



Form and Reform: Affective Form and the Garden Suburb

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Abstract

This thesis establishes the concept of *affective form* as a means of examining urban design – being the intersection of architecture, planning and landscape – in relation to techniques of governance. Affective form broadly describes a built environment where people are encouraged to amend, or govern, their actions according to particular socio-political ideas. Exploration of the concept's application as a theoretical tool is undertaken here in order to generate a means of discussing the ethical function of urban design.

The emergence of notions of affective form will be located in the eighteenth century, alongside the growing confidence in the ability for humankind to effect social and cultural progress. In a series of examples, stretching throughout the twentieth century, the implicit relation of planning, architectural and landscape form to social effect is discussed. The language, and design models, used to delineate affective form are described, alongside discussion of the level of intentionality apparent in the conceptions of urban form's social effect. Critique through affective form allows an analysis that brings together the underlying utopian elements of projects – the traces of ideology and sociological theories – with an evaluation of the formal concepts projected.

As the second area of investigation, the city of Perth in Western Australia provides a contextual focus for the examination of concepts of affective form. Through a series of appropriations of urban design models a suburban archetype emerged in Perth of a planned, homogenous field of low-rise, single-family, detached dwellings within a gardenesque landscape. The process of appropriation is described as a continuing negotiation between local expectations and the implicit conceptions of affective form within the imported models.

Connecting the two primary concerns of the thesis, the ability of form to influence social change and the evolution of Perth's garden suburb ideal, is the association of that developing garden suburb model with notions of affective form. The associations are outlined through three case studies. The first is an account of the planning of the City of Perth Endowment Lands Project during the 1920s. The second describes the planning and architecture of the athletes' village built for the VIIIth British Empire and Commonwealth Games held in Perth in 1962. The third study details the development in the 1990s of Joondalup, a satellite city in the Perth metropolitan region.

The account of Perth's garden suburb ideal is intertwined with the consideration of the varying ways in which the conceptualization of affective form has been expressed. Each case study is contextualized by a preceding chapter that discusses the particular conceptions of affective form used in its examination. Thus the main body of the thesis comprises three parts – each associated with a case study, each containing two linked chapters.

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Contents

01	Introduction
17	Chapter One Some Notes on Form – Prolegomenon
71	Chapter Two Form and Reform
159	Chapter Three Some Notes on Form - The Post-War Suburb
201	Chapter Four Modernism and the Games Village
263	Chapter Five Some Notes on Form - The Contemporary
325	Chapter Six Post-modern Urban Pastoral
397	Conclusion
409	List of Figures Bibliography

Introduction

*Form is an eminently social matter.*¹

No form is “innocent.” Underlying any urban design – being the intersection of architecture, planning and landscape - is an implicit relation to social effect. The purpose of this work is to introduce the term *affective form* as a means of discussing the level of intentionality when generating such form. What traces of utopian visions, reform ideologies, or sociological theories can be discerned in urban “forming”?

The negative consequences of industrialism for nineteenth century Britain generated a paradigmatic example of the conception of affective form. Urban design projects, such as public walks and parks, were explicitly conceived as socially reformative. Thus, the parliamentary commissioner J.R. Martin commended the Derby

Arboretum, laid out by British landscape architect John Claudius Loudon (1783-1843) in 1840.

Tastefully laid out in grass intersected by broad gravel walks, and planted with a great variety of trees, shrubs and flowers, botanically arranged ... the Arboretum, as these gardens are designated, is much frequented, and has already produced a perceptible effect in improving the appearance and demeanour of the working classes, and it has, doubtless, conferred an equal benefit on their health.²

In the context of widespread concerns over the spread of industrial ugliness, diseases such as cholera, and the social unrest springing from phenomena such as Chartism, the construction of projects such as the Arboretum provided hope for social progress. The laying out of public parks as a means of improving the physical and moral health of the working classes was one response to increasing apprehension of a future dominated by malignant and chaotic urban growth.³

The arboretum is representative of Loudon's response within his projects to the nineteenth century debates about the condition of England. Key to Loudon's conception of such an ameliorative environment was its form: ordering, arrangement and design were seen as tools to achieve didactic and moral effect. In 1835, writing on the design principles for public gardens and promenades, he conveyed very firm ideas about the formal characteristics required to achieve that instructive quality. On the laying out of paths he stated:

It ought to be laid down as a rule, derived from the principle of unity, that there should be one main walk, by walking along which every material object on the garden may be seen in a general way, that the end of this walk, and its commencement should be at one main entrance and the exit at another, and that not more than two main entrances should be admitted; and that it should show no scene twice. From this main walk there may be small episodal walks, to display the particular scenes in detail ... but it ought to be a rule, derived from the same principle, that these episodal walks should never exceed one third of the width of the main walks, and that they should always proceed from the main walks at right angles, so as not to seem to invite the stranger to walk in them.⁴

These principles defined the way a visitor should experience, and thus learn from, the park. Beginning with a "unifying" view of the whole, a series of hierarchical steps would be made in order to experience greater detail and generate more sophisticated ideas. At the Derby Arboretum this kind of layout was put to

instructive use, a train of mental associations leading a visitor from the contemplation of a single plant to much wider concerns:

And yet, from no tree or shrub occurring twice in the whole collection, and from the name of every tree and shrub being placed against it, an inducement is held out for those who walk in the garden to take an interest in the name and history of each species, its uses in this country or other countries, its appearance at different seasons of the year, and the various associations connected with it.⁵

Loudon's concern with the role of form is even more explicit in his assessment of the moral and educational potential of cemeteries; he intended them to be used as much by the living as a repository for the dead. Nineteenth century reformers of many persuasions sought new models for the urban cemetery that would address the hygiene problems of the city, as well as exploit the cemetery's important social role.⁶ Particularly for Loudon, the composition of landscape, planting, statuary and architectural elements could play an important part in cultivating self-improvement. As William Taylor has noted, that envisaging of the cemetery as a pedagogic space parallels the development of national educational systems in Britain, and the roles of the emerging public institutions such as the museum:

In each case the arrangement of the objects of knowledge (monuments, texts, works of art, and botanical specimens) was seen to be central to the formation of a knowledge of the self - the formation of individual identity – be that of the mournful subject, the diligent pupil, or the respectful observer of culture and nature.⁷

Loudon's approach to the design of the cemetery was largely concerned to produce a controlled landscape capable of improving social cohesion and cultural identity. In 1842 he wrote admiringly of the "New Carlton Burying-Ground" in Edinburgh:

Scientific skill and good taste have contributed much to heighten the beauty of the place ... The walks are neatly formed of gravel, tastefully edged with grass kept smooth and firm by rolling and frequently mown to keep it short. A circular-built watch-house, commanding a full view of the whole cemetery, which at night is lighted with gas, and the many ornamental tombstones, with the nicely planted roots and flowers showing the affectionate regards of surviving friends, fill the visitor with a pleasing and melancholy.⁸

For Loudon, in a well-designed cemetery such neatness implied an appropriate respect for the deceased. Further, certain trees provided the necessary funereal associations, although clumps of trees were to be avoided as, apart from unwelcome associations with "pleasure-grounds," they prevented the healthy exposure of the

ground to sun and air, as well as the free visual contemplation of the cemetery's tombs and monuments. In relation to the built elements of the cemetery, Loudon suggested that memorial tablets, bust and reliefs could beautify the buildings and colonnades. Vertical, rectilinear headstones were considered superior in being more dignified; boundary walls and piers were required to be at least 10 feet high and have an architectural character; and similarly to his proscriptions for public parks, Loudon advised against more than one public entrance. Architectural style and form was also important in ensuring a suitably solemn character and should be judiciously chosen - a gatehouse could have a suitably grand Egyptian character whilst a gothic chapel might transmit an ennobling gravity.⁹

Ultimately, the conscientious planning and design of the cemetery, and particularly a careful attention to its form, was vital to its role as a means of moral and educational improvement; visiting its imposing and sobering environment could help to develop an individual's taste and personal disposition. As Loudon contended:

A general cemetery in the neighbourhood of a town, properly designed, laid out, ornamented with tombs, planted with trees, shrubs, and herbaceous plants, all named, and the whole properly kept, might become a school of instruction in architecture, sculpture, landscape-gardening, arboriculture, botany, and in those important parts of general gardening, neatness, order and high keeping.¹⁰

In proposing a cohesive urban model for the cemetery I would argue that Loudon established its form as affective; the combinatory effect of architectural and landscape design was envisaged as a tool for social governance. The “mechanism” through which this tool operated was based on theories of cognitive association that will be explored in more detail at a later point. Here, I wish to introduce the work of Loudon in order to make clearer the notion of affective form and its implications for this thesis.

Loudon's efforts mark an early attempt to give urban design – the conjunction of planning, landscape and architecture – an ethical function. His work forms part of a body of nineteenth century design, encompassing prisons, mental institutions, model housing, and even new towns and cities, that explicitly positioned itself as

contributing to the amelioration of society's ills and the engineering of better citizens. My broader interest is in the way such desires extend through urban design projects in the twentieth century as an underlying, if not explicit concern. My intention is that this thesis primarily establishes the concept of affective form as a means of investigating the manner in which the design of the built environment has been understood to influence human behaviour.

Placing this in an Australian context I am also interested in the way that ideas of affective form translate when imported to Perth. Examining the appropriation and transplanting of international urban design models to Australia, and the ways that they have been transformed and distorted will help illuminate the local understanding of urban design and its social role. A history of the garden suburb in Perth during the twentieth century is thus provided, tracing its evolution through the concept of affective form. Through both these tasks the thesis introduces affective form as a means of discussing the ethical function of urban design- to what extent the intersecting space of architecture, planning and landscape is implicated in the governance of society.¹¹

Thus, the thesis operates on two levels. Firstly, it contains a theoretical discussion about different understandings of the built environment's potential to influence its inhabitants. Focusing on the production of model residential environments, it traces a concern with affective form in projects from the seventeenth century onwards. The discussion demonstrates in those projects a consistent, underlying and evolving notion that the design of the built environment is a means to effect social change, the morality and health of the inhabitants of interiors and nations as a whole. Examples of this proposition range from the nineteenth century construction of model workers' housing that embedded social norms regarding cleanliness and propriety in its spatial configuration, to the neo-traditional architecture of New Urbanism that hopes to inspire cohesive community through symbolic, figurative form.

The relationship between built form and the social life that surrounds it has often been discussed through environmental psychology in a deterministic sense:

Architectural theory contends that the social behavior [sic] of building users is influenced, even determined, by the physical environment in which the behavior occurs. Thus the belief system includes the notion that we architects direct social behavior patterns through our work. This premise ... flows from a specific interpretation and emphasis of the architectural concept of "functionalism."¹²

I have used the term affective form in this thesis to avoid the more lineal associations of environmental determinism. Instead, I have grounded my definition in a broader conception of “critical” psychology, drawing selectively on the work of Nikolas Rose. Similarly to Michel Foucault, Peter Miller and Paul Rabinow, Rose has developed a body of work that investigates the practices of governance beyond the political power of the state.¹³ In *The Psychological Complex* (1985) Rose described the emergence in eighteenth-century England of a strong concern with the “organization of the population and the creation and maintenance of order, morality and tranquillity.”¹⁴ He also outlined the ways in which the psychology of the individual that emerged around that time contributed techniques of instruction, testing, therapy and reformation that could be adopted towards those ends.¹⁵ I will argue that the built environment was also beginning to be conceived as a means of governance at that time, including public parks as symbolic landscapes and model housing as a pedagogic instrument.

Appropriating Rose’s work, the term affective form is used within this thesis to describe designs for the built environment that are imagined as governmental, productive forms of power. That is, they are “strategies for acting, through indirect means, on the conduct of others in a range of different sites, and under the aegis of a range of different authorities.”¹⁶ Thus, in contrast to accounts of architectural determinism, which place its emergence with the modern movement and the rationale of functionalism, I will describe conceptions of affective form that stretch back to the eighteenth century.¹⁷ My account of that emergence of affective form will provide a basis for the examination of its subsequent representations, stretching from the eighteenth century to the present day. In turn, that discussion will

foreground the consideration of a second theme, being the translation of the garden suburb model in Perth.

This second area of investigation will help to test the persistence and transmutation of conceptions of affective form through a series of case studies examining the introduction and evolution of the garden suburb in Perth during the twentieth century. It will be suggested that a local understanding of the typical (and desirable) suburb was largely formed from thoughts developing elsewhere.

Through a series of appropriations, a suburban archetype emerged in Perth of a discrete planning entity, containing a homogenous field of low-rise, single-family, detached dwellings within a gardenesque setting. A reading of this process through examination of the garden suburb will be suggested that traces elements of ideology, utopian visions, and social reform that float over the ostensibly impassive assemblage of the city's planning.

The introduction of curvilinear street patterns to the residential subdivisions laid out by the surveying firm of Hope and Klem, during the 1920s and 1930s, provides an example of this process. Until that time Perth's subdivisions were almost exclusively orthogonal, gridded layouts. Although Hope and Klem's curvilinear layouts were ostensibly introduced as a means of reducing the earthworks required in constructing street layouts on hilly sites, they were also conceptualised as affective form. The curved vistas and crescents of their plan for the 1928 Endowment Lands project in Perth drew on American "City Beautiful" ideas to provide a suitably formal character for the suburb. They were also modelled on the English garden suburbs, using the streets to create secluded pocket parks overlooked by adjacent homes. Like Raymond Unwin's design of the early 1900s for Hampstead in England, the associations with rural imagery and attempt to create a controlled picturesque quality were envisaged as a means of establishing a harmonious community. The creation of an ordered arrangement of public space was intended to frame an ideal residential environment that would, as Klem put it: "influence in a very large measure the social, moral and physical welfare of future generations."¹⁸

Thus, connecting the two primary concerns of this thesis, the ability of form to influence social change and the evolution of Perth's garden suburb ideal, is the association of that developing suburban model with notions of affective form. These associations are outlined within the thesis through three case studies. The first is an account of the planning of the City of Perth Endowment Lands Project during the 1920s. The second describes the planning and architecture of the athletes' village built for the VIIIth British Empire and Commonwealth Games held in Perth in 1962. The third study details the development in the 1990s of Joondalup, a satellite city in the Perth metropolitan region.

This account of the development of Perth's garden suburb ideal is intertwined with a consideration of the varying ways in which the conceptualisation of affective form has been expressed. Each case study is contextualised by a preceding chapter that discusses the particular conceptions of affective form used in its examination. Thus, the main body of the thesis comprises three parts- each associated with a case study, each containing two linked chapters. The particular concerns of those chapters are outlined below.

Chapter One establishes a history for the concept of affective form, providing a model for subsequent discussion of affective form within the thesis, but also providing the background for Chapter Two's discussion of its influence in Perth's first garden suburbs. The chapter outlines the transformations in the idea of progress during the Enlightenment that underpinned theorisation of affective form during the nineteenth century. Societal progress became linked with the idea of human perfectibility and the possibility for purely human forces to ensure humanity's improvement. That growing acceptance of humankind's emotional and intellectual malleability provided a rationale for writings and projects whereby landscape and architecture became valued for influencing health and morality. The ideas of figures such as Loudon are used to demonstrate the important link between the interdependency of building, planning and landscape design in the broad conception of affective form as an agent of society's progress.

The subsequent rise of an architecture of reform is then discussed, beginning with the development of specific modern institutions; the role of the gaol as a setting for moral reform is a particular focus and means of exemplifying ideas addressed in this chapter. The discussion of institutions like gaols provides a context for examining the wider application of ideas of progress and formal affectivity to the development of reform housing, and associated model communities, where built form was engaged as a powerful means of governance.

Using this concept of affective form, Chapter Two traces the aspirations for social influence that emerged in the layout of the first Garden City at Letchworth (1903) and the importance of these in the design of Perth's first garden suburbs. This analysis is carried out through the first case study, an account of the two planned "Garden Cities" - that were built as garden suburbs - in the City of Perth Endowment Lands development. The embodied notions of social reform and governance in the planning forms that were imported from England, and the ways in which those notions changed when applied in Perth, are addressed. A particular focus is the emphasis on a landscape ideal in the formation of the garden suburbs, and the relative disappearance of the building form as an element in their designed character. The Endowment Lands development is posited as a key project in the establishment of a local town planning profession and crucial to formulating both understandings of exemplary residential amenity and a language of urban reform within Perth at the time. It is suggested that the importance of the project lies within its establishment of such ideas and the link with the garden suburb as the associated ideal form.

Chapter Three concentrates on the linking of suburban form with images of the autonomous, responsible family after the Second World War. Whereas the importation of the Garden City model to Perth in the early twentieth century was seen as a generator of wider civic improvement, entailing the establishment of Perth as a mature city, the post-war role of suburban housing can be more readily associated with the virtues of the nuclear family. Thus, Chapter Three examines the connections between evolving concepts of dispersed suburbs and the similarly ductile idea of an Australian way of life to which the privatised family was central.

It addresses the way in which modernist planning and architecture impacted upon Australia's suburban development at the same time as the suburban ideal of the detached, single-family, owner-occupied home developed more independent connotations. A link is argued between the post-Second World War suburban home as model of affective form, and the promotion of the nuclear family as an increasingly privatised, autonomous entity. .

Building on this proposition, the construction of athletes' housing for the 1962 British Empire and Commonwealth Games in Perth forms the second case study and the focus of Chapter Four. The village is viewed as a testing ground for the development of a model suburb suited to the socio-economic conditions of post-war Perth. In reconciling influences ranging from the introduction of television through to the development of the British New Towns programme, and the increased influence of traffic engineering, the village married the forms and techniques of modernist planning and architecture with the local garden suburb model. Thus, the modern planning and architectural forms of the athletes' village became reconstituted as an updated form of Perth's garden suburb ideal. It will be contended that also involved in that process was a shift in the conception of the garden suburb as affective form. The modernist garden suburb saw the disappearance of the mediating middle landscape of Perth's initial garden suburbs – the public realm where community was formed. Instead the affective form of the newer model was focused on the governance of the privatised family within the landscape of a mediated public- an abstract entity that required little formal articulation.

Chapter Five addresses the criticism of post-Second World War modernism, particularly its building and planning forms, during the late twentieth century. Confidence in the potential for social reform through environmental design became increasingly circumspect in light of a critique that began as early as the 1950s. The urban landscape of functional segregation, rationalised architecture and car-dominated streets that had developed through the rational planning of modernism was unfavourably characterised by writers such as Jane Jacobs (in her seminal work *The Death and Life of Great American Cities*).¹⁹ The continued application of modernist

urban form during the large-scale expansion of cities in the late twentieth century, coupled with an increasing privatisation of public space, decentralisation, and dispersion of the city, produced a “post-modern” landscape that has often been characterised as “placeless” sprawl. Recent accounts of the post-modern city have pointed to a migration of public life from physical space to virtual space, a metaphysical placelessness that has devalued the materiality of architecture and the urban landscape.²⁰ This condition has served to heighten the sense that the possibilities for meaningful urban form have been severely circumscribed.

Chapter Five discusses two contrasting responses - both described as post-modern - that have reacted to what is, I will argue, a crisis for affective form that has emerged from this condition. Within the work I discuss as “Flow Urbanism” there is an interest in the abstracting of the post-modern city’s flux and indeterminacy as a means to generate form. The affective impact of the associated architecture and urbanism is presented by its designers as effectively depoliticised, and is rendered as an escape from the traditionally deterministic conception of architecture. In contrast, it will be contended that the recent urban development model of New Urbanism, in which “traditional” architectural and planning forms are resuscitated to help structure modern communities, maintains a strong faith in the power of affective form. For New Urbanists, the sources of the modern city’s problems lie, essentially, in its physical patterning; the solution is contained in a figurative reforming of this patterning as well as the professional structures of planning and architecture. The New Urbanist understanding of the potential for affective form is critiqued in relation to the social models upon which their designs are based. The fragmented social conditions of the post-modern city, and the apparent disappearance of a spatial civitas, suggest that the concepts of neighbourhood and community supposedly generated by New Urbanist forms become problematic.

The virtually antithetical understandings of the contemporary potential for affective form demonstrated in Flow Urbanism and New Urbanism provide a context for Chapter Six’s discussion of recent urban design work in Perth. The focus of this chapter is the implication of post-modern architectural and planning models,

specifically New Urbanism, for Perth's garden suburb ideal - how is the garden suburb conceived of as affective form in the post-modern city?

The third and final case study is Joondalup City North. A satellite city north of Perth, Joondalup was first proposed as a New Town in the 1950s, drawing on the model of the post-Second World War English New Towns. However, Joondalup was substantially developed during the 1990s, with the result that contemporary New Urbanist theories were drawn on for precincts such as City North. Chapter Six discusses the history of the project and the recent role of Joondalup as a model for reconfiguring post-modern Perth's sprawling suburbia. The implications of Joondalup's role in the metropolitan area are outlined, focusing upon the projection of Joondalup City North as a model residential development. It will be suggested that the role of the precinct extends to establishing affective form; that, as with the earlier case studies, City North's planning and design is deployed as a tool to govern residents' social relations.

The concept of affective form is developed within this thesis as a means of examining and deconstructing the intentions associated with urban design (understood here as the intersecting space of planning, landscape and architecture). It is suggested that affective form can be used as a conceptual tool to unpack some of the assumptions made about urban design's social impact, and consequences for governance. As a flexible term, avoiding the mechanistic implications of environmental determinism, affective form can be used to discuss architectural form conceived in a broader sense than simply programming human behaviours. Affective form is more accurately described in terms of a built environment where people are encouraged to define themselves and amend, or govern, their actions according to particular socio-political ideas. As well as form-making that implies a sense of deterministic influence, affective form can be related to notions of symbolic landscapes and spaces of autonomy.

The tracing of Perth's garden suburb ideal is used as an example of this potential for affective form as an analytical instrument. It will be argued that certain characteristics have become implicit in urban thinking in Perth, particularly the

notion of the garden suburb as a measure of the residential environment and the accompanying, underlying notion of affective form in which a romantic attitude to “nature” is privileged alongside an aversion to demonstrative urban form. The implications and consequences of this trend will be touched on, using affective form in order to tease out some of the implicit issues of social governance involved in debates regarding the reformation of Perth’s urban landscape.

Thus a better understanding of issues such as urban consolidation and heritage conservation may be engendered. What social aspirations or symbolic connotations are attached to the form of the garden suburb? How do they impact upon discussions of appropriate architectural form, density and framing of the landscape? The question of why certain forms of urban design are advanced and pursued can be investigated and illuminated using the concept of affective form.

Notes

¹ Adolf Behne, *The Modern Functional Building*, (introduction by Rosemarie Haag Bletter; translation by Michael Robinson), Santa Monica, Getty Research Institute for the History of Art and the Humanities, 1996 (first published 1923), p. 137.

² J.R. Martin quoted in Melanie Lousie Simo, *Loudon and the Landscape: From Country Seat to Metropolis 1783-1843*, Massachusetts, Yale University Press, 1988, p. 201.

³ S. Martin Gaskell, "Gardens for the Working Class: Victorian Practical Pleasure," *Victorian Studies*, Vol. 23, No. 4, Summer 1980, pp. 479-501; Gordon E. Cherry, "The Town Planning Movement and the Late Victorian City," *Transactions of the Institute of British Geographers*, New Series, Vol. 4, No. 2, The Victorian City (1979), pp. 306-319; H.L. Malchow, "Public Gardens and Social Action in Late Victorian London," *Victorian Studies*, Vol. 29, Autumn 1985, pp. 97-124.

⁴ J.C. Loudon writing in the *Gardener's Magazine*, 1835, quoted in George F. Chadwick, *The Park and the Town: Public Landscape in the 19th and 20th Centuries*, London, The Architectural Press, 1966, pp. 61-62.

⁵ J.C. Loudon quoted in George F. Chadwick, *The Park and the Town*, p. 63.

⁶ William Taylor, "'A Contrivance for Life': The Garden Cemetery and the Cultivation of National Enterprise and Individual Sentiment as Aspects of British Character," *National Identities*, Vol. 1, No. 1, 1999; James Stevens Curl, "John Claudius Loudon and the Garden Cemetery Movement," *Garden History*, Vol. 11, No. 2, Autumn 1983, pp. 133-156.

⁷ Taylor, "'A contrivance for Life'," pp. 53-72.

⁸ J.C. Loudon, *The Gardener's Magazine*, 1842, quoted in Curl, "John Claudius Loudon and the Garden Cemetery Movement," p. 134.

⁹ Curl, "John Claudius Loudon and the Garden Cemetery Movement."

¹⁰ J.C. Loudon, *The Gardener's Magazine*, 1843, quoted in Curl, "John Claudius Loudon and the Garden Cemetery Movement," p. 140.

¹¹ It should be noted that this thesis is not intended as a critique of affective form. I do not attempt to promote one conception of affective form instead of another, nor do I seek to expose any of its various conceptions as false. I am, rather, concerned with outlining how understandings of affective form link up with

varying design models and how other social, political and theoretical events relate to the concept.

