to have clear – that is, relatively measurable – substantive goals. An overly-flexible regulatory regime may also impose costs through not providing adequate certainty to the development industry or local communities (cf. Punter 2004; Haden 2005; Venturi 1977). That said, a persistent fear of the architectural community is that over-regulation may suppress innovation, with public policy potentially 'enforcing design mediocrity' (Nimmo 2003; cf. Serle 1995; Haden 2005; Dobbin 2013). Overly prescriptive regulation may also be inconsistent with the design diversity that might otherwise be expected to arise in multicultural cities.

Conclusions

A primary way in which cities are experienced is visually, although their built environments will inevitably be seen in different ways, depending on who is doing the seeing. That said, our aesthetic experiences are rarely entirely idiosyncratic. In making judgements on what is beautiful or otherwise has aesthetic value (or conversely, a lack of value) we invariably draw on myriad social or cultural sources, even if we are not necessarily always consciously aware of them.

In the abstract and in practice, aesthetic governance must therefore sit astride a tension between individual responses to objects and the broader socio-cultural origins of those responses. It will often need to negotiate gaps of understanding and sensibility between designers and their patrons on one hand and others who will be visually exposed to proposed developments.

While absolute claims about buildings or other objects in terms of beauty are now largely unviable, total relativity does not reign either. There is still widespread belief that built environments can be made more or less visually attractive and that collective judgements of taste can be made. Accordingly, and notwithstanding the various challenges discussed above, the aesthetics of the built environment will continue to attract public policy interest. The scope and design of such aesthetic governance should be closely attuned to what the public specifically values – which may not always align with views held by traditional sources of aesthetic expertise or enthusiasts.

To some extent, contemporary design practice increasingly reflects this imperative in so far as it has taken a turn towards process and increasingly rigorous engagement with clients and consumers (see, for example, Lee 2011). However, effective aesthetic regulation from a public value perspective necessitates proactive systematic empirical inquiry into what particular communities collectively value in terms of the appearance, or the potential appearance, of the objects within their built environments. In practice, this might mean jurisdictions deliberately building their knowledge of what their residents value through, for example, large scale surveys of the latter's aesthetic values. As with many other environmental values in socio-culturally plural cities, the identification of what is valued, and the priority of different values, will be a highly contingent question.

Endnote

[1] The views expressed in this paper are solely personal views and not those of the author's employer.

References

- Auspoll (2011) 'My City: The People's Verdict 2011', Research report commissioned by the Property Council of Australia.
- Australian Government (2011a) 'Creating Places for People: An Urban Design Protocol for Australian Cities'. Document available at: www.urbandesign.gov.au (accessed 22 April 2013)
- Australian Government (2011b) *Our Cities, Our Future – A National Urban Policy for a Productive, Sustainable and Liveable Future*. Canberra: Department of Infrastructure and Transport.
- Baldwin, R. and J. Black (2007) 'Really Responsive Regulation', LSE Law, Society, Economy Working Papers, No. 15.
- Benington, J. and M. Moore (2011) 'Public Value in Complex and Changing Times' in J. Benington and M. Moore (eds.) *Public Value: Theory and Practice*, New York: Palgrave Macmillan, 1-30.
- Berry, M. (2005) 'Melbourne – Is there Life after Florida?', *Urban Policy and Research*, 23(4): 381-392.
- Bleby, M. (2012) 'Government architect cuts short-sighted', *Business Review Weekly*, 9 August.
- Bourdieu, P. (2010) *Distinction: A Social Critique of the Judgment of Taste*. London and New York: Routledge.