¹² Alan Lipman, "The architectural belief system and social behavior," in Jon Lang, Et Al (Eds), *Designing for human behaviour: Architecture and the Behavioural Sciences*, Philadelphia, Dowden, Hutchinson & Ross, 1974, p. 23. This relationship between buildings and behavior has also been captured by environmental psychologists. They suggest this influence can be conceptualized by three positions. First, architectural determinism suggests that there is a rather direct and causal link between buildings and behavior. A second position, environmental or architectural "possibilism" views the building as offering opportunities and setting limits for behavior. The relationship is denoted by context rather than by determinism. Finally, architectural or environmental "probabilism" assumes that certain behaviors have probabilistic links to the built environment. See Paul A. Bell (et al), *Environmental Psychology*, (Fort Worth, Holt, Rinehart & Winston: 1990). More recently Bill Hillier has pointed out the importance of this idea to modernist architecture, and its grounding in misconceptions about the ability of a material object, such as a building, to influence behaviour. See Bill Hillier, *Space is the Machine*, (1996)

¹³ Nikolas Rose, *The Psychological Complex: Psychology, Politics and Society in England 1869 – 1939*, London, Routledge & Kegan Paul, 1985; Nikolas Rose, *Governing the Soul: The Shaping of the Private Self*, London, Routledge, 1989; Nikolas Rose, "The death of the social? Re-figuring the territory of government," *Economy & Society*, vol. 25, no. 3, 1996.

¹⁴ Rose, *The Psychological Complex*, p. 40.

¹⁵ Rose, *The Psychological Complex*.

¹⁶ Peter Miller & Nikolas Rose, "Production, Identity, and Democracy," *Theory and Society*, Vol. 24, No. 3, June 1995, p. 429.

¹⁷ On modernism and architectural determinism see: Lipman, "The architectural belief system and social behavior," and Adrian Forty, *Words and Buildings: A Vocabulary of Modern Architecture*, London, Thames and Hudson, 2000, pp.149-195.

¹⁸ "City Endowment Lands: Plans for Two Towns," *West Australian* (29.09.1925)

¹⁹ Jane Jacobs, *The Death and Life of Great American Cities*, London, Jonathon Cape, 1962.

²⁰ See for example: Frederic Jameson, *Postmodernism or the Cultural Logic of Late*

Capitalism, Durham, Duke University Press, 1991; David Harvey, *The Condition of Postmodernity*, Oxford, Blackwell, 1989 (first published 1980); Charles Jencks, *The Language of Post-Modern Architecture*, New York, Rizzoli, 1984 (first published 1977); Andreas Papadakis (Ed), *Postmodernism on Trial*, London, Academy Editions, 1990.



Some Notes on Form - Prolegomenon

Chapter One

Stones can make people docile and knowable.¹

This chapter outlines some of the intellectual processes and conditions that have, historically, allowed architecture and urban design to be conceived as a potential tool in the construction of social relations. The Enlightenment produced new models of the human mind which, during the nineteenth century, began to offer new possibilities for architecture and urban design. The means for society's progress became increasingly conceived in worldly, secular terms. Correspondingly, the built environment became implicated as a tool to achieve that progress.

Architecture, in particular, came to be seen as a tool to exploit a newly-recognised mental pliability, with the goal of improving moral character. The application of these new ideas within reform institutions such as the gaol and asylum will be discussed, describing the scope of the architectural techniques generated and their

intended effect. The broad application of notions of affective form, within projects for public parks and model housing, will be examined in order to establish the way in which the term will be discussed throughout the thesis.

Progress

Since its publication in 1920, J.B. Bury's *The Idea of Progress* has provided an influential history of the concept, and a definition that retains its currency:

This idea means that civilisation has moved, is moving, and will move in a desirable direction... The idea of human Progress then is a theory which involves a synthesis of the past and a prophecy of the future. It is based on an interpretation of history which regards men as slowly advancing – *pedetentim progredientes* – in a definite and desirable direction, and infers that this progress will continue indefinitely. And it implies that, as “The issue of the earth’s great business,” a condition of general happiness will ultimately be enjoyed, which will justify the whole process of civilisation; for otherwise the direction would not be desirable.²

Despite its seemingly broad scope, subsequent scholarship has revealed two key limitations in Bury’s definition. Firstly, his presentation of an Enlightenment pervaded by an optimistic view of progress discounted believers in progress who did not necessarily subscribe to an indefinite and gradual advance.³ Secondly, by locating the origins of the idea in the Enlightenment, Bury failed to consider earlier manifestations of the concept in the Ancient world, particularly its links with the Judeo-Christian tradition of providence. According to Bury, as summarized here by Wagar:

Classical thought insisted on the unchangeability of human nature and of the ideal world; the historical process was almost invariably thought of as cyclical and in any case no fundamental change in the order of reality was involved. Christian thinkers for their part subjected everything to the will of divine providence and took no real interest in the prospect of terrestrial improvement.⁴

Spadafora argues that this unfairly discounts a number of intellectual formations that might be thought of as theories of progress. He cites early Christian doctrines of religious progress, and others of progress in learning or knowledge, as examples.⁵ Although defined by rather different views of historical directionality, these philosophies do indeed indicate a much longer history for theories of progress than that described by Bury.

The Enlightenment was thus important not for the emergence of the idea of progress, but for the spread of such doctrines and especially the growth in their secular nature.

Instead of the Baconian concept of the advancement of learning, Continental thinkers like Anne-Robert-Jacques Turgot, Condorcet, and Immanuel Kant talked about the improvement of civilization; instead of the Christian dream of a divine millennium, others looked for the self-perfectibility of man in this world.⁶

It is these changes that are critical to the establishment of ideas regarding affective architecture. The intellectual atmosphere of eighteenth and nineteenth century Europe, the confluence of discourses using notions of progress, perfectibility and rudimentary forms of psychological analysis, proved conducive to the development of a new understanding of the role of architecture in human society. The Enlightenment marked the height of the belief in an applicability of empirical analysis to issues of human behaviour and moral psychology; through the systematic application of reason to society, conditions supporting human life could be rationally ascertained and enhanced while architecture could conceivably become an instrument of reason.

Notwithstanding these limitations, Bury's definition is instructive in covering the two closely related propositions that recur in more recent attempts to explain the term. The first entails an understanding of the cumulative improvement of knowledge, particularly of the arts and sciences: the means by which the physical conditions of living are improved. The second centres on society's moral or spiritual condition, in which progress is to perfect human nature and to maximise happiness, freedom and tranquility.

David Spadafora has revised Bury's definition, making it more provisional, to emphasise the shifting forms of the idea. Thus, progress is taken to mean "the belief in the movement over time of some aspect or aspects of human existence, within a social setting, toward a better condition."⁷ The virtue of the generality of this definition is that it limits the dangers of reifying ideas of progress and

acknowledges the many possible expressions of the idea, which Spadafora refers to as “doctrines”.⁸

Spadafora’s recasting of the definition is useful in relation to the discussion within this thesis of varying understandings of affective form. The concept that architecture might aid movement towards a better condition is grounded in certain doctrines of progress and affectivity. The expressions of progress and perfectibility that existed during the Enlightenment provide particularly useful references by which to assess the emerging concept of an affective architecture.

The idea of progress as it developed in the eighteenth and nineteenth centuries proved pivotal in encouraging social change. Robert Nisbet contends that it became the developmental context for other important and influential ideas.⁹ Concepts of equality, social justice and popular sovereignty, amongst other ideas, became not merely worthy of consideration but historically necessary - all history could be seen as a slow, gradual, but continuous ascent to some given end. The definition of the historical direction of events became unequivocally progressive.

The secularisation of the idea of progress liberated it from any crucial relationship with Christian ideas such as an active, guiding Providence, while the demonstration of the *scientific* reality of the idea became a focus of the social sciences and philosophy.¹⁰ Natural and purely human forces, demonstrated through science, were the agents by which improvement could be ensured. For figures such as Condorcet, Comte, Marx, Mill and Spencer, the steady advance of the sciences became synonymous with the progress of society. Despite obvious differences regarding the political and economic institutions of the future, the two doctrines formulated a similar vision of a normative, scientific society, with history seen as the inevitable movement toward this state. John Stanley gives an eloquent summary of that particular idea of progress, from the Marquis de Condorcet’s *Outline of the Historical View of the Progress of the Human Mind* (1795):

In this work, Condorcet puts forth all six of the concepts that make it a new idea in the eighteenth century (though not originating with Condorcet) and an idea that

characterizes the following age. (1) Progress occurs in all fields; (2) is projected into the future; (3) rejects inevitable annihilation and the pessimism that goes with it; (4) renders civilization indefinitely perfectible; (5) has a linear view of history; (6) regards the future as having certain inevitable patterns which are calculable.¹¹

It is this combination of properties that differentiated the modern idea of progress from the earlier view of history. Most importantly a new conception of the individual arose, as the creator of knowledge, the agent of progress; of knowledge as the catalytic force that provokes all material, political, moral and aesthetic improvement; and humankind as the ultimate means and beneficiary in this process. The eighteenth and nineteenth century idea of progress followed, accompanied and produced institutional, technical and cultural changes of vast scope and accelerating momentum. It also played a part in the reconfiguration of the foundations and effects of architecture and the city.

Perfectibility

Intertwined with the idea of progress is the question of the perfectibility of humankind, and shifts in the way Enlightenment philosophers cast the former saw a corresponding adjustment in the conception of that perfectibility. Perfectibility came to be divorced from Christian ideals of immaculate (sinless) perfection, or metaphysical perfection (becoming eternal and unchanging)¹² Classical theories of final perfection through some mystical experience or divine revelation (usually after a long period of discipline) were similarly abandoned.¹³

During the seventeenth century, moralists and philosophers in France and in England began to set their sights on more comfortable, finite social objectives. Human perfectibility came to be seen as an ability to be morally improved rather than a capacity to enter into relation with some higher metaphysical Being. No longer the domain of the monastery or convent, the process of perfecting consisted in the daily practice of morality.¹⁴ The ideal was to possess a harmoniously developed moral character and, in line with contemporary conceptions of progress, it was believed that incremental growth towards this was infinitely extensible.

Perfectibility understood in this way was more attuned to the social circumstances developing in Europe during the industrial revolution. As shifts in work and

leisure patterns concentrated populations in towns and cities, beliefs that human beings could be perfected by God, or by the exercise of their own free will, were abandoned in favour of a more fitting mechanism for perfecting people: the deliberate intervention of other human beings.

The process of perfecting people, it was held, would be both developed by and exhibited in social relations. An example of the manner in which a person's public dealings might manifest behavioural morality was the exhortation that the priority for a person's actions was to bring happiness to others. "The highest merit which human nature is capable of attaining" is conveyed, as Hume explained, by such epithets as "sociable, good-natured, humane, merciful, grateful, friendly, generous, beneficent".¹⁵

These values were believed to reflect a modern enlightened society and structured the manner in which emerging public spaces such as the library, museum, art gallery and park were utilised. The coffee-houses of the late seventeenth and eighteenth centuries, for example, were envisaged as places of equitable, communal discussion and rational intellectual debate.¹⁶ Joseph Addison described, and to some extent romanticised, the rituals of these settings:

I was yesterday in a Coffee-House not far from the Royal Exchange, where I observed three Persons in close Conference over a Pipe of Tobacco; upon which, having filled one for my own Use, I lighted it at the little Wax Candle that stood before them; and after having thrown in two or three Whiffs amongst them, sat down and made one of the Company. I need not tell my Reader, that lighting a Man's Pipe at the same Candle, is looked upon amongst Brother-smoakers [sic] as an Overture to Conversation and Friendship.¹⁷

The rational intellectual debate and analysis Addison associated with his conversations in the coffee house were widely held as the source of such improvement. In the course of conversations, vices and moral weaknesses could be dispelled by reason. The intellectual and writer William Godwin suggested that this new rationality would provide "noble and more beneficent principles in their stead."¹⁸

The result of this was that the idea of perfectibility became entirely divorced from the idea of absolute perfection. This secularization of the soul focused the moral domain on principles purely social in origin: deference, modesty, compliance, industriousness, regularity of habits.¹⁹ There was no such thing as a perfect person, if that means someone who has no further potential for improvement. Instead there was the process of *perfecting* people, bringing about moral improvement, and *perfectibility*, the capacity for moral improvement. As William Godwin explained in the 1796 edition of *Political Justice*: “By perfectible...is not meant...capable of being brought to perfection. But the word seems sufficiently adapted to express the faculty of being continually made better and receiving perpetual improvement.”²⁰ The doctrine was essentially reformulated as a belief that all people are capable of being perfected, and to a degree that has no limit. Robert Owen, a significant figure in the application of this belief to the development of model communities through the use of built form, asserted the possibility of “endless progressive improvement, physical, intellectual and moral, and of happiness, without the possibility of retrogression or of assignable limit.”²¹

Faith in that mental and emotional pliability of the individual invited discussion as to the manner in which surroundings and experience might shape a person and, therefore, of the extent to which environmental control was capable of promoting progress. Projects such as model prisons, utopian communities and social housing, became sites for the experimental application of affective form. The ability of architecture to affect the mental, particularly moral, development of people was increasingly tested. The model villages of Robert Owen and the Phalansteries of Charles Fourier are notable examples. Both proposed small, segregated communities, housed in distinct architectural forms that would contribute to the inculcation of an associated moral system. Productivity, religion, education and leisure would all be regulated in these communities, an outcome aided by the definition of architectural forms and structures.²²

Pliability and Association

Shifting notions of progress and perfectibility were accompanied by a rise, during the eighteenth century, of a scientific, medical approach to the study of the mind.

Concern for the mental and emotional pliability of human beings extended to an interest in the operation and regulation of the mind. Theories of association, proposed by figures such as John Locke, fostered a popular understanding of humans as predominantly shaped by experience and environment. The “connexions of *ideas*” was seen as a powerful force that could play an important role in intellectual and moral life: forming, altering or obliterating various “passions.”²³

The psychological analysis that arose from Locke’s philosophical findings and the search for a medicine of the mind often overlapped with discourse on educational theory and practice. Locke’s writings, especially his *Essay Concerning Human Understanding* (1690) and *Some Thoughts Concerning Education* (1693), were key references in both discussions, outlining the intellectual framework for future studies. His significant contribution has been summarised by John Passmore:

Locke has argued, first, that there is nothing in men, no innate depravity, to prevent them from being morally improved. Secondly, that there are secular processes, controllable by men, by which they can bring about the moral improvement of their fellow-men, particularly the processes of education. (Locke uses the word ‘education’ very broadly, to cover, for example, the control of diet and ‘toilet training’.) Thirdly, that secular reformers can achieve their end by manipulating pleasures and pains, especially the pleasures of reputation and the pains of blame. It will at once be obvious that Locke has opened up, in principle, the possibility of perfecting men by the application of readily intelligible, humanly controllable, mechanisms.²⁴

Spadafora has identified a number of writers during the eighteenth century, perhaps the most important being David Hartley, who further explored the link between a psychology of associationism and the concepts of pliability and progress.²⁵ Hartley consolidated the prevailing theories and developed a detailed system that was published in the influential *Observations on Man* (1749).²⁶ His writings contained the most comprehensive account of the notion that all ideas and moral convictions were derived from associations between physical sensations and their mental effects. His foundation for this psychology contended that sensation occurred through the transference of external particle motion (termed vibrations) to the nervous system. The sensations derived from these corporeal vibrations generated ideas. The result was that all “passions” and moral concepts were

derived from the association of simple ideas and sensations, triggered by the external world. Consequently, the appropriate control of the environment could engender positive change within individuals and society generally. Hartley wrote:

It is of the utmost Consequence to Morality and Religion, that the Affections and Passions should be analysed into their simple compounding Parts, by reversing the Steps of the Associations which concur to form them. For thus we may learn how to cherish and improvve [sic] good ones, check and root out such as are mischievous and immoral, and how to suit our Manner of Life, in some tolerable Measure, to our Religious Wants.²⁷

The scope for reform implicit in this statement would eventually extend to include the manipulation of the built environment as one of the chief instruments of reform. The understanding of the workings of the mind as being conditioned by environment led logically to the development of techniques and forms of influence, grounded in the same instrumental reason. Hartley himself discussed mental operations in terms of mechanicism, indeed he closes the first volume of his *Observations* with “Some Remarks on the Mechanism of the Mind”, this engineering perspective opening up the possibility of a “mechanical” remedy to social ills.²⁸

The outcome of Hartley’s work, along with that of figures such as the self-confessed follower of Locke, Abraham Tucker, and the theological utilitarian William Paley, was the establishment, in associationism, of a foundation for psychology and moral philosophy. Their theories provided what appeared to be a satisfying explanation of the functioning and interdependence of the mental and moral world, which they subsequently related to the ideas of progress and pliability. These theories also provided a basis for establishing new critical frameworks by which to assess and produce works of architecture and landscape gardening. Elements of associationism, converging with social concepts of the perfectibility of humankind and progress, became important foundations for the idea of an affective built environment, capable of producing morally improved citizens.

In terms of architecture the idea developed that the utility or fitness of a building’s various elements could also be defined by their ability to produce an appropriate emotional character through association. This associational aspect of objects,

including buildings, expressed through their material qualities “bring[s] with it the conception of the different uses or pleasures ... and excite in us the same Emotion, with the uses or pleasures thus signified.”²⁹

Character and Association: Consequences for Architecture

The new architectural possibilities created by the concepts of progress, perfectibility and pliability coincided with and reinforced the social and cultural changes that occurred during the eighteenth century. The breakdown of paradigms of social order in the face of doctrines of a self-regulating economic realm, coupled with the discovery of non-European social models, was paralleled in architecture by challenges to a static grounding in classical models and symbolism. The speculation on architectural identity that ensued gave rise to a re-examination of its historical impact, laying the foundations for the eventual theorising of an affective form.

The understanding of architectural antiquity as a homogenous and unified realm was contested in the eighteenth century by the undertaking of archaeological expeditions (referred to by Joseph Rykwert as “scurrying around the ruins”³⁰). Revelations that art and architecture were culturally specific, their forms relative to the exigencies of site and society, led to the displacement of eternal concepts of beauty embedded in imitations of nature or a divine configuration. The idea that social convention was critical in creating an architectural language allowed for an alternate rationale based on concepts such as emotive impact, and the displacement of a representative model architecture by one based on association and metaphor.

The manner in which architecture came to be theorised depended heavily on ideals regarding rural scenery and landscape design that developed through literature and painting in the seventeenth century. Developments in music, literature and landscape design were early subjects for exploration of the role of expression and affectivity, providing key influences for early models of affective architecture.³¹ Painting, in particular, provided idealised visions of natural landscapes that contributed to the development of the picturesque sensibility, an interpretation of the landscape that invested it with emotive powers and suggested the control of these powers could exist through garden design.

Seventeenth century painters in Italy and France such as Claude Lorrain (1604-82), Salvator Rosa (1615-73) and Nicolas Poussin (1594-1665) provided evocative, varied landscapes that inspired attempts at embodying their qualities in cultivated estates. Landscape painting such as theirs influenced discussions about natural scenery; it shaped responses and provided a vocabulary with which to articulate new garden designs.³² Paintings were readily understood as conveying mood and promoting reflection through their landscapes: symbolising grief, portraying the effects of terror and suggesting the 'aweful' connotations of sublime nature.³³

The potential for built landscapes to evoke similar responses was recognised in England by John Evelyn, who in 1658 suggested that private gardens could induce "virtue and sanctitie [sic]," as well as "contemplative and philosophicall [sic] enthusiasms," and thus might "influence the soule [sic] and spirits of man."³⁴ During the eighteenth century the English landscape garden became recognised as able to translate a range of complex emotions and even provide moral instruction through iconography. For example, Joseph Addison adapted Locke's ideas about mental activity to his own theorising on the manner in which the landscape garden worked upon its visitors: "We may observe, that any single Circumstance of what we have formerly seen often raises up a whole Scene of Imagery, and awakens numberless Ideas that before slept in the Imagination[.]"³⁵

Such theorising, such as the meditation on the idea of the picturesque by figures such as Sir Uvedale Price (1794) and Richard Payne Knight (1794, 1805), was critical in reconfiguring understandings of how the landscape mentally affected the viewer.³⁶ Emerging ideas regarding the complex interactions between the surveyed landscape and the imagination initiated new modes of constructing landscapes. Thomas Whately, in *Observations on Modern Gardening* (1770), described both "emblematic" and "expressive" gardens as offering different approaches to addressing the mind's ability to encourage particular moods, ideas and mental connections. The emblematic was associated with landscapes where carefully deployed statuary and other devices required close "reading" of their didactic significance. The expressive landscape was much more personal, encouraging a

unique and individual response through less obvious ordering and a concern for generating a more general mood (associational devices might be employed but these were more intimate).³⁷ These approaches variously determined the style of landscaping, the relationship of the house with its gardens, and the embellishment of the landscape with buildings or other structures.

Two important figures in the development of similar understandings for architecture's affective qualities were the French architects François Blondel and Germain Boffrand. Paralleling the discussions happening in England, in their writings and work during the eighteenth century, such as Boffrand's *Livre d'architecture* (1745) and Blondel's *Cours d'architecture* (1771), they emphasised the idea of an organising character as a fundamental part of architectural design.³⁸ Thus, the knowledgeable application of classical conventions could give a building a character appropriate to its situation, owner and function. Blondel went as far as applying a physiognomic analysis to elements of various buildings. As an example he related the form of a cornice to facial proportions, attempting to demonstrate the expression of character and soul through architectural detail. In this way the building might represent and project human character and passions. The architect's task was to form the manner of this expression/ representation. As Blondel wrote, they should be able to:

Exprimer les divers caracteres des différentes productions de l'Architecture, en retraçant aux yeux du spectateur, quoique dans le plus petit détails, le motif qui a donné lieu à l'érection de l'édifice; de même que dans un tableau d'histoire ou dans un bas-relief, le Peintre & le Sculpteur, dans les airs de tête de leurs figures, indiquent, par l'expression de chacune d'elles, l'image des passions qui caractérisent les personnages représentés sur la toile, ou par le marbre.³⁹

John Archer identifies the contribution of Blondel and Boffrand, in this context, as the promulgation of the notion of character being the primary aesthetic quality for architecture, and the recognition of its active relation to the spectator.⁴⁰

In England, thoughts on architecture also focused on this issue although the extent to which ideas were exchanged with France is not entirely clear.⁴¹ Certainly, the discussion in England focused more on the associational theories of figures such as Locke when dealing with notions of architectural character and its impact.

By the late eighteenth century these expressive and affective faculties had been recognized more widely, and formed two important considerations in writings on architectural theory. In 1768 Thomas Rawlins enthusiastically expounded on the power of these considerations to affect the observer:

It must give the highest Satisfaction to a speculative Genius, to consider the utmost Extent of Architecture, and to weigh the different Effects it impresses on the Mind, according to the different Structures presented to the View! How awe-struck must be the Passions, when we behold the antient [sic] Buildings of *Greece* and *Rome*! How sooth'd and mollify'd, when we descend to the pleasing rural Cot, where simple Elegance, Proportion, and Convenience unite! The Soul may then be said to be tun'd and exhilarated by the Objects which strike the Attention.⁴²

Archer locates a crucial synthesis of the various theories of affectivity and character within Thomas Whately's *Observations on Modern Gardening* (1770). Published two years after Rawlins' work, Whately's writing entwined the ideas of an organising identity, affectivity and associationism in the fundamental "character" of the "modern" landscape garden. As he conceived it, ground, trees, water, rocks and buildings should all be composed with regard to the effect they would have on the sensibilities of the spectator.

His theory described an extended, more emotionally affective idea of architectural expression in which the epistemological role of association was of great importance. The manner in which buildings, still seen as an adjunct to the landscape, could induce emotions and evoke a particular character was explained through this power of association:

The power of such characters is not confined to the ideas which the objects immediately suggest; for these are connected with others, which insensibly lead to subjects, far distant perhaps from the original thought, and related to it only by a similitude in the sensations they excite.⁴³

He suggests the manner in which these associations operate through the example of ruins:

Whatever building we see in decay we naturally contrast its present to its former state, and delight to ruminate on the comparison. It is true that such effects properly belong to real ruins; but they are produced in a certain degree by those which are fictitious;

the impressions are not so strong, but they are exactly similar; and the representation, though it does not present the facts to the memory, yet suggests subjects to the imagination: but in order to affect the fancy, the supposed original design should be clear, the use obvious, and the form easy to trace; no fragments should be hazarded without a specific meaning, and an evident connection; none should be perplexed in their construction, or uncertain as to their application.⁴⁴

Thus Whately begins to outline methods for the quotation of architectural styles, forms and fragments that can then construct an associational narrative; concentrating on the immediate, emotional effect. Within his work, the linking of specific effects to historical architectural forms again reinforced the logic of mental association, and raised further the possibility that built form might be shaped to provoke a desired response.

Following Whately, further emphasis was placed on clarifying the psychological process whereby human beings were emotionally affected by buildings or the landscape. A model of the building as something akin to an 'informational appliance' developed, its precepts emerging in the writings of figures such as Archibald Alison.⁴⁵ Synthesizing and developing the works of the Scottish writers of the 'common sense' school of philosophy, Alison's treatise *Essays on the Nature and Principles of Taste* (1790) provides a key investigation of associational aesthetics.⁴⁶ His ideas were drawn upon by Loudon in his discussions of architecture and extensively influenced Richard Payne Knight's meditations on the picturesque landscape.⁴⁷ Beauty, Alison argued, is not intrinsic in objects but emerges through certain mental associations triggered by those objects:

when any object, either of sublimity or beauty, is presented to the mind, I believe every man is conscious of a train of thought being immediately awakened in his imagination, analogous to the character or expression of the original object...It is then, only, we feel the sublimity or beauty of their productions, when our imaginations are kindled by their power, when we lose ourselves amid the number of images that pass before our minds, and when we waken at last from this play of fancy, as from the charm of a romantic dream.⁴⁸

Thus the natural and relative modes of beauty he identified depend on the number and quality of those associations for full exposition.

Richard Payne Knight drew upon those associational ideas of Alison in developing his theory of the picturesque. Within Knight's vision of the picturesque, education

and erudition could bring about a different mode of viewing the landscape that extended its associations and pleasures: “The sensual pleasure arising from viewing objects and compositions, which we call picturesque, may be felt equally by all mankind in proportion to the correctness and sensibility of their organs of sight[.]”⁴⁹

A precise definition of the picturesque was evasive, but implied a way of seeing the landscape that broadened the aspects that might produce associations and provide pleasure.⁵⁰ It extended associationism beyond the emblematic qualities of individual garden elements and argued for the expressiveness of their pictorial composition.

The spectator, having his mind enriched with the embellishments of the painter and the poet, applies them, by the spontaneous association of ideas, to the natural objects presented to his eye, which thus acquire ideal and imaginary beauties; that is, beauties, which are not felt by the organic sense of vision; but by the intellect and imagination through that sense.⁵¹

Advocates of the picturesque like Knight and Price therefore advocated mental variety; characterised by landscapes with highly irregular forms and vigorously overgrown foliage that contrasted with the associationist poverty they saw in the designs of someone like Capability Brown. The picturesque was employed to stimulate the imagination of viewers - whose minds, “richly stored” with allusions and associations, would be excited into “fresh trains and combinations of ideas.”⁵² Thus, in the picturesque ideal, theorists like Knight and Price sought richly affective landscapes.

It was Loudon who provided the most consistent application of the associational model, derived from Alison, to building form - most significantly in his *Encyclopedia of Cottage, Farm and Villa Architecture* of 1833.⁵³ In this influential text he describes three factors that determine architectural quality and beauty: those of fitness, expression of fitness and expression of style. The associational cast given to the notion of fitness now became the definitive condition for good architectural form. The fitness of a building form for its intended purpose was, unquestionably, crucial but the expression of this utility in the form of the building was equally vital for the building to be a work of architecture. It followed that although an unarticulated

building may adequately fulfil its rudimentary functions it cannot obtain beauty and so be considered 'true' architecture until it is also expressive of these functions. A square house may have all the necessary conveniences of a home but "... the cubical form will give no indication of their existence to the external spectator; and therefore, though it may be well adapted for economy, it cannot be considered as one expressive of ease and comfort."⁵⁴

For Loudon the purpose of architecture, as "an art of taste"⁵⁵ was to add other beauties to those of "use and truth".⁵⁶ Whereas the qualities of use and truth were prescribed by reason, "those of Architecture...address themselves jointly to reason and to the imagination." That appeal to the imagination depends on "the addition to the first class of beauties, of the associations connected with the known forms and details of the different styles of Architecture hitherto in use, or which may hereafter come into use, in this and in other countries."⁵⁷

From this view of the expressive potential of architecture, various building elements became associational signifiers: expressing aspects of the building's use, its relation to the surrounding context and the character of its occupants. This capacity for expression is what makes a building, for Loudon, an 'informational appliance.' As such, architectural styles and architectonic elements form denotative vocabularies to be applied for judicious and appropriate effect. In his *Encyclopaedia*, Loudon described the way the owner of a house might use a particular architectural style and type of ornament to conjure pleasant memories or demonstrate the owner's personal qualities. Greek ornament, for instance, could be used to demonstrate a scholarly character. Loudon even illustrated a basic dwelling within the book, with six architectural styles that could be applied to produce various emotional, associative effects.

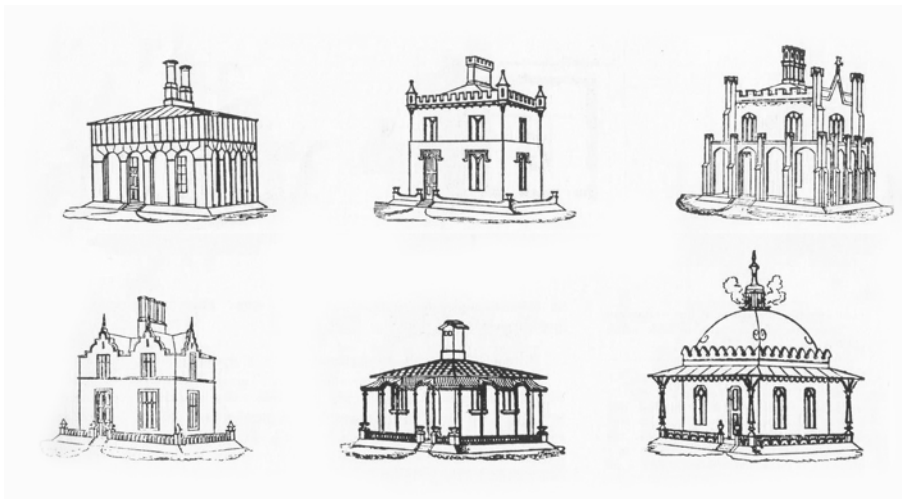
These ideas were developed over the ensuing decades by a number of architects, a survey of which is provided by John Archer.⁵⁸ Writing in 1834, John Billington developed a more coherent and consistent view of character, or physiognomy, for differing building types. A prison, he felt, should inspire terror, while a church could express power and majesty. George Wightwick incorporated these ideas into

his outline of a comprehensive Romantic architectural aesthetic, one supported by the affective powers of architectural form.⁵⁹

The conception of architecture as emotionally affective gained broad acceptance in the eighteenth century. As a kind of language, architecture was thought to project a formal character that could express, alter and reinforce emotions in its occupants through the control of associations. In the nineteenth century, the conception of architecture as “a science of sensations”, as Tafuri put it, would be expanded to encompass a role as “the instrument of social equilibrium”.⁶⁰ The emotive power of a building was a powerful tool in this task.

Theorising a Moral Architecture

The discussion of affective architecture shifted and expanded in the nineteenth century. No longer a mere aesthetic exercise, architecture would increasingly be conceived of as a social instrument, its program and forms aimed at the welfare of its users. The increasing tendency to view society as an artificial structure of instrumental rationality, rather than a naturally or supernaturally determined entity, expanded the possibilities for the transformation and reform of people. This situation imparted to architecture a socially conventional, rather than natural, model of interpretation and ordering. As society, through the self-referential, associational process, became the progenitor of architectural meaning and acquired a formative influence on the moral development of the individual, architectural theories aspired increasingly to the production of socially meaningful buildings.



1

Drawings by Loudon showing a utilitarian cottage given different treatments (clockwise from top left): Dwelling with trellis; Dwelling with castellated jacket; Dwelling with monastic jacket; Dwelling with Elizabethan jacket; Dwelling of two rooms for a man and his wife; Dwelling with Indian jacket.

Architectural utility and fitness became key objectives as these qualities came to be governed by the desire to provide more efficient, humane and healthy accommodation for workers. This was exemplified by Loudon, who proclaimed in his *Encyclopedia* that his “main object” was “to improve the dwellings of the great mass of society”.⁶¹ The improvement in living conditions was aimed not only at ameliorating physical health through better urban planning and building standards, but as a tool to improve moral character. Buildings, public spaces and almost all aspects of daily life were employed in the effort to morally improve society, as art, design and commerce became matters of moral and aesthetic dispute. ‘Society’ frequently meant the working class, as the amelioration of living conditions and the quality of the public realm was understood as a means of preventing political unrest amongst workers, aiding productivity and the continued advance of industrialisation.

The efforts of the Benthamite civil servant, Henry Cole, are notable in demonstrating the importance given to the connection between the physical environment and social progress. Cole was instrumental in the organisation of the 1851 Great Exhibition, established a Museum of Ornamental Art (subsequently the Victoria and Albert Museum), launched the *Journal of Design*, and was engaged to reform the Government School of Design (established in 1837 to supply British manufacturers with artists and designers to compete with foreign producers). These activities were all undertaken with the intention of developing sound moral and aesthetic principles for the production of commercial goods in light of the observation that principled ornament was an indicator of a principled civilization. As with earlier debates on the picturesque; the appropriate representation of the natural, and the cultivation of appropriate taste, emphasised the moral value of an appeal to the essence and principles of nature.

Cole’s restructuring of the School of Design was characterized by such thinking; proposing the establishment of certain artistic principles that would be inculcated through the schools. The Select Committee he led was convinced of the need to train designers to produce fine and tasteful design and ornamentation that might improve the standards of public taste (and simultaneously create a greater market

for high quality goods).⁶² Cultural and economic progress was felt to be intertwined: "High Art does not end with itself. It presupposes great knowledge, which influences manufactures, as in France. Why is she superior in manufactures at Lyons? Because by State support she educated youth to design."⁶³

The principles established by Cole and his associates were disseminated through exhibitions, the *Journal of Design* and the Schools of Design. They crusaded for design and ornamentation that avoided illusionistic naturalism and instead geometricised and conventionalised natural sources. It was felt that direct imitation could lead to moral degradation: "We think we could prove, without great difficulty, that there is some damage even to good morals in the long run to the housemaid, who, parading in a Glasgow printed shawl, affects to pass for her mistress in a cachmere [sic] one."⁶⁴

Criticism of this stern moral calculus of design is characterized by F.J. Prouting, in a pamphlet that, ostensibly, rails against Cole's taste censorship.⁶⁵ Prouting ridiculed the notion of a single theory of good taste but reaffirmed the crucial, civilizing effects of art, and the design of the everyday object:

...for many centuries natural ornament has been applied to everything. How far our liberty in this respect has had to do with our progress in Civilization cannot be estimated with much certainty; but this we know, that for many centuries Turkey and Arabia has in everything been standing still, if not retrograding, whilst England for as many centuries has been rapidly advancing. It is true all Christendom has not kept pace with England. But why? Because ever since England began to make any appreciable advance in refinement and intelligence, she has been commercial. It is easy to perceive that Commerce, though its immediate end is Gain, is, and must be, the great civilizer of the world; inasmuch as it is the originator, the encourager, the protector, and the disseminator of the Arts,- the proper and legitimate end of which, whether practical and useful, or refining and luxurious, is mentality, morality, religion. If Commerce trades in natural ornament it disseminates a natural luxury, a mental luxury, and, therefore, the means of mentality and enlightenment.⁶⁶

He believed the "mental interests" of humanity were best served by allowing commerce free reign to disperse the enlightening effects of art, including naturalistic ornament that might bring the minds of workers "closer to God."

Despite the argument over appropriate didactic forms and aesthetic systems, in the nineteenth century the connection between design and morality was consistently held to be a powerful one. The period produced an architecture that corresponded to the changing conception of human morality and social relations. The social role of architecture was extended beyond the limits usually ascribed to it as utilitarian construction or high art form. Architects and reformers attempted to provide environmental mechanisms to rehabilitate peoples' ethics and morals with the new conception of architecture as a social instrument.

The Institution

The conception of architecture as a social instrument, its program and forms aimed at the welfare of its users, was most extensively applied to the spaces that housed those, it was believed, who were in the utmost need of moral reform: the poor, the insane, the criminal. The developing modern institutions of the prison, hospital and mental asylum provided a site for the intersection of a number of social, economic, political and religious forces. Here, all aspects of daily life were investigated to discover the conditions that might stimulate social progress amongst the destitute. Within these spaces, ideas about affective form and the influence of the built environment on character, morals and identity were applied. Institutional building complexes became testing grounds for a new building science of form and psychological effect.

The advent of the industrial age and the rise of capitalism wrought significant change within the heterogeneous collection of establishments that would eventually coalesce into the reformatory institution, providing a testing ground for an architecture that functioned to form and re-form its inmates.⁶⁷ Buildings such as asylums and prisons were envisaged as instruments that worked upon the body and soul, making mechanisms of their inhabitants in turn. The significance of these institutions for the concept of a reformatory architecture is in their role as experiments in control and discipline; exploring a socially formative role for urban form. This situation led to a body of knowledge concerned with the relation between architectural mechanism and human behaviour, focused on the extent to

which the subject could be manipulated through the use of the built environment. The ultimate intention in the majority of such projects was not simply to enforce a certain physical discipline but to operate on the mind, or soul, of the subject; effecting a moral transformation.

The theories and techniques of isolation, pacification, sanitation and observation developed were applied to varying degrees in subsequent architectural and planning works, such as the Pentonville Prison of 1841. The manner in which these reformatory principles were utilised varied in relation to the type of project and the shifting conceptions of this relationship between architecture and reform. The immediate application of the new reformatory techniques was within these institutional sites: the prison, hospital, asylum and workhouse. However, their influence was also felt in schools, housing and town planning, and this is where the focus shifts from reforming abnormality to fabricating normality.

There are a number of accounts regarding this period that deal with the various conditions that formed institutions such as the prison in Europe and America, as well as their political, social and architectural effects.⁶⁸ The importance of evolving religious conceptions of reform and rehabilitation in their development, as well as a potential role in training a dutiful proletariat, has been described. These accounts intersect with discussion of the transformation in the concept of punishment, the effect of new medical and scientific knowledge on physical conditions of incarceration, and the architectural manifestation of these concerns.

From this research an understanding of these modern institutions as critical loci for an affective architecture has emerged. It is generally contended that they provide a point of convergence where the issues of personal reform and rehabilitation intersected with religious and political change, and technological progress. The subsequent dialogue was often transformed and translated into administrative or physical instruments of control and reform. The power of reflective contemplation, the instilling of hygienic, disciplined behaviour, involvement in productive labour and other reformatory methods began to be regulated within specific architectural forms.

Architecture received an increasing amount of attention regarding its ability to influence its inhabitants; the formative, instrumental character that was introduced by the associative concept and its subsequent “medicine of the mind.”⁶⁹ The nineteenth century saw a remarkable optimism and confidence in that aspect of the built environment. A feeling was evident amongst architects, administrators and philanthropists that they were in possession of a new body of knowledge that could generate a precise effect on the deviant.

The development of the first modern institutions of reform marked the height of belief in a mechanistic affectivity. It was felt that the complimentary effect of a building’s architectural character (able to produce emotional response) and its spatial arrangement (able to direct or control physical movement, actions and comfort) could direct the mental processes of the inhabitant. During the early nineteenth century the strongest faith in this use of architectural form as a tool for moral and social reform can be found.

The development of the English prison and the translation of its reformatory ideals and techniques provide a critical indication of the intersecting moral, economic, medical and architectural trajectories that contributed to the conception of a reformatory architecture during this period. As a form of housing the prison also prefigures the manner in which the techniques developed for application on the criminal classes (as well as the inhabitants of other institutional models) were eventually translated for use in a wider social context, particularly within working class housing schemes.

The Pre-Reform Gaol

Prior to this experimentation with the form of the institution (its beginning perhaps marked by John Howard's first formulation of the idea of penitentiary discipline in 1779) it would seem that the outstanding characteristic of the various gaols, bridewells and houses of correction was an extremely permeable relationship with the community. As Robin Evans has shown for the prisons of England, and David

Rothman for those of America, the pre-reformation prison was much more closely entwined, physically and socially, with its location.⁷⁰

From the surveys of John Howard and James Neild in England it can be seen that the existing prisons were predominantly small, often little more than rooms or cottages, and had no particular architectural style or features that might define a typology.⁷¹ Even larger structures housing society's miscreants displayed a variety of settings that precluded any architectural or spatial unity. Often they would be associated with or incorporated into other public buildings, including the city gatehouse, but a number of other locations were also utilized like old mansions, disused chapels, guild or town halls, the spaces under courtrooms and council chambers - even taverns. Thus, at this stage, prisons were integrated into their surroundings. They did not resemble the heterotopic structure of the penitentiary, where a discreet environment is created for the application of reformatory procedures. The need to confine the prisoner was reconciled through the use of shackles, gratings, locks and wall-spikes, rather than through the spatial disposition of the institution itself.

The life of the prisoner also appears to have been less alienated from the surrounding community prior to the introduction of the nineteenth century penitentiary. Most prisons were under the control of private gaolers, who used the position to exact (or extort) fees for services and privileges. Thus, with the gaoler making a profit from the majority of activities, the prisons developed their own "microcosmos, a little world of woe ... a mappe [sic] of misery."⁷² This purchased liberty often included the ability to buy better accommodation (sometimes external to the prison) and temporary access to the outside world, along with the essentials such as food and clothing. The larger prisons even had their own taverns and activities, often drawing patrons from outside. These conditions all reflect a very different conception in this earlier situation of the prison's role in relation to rehabilitation or punishment.

An adjunct to these little economic fiefdoms, that demonstrates again the permeability of the prisons, was the begging grate. This point of access, generally a

grated door or hole in the wall, allowed poor prisoners who could not obtain money from relatives or patrons to solicit donations from passers-by. It also functioned as an assembly point for meeting acquaintances and a conduit for the purchasing of supplies from nearby shops.⁷³

Although the begging grate marks one of the only points where the pre-reformation prison frames and shapes the activities of its inmates (and so architecturally distinguishes itself as a particular institution) it also reinforces the difference in the social structuring and intent of these earlier prisons and the later penitentiaries: the different degrees of affectivity. The transformation in architectural form, administration and operation of the prisons during the nineteenth century reflects an equally critical shift in the conception of crime, punishment and imprisonment. From an acceptance of prisoners' visibility and participation in social and economic relations there is a move toward the seclusion and alienation of those prisoners in an institutional model.

The purpose of this removal was to ensure that the environment a prisoner experienced could be completely controlled, allowing the precise determination of physical, psychological or moral effects brought about by the institution. In a limited sense the pre-reformation gaol might be used to frighten the criminal into lawful conduct, or to prevent disorder being caused within the community, but there was no conception of this later use as a rehabilitative or reformative instrument.

The Separate System

The development of the prison saw a great deal of experimentation, in terms of architectural form and disciplinary/administrative systems, in order to achieve the desired control and influence over prisoners. The research of reformers and the writings of other thinkers during the Enlightenment period saw a debate develop about the nature of punishment. This reconsideration of the essence and purpose of punishment was critical in the development of the reformed gaols. The new ideas that had emerged - the outlining of the possibility for moral progress and

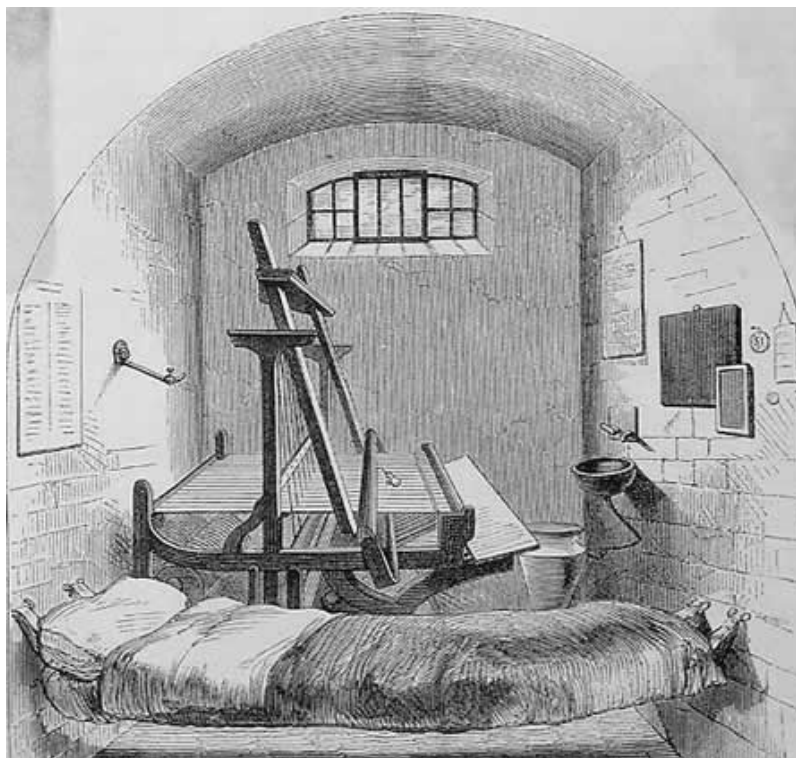
improvement, the construction of a science of the mind and the emphasis on the potential of education - supported the possibility of a reforming prison.

The administrative solutions and architectural forms proposed depended largely on the underlying philosophies of the reformers. There were two primary movements: one an overtly religious, evangelical group, represented by figures such as John Howard and William Blackburn, the architect; the other being of a utilitarian, Benthamite persuasion typified by Sir William Eden. There were many similarities in the aims and approaches of each faction but the remedies they proposed differed significantly. The more evangelical reformers favoured solitude, reflection and prayer in the conversion of prisoners; the utilitarians, however, saw the possibility of creating hardworking, industrious citizens through exposure to working discipline and industrial labour. Ultimately, both approaches to reform relied on building forms that created the required environment: enforcing solitude, aiding surveillance, ingraining correct behaviour.

The debate over the relative merits of different penal systems continued throughout the late eighteenth and early nineteenth centuries with neither approach being fully adopted. The emphasis in new prison building remained the improvement of hygiene; changes in form related primarily to issues of adequate ventilation, heating and sanitary measures. One disciplinary and reformatory aspect of the prisons that did develop and impact upon the built form was the process of classifying



2
*The sociability of the pre-reform gaol – prisoners
 at Newgate prison, 1735.*



3
*Pentonville circa 1860 - a cell in the prison, with a
 hammock for sleeping and a loom for day-work.*

prisoners. The rationale, applied in varying degrees to prisons based on either system, was that different kinds of criminals corrupted each other and hence should be kept apart. This sort of moral 'miasmic' theory led to the provision of complex series of wards, classes, workrooms, dayrooms, exercise yards, and sleeping cells. However, these early attempts at a more precise social control were not uniformly implemented, and more fundamental changes were imminent.

By the mid-1830s the solitary, or separate, system emerged as the favoured option for new prisons. It was based largely on a scheme developed within the Pennsylvanian penal system, in America, where inmates were kept in single cells day and night throughout their sentences. Helped by the extensive lobbying of its supporters, the solitary system became the dominant type for gaols built during the remainder of the nineteenth century. However, the implementation of this system required extensive reconstruction of existing prisons and the construction of new, expensive ones. The enthusiasm to undertake such a task stemmed from the prevailing confidence in new scientific, medical and architectural knowledge: there was a certainty and optimism that the separate system could cure criminal ills and reform its inmates.

The primary objectives that this system was intended to fulfil were the separation of the untried and possibly innocent prisoner from contact with the convicted; the prevention of cross-fertilisation of criminal ideas; and the reformation of the convicted inmates. It was felt that the separate system could fulfil all these requirements; untried prisoners would never see the convicted ones, and first-time offenders would not be contaminated or further corrupted by the company of evil-doers. The deterrent nature of solitude was seemingly undeniable, criminals would have no support or encouragement from peers, but equally important was the ideal environment it provided for reformation.

Solitude gave the prisoner ample opportunity to reflect upon their actions; there was no alternative to introspection. The conditions would break down a rebellious spirit and, combined with time and peace, would leave the mind more open to the ministrations of the prison chaplain. At that time, the system was not seen as brutal

or repressive, rather the quiet and seclusion would stimulate pious and rational contemplation, leading to rehabilitation and moral improvement. John Thomas Burt, chaplain at Pentonville described the power of this process:

The first hours of the cell are hours of great anguish; all the stimulants of crime are gone, there is no voice nor fellowship in the passionless walls, no sympathy, no love, no hate, nothing present but the past; how can the mind resist and not be subdued? Then arise the cravings of the social instinct: the trade-master's hour of lesson, the visit of the minister of religion, the chapel with its common worship, the school with its common instruction, are privileges not lightly to be forfeited. The heart imperceptibly yields up its impurities and is cleansed. Kindness compels belief and gratitude, many a casual word gives issue to feelings long concealed under the lava-crust of vice.⁷⁴

An Architecture of Separation

The enforcement of the separate system, and the successful reformation of the inmates, required a physical environment that would provide the desired corrective conditions. The building that emerged to embody the ideas of the solitary system was subject to detailed, careful planning. Every aspect was minutely investigated: the ideal site, the arrangement of the plan, the optimum cell size, the thickness of the door, the types of locks, and the dimensions of windows.

William Crawford and William Whitworth Russell, prison inspectors and reformers, along with Joshua Jebb as their architect, set out to design a model gaol, embodying all their social and religious ideas. They published plans in 1838, and this was followed in 1840-1 by the construction of the Model Prison at Pentonville.⁷⁵ The final form of the prison reflected their social and moral objectives, achieved through the careful control of the prisoners' environment: the enforcement of solitude, regulation of movement, maintenance of physical and mental health, and attempts at education. In the criminological/architectural survey entitled *The Criminal Prisons of London and Scenes of Prison Life* (1862), Henry Mayhew and John Binny described Pentonville, the comprehensive description giving an indication of the extent to which the daily life of the prisoners was controlled, in order to reform:

As regards the details of the building, the following are the technical particulars:- The prison occupies an area of 6¾ acres. It has "a curtain wall with massive posterns in front," where, as we have said, stands a large entrance gateway, the latter designed by Barry, whose arches are filled with portcullis work; whilst from the main building rises an "Italian" clock-tower. From the central corridor within radiate four wings,

constructed after the fashion of spokes to a half-wheel, and one long entrance hall, leading to the central point. The interior of each of the four wings or "corridors" is fitted with 130 cells, arranged in three "galleries" or storeys, one above the other, and each floor contains some forty-odd apartments for separate confinement. Every cell is 13½ feet long by 7½ feet broad, and 9 feet high, and contains an earthenware water-closet, and copper wash-basin, supplied with water; a three legged stool, table, and shaded gas-burner - besides a hammock for slinging at night, furnished with mattress and blankets. In the door of every cell is an eyelet-hole, through which the officer on duty may observe what is going on from without. Each of the cells is said to have cost, on an average, upwards of £150. The building is heated by hot water on the basement, and the ventilation is maintained by an immense shaft in the roof of each wing. The prison also has a chapel on the separate system, fitted with some four hundred distinct stalls or sittings, for the prisoners, and so arranged that the officers on duty, during divine service, may have each man under their *surveillance*. There are also exercising yards for single prisoners, between each of the radiating wings, and two larger yards- one on either side of the entrance-hall- for exercising large bodies of the prisoners collectively. Moreover, there are artesian wells for supplying the prison with water, and a gas-factory for lighting the building. Indeed, the prison is constructed and fitted according to all the refinements of modern science, and complete in all its appliances.⁷⁶

The form of the prison as it was calculated to affect the behaviour of the inmate was a primary element in this regime of control. It aided in ensuring solitude to promote reflection, and exposure only to people, such as the chaplain; who would have a beneficial influence. It enabled work to be carried out in the cell to promote industry and responsibility (and as a welcome relief to the monotony of confinement). Controlled spaces were built for administering exercise and diet to maintain physical health; religious instruction to aid moral reform, and schooling to provide literacy and a trade. These strategies were all to be effected, or supported, by the built form of the prison; its ability to segregate, isolate, provide comfort or instil fear. This new prison system was to be more effective and efficient because through its technical arrangements it could provide inner transformation; the production of penitents with an in-built and ongoing capacity to monitor and hence curb their own tendency to wrongdoing.