- Boyd, R. (2012) *The Australian Ugliness*. Melbourne: Text.
- Braithwaite, J. (1999) 'Accountability and Governance under the New Regulatory State', *Australian Journal of Public Administration*, 58(1): 90-97.
- Carmona, M., de Magalhaes, C., Edwards, M., Awuor, B., and Aminossehe, S. (2001) 'The Value of Urban Design', Research report commissioned by the Commission for Architecture and the Built Environment and the UK Department of the Environment, Transport, and the Regions.
- de Botton, A. (2006) *The Architecture of Happiness*. New York: Pantheon Books.
- Dobbin, M. (2013) 'Architects bemoan imitation heritage', *Sydney Morning Herald*, 8 July.
- Dovey, K., Woodcock, I., and Wood, S. (2005) 'What is Urban Character? The Case of Camberwell'. Paper presented to the State of Australian Cities Conference, Brisbane.
- Frampton, K. (2007) *Modern Architecture: A Critical History (Fourth Edition)*. London: Thames and Hudson.
- Francis, M. (2007) *Herbert Spencer and the Invention of Modern Life*. Ithaca NY: Cornell University Press.
- Freestone, R. (2007) *Designing Australia's Cities: Culture, Commerce and the City Beautiful 1900-1930*. Sydney: UNSW Press.
- Freestone, R. (2010) *Urban Nation: Australia's Planning Heritage*. Collingwood VIC: CSIRO Publishing, in association with the Australian Government Department of the Environment, Water, Heritage and the Arts, and the Australian Heritage Council.
- Fukuyama, F. (2011) *The Origins of Political Order*. London: Profile.
- Guy, M. (2013) 'Expert design advice for local government', Media release (issued by the Victorian Minister for Planning), 28 June.
- Haden, B. (2005) 'Urban Design Panels in British Columbia: An Insider's View', *Canadian Architect*, February.
- Hewett, B. (2011) 'The Role of the Government Architect in the Integrated Design Commission South Australia', paper presented to the State of Australian Cities Conference, Melbourne.
- Horner, L. and W. Hutton (2011) 'Public Value, Deliberative Democracy and the Role of Public Managers' in J. Benington and M. Moore (eds.) *Public Value: Theory and Practice*, New York: Palgrave Macmillan, 112-126.
- Infrastructure Australia (2013) *National Infrastructure Plan*. Canberra: Infrastructure Australia.
- Lee, L. (2011) 'An Integrated Design Strategy for South Australia', Research report commissioned by the Government of South Australia.
- Lubbock, J. (1995) *The Tyranny of Taste: The Politics of Architecture and Design in Britain 1550-1960*. New Have: Yale University Press.
- Mattila, H. (2002) 'Aesthetic Justice and Urban Planning: Who Ought to Have the Right to Design Cities?', *GeoJournal*, 58: 131-138.
- McGregor, A. (2011) *Grand Obsessions: The Life and Work of Walter Burley-Griffin and Marion Mahony Griffin*. Penguin Putnam.
- Moore, M. (1995) *Creating Public Value: Strategic Management in Government*. Cambridge MA: Harvard University Press.
- Moore, M. (2013) *Recognizing Public Value*. Cambridge MA: Harvard University Press.

- Mulgan, G. (2011) 'Effective Supply and Demand and the Measurement of Public and Social Value' in J. Benington and M. Moore (eds.) *Public Value: Theory and Practice*, New York: Palgrave Macmillan, 212-224.
- McIndoe, G., Chapman, R., McDonald, C., Holden, G., Howden-Chapman, P., and Sharpin, A. (2005) 'The Value of Urban Design: The Economic, Environmental and Social Benefits of Urban Design', Research report commissioned by the New Zealand Ministry for the Environment.
- NSW Government (2011) 'SEPP 65 and Residential Flat Design Code Review: State Environmental Planning Policy No 65: Design Quality of Residential Flat Development'. Discussion paper, November.
- NSW Government (2013) 'A New Planning System for NSW: White Paper'. Discussion paper, April.
- Nimmo, A. (2003) 'Regulating Aesthetics', *Architecture Australia*, November/December.
- Parliament of Victoria Drugs and Crime Committee (2013) *Inquiry into the Application of Safer Design Principles and Crime Prevention through Environmental Design – Final Report*. Melbourne: Parliament of Victoria
- Productivity Commission (2011) *Performance Benchmarking of Australian Business Regulation: Planning, Zoning, and Development Assessment*. Research report.
- Punter, J. (2004) *The Vancouver Achievement*. Vancouver: University of British Columbia Press.
- Serle, G. (1995) *Robin Boyd: A Life*. Melbourne: Melbourne University Press.
- Venturi, R., D. Brown, and S. Izenour (1977) *Learning from Las Vegas: The Forgotten Symbolism of Architectural Form*. Cambridge MA: MIT Press.
- Wilson, W. (1994) *The City Beautiful Movement*. Baltimore: Johns Hopkins University Press.
- Woodcock, I., Dovey, K., Wollan, S., and Beyerle, A. (2010) 'Modelling the Compact City: Capacities and Visions for Melbourne', *Australian Planner*, 47(2): 94-104.