As more prisons such as Pentonville were built, from the mid-eighteenth century onward, discussion also increased regarding their external appearance. Associational theories became relevant as architects attempted to distinguish prisons from other institutions, such as hospitals or asylums, and provide an appropriate architectural character. A prison could deter potential criminals by its

fearsome external appearance and ensure the unwavering concentration of its inmates through a regimented and unrelenting interior. Two main characters were pursued with regard to the public form: an emphasis on solidity, with fetters overhanging the gates to emphasise the role of incarceration; or turrets and crenellation reminiscent of a medieval castle. The visual appearance of the prison thus generated was envisaged as an evocative symbol of the pains of incarceration and an effective deterrent to wrongdoing. The forbidding, high boundary wall allowed only occasional glimpses of the long cell-blocks, which were punctuated by low, barred windows. The main gateway was often flanked, as at Pentonville, by the governor's and chaplain's houses; symbolic of the dual function of discipline and reform.

This stark simplicity was believed to be in accordance with the intended effect, and also a desired economy of construction. However, this did not prevent experimentation with more elaborate, affective forms; the application of various gothic and classical styles to facades, gateways and towers was carried out in order to heighten the carceral character. A contemporary writer explained that if an architect did not choose to utilise a castellated style in the design of a prison he was "depriving himself and his employers of a vantage ground of association and situation, which of themselves afford character and expression so desirable in architecture".⁷⁷ Thus it could be conceived that a prison failing to draw upon the affective properties of appropriate form and ornament was deficient as a reformatory tool.

The reformed prisons, such as Pentonville, provide an explicit example of highly controlled, built environments that were intended to address the social and moral shortcomings of the criminal population. The nineteenth century cellular prison developed from a need to address overcrowded prisons and devise alternative forms of correction. During the late eighteenth century the increasing number of committals to trial, the corresponding increase in punitive incarceration, and concerns about the limited forms of punishment available prompted experiments in prison design. During a period that was characterised by its faith in progress and the pliability of the individual the possibilities of rehabilitation and reform were

explored.⁷⁸ The underlying assumptions about the prison population: that it was coarse, idle and slovenly; that it needed to learn habits of cleanliness, order and hard work; that it was ignorant and of poor health; these were all amenable to the new instruments of reform. A combination of Benthamite surveillance, solitary penance, improved hygiene and education within an institution that utilised the technology of the period would physically generate or augment this reform.

Metropolitan Improvement

The techniques exhibited in the reformed prisons of the nineteenth century were not confined to this particular building type. As well as analogous institutions such as the mental asylum and the hospital, the concepts of reform initiated by the physical environment permeated other aspects of public life during this period. Emerging institutions such as the museum, public libraries and parks as well as model housing schemes and the cultivation of activities such as organised recreation were also infused with a spirit of social progress and reform. They explored the deliberate design of the built environment as an aid to achieving desired social effects and, in this process, generated lengthy debate on the affective qualities of building and landscape.

During the course of the nineteenth century the need to control the physical and social processes of urbanisation, along with newly developed conceptions of physical and moral health, were combined with notions of progress in the development of broader reform measures. At this time the use of public space was realigned to reinforce control and reform of the populace.⁷⁹ Culture began to be focused on as an object of governance, needing both transformation and regulation. The reform of the morals, manners and beliefs of the subordinate classes was seen as equally dependent on the provision of appropriate technologies as any other area of social administration. By the mid-to-late nineteenth century the works, forms and institutions of high culture were deemed capable of the task of civilizing the population as a whole. The use of building and landscape in the process of form and reform was more widely applied; reaching beyond the criminal, insane or sick to a wider populace.

In the early 1800s there was a growing sense that recreation and leisure time should be associated with improvement. This led to attempts at reforming the existing institutions, such as public houses, and the establishment of new enterprises, such as public museums, circulating libraries, Mechanics' Institutes and Working Men's Clubs. As Thomas Greenwood saw it, "a Museum and Free Library are as necessary for the mental and moral health of the citizens as good sanitary arrangements, water supply and street lighting are for their physical health and comfort."⁸⁰

Observers at this time found the recreations of the working people within urban centres such as London in a state of physical and moral degeneracy.⁸¹ The density of poor neighbourhoods, combined with unsanitary conditions and lack of open space, was injurious to public health and promoted the spread of disease. Environments such as the public house, with its licentious atmosphere, supposedly promoted regression into animal sensuality. This was exemplified by the regrettable indulgence in such rude pleasures as drunkenness, feasting, brawling and (less openly stated) fornication.

Along with the sanitary improvements promoted by figures such as Edwin Chadwick, the reformers intended to curb this immoral behaviour by providing alternative recreations that stimulated and restored the mind rather than merely debilitating the body. This would be combined with more appropriate physical exertion that would also be restorative and improving. The most ambitious attempt to reform public space to these ends was the development of the public municipal parks. It was considered that their provision would:

Assist to wean them from low and debasing pleasures. Great complaint is made of drinking-houses, dog-fights, and boxing matches, yet, unless some opportunity for other recreation is offered to workmen, they are driven to such pursuits. The spring to industry which such occasional relaxation gives, seems quite as necessary to the poor as to the rich...⁸²

The parks movement of this period developed out of debate surrounding the conditions of urban life in England. A number of organisations and select committees, (such as the English Parliament's Select Committee on Public Walks, 1833) suggested that parks and public open space would improve the health of

those living in cities. London's Battersea Park, first drawn up by James Pennethorne in 1845, and the Derby Arboretum, designed by John Claudius Loudon and opened in 1840; provide examples of the many parks developed in the mid-to-late nineteenth century.⁸³ The idea of these spaces of recreation combined arguments regarding both medical and moral reform with an attachment to the aesthetic traditions and qualities of the pastoral landscape. The buildings, planting, statues and fountains that formed the physical fabric of parklands and the range of activities permitted within them reflected the social, moral, economic and political concerns of the time. Parks provided a source of fresh air, opportunities for financial investment, a means of diffusing social tensions and improving the physical and moral condition of the urban citizens. The affective potential of the park was much increased from the associational possibilities raised by figures such as Whateley in the eighteenth century, so that the whole construction of an urban park could be envisaged as a medical, didactic mechanism.

By the end of the century the parks had been described as providing "what is in reality a moral, intellectual and physical sanatorium for the ailments that unavoidably attack crowded communities".⁸⁴ Physically, the parks were likened to lungs that would refresh the exhausted air of the city, as well as being the setting for physical recreation that would maintain the individual's constitution.⁸⁵ As a morally instructive environment it provided the lower classes with exposure to the superior example of their social betters.

A man walking out with his family among his neighbours of different ranks, will naturally be desirous to be properly clothed, and that his wife should be also; but this desire duly directed and controlled, is found by experience to be of the most powerful effect in promoting Civilization and exciting industry.⁸⁶

The physical environment of the park also contributed to this pedagogic process directed at the moral lives of its users. Designs often included a lodge by the main gates to impose a certain character and order, and refreshment rooms as an alternative to the public house (some even contained museums). Bandstands were used to promote the moral influence of music, statues as instructive devices and



4
*London's slums - Gustav Doré, View from the
 Brewery Bridge, 1872.*



5
*London's Victoria Park – rational recreation,
 strolling along the avenue and boating.*

triggers for the collective memory, drinking fountains as a further temperance measure, and even the plantings could be instructional as at the Derby Arboretum.⁸⁷

Loudon was prominent among the figures that campaigned for public parks and metropolitan improvements, and believed strongly in the capacity of the urban environment to contribute to the improvement of the populace. After a tour of Europe, begun in 1828, he was scathing of the provision in England, and especially London, of public parks and walks. He consequently dedicated himself to the establishment of new parks for the people, professing a hope that all towns and villages would one day have a park.⁸⁸

For Loudon, material conditions, character, sensibility and the quality of the environment were all intimately connected. He was continually suggesting improvements for the private and public domains, aiming for a correlating expansion in the education and refinement of the masses. The scope of his concerns was broad; he argued for the opening to all people of museums, painting and sculpture galleries as well as gardens and parks. In this way he envisioned that the urban environment and those institutions contained within it would be wholly instructive. He saw the ultimate purpose of this informal education as “the improvement of the moral character and the habits, and the diffusion of happiness.” He then added, “nothing is more conducive to the happiness of the individual (the means of comfortable existence being provided for) than the cultivation of the heart and of the affections. To teach man how to pursue this kind of cultivation is one of the most important, though most wholly neglected, branches of education.”⁸⁹

Although not as well known, nor historically influential, as Loudon, James Pennethorne had more involvement in actual attempts during the second half of the nineteenth century to improve and rationalise London’s urban environment. In 1839 he was appointed Architect and Surveyor for Metropolitan Improvements to the Commission of Woods and Forests.⁹⁰ In this capacity he was employed to execute or consult on all important projects affecting the layout of London in mid-Victorian Britain. The construction of new thoroughfares such as the ambitious New Oxford Street scheme (designed to open up one of London’s worst slums, the

‘Rookery’) and the development of municipal parks such as Victoria Park (providing public recreational space for the squalid, crowded East End) demonstrated an integrated approach to reform.⁹¹ His work on urban improvements involved upgrading buildings, sanitation, provision of public space and traffic circulation; reform was always associated with the rehabilitation of both the visual and sanitary quality of the dismal neighbourhoods in which his thoroughfares and parks were laid out.⁹²

This comprehensive approach, prescient of more modern town planning techniques, was similar to the method displayed in Loudon’s earlier, and more ambitious, scheme for London entitled “Hints for Breathing Places” (1829).⁹³ This, his most comprehensive scheme for metropolitan improvements, described a series of greenbelts for the city containing parks, gardens and public institutions. He also described provisions for ensuring efficient transportation, adequate fuel and water supply, sewerage, good postal service, clean air and public safety.⁹⁴

All this was intended to create a garden metropolis, although Loudon imagined a far more sociable city than Ebenezer Howard’s later Garden City. Rather than seeking to segregate the activities of the city as Howard would propose, he enjoyed the concentration of commerce, cultural activity, government and industry found in the city. The rich variety of architecture, the healthful and useful boulevards, the public parks, pleasure gardens and botanical gardens, the mingling of people of all classes, were the attractions of the city. It was felt that the combination and balance of different building forms, public spaces, landscape and architecture, contributed to the health of the city’s people. This intercommunication and, for Loudon, the possibility of the environment to activate the minds of the people, was the key to physical and moral improvement. His envisioning of the character of the greenbelts gives a vivid sense of the sociability he imagined:

In the country zones we should permit individuals, on proper conditions of rent and regulations, to establish all manner of rural coffee-houses, and every description of harmless amusement; and the space not occupied by these establishments, and by the public buildings before mentioned, we would lay out as park and pleasure-ground scenery, and introduce in it all the plants, trees, and shrubs which would grow in the open air, with innumerable seats, covered and uncovered, in the sun and in the shade

... [T]o complete the whole, there should be certain bands of music to perambulate the zones, so as at certain hours to be at certain places every day in the year.⁹⁵

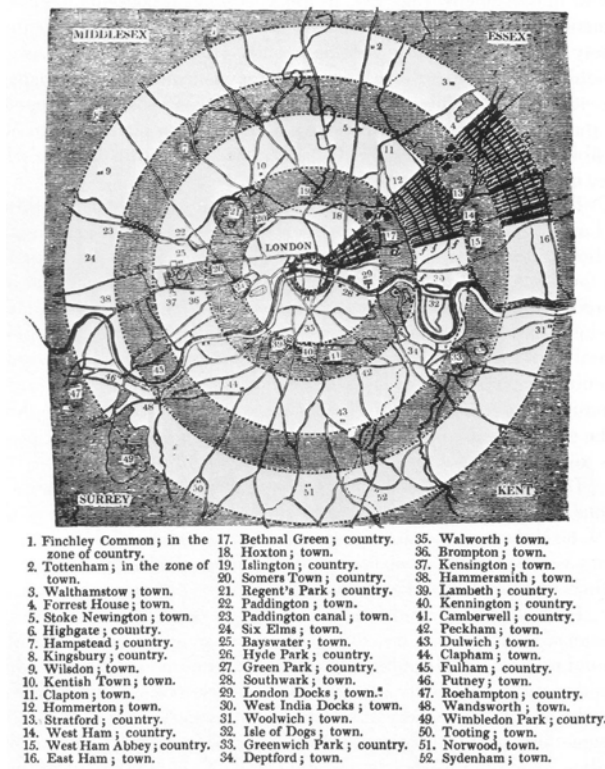
Despite differences in form the prison, asylum and clinic share a common reform trajectory with public improvements such as parks and museums. Organisationally, the former entailed the enclosure, through the walls of various institutions, of aberrant populations whilst the latter were conceived as promoting the mixing and intermingling of publics - elite and popular. The development of the reformed prison saw a series of architectural initiatives that produced an enclosed space of constant surveillance; an architecture that focused on the organisation of power relations within the interior space of the prison. The various metropolitan improvements placed greater emphasis on encouraging complicity through the emblematic display of power and model conduct. Importantly, both sets of examples involved the structuring and design of the built environment to influence behaviour, encourage reflective thought and improve morality.

The new public spaces, such as parks, museums and galleries, were equally understood as instruments of reform that targeted and modified external behaviour and internal sentiments. The control of routines and technologies that required shifts in bodily comportment were readily applied to places such as the municipal park. Directions regarding the forms of behaviour associated with public assembly - eating and drinking, forms of clothing and manners - all applied a pattern of informal control, not as severe as the studied manipulation of the prison or asylum, but still deemed effective (and affective). The built environment was crucial to the supporting and reinforcing of these influences. This combination of a space of emulation with elements of supervised conformity offered a context in which new forms of behaviour might, in being internalised, become self-acting imperatives.



6

Derby Arboretum – pavilion designed by E.B. Lamb



7

Loudon – Hints for Breathing Places for the Metropolis, 1829.

Techniques of Reform: Housing

Attempts to influence behaviour, encourage reflection and improve morality through the built environment in the nineteenth century were not limited to the development of public institutions. Through housing improvement, it was intended that moral and physical reform would take place at the centre of daily life. Housing design and construction was restructured to not only improve sanitary conditions but also structure family relations and promote domestic pride. Reformers like Octavia Hill were involved both in renovations and the construction of new housing, but also attempted to demonstrate by example to tenants the benefits of gardening and the beautification and maintenance of their dwellings.⁹⁶

To the housing reformers, the design, and condition, of dwellings and the morality of their inhabitants were understood to be in close alignment. Thus the dwellings of the urban poor were seen to be instrumental in the proliferation of vice and immorality, if not the very heart of the problem.

The cellar flooded with effluent was regarded as the source of zymotic diseases; the day-room (or common kitchen) was characteristically portrayed as the scene of daylight dissipation, drunkenness and criminal conspiracy; the dormitory as a nest of sexual promiscuity. Brought together, they represented the ultimately malign power of bad dwellings.⁹⁷

The physical pattern of the city seemed to reflect the dispersion or agglomeration of various classes; an area like the Rookery, home to the corrupted poor, exhibited a distinct street patterning and set of housing types. These particular conditions were seen as conducive to, even productive of, the degraded social conditions experienced within. As Robin Evans has explained:

Thus architecture - in its broader social perspective, beyond the territory marked out for it by art - could be interpreted as a physical geography of moral conditions: the layout of the house mapped the moral condition of the family, and the street layout mapped the moral condition of a community, just as the city mapped the moral condition of a society at large.⁹⁸

Thus it became imperative for the housing reformers to replace these corrupting conditions with a new system of housing that would cleanse the domestic scene in all senses. As *The Builder* explained in 1848:

Where there is not perfect privacy in a dwelling, proper self-respect, if it have existed, must give way; and if it have not existed, can never spring up; where the decencies of life cannot be observed, morality cannot but break down: where the structural arrangements are not calculated to promote and preserve cleanliness and order, any attempts at these will prove futile, the love and pride of home will ere long be discouraged, and recklessness and degradation in due course ensue. It becomes thus obvious, that to the well disposed portion of the labouring community, a better order of dwellings, in which they could enjoy the maximum of comfort of which their sphere is capable, and where they could rear their families without fear of contamination, moral or physical, must be an inestimable boon.⁹⁹

The fundamental architectonic problems of housing within areas like the Rookery were the complex, maze-like layouts of neighbourhoods combined with chronic overcrowding. The convoluted assemblage of buildings, courts, passages and chambers meant that the maintenance of order and surveillance (for the police, debt collectors, social investigators and reformers) was almost impossible and basic principles of property and person were neglected; families, buildings and activities were part of an undifferentiated whole.

As discussed earlier, the work of James Pennethorne in planning new thoroughfares through such slum areas was part of a series of metropolitan improvements initiated during the mid nineteenth century. The widening and creation of streets was often predicated on traffic management principles but carried out with an understanding of far wider benefits. Thomas Leverton Donaldson, chairman of the Commission of Sewers for Westminster underlined the reforming features of this process in his reporting to the Select Committee on Metropolitan Improvement:

Immediately a street is widened and a respectable traffic and thoroughfare is established, then a more respectable class of occupants is induced to come and live in the houses, which will also be improved by the owners to meet the improving nature of the thoroughfare.¹⁰⁰

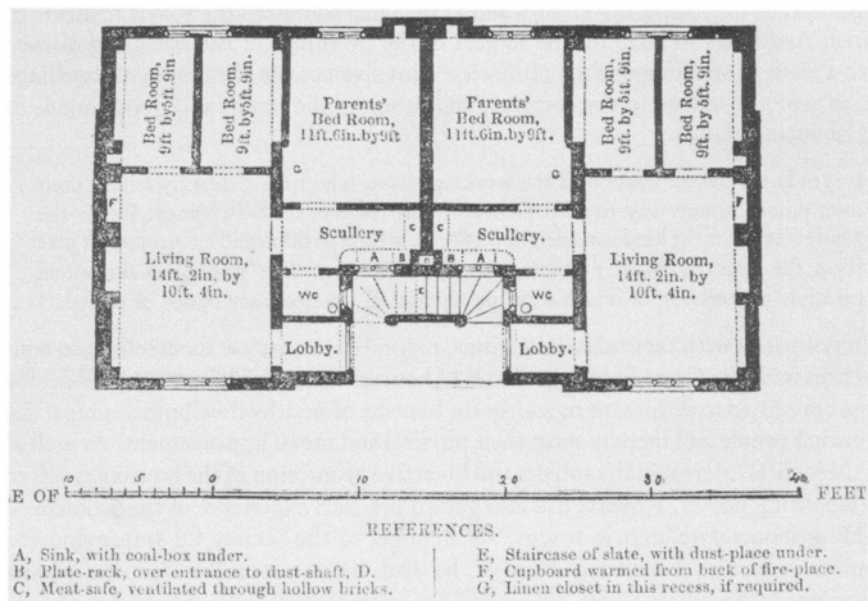
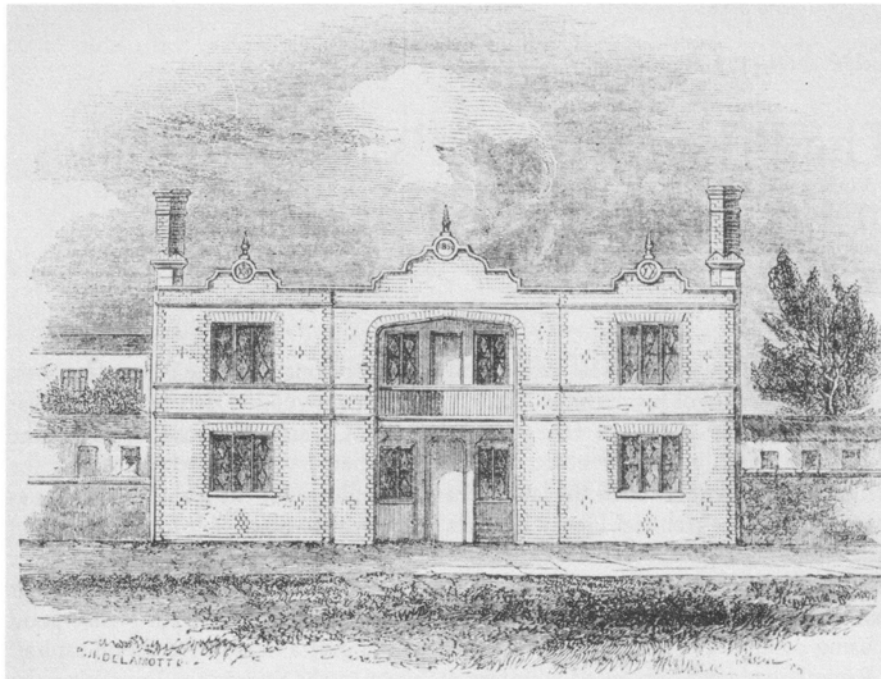
The streets that were cut through the Rookery of St. Giles, and areas like Whitechapel and Spitalfields, opened up the city to gain economic, policing and medical benefits. The traffic of goods and people was made easier and surveillance of public spaces improved. Sewerage was installed, along with an increase in light and ventilation; reducing the 'miasmas' and 'exhalations' that were linked with the

spread of diseases like typhoid and cholera. In addition to this technical role, new streets were seen to have a civilising influence. Commenting on Pennethorne's proposed Commercial Street development, a local MP proclaimed that the street was:

... of the last moment to the happiness, comfort, health and morality of that district ... The expense of these improvements would be more than repaid by the moral advantage the public would derive from them.¹⁰¹

Along with metropolitan improvements, such as new streets and sewerage, the planning and design of housing stock was also scrutinised. Generally, it was the problems of overcrowding that provided the most cause for alarm. Not simply a sanitary health hazard, this density also had moral implications. The continual exposure of all inhabitants to all daily activities, no matter how intimate, contributed to an atmosphere where it would be impossible for comfort or innocence to flourish. The exposure, mixture and dirtiness of such life with its moral, especially sexual, implications were the focus of the campaigns for domestic reform.¹⁰²

Experimentation with model housing schemes gained momentum towards the middle of the nineteenth century. As Robin Evans has shown, this architecture of domestic reform attempted to alleviate the problems of slums through the imposition of a new, introverted domesticity that would replace their congested dwellings.¹⁰³ New forms of housing were needed that would break up the slum populations and provide a more appropriate privacy, cleanliness and structuring of familial relations. Responding to this situation, Henry Roberts designed a model housing block that attempted to provide for superior conditions of morality and health for the Great Exhibition of 1851. These model houses were part of Robert's work for the Society for Improving the Condition of the Labouring Classes. The houses consisted of four flats, on two floors, each with its own front door. Inside there was very generous accommodation by the standards of the day: a living room, three bedrooms, one for the parents and two for the children, a scullery (an unusual luxury at this time), a W.C. and an entrance lobby. The exterior walls were



8
 Model housing block designed by Henry Roberts
 for the Great Exhibition, 1851.

constructed of hollow bricks, patented by Roberts, which were cheaper, provided better insulation and reduced the risk of fire.¹⁰⁴

The building demonstrated a refined set of supervening techniques to structure communication and familial relations. The innovative external stair separated each family, placing them within a self-contained territory. This design detail, along with others, was rationalised as a measure against the spread of disease, but also signalled the imposition of the restrained morality of the Victorian family.

Inside, further partitioning continued this approach. Each bedroom had only one door, ensuring privacy and decorum. The number, three, was the minimum arrangement to allow appropriate segregation: parents from children; male children from female children. The parent's room was separated from the living room by the scullery, allowing suitable seclusion, whilst the children's rooms were entered directly from the living room; allowing a high level of supervision and surveillance.

The subdivision and allocation of domestic space provided a framework for moral and social improvement, reinforcing the authority of parenthood and facilitating decent, legitimate intercourse between members of the family. As Evans points out:

Hence the wall and door were the determining elements in the configuration of reforming architecture; the wall as the means of a general sequestration, the door to give specific structure to personal relationships. Within each room, furniture and fittings (still uncommon in the homes of the really poor) specified yet more exactly the location and circumstances of domestic activity. So the Model Houses, in their fixity, stood in stark contrast to the confused, overlapping territories teeming with life in the slum.¹⁰⁵

The carefully calculated design for Robert's workers' housing resembles in many ways the strict planning of the prison. The physical relationships and adjacencies between different families (and between family members) were systematically considered. The spatial configuration of apartment and stairwell, living room and bedroom, bedroom and ablutions; the size of rooms; their outlook; all elements were choreographed to encourage the correct interaction and behaviour of the inhabitants. With the housing functioning to proscribe such things as opportunities

for interaction or seclusion, the paternalistic desires of reformers like Roberts could be implemented. In a manner similar to the methods by which prisoners might be encouraged to penitence and more honest ways, poor, working class families might be induced to live more sanitary and moral lives.

The proponents of reform during this period attempted the remodelling of much of the urban environment in the pursuit of improvement and progress: the penal and medical institutions, educational system, recreational practices, streets and housing. Although a great deal of effort was expended on interventions that restructured the city, it was still often seen as a central cause of moral dissolution and an essentially unfit place to live. Urban reform measures had generally failed to lessen this view.

These attempts to provide moral structure within the public and private realms found their ultimate expression in numerous model communities, especially during the nineteenth century. Here all aspects of urban life could be regulated and controlled, banishing the spaces of darkness and secrecy where vice might flourish, as described by James Buckingham in 1849:

It is constantly contended that mankind are not to be improved by mere mechanical arrangements, and that their reformation must first begin within. But there is surely no reason why both should not be called into operation. A person who is well fed, well clad, cheerfully because agreeably occupied, living in a clean house, in an open and well ventilated Town, free from intemperate, dissolute, and vicious associations of our existing cities and villages- with ready access to Libraries, Lectures, Galleries of Art, Public Worship, with many objects of architectural beauty, fountains, statues, and colonnades, around him, instead of rags, filth, drunkenness, and prostitution, with blasphemous oaths or dissolute conversation defiling his ears, would at least be more likely to be accessible to moral sentiments, generous feelings, and religious and devout convictions and conduct, than in the teeming hives of iniquity, with which most of our large cities and towns abound. Inward regeneration will sometimes occur in spite of all these obstacles, and burst through every barrier, but these are exceptions, and not the rules; and the conduct pursued by all good parents towards their children, in keeping them away as much as possible from evil associations, and surrounding them by the best examples and incentives to virtue, is sufficient proof of the almost universal conviction, that the circumstances in which individuals are placed, and the kind of training and education they receive, have a great influence in the formation of their character, and materially assist at least the development of the noblest faculties of the mind and heart.¹⁰⁶

Consequences

This chapter has established an historical context for the concept of affective form, grounded in the intellectual activity of the eighteenth century. The Enlightenment witnessed the development of a widespread faith in the possibility of indefinite progress for humankind and an associated belief in the mental pliability and perfectibility of the individual. Those conditions aided in the conception of landscape and architectural form as a means of governance, encouraging people to regulate their everyday conduct – particularly the ways they spent their leisure time. During the nineteenth century the structuring and design of the built environment was increasingly proposed as a means to influence behaviour, improve physical health and morality. Particularly important to that development were the new public spaces such as parks, museums, and galleries, their forms becoming understood as instruments of reform that targeted and modified external behaviour and internal sentiments.

That notion of affective form was extended into the sphere of housing improvement. Thus, as well as in the public realm, the goals of moral and physical reform were envisaged as taking place at the centre of daily life. Through the clearance of slums and the establishment of model workers' housing, the domestic realm was restructured to not only improve sanitary conditions but also govern family relations. The creation of clean, open streets and houses with individual gardens was deemed important in encouraging the development of moral sentiments such as domestic pride. The subdivision and allocation of the internal space of the home particularly, provided a framework for moral and social improvement - encouraging the individual and family to govern their forms of cohabitation and sociability.

Through this chapter's account of the emergence of affective form – and a developing importance in the forming of the built environment - it is presented as a means to examine the social implications of urban design. The following chapter will address the extension of the model of affective form developed in the eighteenth and nineteenth century into the production of model communities. The focus of that account is the way in which the Garden City ideal, within its

manifestation in the garden suburb and transference to Perth, was conceived as an exemplary urban environment – capable of structuring health and morality.

Notes

¹ Michel Foucault, *Discipline and Punish: The Birth of the Prison* (tr. Alan Sheridan), Penguin, London, 1991 (first published 1975), p. 172.

² J.B. Bury, *The Idea of Progress: An Inquiry into its Origin and Growth*, Macmillan and Co. Limited, London, 1924, pp. 2-5.

³ See David Spadafora's discussion of the literature on the idea of Progress in David Spadafora, *The Idea of Progress in Eighteenth Century Britain*, Yale University Press, New Haven, 1990, pp. 2-6 and W. Warren Wagar's survey in W. Warren Wagar, "Modern Views of the Idea of Progress", *Journal of the History of Ideas*, vol. 28, January/March, 1967, pp. 55-70.

⁴ Wagar, "Modern Views of the Idea of Progress", p. 60.

⁵ Spadafora, *The Idea of Progress in Eighteenth Century Britain*, p. 8.

⁶ Spadafora, *The Idea of Progress in Eighteenth Century Britain*, p. 8.

⁷ Spadafora, *The Idea of Progress in Eighteenth Century Britain*, p. 6

⁸ Spadafora, *The Idea of Progress in Eighteenth Century Britain*, p. 7

⁹ Robert Nisbet, *History of the Idea of Progress*. Basic Books, New York, 1980, p. 173.

¹⁰ However, it is important to note that this secularisation was not a complete shift, Providence and faith still played an important role. The distance that separated the naturalistic world-view of the eighteenth century Enlightenment from the more modern denial of any objective value was much greater than the break between the demythologised world of the Enlightenment and the religious paradigm of a prescientific age. The import for architecture can be seen in the development of the reform gaols where the scientific, rational design of affective form often worked to promote the prisoner's reflection on the state of his/her soul and their relation to God.

¹¹ John Stanley, introduction to Georges Sorel, *The Illusions of Progress* (tr. John and Charlotte Stanley), University of California Press, Los Angeles, 1969, pp. xv-xvi.

¹² The following discussion of the discourse surrounding the notion of the perfectibility of humankind is drawn largely from Spadafora, *The Idea of Progress in Eighteenth Century Britain*, John Passmore, *The Perfectibility of Man*, Duckworth, London, 1970.; Maurice Mandelbaum, *History, Man, and Reason: A Study in Nineteenth-Century Thought*, John

Hopkins Press, Baltimore, 1971; and John Passmore, "The Malleability of Man in Eighteenth Century Thought" in Wasserman (ed), *Aspects of the Eighteenth Century*, JohnHopkins Press, Baltimore, 1965.

¹³ Plato's vision of the form of the good, or Plotinus' union with the One, for example Passmore, *The Perfectibility of Man*, p. 157.

¹⁴ Passmore, *The Perfectibility of Man*, pp. 156-158.

¹⁵ David Hume, *An Enquiry Concerning the Principles of Morals*. (Microform) Printed for A. Millar, 1751, section II, pt. 1.

¹⁶ See discussions on the impact of coffee-houses, clubs and societies in Dorinda Outram, *The Enlightenment*, Cambridge University Press, Cambridge, 1995, Chapter 2; Thomas Kelly, *A History of Adult Education in Great Britain*, Liverpool University Press, Liverpool, 1970, Chapter 6.

¹⁷ Joseph Addison, *The Spectator*, no. 568, 16 July 1714, reprinted in Joseph Addison, Richard Steele and others, *The Spectator*, Everyman Edition, vol. 4, J.M. Dent, London, 1907, p. 287.

¹⁸ Cited in Passmore, *The Perfectibility of Man*, p. 157.

¹⁹ Michel Foucault, *Madness and Civilization: A history of insanity in the Age of Reason*, (tr. Richard Howard, first published 1965) Vintage Books, New York, 1973. p. 257.

²⁰ Cited in Passmore, *The Perfectibility of Man*, p. 158.

²¹ Robert Owen, *The Book of the New Moral World*, (microform), E. Wilson, London, 1836, p. iv.

²² Owen's model communities will be discussed in Chapter 2.

²³ John Locke, *An Essay Concerning Human Understanding* (1690) cited in Passmore, *The Perfectibility of Man*, p. 138.

²⁴ Passmore, *The Perfectibility of Man*, p. 163.

²⁵ See Abraham Tucker, *The Light of Nature Pursued*; William Paley, *Principles of Moral and Political Philosophy*; and John Gay, *Preliminary Dissertation* in J Crimmins (ed) *Utilitarians and Religion*, Thoemmes Press, Bristol, 1998.

²⁶ David Hartley, *Observations on Man, His Frame, His Duty, and His Expectations* (first published in 1749), Garland Publishing, New York, 1971.

²⁷ Hartley, *Observations on Man*, p. 81.

²⁸ Hartley, *Observations on Man*.

²⁹ Archibald Alison, *Essays on the Nature and Principles of Taste*, Georg Olms Verlagbuchhandlung, Hildesheim, 1968, p. 129.

³⁰ Joseph Rykwert, *The First Moderns*, The MIT Press, Cambridge, 1980, p. 415; for further discussion of this aesthetic shift see also, J. Mordaunt Crook, *The Dilemma of Style: Architectural Ideas from the Picturesque to the Post-Modern*, John Murray, London, 1987, especially Chapter 1.

³¹ Wallace Jackson, "Affective Values in Later Eighteenth-Century Aesthetics," *Journal of Aesthetics and Art Criticism*, vol. XXVII, no. 1, Fall 1968, pp. 87-92.

³² John Dixon Hunt & Peter Willis (eds), *The Genius of the Place: The English Landscape Garden 1620-1820*, Paul Elek, London, 1979.

³³ Sometimes they went beyond this. Hubert Robert, a pre-Revolution French landscape painter, was commissioned to paint picturesque 'scenes' which were used as the basis for actual garden designs. See: Dora Wiebenson, *The Picturesque Garden in France*, Princeton, Princeton University Press, 1978).

³⁴ Extract from John Evelyn's diaries quoted in Hunt & Willis, *The Genius of the Place*, p. 58.

³⁵ *The Spectator*, No.417, 28 June 1712, in Hunt & Willis, *The Genius of the Place*, p143.

³⁶ Sir Uvedale Price, *An Essay on the Picturesque*, 1794. Richard Payne Knight, *The Landscape* (1794) and *An Analytic Inquiry into the Principles of taste* (1805).

³⁷ John Dixon Hunt, *Gardens and the Picturesque: Studies in the History of Landscape Architecture*, Cambridge, The MIT Press, 1992, pp.75-102.

³⁸ John Archer, "Character in English Architectural Design", *Eighteenth Century Studies*, v.12, Spring 1979.

³⁹ "express the diverse characters of the different forms of Architecture, retracing for the eyes of the spectator, even in the smallest details, the motif that gave rise to the erection of the edifice; as much as in an historical painting or in a bas-relief, the Painter and the Sculptor, in the appearances of their figures, indicate, by the expression of each one, the image of the sentiments that typify the characters represented on the canvas, or by the marble." (My translation). Blondel quoted in Archer, "Character in English Architectural Design", p. 345.

⁴⁰ Archer, "Character in English Architectural Design", p. 347.

⁴¹ Certainly the forms and characteristics of the French garden were dominant in England at the end of the seventeenth century. Reciprocal influence continued into the eighteenth century as the English landscape garden movement became internationally influential. See Hunt & Willis, *The Genius of the Place*, "introduction."

⁴² Thomas Rawlins, "Familiar Architecture" quoted in John Archer, *The Literature of British Domestic Architecture 1715-1842*, The MIT Press, Cambridge, 1995, p. 49.

⁴³ Thomas Whately, *Observations on Modern Gardening*, (first published in 1770) Garland Publishing, New York, 1982, p. 154.

⁴⁴ Whately, *Observations on Modern Gardening*, p. 132.

⁴⁵ Obviously this discourse involved a number of other figures; Alison and Loudon represent perhaps the most explicit early considerations of the concept of association within Britain. A more detailed discussion is carried out in George L. Hersey, *High Victorian Gothic: A Study in Associationism*, John Hopkins Press, London, 1972. Even earlier than these two figures were a number of French architectural theorists, including Blondel and Ledoux, who identified and advocated forms of an architectural physiognomy. However, Hersey notes that these architects tended to focus on the notion of "poetic feedback"; written interpretation that guided the perception of a building. This aspect is covered slightly more extensively in: George Hersey, "Associationism and Sensibility in Eighteenth Century Architecture", *Eighteenth Century Studies*, vol. 4, 1970. pp. 71-97.

⁴⁶ Hersey, *High Victorian Gothic: A Study in Associationism*, p. 10.

⁴⁷ On the relationship between Alison's ideas and those of Knight, see: Andrew Ballantyne, *Architecture, landscape and liberty: Richard Payne Knight and the picturesque*, Cambridge, Cambridge University Press, 1997.

⁴⁸ Alison, *Essays on the Nature and Principles of Taste*, pp. 2-3.

⁴⁹ Richard Payne Knight, *An Analytic Inquiry into the Principles of taste* (1805), quoted in Hunt & Willis, *The Genius of the Place*, p349.

⁵⁰ There was dissension between Knight and Price as to the extent to which a landscape might be intrinsically picturesque versus an understanding of the category as describing a manner of aesthetic appreciation and perception. See: Ballantyne, *Architecture*,

landscape and liberty: Richard Payne Knight and the picturesque, pp.203-205.

⁵¹ Richard Payne Knight, *An Analytic Inquiry into the Principles of taste* (1805), quoted in Hunt & Willis, *The Genius of the Place*, p348.

⁵² Richard Payne Knight, *An Analytic Inquiry into the Principles of taste* (1805), quoted in Hunt & Willis, *The Genius of the Place*, p348.

⁵³ John C. Loudon, *Encyclopedia of Cottage, Farm and Villa Architecture*, Frederick Warne & Co., London, 1869.

⁵⁴ Loudon, *Encyclopedia of Cottage, Farm and Villa Architecture*, p.1113.

⁵⁵ Loudon, *Encyclopedia of Cottage, Farm and Villa Architecture*, p. 1114.

⁵⁶ Loudon, *Encyclopedia of Cottage, Farm and Villa Architecture*.

⁵⁷ Loudon, *Encyclopedia of Cottage, Farm and Villa Architecture*.

⁵⁸ John Archer, *The Literature of British Domestic Architecture, 1715 – 1842*, The MIT Press, Cambridge, 1995.

⁵⁹ Archer, *The Literature of British Domestic Architecture*, p. 56.

⁶⁰ Manfredo Tafuri, *Architecture and Utopia: Design and Capitalist Development*, The MIT Press, Cambridge, 1976, p. 11.

⁶¹ Loudon, *Encyclopedia of Cottage, Farm and Villa Architecture*, cited in Archer, *The Literature of British Domestic Architecture, 1715 – 1842*.

⁶² Jules Lubbock, *The Tyranny of Taste: The Politics of Architecture and Design in Britain 1550-1960*, (Published for the Paul Mellon Centre for British Art) Yale University Press, New Haven, 1995, pp. 248-252.

⁶³ Benjamin Robert Haydon, quoted from an address to the British Prime Minister arguing for art schools to be established, in Lubbock, *The Tyranny of Taste*, p. 250.

⁶⁴ Lubbock, *The Tyranny of Taste*, p. 256.

⁶⁵ F.J. Prouting, *A Mild Remonstrance against the Taste Censorship at Marlborough House* (1853), quoted in Lubbock, *The Tyranny of Taste*, p. 276.

⁶⁶ Lubbock, *The Tyranny of Taste*, p. 276.

⁶⁷ Whilst the institutional environments discussed in this section are referred to as reformatory (and were intended as such), the techniques developed were often applied

directly to buildings/institutions designed to influence the initial formation of an individual's character (such as the school and poor housing). This point will be expanded later in this thesis.

⁶⁸ The key texts I have utilised in surveying the period are: Georg Rusche & Otto Kirchheimer, *Punishment and Social Structure* (first published in 1939), Russell & Russell, New York, 1968; Dario Melossi & Massimo Pavarini, *The Prison and the Factory: Origins of the Penitentiary System*, The MacMillan Press Ltd, London, 1981; Michael Ignatieff, *A Just Measure of Pain: The Penitentiary in the Industrial Revolution 1750-1850*, Penguin Books, London, 1978; David J Rothman, *The Discovery of the Asylum: Social Order and Disorder in the New Republic*, Little, Brown & Company, Toronto, 1971; Michel Foucault, *Discipline and Punish: The Birth of the Prison*. (tr. Alan Sheridan, first published 1975) Penguin, London, 1991; and Robin Evans, *The Fabrication of Virtue: English prison architecture 1750-1840*, Cambridge University Press, New York, 1982. The work of these authors is critical in shifting the history of the institution, and especially the prison. This movement is away from a model based on an essential benevolent intent toward one that recognises the ambivalence of the institutions; the development of these total environments had little, directly, to do with modulating kindness or severity.

⁶⁹ This way of terming the concept is discussed in Spadafora, *The Idea of Progress in Eighteenth Century Britain*, p. 134-5.

⁷⁰ Howard's first conception of penitentiary discipline is discussed in Ignatieff, *A Just Measure of Pain*, p. 11; See also Evans, *The Fabrication of Virtue* and Rothman, *The Discovery of the Asylum*.

⁷¹ Evans, *The Fabrication of Virtue*, pp. 12-13.

⁷² Geffray Mynshull (Garffeg Luhnsynm) *Certain Characters and Essayes of Prison and Prisoners*, London, 1618 (no pagination) cited in Evans, *The Fabrication of Virtue*, p. 16.

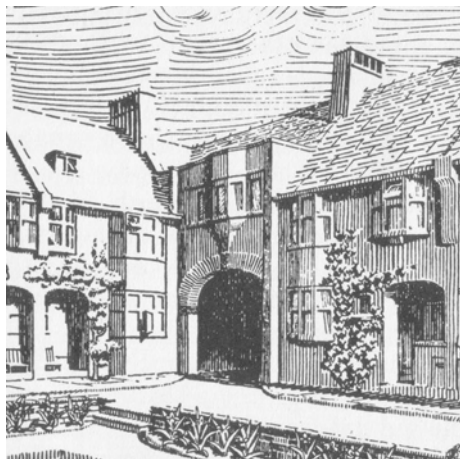
⁷³ It could even take the form of a boot on a string left dangling from an upper storey, or fettered prisoners being allowed to wander in the street with a bowl. Evans, *The Fabrication of Virtue*, p. 28.

⁷⁴ John Thomas Burt quoted in Heather Tomlinson, "The Nineteenth-Century English Prison" in Anthony D. King (ed), *Buildings and Society: Essays on the Social Development of the Built Environment*. Routledge & Kegan Paul, London, 1980, p. 98.

⁷⁵ Tomlinson, "The Nineteenth-Century English Prison", p. 99.

- ⁷⁶ Henry Mayhew & John Binny, *The Criminal Prisons of London and Scenes of Prison Life*, Frank Cass & Co. Ltd, London, 1968 (first published in 1868), pp. 116-117.
- ⁷⁷ "Prison Architecture", *Building News* (1857) quoted in Tomlinson, "The Nineteenth-Century English Prison", p. 112.
- ⁷⁸ See Ignatieff, *A Just Measure of Pain*, especially Chapter 3.
- ⁷⁹ This meant, essentially, the working and middle classes.
- ⁸⁰ Thomas Greenwood quoted in Tony Bennett, *The Birth of the Museum: History, Theory, Politics*, Routledge, London, 1995, p. 18.
- ⁸¹ Peter Bailey, *Leisure and Class in Victorian England: Rational Recreation and the Contest for Control, 1830-1885*, Routledge, Kegan & Paul, London, 1978, pp. 35-38.
- ⁸² House of Commons (Proceedings- 11), "First Report from the Select Committee on Metropolitan Improvements", 1838.
- ⁸³ Other "instructional" parks include: Victoria Park in London, first drawn up by James Pennethorne in 1841; The People's Park, laid out in Halifax by Joseph Paxton in 1857; Birkenhead park, laid out by Sir Joseph Paxton and opened in 1847.
- ⁸⁴ C. Goodall, *Illustrated Royal Handbook to Roundhay Park* (1872) quoted in H.L. Malchow, "Public Gardens and Social Action in Late Victorian London", *Victorian Studies* vol. 29, Autumn 1985, p. 102.
- ⁸⁵ *Second Report on the State of Large Towns and Populous Districts* (1845) quoted in Hazel Conway, *People's Parks: The Design and Development of Victorian Parks in Britain*, Cambridge University Press, Cambridge, 1991, p. 55.
- ⁸⁶ *Select Committee on Public Walks* (1833) quoted in Bailey, *Leisure and Class in Victorian England*, p. 41.
- ⁸⁷ Conway, *People's Parks*, p. 78.
- ⁸⁸ Susan Lasdun, *The English Park: Royal Private and Public*, Vendome Press, New York, 1992, pp. 139-145.
- ⁸⁹ Loudon quoted in Melanie Louise Simo, *Loudon and the Landscape: From Country Seat to Metropolis*, Yale University Press, New Haven, 1988, p. 255.
- ⁹⁰ Geoffrey Tyack, *Sir James Pennethorne and the Making of Victorian London*, Cambridge University Press, Cambridge, 1992, p. 47.
- ⁹¹ Tyack, *Sir James Pennethorne and the Making of Victorian London*, Chapters 2 and 3.
- ⁹² Although, as Tyack points out throughout his account, Pennethorne's plans often suffered through budgets cuts, cost over-runs and changes in government policy.
- ⁹³ Simo, *Loudon and the Landscape*, p. 227.
- ⁹⁴ J.C. Loudon, "Hints on Breathing Places for the Metropolis, and for Country Towns and Villages, on Fixed Principles," *Gardener's Magazine*, 1829.
- ⁹⁵ J.C. Loudon, "Hints on Breathing Places for the Metropolis, and for Country Towns and Villages, on Fixed Principles," 1829.
- ⁹⁶ S. Martin Gaskell, "Gardens for the Working Class: Victorian Practical Pleasure", *Victorian Studies*, vol. 23, Summer 1980, pp. 491-495.
- ⁹⁷ Robin Evans, *Translations from Drawing to Building and Other Essays*, The MIT Press, Cambridge, 1997, p. 95.
- ⁹⁸ Evans, *Translations from Drawing to Building and Other Essays*, p. 99-101.
- ⁹⁹ *The Builder*, 28 October 1848, pp.523-524, reproduced in David Rubinstein, *Victorian Homes*, David & Charles, Vermont, 1974, pp. 247-248.
- ¹⁰⁰ Report of the Select Committee on Metropolitan Improvements PP 18366, 20 [517], p. 8, cited in Tyack, *Sir James Pennethorne and the Making of Victorian London*, p. 46.
- ¹⁰¹ Hansard, 49 (17 July 1839), 726-7, cited in Tyack, *Sir James Pennethorne and the Making of Victorian London*, p. 52.
- ¹⁰² The work of Charles Booth in compiling his 1889 *Descriptive Map of London Poverty*, which colour-coded streets to reflect the levels of poverty and degradation, emphasises the concern with these issues.
- ¹⁰³ Evans, *Translations from Drawing to Building and Other Essays*, pp. 107-110. My discussion of Henry Robert's model housing block relies heavily on Evans' analysis.
- ¹⁰⁴ A more detailed physical description of the houses is found in S. Martin Gaskell. *Model Housing: From the Great Exhibition to the Festival of Britain*, Mansell Publishing Ltd, London, 1987, pp. 19-24.
- ¹⁰⁵ Evans, *Translations from Drawing to Building and Other Essays*, pp. 109-110.
- ¹⁰⁶ James Silk Buckingham, *National Evils and Practical Remedies, with the Plan of a Model*

*Town: Accompanied by an Examination of
Some Important Moral and Political Problems,*
(microform) P. Jackson, late Fisher, London,
1849, pp. 224-225.



Form and Reform

Chapter Two

*Home is the congenial soil of the purest affections of the noblest virtues of the heart.*¹

As Robin Evans has suggested, the legacy of British nineteenth century housing reform is extensive:

[T]wentieth-century housing is in some measure the relic of an entirely successful campaign to liquidate the rookery den ... what we refer to now as decent homes have their origin in the indecencies to be found there.²

This chapter presents a partial examination of that legacy through the tracing of the idea of affective form in certain model residential environments, in its development from the eighteenth to twentieth century and from Britain to Australia.

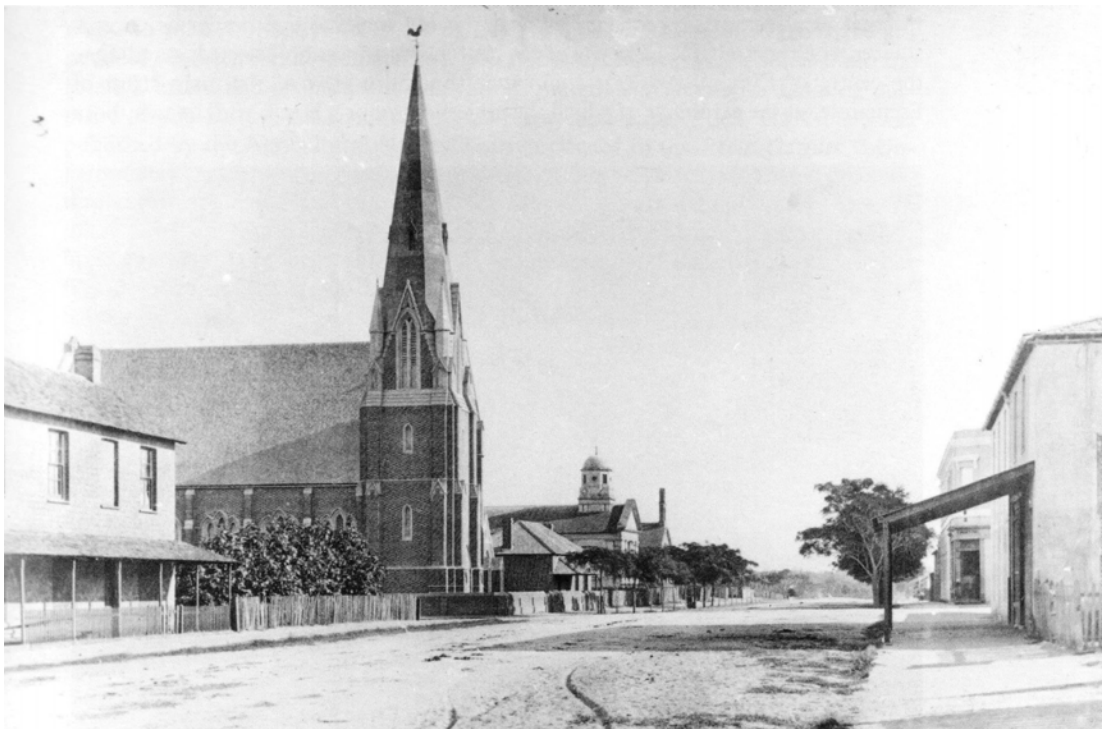
Building on the concept of affective form introduced in Chapter One, this chapter will begin by examining other manifestations of the concept in projects and writings ranging from the eighteenth to twentieth century. The survey will briefly relate different ways that the understanding of form as affective was applied in Britain

over that period as a prelude and context to the more detailed discussion of affective form in the garden suburb concept, and its translation to Perth at the beginning of the twentieth century.

The discussion of the garden suburb's introduction to Perth forms the second half of this chapter, charting the "Garden City" and "Garden Suburb" concepts as they were translated within the City of Perth Endowment Lands Project. The discussion focuses on the expression of the notion of affective form during that translation, and its importance in providing justification for the establishment of local town planning institutions that would significantly impact on Perth's future residential environment.

At the close of the nineteenth century Perth began to emerge as a city proper. This was evidenced not only by a significantly expanding population and economy but, also, and perhaps more critically, by evidence of a developing civic consciousness. The projects of a nascent town planning profession within Perth echoed efforts within the cities of the industrial revolution to reconcile the modes of relation formed by new economic and social conditions with the shifting notion of a common civic purpose and culture. The proclaimed influence of the garden suburb on the moral behaviour of a community was strongly linked with understandings of ideal citizens and an ideal city. The garden suburbs developed as part of the Endowment Lands were critical in the growth of Perth as a city as well as local conceptions of its urban image.

Although reform of the built environment (particularly housing) was still ostensibly centred on the regulation of the moral and physical health of the working classes, during the early twentieth century it was increasingly incorporated in other governance measures. The establishment of planning as a bureaucratic regime, and its concerns with economic efficiency and national productivity, impacted considerably on the formulation of affective form. Other shifts in socio-economic spheres such as consumption culture, domestic science, and familial relations, remade the suburban family home. Such changes



9

*Central Perth, c1880 – looking north along
William Street.*

contributed to the establishment of the garden suburb as an ideal residential environment in Perth and a critical component in the city's urban development. The intertwining of planning discourse, political process and social change in the emergence of that suburban ideal is a key concern of this chapter.

The processes of importing and remoulding the Garden City model to "fit" the context of Perth during the early twentieth century revealed and shaped certain local attitudes to the possibility of affective form. It also revealed particular objectives accompanying the use of a reformist urban language developed primarily in Britain in this new context. Consideration of this process and these objectives suggests a critical perspective that can be applied to the assessment of Perth's future urban growth. In this chapter the importance of the garden suburb, and its idealised form, are posited as crucial to the understanding of Perth's development and self-image as a city.

Model Communities

The model communities proposed in the eighteenth and nineteenth centuries provide good examples of the different ways in which affective form can be understood. The following section gives an overview of some of these projects in Britain, as well as the writings of theorists like William Morris and John Ruskin whose work related directly to the ideas contained in them. The projects and writings discussed have historical and theoretical consequences that stretch well beyond the particular frame within which I discuss them. However, this circumscribed overview is taken in order to focus on identifying the ways that different conceptions of affective form were embodied, and from which certain physical models and understandings of associated affects have derived.

Architects, reformers and philosophers of the eighteenth and nineteenth centuries were consistently engaged in thinking through issues arising from social transformations by imagining model communities and how they might provide for ideal relations between individuals. As the previous chapter showed, the proponents of reform during this period attempted the remodelling of much of the urban environment in the pursuit of improvement and progress: the penal and

medical institutions, educational system, recreational practices, streets and housing. These attempts to provide moral structure within the public and private realms found their ultimate expression in numerous model communities, especially during the nineteenth century. Here all aspects of urban life could be regulated and controlled, banishing the spaces of darkness and secrecy where vice might flourish.

Model communities during that period were often separated from the existing city as a prerequisite for their being the means of moral improvement. The *phalansteries* of Fourier (1772 - 1837), the model town of Victoria proposed by James Silk Buckingham (1786 - 1865), along with the small-scale model agrarian settlements proposed by a number of figures, most notably Robert Owen (1771 - 1858), all featured self-contained social systems that regulated and enveloped every aspect of daily life, including the production of goods, recreation, education and the practice of religion.

The previous chapter touched on the manner in which the social relations shaped by industrial capitalism in Britain over the course of the seventeenth and eighteenth centuries became more explicit in the nineteenth century as they came to be manifest in new urban improvements aimed at moral reform. The work of architects, landscape gardeners and social reformers throughout that time contributed to a new conception of the role of the built environment as it became integral to communal objectives, particularly the imposition of a moral order.

The notion of city form as a public, reformatory element developed during the eighteenth century when older, traditional definitions of society were displaced by a more distant and powerful entity called civil society. This view of the importance of form would continue to permeate proposals for model communities, parks and other urban projects as the continuing impact of the industrial revolution on cities accelerated dissatisfaction with their ability to provide a satisfactory living environment. Model communities often made the sources of that dissatisfaction more evident through the societal ills they claimed to address, and the alternate living environments they proposed.

The architectural manipulation of relations of space and vision was important to the ways in which such communities aspired to be morally self-regulating. As Anthony Vidler has shown, the history of these projects demonstrates a confluence of sources, techniques and aims: from James Silk Buckingham's raised promenades to the galleries of Fourier's *Phalanstery*.³ For Claude-Nicolas Ledoux, the production of relations of transparency was central. Most significantly in his designs for the salt-works at Chaux, the organisation of relations of either hierarchical or mutual visibility played a crucial role in the techniques by which architecture might help to shape and fashion human conduct.⁴

Regulation, surveillance and control were crucial to the establishment of moral, cultural and physical well being of the population in these communities. It is worth quoting, in full, the following passage from Buckingham that outlines the "practical remedies" characterising reform methods established at this time that were to feature in the model communities, and influenced their successive incarnation in the form of the modern housing estate. His sentiments were often repeated in the development of highly experimental and utopian schemes, but the overarching themes have resurfaced many times and continue to structure reformative projects. Writing in 1849, Buckingham stated that:

It is constantly contended that mankind are not to be improved by mere mechanical arrangements, and that their reformation must first begin within. But there is surely no reason why both should not be called into operation. A person who is well fed, well clad, cheerfully because agreeably occupied, living in a clean house, in an open and well ventilated Town, free from intemperate, dissolute, and vicious associations of our existing cities and villages- with ready access to Libraries, Lectures, Galleries of Art, Public Worship, with many objects of architectural beauty, fountains, statues, and colonnades, around him, instead of rags, filth, drunkenness, and prostitution, with blasphemous oaths or dissolute conversation defiling his ears, would at least be more likely to be accessible to moral sentiments, generous feelings, and religious and devout convictions and conduct, than in the teeming hives of iniquity, with which most of our large cities and towns abound. Inward regeneration will sometimes occur in spite of all these obstacles, and burst through every barrier, but these are exceptions, and not the rules; and the conduct pursued by all good parents towards their children, in keeping them away as much as possible from evil associations, and surrounding them by the best examples and incentives to virtue, is sufficient proof of the almost universal conviction, that the circumstances in which individuals are placed, and the kind of training and education they receive, have a great influence in the formation of their character, and materially assist at least the development of the noblest faculties of the mind and heart.⁵

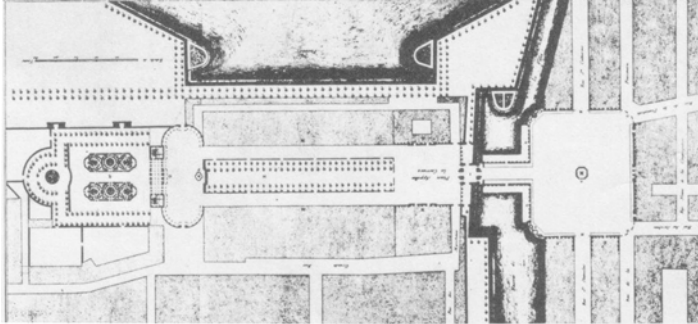
A lasting impact of such reformist thought was the evolution of satellite or peripheral development, as a balance, rather than complete reconstruction of the metropolis. The model communities, from which this creation of a middle landscape, between town and country, has derived, contain the most pronounced speculation on the potential for form to be affective. However, as well as continuities they also provide examples of the changes in the way that affective form has been conceptualised, the different forms of moral regulation they have been associated with, and distinct shifts in the means of governance.

Edinburgh - the New Town

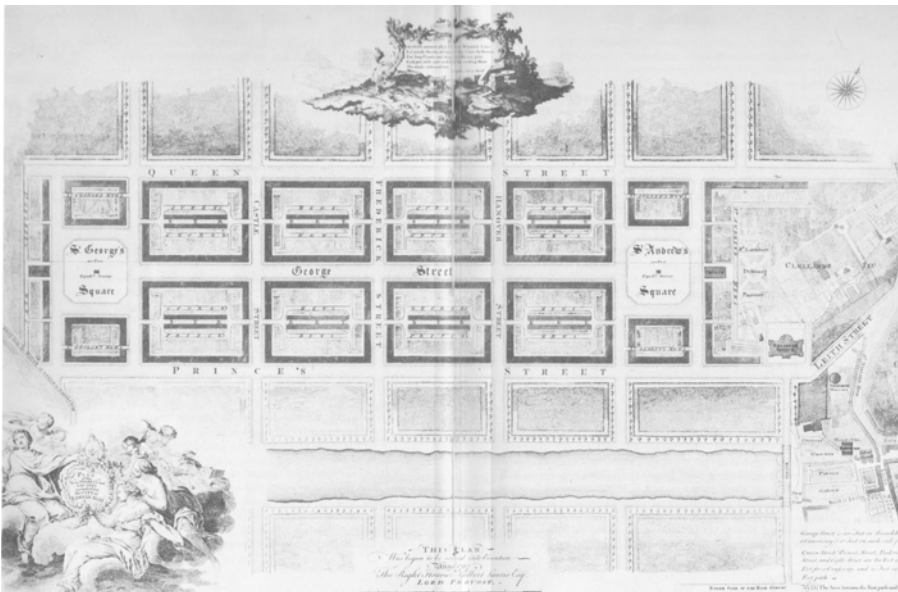
Edinburgh's eighteenth century New Town provides an early British example of the use of affective form in the practice of governance. Through the project an essentially residential, urban development was to embody social change and to nurture moral reformation through an affective architectural and urban configuration. It is also noteworthy as an application of affective form designed to inspire and foster emerging social formations amongst the upper classes in Edinburgh, in contrast to the nineteenth century projects that promoted affective form as a remedy to social ills among the working classes.

The New Town prefigures the model communities of the nineteenth century that more explicitly reject the city as a living environment. It represents an attempt to define an ideal urban residential environment that would respond to changes in societal relations, and one capable of producing citizens adapted to these changes. Primary among these changes was the emergence of civil society.

Under the aegis of the Enlightenment and its altered sensibilities about the self and its refinement, traditions and customs tied to a transcendental order, characterised by the divine right of Kings, were increasingly regarded with scepticism. Civil society emerged in this context as a mediating factor cast between the traditional state or political society and the newly autonomous individual.⁶ Rather than the subject of divine will, civil society was governed by the ideas of universal reason and the individual. The common virtues of commercial society came to represent



10
 Nancy – Héré de Corny's plan linking the place
 Stanislas to the Palais du Gouvernement, c1750.



11
 Edinburgh – James Craig's winning scheme for
 the New Town: "Plan of the new streets and
 squares intended for the City of Edinburgh, 1767."

ideal values for promoting the preservation of civic security and economic health. Notions of patience, fortitude, industry and cautious thought become dominant ethical paradigms. This incipient atomistic conception of individual existence led to the pursuit of a moral discourse focused on the contradictions between benevolence and self-interest.⁷ A recurrent concern was the need to articulate a vision of the individual that would uphold his or her autonomy but at the same time present a vision of a public sharing core ideals and beliefs. Urban institutions such as lecture forums, subscription libraries and discussion societies formed the outlets from which to articulate a new moral identity for the common person. The activities of these organisations were attuned to the developing culture of self improvement and the understanding of cultural progress highlighted in the previous chapter.

The intellectual work of the Scottish Enlightenment circumscribed the exigencies of this new society through the work of figures like Lord Kames (1696-1782) and Adam Ferguson (1723-1816). Enlightenment thought entailed a rational, critical self-conception aligned with an emerging capitalist economy and liberal constitutional state, conceived as developing whilst regulated by existing aristocratic social structures. Acceptance of the notion of civil society was tempered by desires to retain the social stability of existing regulatory institutions. The new modes of relation between the individual and wider society tended toward the reduction of traditional obligations and responsibilities, while an inward searching for a complicit order within the moral realm reflected the characteristics of specialisation and individualism in the realm of commerce. The classic image of civil society provided in Scotland during the eighteenth century was distinguished by this disengagement of the moral sense from a direct theological linkage.

A number of Scottish *literati* were concerned with the implications of this development for intellectual activity. The emerging distinction of public and private, and developing capitalist market relations, posed a new set of problems for the conception of social order. Ferguson wrote:

Under the *distinction* of callings, by which the members of polished society are separated from each other, every individual is supposed to possess his species of

talent, or his peculiar skill, in which others are confessedly ignorant; *and society is made to consist of parts, of which none is animated with the spirit of society itself.*⁸

Thus, the virtues of commercial life were seen to be problematic for the public domain as they would eventuate in a “society of strangers”.⁹ This distrust of what was seen as the ineluctable consequence of civil society and consumerism is manifested in the continued support of existing social structures: traditional values and social stability were paramount. Concerns about the negative consequences of the individual’s “rational self-interest” were reconciled through the assignation of moral attributes to the nature of human beings themselves, and their part in communal life. Ferguson, again, wrote:

[M]an is by nature, the member of a community; and when considered in this capacity the individual appears to be no longer made for himself. He must forego his happiness and his freedom, where these interfere with the good of common society ... He is only part of a whole ... and if the public good be the principle object with individuals, it is likewise true, that the happiness of individuals is the great end of civil society.¹⁰

Conceived amongst these social and economic conditions, the New Town of Edinburgh embodies an attempt to give appropriate form to the city, reflecting social changes, but it also represents a desire to mould the new societal structure through the influence of the built environment. In this way, despite obvious differences in the social intent of the scheme, the New Town can be considered a precursor to later British reform projects in its scale, its development of a new space of community external to the existing city, and careful control of planning and architectural form.

The development of the New Town had its precise origin in the document *Proposals for carrying on certain Public Works in the City of Edinburgh* (1752).¹¹ This pamphlet set out the reasons for extending the city as well as describing a plan for enacting these improvements. The congested nature of the Old Town, hygiene concerns and a desire for buildings to more appropriately house secular, commercial activities were the predominant motivations. The importance of the project for this discussion, however, is its synthesis of the social concerns of the Scottish Enlightenment within

the framework of a planned city form. The improvement of Edinburgh and its people was seen as the inevitable result of this physical urban intervention.

The New Town was an outlet for capital investment; it not only responded to a need for city expansion but anticipated further growth. It was also bound up with hopes for economic and cultural progress, issues that had gained greater importance since Scotland's union with England in 1707. The independent identity of Scotland and Edinburgh, Edinburgh's role as capital, the wealth and condition of its people - all were to be expressed through the improving work of the New Town. The author of the proposals (generally believed to be Sir Gilbert Elliott of Minto) claimed that:

Among the several causes to which the prosperity of a nation may be ascribed, the situation, conveniency, and beauty of its capital, are surely not the least considerable. A capital where these circumstances happen fortunately to concur, should naturally become the centre of trade and commerce, of learning and the arts, of politeness, and of refinement of every kind. No sooner will the advantages which these necessarily produce, be felt and experienced in the chief city, then they will diffuse themselves through the nation, and universally promote the same spirit of industry and improvement ... The little detail of an established commerce, may ingross the attention of the merchant: but it is in the prosecution of greater objects, that the leading men of a country ought to exert their power and influence. And what greater object can be presented to their view, than that of enlarging, beautifying and improving the capital of their native country? What can redound more to their honour? What prove more beneficial to SCOTLAND, and by consequence to UNITED BRITAIN?¹²

Progress for Edinburgh, and Scotland, would flow from the creation of open, regular streets with light and air, the correct zoning and location of activities, and the introduction of new public amenities and institutions associated with civil society. The *Scots Magazine* urged on such improvements, claiming that "The certain consequence is general wealth and prosperity: the number of useful people will improve, rents will rise and public revenue will improve; and, in room of sloth and poverty, will succeed industry and opulence."¹³

The other aspect that makes Edinburgh an important example of early reformatory urban development is the extent to which the plans were realised. Over the subsequent eighty years, works envisaged by the *Proposals* were carried out: bridges were built, roads improved, the city enlarged and public buildings appropriate to the new order were built.

The architect James Craig won the competition to design the plan of the New Town and his scheme would subsequently receive both compliment and derision.¹⁴ The stark, regular geometry of Craig's plan drew praise for its conformity and rationality whilst it was criticised for its lack of invention and poverty of detail. More recently, in *The Making of Classical Edinburgh*, Youngson witheringly described the plan as "entirely sensible, and almost painfully orthodox."¹⁵ This orthodoxy, which seems to suggest to Youngson a paucity of inspiration, was one of the strengths of Craig's plan as its formal, regular and spacious development gave physical expression to the 'Age of Reason' expressed in Enlightenment thought.

The New Town embodied a sense of the shifting nature of the city as a primarily feudal and mercantile society, synthesizing the new social and economic relations of an emerging capitalist, commercial society. According to Youngson's appraisal of the plan, the works in Edinburgh are comparable in scale and timing to the improvements at Nancy laid out by Emmanuel Héré de Corny and built in the 1750's. Youngson's analysis points out the architectural inadequacies of Craig's plan in comparison to the project at Nancy, which linked the Place Stanislas with the Palais du Gouvernement. The latter design juxtaposed the two open spaces, joining them by a triumphal arch and the tree lined promenade of the Place de Carrière. The ornate monumental Rococo fountains, the variety in the buildings and their intricately crafted charm cause Youngson to speculate that "One feels that it was built, like the Place Stanislas, to set off to advantage the elegant clothes and the courtly manners of the eighteenth century."¹⁶ Lacking such opulence and articulation the Edinburgh New Town's more utilitarian layout is deemed somewhat inferior.

However, in its focus on stylistic concerns, Youngson's comparison belies the power of James Craig's plan for the New Town as a stimulus to the formation of new social relations. The two projects are formed by different social and economic criteria, the French project was commissioned by the Duke of Lorraine in order to create a ceremonial link whilst in Edinburgh a collaboration between local government and commercial investors opened up a site for property speculation. The heroic and

ornamental work at Nancy joins two existing ceremonial spaces in a processional show of power and imperial prestige, whereas the New Town is the creation of a new type of settlement; structured around the ordered, segregated consumption of space by an emergent commercial class.

The plan for the New Town combined the processes of improvement and civilisation. The gridded formation of the plan was articulated to provide laneways separating the principal residences, “for persons of rank and a certain fortune,” and the secondary houses of successful tradesmen.¹⁷ Its water supply and sewerage were the most advanced available at the time and included an underground storm-water system. These physical urban reform measures were laid out in a rigid, gridded plan that recalled the plans of Roman cities and camps. This reference reinforced the civilising process being carried out through its leaning upon the lessons of antiquity and the authority given to Roman achievement.¹⁸ The rationality of the New Town’s layout and architecture, and the distribution within it of the institutions of an emerging civil society, were intended to provide affluent residents of Edinburgh an environment to inspire intellectual and economic progress.

Edinburgh’s New Town gives physical expression, not to the binding power of state or crown, but to the industry and fortitude of the new civil society, a community who wished to express their autonomy. It was felt that Edinburgh should set the first example of the new values of “industry and improvement”¹⁹ and in the *Proposals* the author continues with a call for monuments to the new civic virtues:

[An] Exchange for our merchants; ... safe repository for our public and private records;...place of meeting for our magistrates and town council; ... for the convention of our burgh, which is trusted with the inspection of trade.²⁰

The austere rationality of Craig’s plan, with its subjugation of the natural site contours by a rigid symmetry, restrained Georgian architecture, enclosed gardens, emphasis on residential development and few public buildings, thus related to the emergent socio-political structure. A combination of landed, mercantile and finance

capital, in combination with local government, created a largely residential development that was essentially a speculative gesture. Craig provided the plan for the town but the buildings were designed by others, while the design of those buildings was controlled by strict guidelines. In this way, its formal, regular planning gave physical expression to the ideals of the Enlightenment. Its communal civic buildings and public spaces supported the binding social norms being expressed, while its economic structuring of commercial land development gave scope to the notion of the autonomous and unrestrained liberty of the individual.

However, the unified, planned design would come into conflict with that developing notion of individual liberty for property owners. Craig's eastern square could not be sited where it was originally intended because the area could not be acquired and, perhaps more significantly, the site for a church fronting onto the eastern square was lost to the mansion of Sir Laurence Dundas. Thus the attempt to provide a stable, physical manifestation of the nascent civil society of market capitalism through the careful siting of its social institutions (such as the church) was subverted and distorted from the outset: by its own precepts. The Enlightenment search for communal values residing in the innate qualities of the individual became problematic as that innateness was increasingly doubted, replaced by neutral bonds of contract. Similarly, in constructing the New Town, the attempt to induce the ideal community relations of civil society was undermined by the increasing impact of "neutral" market forces.

The role of the New Town in providing a civilising setting for Edinburgh's growing population of affluent classes, and a physical representation of the ideas of progress, prosperity and order influential at that time, provides a good example of the early conception of affective form in the urban realm as well as the often problematic nature of its application. Craig's plan set out an environment in which the rational accommodation of Edinburgh's growing population could take place. In the New Town the professional and aristocratic classes could conduct themselves in a manner they associated with the cultivated squares of London and moral norms would be established through that self expression.

The conflict between the functioning of the New Town as a site for autonomous investment and its social objectives is described above in the case of Sir Laurence Dundas' home. The situation exemplifies the gap between the formulation of programs of urban governance and the manner in which they play out on the ground. Affective architectural and planning forms that are promoted for the common good and to improve future living conditions have often been less than successful in their implementation. This disjunction between intent and effect is a consistent feature in such promotion of affective form and a continuing theme within this thesis.

As a viable housing scheme to provide accommodation for Edinburgh's wealthier inhabitants the New Town left the population of the "lower orders," and most social and economic activity, in the congested Old Town. Although there are similarities between the precedent of the New Town and later projects in terms of sharing the conception of architecture's affective capacities, reform projects established in the nineteenth century were more often directed toward the pressing question of housing the working classes and improving their character as a social stratum. Urban form as a tool for social improvement was much more explicit in the model communities proposed to address the problems, and opportunities, of the industrial revolution.

The New Town saw a program of affective form applied to inspire Edinburgh's uppermost social stratum and advance the city as a preeminent capital in united Britain, capable of rivalling London in its social and intellectual life. It laid out a new space where the morality and institutions of the newly envisaged civil society might develop freely. The following projects in this brief survey of affective form concentrate more frequently on the uses of affective form as a governmental practice that restricts and redirects the conduct of populations. Rather than the knowing appreciation of the ideas being expressed and exalted in the New Town, expected of the upper classes that would reside there, the later projects for housing and reforming workers were imagined in a more didactic mode. Generally responding to the social problems associated with the industrial revolution, the governance of

space and social relations is seen applied extensively to the moral reformation of the working classes.

New Lanark and the Parallelogram

Were we required to characterize this age of ours by any single epithet, we should be tempted to call it, not an Heroical, Devotional, Philosophical, or Moral Age, but, above all others, the Mechanical Age. It is the Age of Machinery, in every outward and inward sense of that word ... Nothing is now done directly, or by hand; all is by rule and calculated contrivance.²¹

Thus wrote Thomas Carlyle in his essay *Sign of the Times* (1829). Socio-economic processes in the early nineteenth century wrought critical transformations in Britain's urban environment, particularly its cities, including institutional changes, the application of scientific progress to the technology of production, and a combination of economic and demographic growth. The first to term this process industrialism, Carlyle attempted to describe its social implications in his essay. He asserted that the mechanical or logical *external* persuasions of industrialism were coming to regulate the *internal* notions such as virtue and morality. The essential ambition within Carlyle's thought was a synthesis of these dominant, modern modes of relation with a more traditional conception of morality. This notion placed the "imperishable dignity of man" above a "faith in mechanism". It revealed a profound belief in the primacy of a moral force guiding human actions.

The work of Robert Owen as a social reformer can be seen as an attempt to harness such ideas of mechanicism in the process of moral reform. Building on his work as an educational reformer, Owen was concerned with the understanding of the individual as the basic building block of society.²² His understanding of human nature was that it was infinitely malleable, and he believed that an individual's character is formed by education, environment and upbringing, leaving little room for the operation of free will in the development of moral character. His envisioning of model communities for the labouring poor used the supposed regulating powers of affective form to shape their inhabitants' conduct and sentiments. The manner in which his programs for moral reform were outlined will now be discussed as a further exploration of the varying expressions and understandings of affective form.

Owen's reforms at the New Lanark Mill and especially his vision for model communities were a mixture of latent socialist theory, the language of traditional, paternalistic forms of patronage, and knowledge of the logistics of industrial production. His designs for model co-operative communities are significant for their attempt to physically define ideal societal relations and to merge architectural operations with the processes of industrial economy. The experimental measures he instigated at the mill provided inspiration for the later outlining of utopian settlements.

One of the pre-eminent young executives of the industrial revolution, Owen took over the management of the New Lanark cotton mill in 1800. At New Lanark Owen was faced with conditions typically found in factories at that time: squalid living conditions, high levels of crime, low education levels and widespread child labour. The techniques he used to improve the production of the mill were a combination of social reform and the encouragement of industrial efficiency, aided by the restructuring of its physical environment.

Owen placed his home in the heart of the mill's community as a means of demonstrating and inculcating proper conduct through his own example, as well as instituting a number of reforms to the practice of daily life at the mill. Changes included the encouragement of tolerance between religious denominations, discouraging of the consumption of alcohol, and an emphasis was placed on the education of children; their use as labour was discontinued (until at least 12 years old). During the application of these changes attention was also paid to the physical environment and improvements were made to the houses of the labourers as well as the streets of the village. Owen wrote:

This Institution, when all its parts shall be completed, is intended to produce permanently beneficial effects: and, instead of longer applying temporary expedients for correcting some of your most prominent external habits, to effect a complete and thorough improvement in the *internal* as well as the *external* character of the whole village.²³

The consequence of the New Lanark experiment was a conviction that environment and character were interdependent in that the built form of the village could help

bring about the moral improvement of its inhabitants. An Institute for the Formation of Character was even established at New Lanark to explore Owen's ideas of psychological determinism. The relationship he made between environment and moral improvement was explained in his work *A New View of Society; or, Essays on the principle of the formation of Human Character, and the Application of the Principle to Practice*.²⁴ The envisaged role of the built environment was as a didactic tool in prompting and reinforcing correct social relations and moral behaviour.

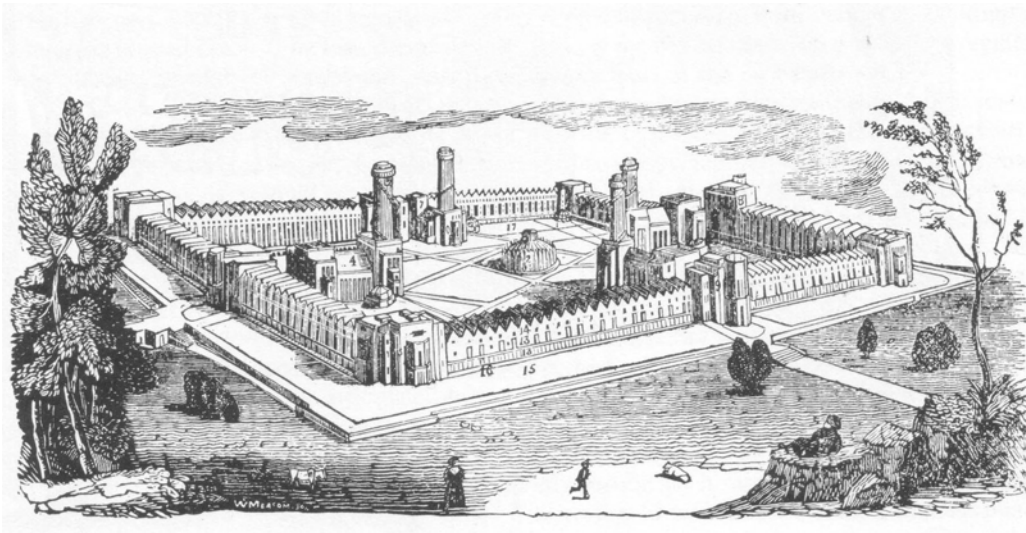
The application of this idea was not seen as merely palliative to existing problems but also as forming the structure of a new society whereby its physical environment was integral to its social objectives. Owen was keen to employ the built environment as a mechanism in the moral improvement of people, envisaging model towns or villages as devices that could be contrived to educate and influence better standards. In his attempts to discover the "true cause of bodily and mental character" (and, from this, methods for its improvement), the context of the industrial city was conceived as wholly unsuitable.²⁵ For the production of the ideal citizen the community would have to be located away from the moral laxities and distracting evils of the city. Owen's ideas about the structuring of model communities to effect moral reform on their inhabitants were founded on his confidence in the power of rational explication and demonstration. His programs for educating and inculcating workers in correct behaviours and sentiments were reinforced by a similarly didactic arrangement of the physical environment, elements like the home, workplace, gardens, schoolhouse, library and church.

Plans for model communities were produced by Owen as he attempted to disseminate his methods of reform and social organization. These efforts included a submission to the Committee for the Relief of the Manufacturing Poor in 1817. This plan envisaged a series of independent communities of a predetermined, static size (around 1000 inhabitants), where the poor could be educated, trained and involved in "healthy and productive" work.²⁶ Although similar to the New Town in Edinburgh, in that the new community was to be established separately to the existing urban condition, Owen's communities involved a very different population

and a different conception of affective form. In Edinburgh it was wealthy landowners and an emerging bourgeoisie who wished to relocate from the congested Old Town, and the New Town was to provide an inspirational and liberating urban environment aligned with the emerging intellectual formations of civil society. Owen, however, wished to remove Britain's urban poor from the corrupting influence of the industrial city and subject them to an environment that would form a pedagogic realm of moral instruction.

Change could only be effected by removing the inhabitants from the degenerative conditions of the industrial city, where "courts, alleys, lanes, and streets create many unnecessary inconveniences, are injurious to health, and destructive to almost all the natural comforts of human life".²⁷ Ideally, this meant relocating them to a community based on Owen's "Parallelogram", a plan endowed with redemptive arrangements "which, being congenial to the natural constitution of man and the well-being of society, cannot fail to produce that amelioration in their condition which all classes have so great an interest in promoting."²⁸ The planning and architectural logic of the reform institutions was applied in an attempt to create a new, didactic living environment for the 'needy.'

Resembling a monastic precinct, Owen's Parallelogram applied the power of enlightened science to a medieval building form fusing the space of community



12
*Robert Owen – View of a Harmonious
Community, 1832.*

with an Enlightenment machine for the production of a productive, harmonious settlement:

The four sides of this figure may be adapted to contain all the private apartments or sleeping and sitting rooms for the adult part of the population; general sleeping apartments for the children while under tuition; store-rooms, or warehouses in which to deposit various products; an inn, or house for the accommodation of strangers; an infirmary; &c., &c.

In a line across the centre of the parallelogram, leaving free space for air and light and easy communication, might be erected the church, or places for worship; the schools; kitchen and apartments for eating; all in the most convenient situation for the whole population, and under the best possible superintendence, without trouble, expense, or inconvenience to any party ... The parallelogram being found to be the best form in which to dispose the dwelling and chief domestic arrangements for the proposed associations of cultivators.²⁹

This plan was later elaborated in the newspaper edited by Owen and his son, *The Crisis* (1832-1834), and in Owen's 1841 proposal for "self-supporting home colonies."³⁰ The Parallelogram was described as "calculated to afford the inmates the advantages at once of a society and retirement, of town and a country residence."³¹ The general layout and principles remained constant as the concept developed, although the envisaged population increased to around 2500.

This pioneering model factory village envisaged the reconstitution of society within a rational architectural machine that would educate, invigorate and reform. Owen reimagined the authoritarian order of the nineteenth century prison (particularly the ideas of the Panopticon developed by his one-time business partner Jeremy Bentham) as an environment of cooperative endeavour and improvement. He projected the establishment of communities founded on social equality, communal land ownership, and cooperative living that prefigured some of the socio-economic structures proposed in the Garden City.³² However, the coercive and regulatory environments imagined by figures like Bentham were not completely abandoned. The planning and articulation of the Parallelogram was still formed specifically as a means of community governance.

The Parallelogram prioritised education, physical health and morality. This was planned around a community square, the junctions of which were intended as sites for secular, cultural institutions including museums, libraries, music rooms and

lecture theatres. Covered gymnasiums, infirmaries, and separate male and female baths were located between these, along the sides of the square. All these elements were connected by covered arcades that ensured “open communication with every part of the building.”³³ The complex was designed to be perpetually transparent to surveillance and control; the central courts allowed children to play under the watchful eyes of parents and were lit at night to ensure good behaviour. Servicing was placed underground, in basements connected by subways. This carefully contrived disposition of the institutions and activities of the community was intended to ensure that at every moment, the complex regulated the moral development of its inhabitants. The plan would unite the virtues of morality, education and community in its physical form, focusing their effects in a hermetic composition with the centripetal force of a house of worship at its centre. The new ideals of progress, science and technology, in determining the ideal relations, distribution and functioning of each part of the Parallelogram, would be instrumental in refining human beings’ social relations.

This plan, carefully elaborated by Owen’s architect, proffered a reconciliation between a notion of *gemeinschaft* and the exigencies of industrial society. The small-scale rural community with its carefully controlled social relations was imagined as a repeatable element across the British landscape. It was to be a cog in a larger machine servicing the burgeoning consumer demands of the nineteenth century without succumbing to the vices of the industrialised towns.

For Owen, key to the functioning of the Parallelogram was its didactic ability. The architectural arrangement of these settlements was a machine for the cultivation of the ideal citizen. Indeed that is how it was described; “a machine it truly is, that will simplify and facilitate, in a remarkable manner, all the operations of human life, and multiply rational and permanently desirable enjoyments to an extent that cannot be yet calmly contemplated by ordinary minds”.³⁴

Building on his experiences at New Lanark, Owen’s Parallelogram anticipates a number of recurring elements in later projects for the reform of working class housing: the need to create a new residential landscape defined in opposition to the

ill effects of the city, the provision of a “rational” plan for the disposition of its buildings and gardens, as well as the use of architectural form and style to provide a suitably didactic, inspirational and affective environment. Although Edinburgh’s New Town responded to a very different program than the Parallelogram and its effects were described in different terms, both projects established an underlying confidence in the power of the built environment as an affective medium for the moral regulation of a population.

These examples give a good indication of the diversity that occurs in expressions of affective form. It can be seen that understandings of the processes by which form might affect human beings, as well as the governance objectives that those processes might be put to are conceived in different ways. That the built environment is invested with some affective power is the consistent thread.

The Moral Aesthetics of Reform

The “mechanistic” conception of early nineteenth century projects such as Owen’s Parallelogram as architectural devices for the construction of ideal social relations was present to some extent in subsequent projects such as Millbank and Pentonville prisons, Jeremy Bentham’s panopticon project, James Silk Buckingham’s model town of Victoria and Ebenezer Howard’s Garden City at Letchworth. While these projects continued to focus on the judicious scale, placement and juxtaposition of the institutions of a community, they mark a shift in the understanding and expression of architectural affectivity. In the late nineteenth and early twentieth centuries a more complex, emotive sense of architecture’s affective powers arose, influenced by the works of John Ruskin (1818-1900), William Morris (1834-1896) and Augustus Pugin (1812-1852), whose writings develop and refine concepts of association between societal character and built environment.

In the previous chapter an outline was given of the manner in which, during the late eighteenth and early nineteenth century, a model of the building as informational appliance developed, promulgated through the writings of figures such as Archibald Alison and John Loudon.³⁵ The various elements of a building became understood as associational signifiers, expressing aspects of the building’s use, its

relation to the surrounding context and the character of its occupants. This was what Loudon referred to as the informational appliance: instances where architectural styles and architectonic elements served as denotative vocabularies to be applied for appropriate effect. As outlined in Chapter One, the understanding of affective form displayed by Loudon can be related to developments in the use of garden design and architecture as expressive tools during the eighteenth century. Architectural styles, garden ornamentation and the construction of picturesque landscapes could all be suggestive of moral lessons and emotive character.

Like Loudon's projects, Robert Owen's propositions for model communities engage with the concept of affective form. However, they involve different representations and understandings of its functioning, as the focus of Owen's plans was the rational arrangement of elements to form an "architectural machine." For Owen, the careful selection and disposition of a community's buildings, contributing to a regime of observation and instruction, was capable of functioning in a didactic manner relative to the formation of an inhabitant's character. In comparison, the underlying expression of affective form in Loudon's work is similar to the symbolic and inspirational role it played in Edinburgh's New Town, where style, ornament and form were employed to help inspire the most appropriate intellectual response from inhabitants. In contrast to Loudon's expressive and emotive associationism (reliant on the 'reading' of buildings by an informed, literate audience), Owen structured a more paternalistic mechanism that regulated the activities of its occupants.

These two understandings of affective form are examples of the manner in which its different conceptions were enacted and related to different sections of society in the eighteenth and early nineteenth centuries. Beginning with Pugin, the following brief overview will describe different models that arose from the mid-nineteenth century to address the "reading" of architectural form, its relation to society, and the possibility for its application in reforming the working class.

The writings of Pugin exemplify the emergence in Britain of a conscious association of architectural style with particular religious, moral and social qualities thought to be desirable in human beings. Pugin rejected the previous notion, implicit in the

Roman references of Craig's planning of the Edinburgh New Town, the references to classical Greece in its architecture, and the associational theories developed by Loudon, that architectural styles could be freely assumed in order to produce a desired effect. Pugin believed architectural styles embodied particular cultures and the character of their people. His conception of the affective power of architectural form was that of an extremely powerful social force, incorporating the notion that morality pervaded all aspects of the living environment. For Pugin, Gothic architecture was the embodiment of 'true Christian feeling' and was thus the only legitimate style for England, contrary to the contemporary state of architectural eclecticism and the moral degradation that accompanied it:

Will the architecture of our times, even supposing it is solid enough to last, hand down to posterity any certain clue or guide to the system under which it was erected? Surely not; it is not the expression of existing opinions and circumstances, but a confused jumble of styles and symbols borrowed from all nations and periods.³⁶

For Pugin "Pointed", or Christian, Architecture was of paramount importance, especially when it was used in the design of ecclesiastical buildings. With every detail speaking of sacred instructions, mysteries, or images, these structures "all conspire to fill the mind with veneration, and to impress it with the sublimity of Christian worship."³⁷ These inspiring and "soul-stirring" effects of the Gothic church could only be produced by buildings "the composition of which has emanated from men who were thoroughly imbued with devotion for, and faith in, the religion for whose worship they were erected."³⁸ For Pugin the affective power of gothic architecture was critical to the development of a cohesive Catholic society, and thus key to England's moral reform.

Despite an unequivocal rejection of the eclectic tendency of associationism, Pugin's ideas still bore some underlying similarities to its basis in the social grounding of aesthetic principles. Like those of Alison and Loudon, Pugin's theories operated in an intellectual climate that had been transformed, turning thoughts away from a

notion of fixed, eternal principles towards one of beauty as relative to, and produced by, a specific culture or society. This begat an approach to form-making that became inconsistent with the ideal of immutable, universal principles of beauty.

Pugin's principles of Pointed architecture, although supposedly the pinnacle of that faith, were not eternal but rather developed over time:

[W]hen Christianity had overspread the whole of western Europe, and infused her salutary and ennobling influence in the hearts of the converted nations, art rose purified and glorious...it reached a point of excellence far beyond any it had previously attained ... [and] was the natural result of the progress of Catholic feeling and devotion; and its decay was consequent on that of the faith itself...³⁹

For Pugin, the “decay” of English society was commensurate with an architectural and artistic decay. This link between the social and aesthetic was vividly portrayed in *Contrasts* (1836), a series of paired engravings contrasting conditions between England in the fifteenth and in the nineteenth century as interpreted by Pugin. The plates that compare perspectival town views are especially interesting in that they reveal the extent to which the urban landscape of nineteenth century Britain had changed. The decline of English society was embodied for Pugin in his visual record of the desecration of the medieval churches, an increased number of Protestant chapels, and new gaols in the form of Benthamite Panopticons, a lunatic asylum, and a socialist hall of science. Thus, in calling for the resurrection of what Pugin felt were the true principles of Christian architecture, he was also concerned with the reinstatement of an idealized medieval society, complete with what he considered its stable and proper cultural relations. It is this synchronous critique of a civilization and its architecture that resonates in the work of later figures, especially Ruskin and Morris. The relationship between architecture, the city and society is placed at the centre of discussions about the moral regulation and governance of community.

Ruskin's artistic and architectural assessments, like those of Pugin before and Morris later, relate consistently to a social context. His primary concern was with the moral fabric of society and the relation of art to its expression:

The art of any country *is the exponent of its social and political virtues*. The art, or general productive and formative energy, of any country, is an exact exponent of its ethical life. You can have noble art only from noble persons, associated under laws fitted to their time and circumstances.⁴⁰

In his discussion of architectural works, Ruskin utilised an interpretive framework that parallels the associationism of Alison and Loudon. However, as well as developing techniques arising from that framework, including associational vocabularies similar to Loudon's, Ruskin expanded his observations of architecture to include phenomena such as the nature of building materials, the landscape surrounding buildings and the decaying effects of time, weather and patterns of use. The impact upon the mind of associations derived from one form or the other were judged with an increasing sensitivity to the circumstances of place and emotive atmosphere. The expression of built form extended far beyond its role in representing the character of an 'owner' as Loudon suggested. Expression could also be used to identify the moral health of a community. These aspects of the associational impact of form, analysed in his painterly manner, provided an architectural *mise en scene* expressive of a society's moral, religious and cultural constitution. Simply expressed, noble people produced noble architecture. This is evident, for instance, in Ruskin's description of the cathedral on the island of Torcello, near Venice:

...the first strong impression which the spectator receives from the whole scene is, that whatever sin it may have been which has on this spot been visited with so utter a desolation, it could not at least [have] been ambition ... It has evidently been built by men in flight and distress, who sought in the hurried erection of their island church such a shelter for their honest and sorrowful worship as, on the one hand, could not attract the eyes of their enemies by its splendour, and yet, on the other, might not awaken too bitter feelings by its contrast with the churches they had seen destroyed ... The exterior is absolutely devoid of decoration, with the exception only of the western entrance and the lateral door ... while the massy stone shutters of the windows, turning on huge rings of stone, which answer the double purpose of stanchions and brackets, cause the whole building rather to resemble a refuge from Alpine storm than the cathedral of a populous city; and, internally, the two solemn mosaics of the eastern and western extremities ... are expressive at once of the deep sorrow and the sacred courage of men who had no home left them upon earth, but who looked for one to come, of men 'persecuted but not forsaken, cast down but not destroyed.'⁴¹

Ruskin employed an extensive breadth of interpretation in his extrapolation of meaning from the stones from which good buildings and, ultimately, architecture

was formed. The cathedral of Torcello was significant for Ruskin both for the forcefulness of its manner of architectural expression and for the spiritual condition of its builders. These exiles, he believed, typified the spiritual condition that every Christian ought to recognise in themselves - a state of homelessness on earth. After this passionate description of the church Ruskin entered into a discussion of various details of the building, in order to “give a clear idea of the means by which the peculiar expression of the building is obtained.”⁴² From a conception of social context as critical to understanding, Ruskin related the architecture and its setting to the beliefs and emotions of the builders, the validity of these beliefs and emotions, and their correlation with his ideal Christian principles.

This expansive order of associationism allowed Ruskin to “read” the architecture of a whole city as the tracings of its history of thought, action and emotions in *The Stones of Venice*, published in three volumes between 1851 and 1853. Like Pugin, Ruskin saw Gothic architecture as the pre-eminent Christian form. However, he located its purest incarnation in the period from the middle of the thirteenth century to the beginning of the fifteenth, for him the “central epoch of the life of Venice.”⁴³ He described the “fall” of Venetian culture from the fifteenth century onward through the description of Renaissance architecture’s progression from “Early” to “Grotesque.” His lurid account of the final stages in that decline provides a strong example of that associationism. Describing the carvings adorning buildings and bridges he wrote: “...they are evidences of a delight in the contemplation of bestial vice, and the expression of low sarcasm, which is, I believe, the most hopeless state into which the human mind can fall.”⁴⁴

Ruskin believed that the degradation of the Gothic architectural style was symptomatic of a social corruption, similar to that which he saw occurring in his present-day England:

We have much studied and much perfected, of late, the great civilised invention of the division of labour; only we give it a false name. It is not, truly speaking, the labour that is divided; but the men ... And the great cry that rises from all our manufacturing cities, louder than their furnace blast, is all in very deed for this, - that we manufacture everything there except men ... to brighten, to strengthen, to refine, or to form a single living spirit, never enters into our estimate of advantages.⁴⁵

Along with contemporaries such as Carlyle, Ruskin railed against the notion of *laissez-faire* society and its pursuit of perfect rationalism in building. He wrote: "Examine again all those accurate mouldings, and perfect polishings, and unerring adjustments of the seasoned wood and tempered steel...these perfectnesses [sic] are signs of a slavery in our England a thousand times more bitter than that of the scourged African, or helot Greek."⁴⁶ Again, the decay of a society was seen as evident in its artistic production and that led Ruskin to attack not just artistic values but also the principles of the corresponding economic system. As Raymond Williams has observed, Ruskin sought a return to modes of relation he saw as existing in medieval society. That ideal community was embodied by Gothic architecture, where only the right kind of labour was carried out - for the "felicitous fulfilment of function in living things."

Although Ruskin referenced the past in this vision, he was always concerned with the present and future, considering it vital that relations between people should be formed through notions of obligation, loyalty and piety rather than the dictates of the economy and a machine-like regard for society. His ideal society could only be expressed by an art and architecture that was evidently man-made, imperfect and imbued with the spirit of its maker.

Despite the incongruity between Ruskin's romantic notions about the social relations of medieval society and the socialist activism of William Morris, there are similarities in their concerns about industrialisation's dehumanizing division of labour. Morris' Socialism, its relation to Marxist thought, and its divergence from the economic theories of Ruskin are undoubtedly important to an understanding of their relative positions in the mix of ideas typifying nineteenth century thought and culture. In this discussion of the socially formative role of architecture and planning, however, it may be more pertinent to focus on the role of artistic agency that each envisaged.

Morris developed and secularised the discussions surrounding an aesthetic response to industrialisation. His political and social beliefs grounded his

conceptualisation of the connection between art, architecture and the means of production. As with Ruskin, the division of labour is seen as rupturing the relationship between creation, manufacture and use whereby the labourer becomes alienated from his or her work. Belief in the spiritual and moral benefits of manual craft and artistic production link the two men within this discussion of the affective power of architecture. It is Morris's conception of the capacity and prerogative of art (and architecture) that marks another understanding of affective form:

Yet it must be remembered that civilization has reduced the workman to such a skinny and pitiful existence, that he scarcely knows how to frame a desire for any life much better than that which he now endured perforce. *It is the province of art to set the true ideal of a full and reasonable life before him*, a life to which the perception and creation of beauty, the enjoyment of real pleasure that is, shall be felt as necessary to man as his daily bread...⁴⁷

For Morris, art was not merely symptomatic, but should also be generative. Production must be conceived and executed creatively for the individual to regain an organic bond with nature and society, a relationship that Lauren Weingarden terms the “joyful maker- joyful user” model.⁴⁸ Art must enter everyday life in order to dignify it and raise it above the brutalising effects of industrialisation: “the cause of art is the cause of the people ... One day we shall win back Art, that is to say the pleasure of life; win back Art again to our daily labour.”⁴⁹ In this manner art embodied a society's values and its moral state, as it was for Ruskin and indeed Pugin. Morris' critical shift was the privileging of art, envisaging it as formative in the production of new modes of relation that could lead people to a ‘right’ way of life and being integral to the enjoyment of that life. His call is for a method of craft production that imbues the elements of people's daily environment with the liberating qualities of art. This is also similar to Ruskin in the emphasis on a relationship with the techniques and objects of production. Whereas Ruskin's concern is of a spiritual, transcendental nature, Morris envisaged this subjective attitude as important insofar as it could be externalised to communicate and gratify human needs. Thus Morris displaced architecture's affective power from the religious into the social, material realm.

This pervasive consideration of art and architecture as morally beneficent would later resonate in the development of the Garden City. Morris's contention that these activities should be the work "not of the leisure and taste of a few scholars, authors, and artists, but of the necessities and aspirations of the workmen throughout the civilised world," was also a primary concern for the architects of Letchworth, as the following section will demonstrate.⁵⁰

The Parallelogram, as representative of nineteenth century reform models, suggests a carefully regulated and proscribed formal device for producing ideal citizens: an architectural machine for didactic effect. In the late nineteenth and early twentieth centuries a more complex, emotive sense of architecture's affective powers arose, with a concern for the ethical production of architecture and the dignity of the working-class residential environment similar to that expressed by Ruskin and Morris. Moral governance through affective form came to be expressed through the constitutive and ameliorative influence of architecture rather than the language of mechanicism and instrumentalism characterising Owen's Parallelogram.⁵¹

Letchworth Garden City

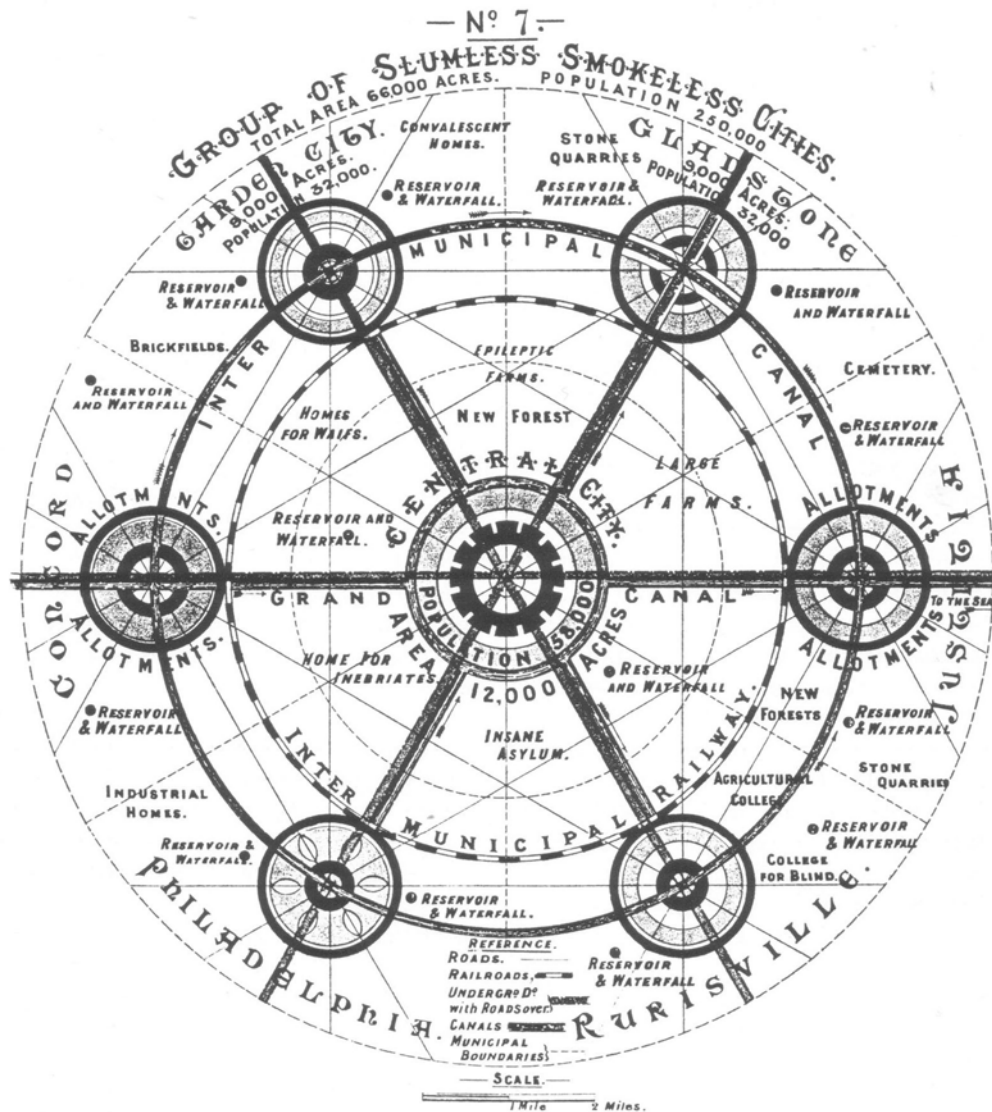
As the Garden City formed itself in my mind, it was a beautiful and glowing reality. But it was still purely an idea- a theory which had not stood the test- the severest test always- of an endeavour to realise it; and in my book I said very little about the steps which must be taken if the idea of a Garden City was to be realised.⁵²

The Garden City is the most influential of the projects discussed in this section as an expression of affective form and is directly related to the early development of Perth's suburban landscape. The preceding quote from Ebenezer Howard illustrates some key points in understanding the legacy of the Garden City; although the vague directions for its implementation allowed its socio-economic objectives to be considerably transformed. For the purposes of this discussion I am particularly concerned with the implications of Barry Parker and Raymond Unwin's vision of architecture for the planning of the first Garden City at Letchworth. Their concerns for the social effects of architecture and planning, especially the housing of the working classes, impacted considerably on the eventual form of the Garden City. Ultimately, their conception of the ideal relation between home and garden

would contribute greatly to the environmental image associated with the terms “Garden City” and “garden suburb.”

In 1899, a year after the publication of *To-morrow: A Peaceful Path to Reform*, the Garden City Association was formed to promote the project suggested by Ebenezer Howard.⁵³ With the drafting of plans for its realisation in 1903, and its construction in 1904 at Letchworth, Howard’s vision was altered. Rather than a community built under the control of elected representatives, the first Garden City was to be built by a private company. Visions of communal ownership and cooperative development thus gave way to more orthodox commercial arrangements in order to secure capital. The urban form envisaged by Howard would also be transformed: both as a result of the social and aesthetic concerns of the designers eventually chosen to execute the project, and of the need to address smaller scale issues of architectural resolution. These changes may have, in some sense, diluted Howard’s vision but they also allowed it to be realised. Through that process an economic, social and architectural model was established that was much more readily appropriated and recast than the initial vision, thus grounding the future Garden Suburb and its continued evolution.

Support for the association and the Garden City project was poor until the 1901 recruitment by Howard of Ralph Neville, a prominent barrister. Neville’s professional standing and personal prestige, together with his recasting of the Association upon more businesslike lines, meant he was able to play a crucial role in the realisation of the model city. Along with the work of Thomas Adams as secretary of the Association, Neville helped to establish the Garden City project as a practicable urban planning venture. In order to secure funds to purchase a site, the Pioneer Garden City, Ltd. Company was set up. In July 1903 a site of approximately 3800 acres was obtained and the building of Letchworth Garden



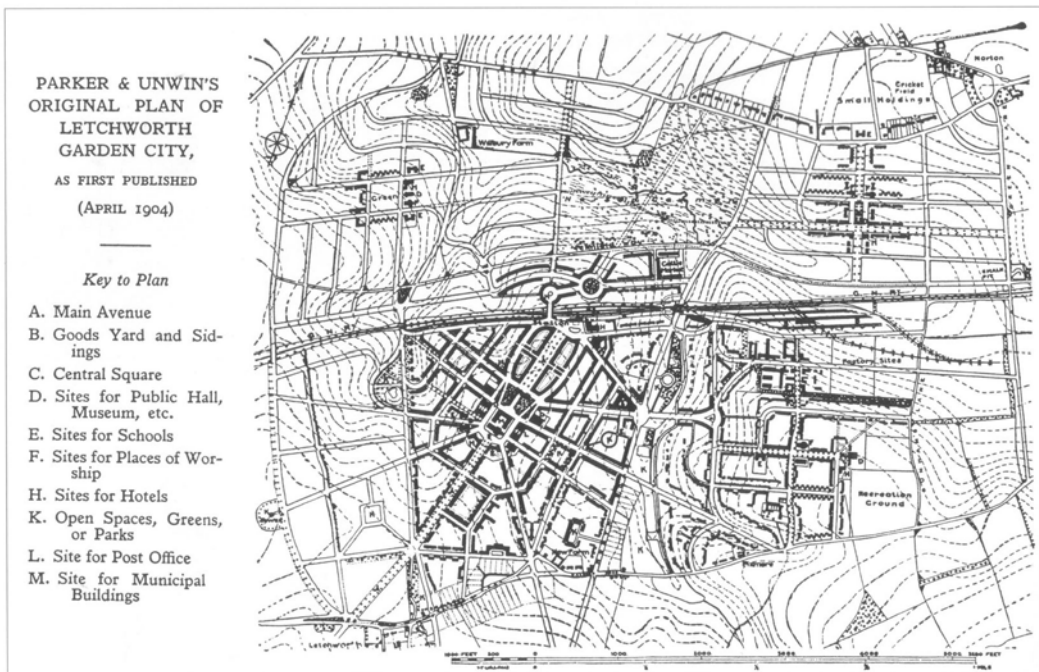
14

"A group of slumless, smokeless cities," from
 Ebenezer Howard's *To-morrow: A Peaceful
 Path to Reform*, 1898.

City was under way. The Pioneer Garden City, Ltd. was dissolved, having achieved its purpose, and the First Garden City, Ltd. was established in order to complete the project.⁵⁴

In 1903 the architectural partnership Parker & Unwin was invited to submit a plan for Letchworth, in competition with Halsey Ricardo & W.R. Lethaby and others. Raymond Unwin subsequently moved to an existing cottage on the site in order to prepare their scheme, with visits from Parker.⁵⁵ The firm was successful, and named the consulting architects for the project. Their influence, especially Unwin's, was to have an extensive impact on the architecture and urban form of the Garden City. As Stanley Buder has noted, they perhaps overwhelmed the concept of the Garden City with their own social and aesthetic concerns, which were linked to the contemporary Arts and Crafts movement.⁵⁶ As such the moral dimension that they articulated in terms of artistic and architectural production was intimately related to the ongoing discourse, identified earlier, concerning the relation of art and industrial society. Parker and Unwin's work on the design and construction of the first Garden City thus strove to imbue a decency and civility through a crafted and mannered architectural approach, which also permeates their planning work. They added to Howard's diagrammatic planning a concern with the effect of the total living environment, at all scales, on the character of its inhabitants.

The example of the constructed Garden City is important to this discussion because it demonstrated a model community that suggested affective form operating at all scales in its planning, architecture and landscape. It was also successfully constructed, providing an example for international study and emulation. Equally significant is the manner in which the Letchworth Garden City linked the instrumentalism of Howard's plan (reminiscent of the Parallelogram) and the morally uplifting aesthetics of Parker and Unwin (deriving from Ruskin and Morris). In 1937 Unwin recalled the formative influence of Ruskin and Morris:



15

*Parker and Unwin's winning layout for
Letchworth, 1904.*

One who was privileged to hear the beautiful voice of John Ruskin declaiming against the degradation of *laissez faire* theories of life, to know William Morris and his work ... could hardly fail to follow after the ideals of a more ordered form of society, and a better planned environment for it, than that which he saw around him in the 'seventies and 'eighties.⁵⁷

An environmental model of substantial influence was thus produced at Letchworth, providing an ideal tool for promoting the more general idea of town planning. This aspect of its appeal was particularly important when the Garden City was introduced to Perth.

Before considering that process it will be helpful to examine the way Parker and Unwin discussed affective form. Their conception and promotion of "dignified" housing entailed the use of a language about the benefits of architecture and planning that synthesised many of the ways affective form was previously expressed. The overwhelming importance of form for moral regulation was expressed by Parker in an essay entitled "The dignity of all true art."

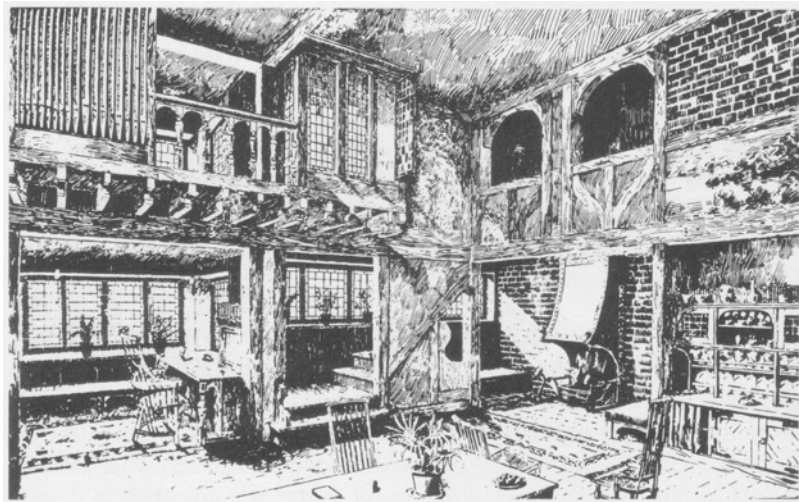
We all know that the mere form of a chair, the contour of a mould, the shape of a bracket, a scheme of colour, have power to affect us, in a degree, in just the same way that music does...And I would have every craftsman and every practitioner of the arts as deeply impressed with the dignity this places upon him, and the responsibilities it brings with it.⁵⁸

The social commitment and conscience of the two architects focused their efforts to improve the quality of urban life, especially for working class men, women and children as they sought to design communities that would bring people into harmony with each other.⁵⁹ This paternalistic and, in a sense, class conscious objective evolved from a reformatory conception of architecture as well as the legacy of projects associated with reform, such as public parks and workers' housing. For Parker and Unwin, the task of the architect was to build for the citizenry of an emerging English democracy. This was grounded in an ability to encourage in people the cultivation of "higher natures," and "to bring the whole weight of his knowledge and experience to persuade [them] from anything foolish or in bad taste ... helping them towards a more natural life."⁶⁰

Prompted by overcrowding and the generally poor condition of housing in Victorian cities, the Public Health Act of 1875 required local authorities to implement building regulations or by-laws, which insisted that each house should be self-contained with its own sanitation and water. While this provided a minimum standard of living, Parker and Unwin believed that the resultant built environment had a soul-destroying “squalid” character. In contrast, Parker and Unwin’s analysis of people’s housing needs, again focusing on those of the working class, led them to seek typological solutions that “shall be satisfactory from the point of view of health and economy, and at the same time afford some opportunity for the gradual development of a simple dignity and beauty...necessary, not only to the proper growth of the gentler and finer instincts of men, but to the producing of that indefinable something which makes the difference between a mere shelter and a home.”⁶¹ Thus the anatomisation of the residential environment they engaged in made manifest the critical difficulties in establishing the balance between what was *decent* and what was *minimal* housing. Parker and Unwin sought to provide designs for housing that was affordable but dignified: “Plain and simple they must be, but a plain and simple building well-designed may be very far from ugly.”⁶²

For Parker and Unwin the need for beauty within these dwellings remained paramount: it was only through the proper design of the built environment that the “best” in people could be attained. Thoughtful and beautiful design, they believed, could exert a formative guidance for residents beyond the limits of the home. The creation of a good citizenry also relied on the careful articulation of building forms and landscape at larger scales, creating thoughtful and beautiful neighbourhoods.

Raymond Unwin’s continued attempts to formulate an integrated relationship between the production of architecture and the development of a new, stable form of society out of the uncertainties of the industrial revolution make him most significant for this discussion in regard to affective form. Indeed, Frederic Osborn has suggested that although Barry Parker was the more gifted in terms of aesthetic craftsmanship, it was Unwin who articulated most clearly a concern for the



16
*Parker and Unwin - Design for a living room with
sanctum, kitchens, offices and bedroom around,
from The Art of Building a Home, 1901.*

function of dwelling and landscape as generator of community.⁶³ It was primarily Unwin who concerned himself with the significance of this architectural production for industrial society at an increased scale. The project of the Letchworth Garden City provided an important opportunity for him to attempt the genesis of a community through an architectural and urban intervention.

Ebenezer Howard's diagrams postulated the Garden City as the physical embodiment of the functional relationships engendered by the activities of a society, an initial premise which Unwin's conception of community and its appropriate form paralleled and expanded on. A series of formal spatial types developed in the vocabulary of Parker and Unwin's work, which Unwin often referred to as "crystals."⁶⁴ The spatial types were the formative building elements in generating community through the built environment and they facilitated or defined various social relations at a number of scales. They ranged from the small scale of the house, in elements such as the inglenook, the bay and the porch, to the larger, urban scale forms of the cul-de-sac, the quadrangle and the square. Unwin felt these forms possessed the power to govern societal relations, as evidenced in his hopes for the planning of Letchworth. Describing the dwellings planned for the development he wrote:

In the squares and quadrangles of our Garden City dwellings the spirit of co-operation will find a congenial ground from which to spring, for there association in the enjoyment of open spaces or large gardens will replace the exclusiveness of the individual possession of backyards or petty garden-plots, and will no doubt soon be followed by further association, to which the arrangement so admirably lends itself.⁶⁵

The associations to which Unwin aspired were those of the medieval village, a prototype that he saw as exemplifying social stability and the physical expression of that harmony. He acknowledged that social relations had changed since the Middle Ages, but argued that new democratic relationships had yet to form an adequate community structure. Architecture and urban design were two means for doing so as they were able to provide an environment that would mediate between people's "sociable instincts" and desire for rural retreat. According to Unwin, an urban form was needed that could provide the balance required between the town, which could only provide an "ugly and dreary life," and the potential isolation of life in the

country. Unwin's idealized or nostalgic conception of society encompassed a finely organised life of relations between individuals, physically embodied in the "organic whole" of the village, the model for his proposals.⁶⁶

In accordance with this view, the Garden City developed as a group of connected villages around a civic centre with a factory district on the outskirts. The villages themselves used Parker and Unwin's various formal devices, the cul-de-sac, the close and the quadrangle, which regulated social interaction at a variety of scales. The town as a whole was symbolically centred on a square with which, once again, Unwin intended to focus communal activity. This urban structure, he believed, would facilitate the formation of a society of free individuals linked by mutual association. Although the citizens were dispersed, ideally in detached and semi-detached houses at twelve to the acre, the various squares and quadrangles and their culmination in this central, civic space would focus their "sociable instincts."

In addition to their employment of larger spatial types such as the cul-de-sac and quadrangle, Parker and Unwin were concerned with effect of the Garden City's architecture at an individual level. Regulations and standards were imposed to set aesthetic guidelines for any new construction. Although these covered elements such as materials, colours, building heights, setbacks and density, they would also go further. Guidelines addressed the individual orientation of buildings, the disposition of rooms and their functions as well.⁶⁷ Through a unity and "harmony" in the construction of Letchworth, and a "crystallisation of the elements of the village" it was hoped that the Garden City citizens would lead wholesome, good lives:

The extremest degree of simplicity may be safely welcomed, for assuredly, if there is among the citizens a love for their city, and some comeliness in their life, these will reveal themselves in the beauty of their streets; and if these are lacking, no efforts of any committee can give the needful inspiration.⁶⁸

In contrasting the architectural machine of Robert Owen with the "organic" elements of Raymond Unwin, some comparisons in the conception of reformative form can be made. Owen's model communities represented a codification of a set of

formal techniques in order to facilitate the formation of character. Focussing on a specific social group, ostensibly the poor, Owen's communities were intended to modify the individual character of its inhabitants. Firmly entrenched in the nineteenth century milieu, Owen attempted to outline a factory for the production of ideal citizens just as numerous other objects and objectives around him were made subject to industrial processes.

Unwin and Parker demonstrated an expanded scope for these reformatory structures, with Letchworth an initial attempt to construct them at a metropolitan scale. In addition to a vocabulary of urban forms, they developed a concern for the associational aesthetic aspects of the architecture that can be explicitly traced in the figures of Morris and Ruskin. The shift was from an emphasis on the individual character to the realm of social relations. The modelling of complete communities was seen to require attention to the structuring of relationships at multiple levels, rather than the improvement of individual "atoms" of humanity within an environment that merely assembled them. Order, community and stability could now be generated (as well as embodied) through architectural form.

The carefully modulated architectural and urban forms of Parker and Unwin's Garden City and subsequent garden suburb projects have had a substantial and well documented influence on suburban development in England, and indeed worldwide.⁶⁹ However, much of this development has seen the reinterpretation, and even discarding, of the principles that informed the original suburbs. What has been consistent is the utilisation of the image of the garden suburb environment as a residential ideal: a landscape able to generate model communities. The affective power of the Garden City or Garden Suburb, in their many guises, has related most strongly to that overarching image. Its key components were articulated by Unwin in defence of his workers' cottage designs against accusations of extravagance:

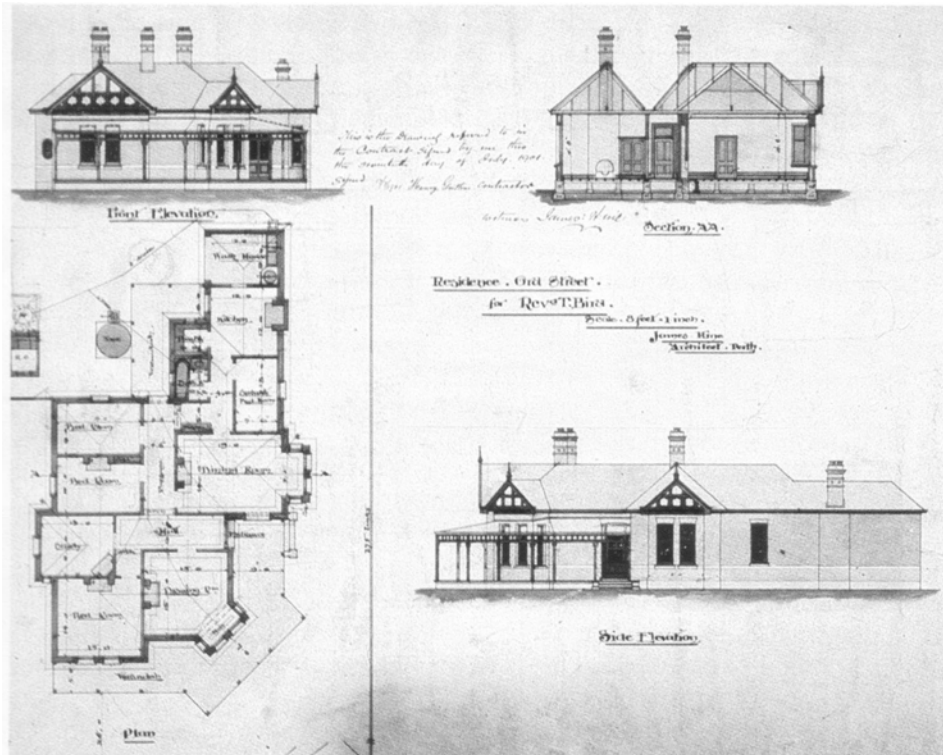
[F]or if the Garden City stands for anything surely it stands for this: a decent home and garden for every family that come [sic] here. That is the irreducible minimum. Let that go and we fail utterly. And if we succeed utterly what then? A beautiful home in a beautiful garden and a beautiful city for all.⁷⁰

“Perth as it should be”

The importation of Garden City concepts to Perth in the early part of the twentieth century helped establish a planning discipline as well as a pervasive planning model for the city. The conceptions and expressions of affective form detailed previously in this chapter underlay the push for the application of Garden City principles in Perth. The supposed power of the Garden City as a means of moral regulation as well as aesthetic improvement for the urban realm encouraged its local translation, playing a prominent part in moves toward the improvement of local civic character. What emerged from this process were garden suburbs rather than a model Garden City, but an assumption of their power as affective form remained. That assumption aided in the local acceptance of the garden suburb as an ideal residential environment; its association with the promoters of town planning in Perth also aided in the establishment of that profession.

The attempted establishment of a Garden City in this isolated antipodean capital and its associated role in the development both of local garden suburbs and a planning profession will be traced in the following section. The emphasis of the discussion will be on the part that the concept of affective form played in that development; particularly the way that Unwin’s unit of a “decent home and garden for every family” became embedded as a local ideal.

In 1890 Perth was granted responsible government, marking an administrative shift toward autonomy. Also in that year a public water supply began to service Perth, and the colony’s manufacturing could be seen to shift from almost entirely primary processing to more sophisticated manufacturing. Two years later, the discovery of gold near Kalgoorlie saw a massive population influx; almost trebling the European population of Western Australia by 1900 and doubling it again by 1921.⁷¹ The growth and change in the economic and social structure of Perth within that period was extensive, bringing about conditions that strained the city’s infrastructure and prompted debate regarding its character and amenity.



17

Typical working drawings for a house in Perth at the turn of the century – architect J.B. Hine.



18

Central Perth – View of St. Georges Terrace, c1900.

An articulated desire that Perth should be “beautiful as well as comfortable” emerged at the turn of the century and prompted discussion regarding the ideal physical characteristics for the city and how they might be achieved.⁷² As Martyn J. Webb’s examination of early town planning in Perth established, newspapers, particularly the *West Australian*, were an important forum for this discussion. Along with public lectures, they were critical in fostering a wider awareness of the issues raised. These included the poor physical condition of parts of the existing city and the problems of accommodating an expanding population, associated with an increased demand for services such as drainage, sewerage, lighting and road construction.⁷³ Surveying the published debate that exists within these articles, letters, and editorials, it is possible to discern an emerging concern with the affective character of Perth’s urban fabric and its social implications. Improvement of the built environment was linked with social governance, as indicated in a 1912 editorial of *the West Australian*:

Beauty is a comprehensive term; in its relation to the city it embraces cleanliness and convenience. The dirty town is an obvious menace to the health of the community; but in ugliness and inconvenience there lurks an insidious enemy continuously jarring against the physical and mental attributes of the citizens. Environment is a powerful factor in life, and when this is squalid, irksome, or uninspiring the cumulative effects are inimical to the general well-being.⁷⁴

As the debate over the form of Perth developed during the early 1900s, comparison was often made with the planning measures of other cities, particularly those in Europe. The “painful experience of other and older lands” generated an aspiration to avoid their “mistakes” and to rectify those that may have already been made in Perth.⁷⁵

Initially, as the new century arrived, concerns regarding Perth’s qualities as a city focused primarily on the rudimentary conditions of its basic infrastructure. The improvement of road surfacing, drainage, water supplies and transport were the main targets of government officials at this stage. With the implementation of improvements such as these, optimism regarding the city’s prospects emerged: “For close on sixty years Perth scarcely moved at all. This is, happily, changed.”⁷⁶ The

relatively humble infrastructure improvements were associated with the emergence of a proud city:

Whatever might be said of the street formation methods of the City Council under its responsible advisers – and they do not escape criticism of an adverse kind – there can be no doubt that their application is affecting such a decided change for the better that Perth bids fair to become in the immediate future a place worth living in by those who are so constituted that they can find contentment where moderate advantages belonging to modern civilisation are given. Nor are those advantages confined to roads and footpaths. Street ornamentation, so far from being neglected, is receiving increased attention, and under the direction of the committee entrusted with the work whole streets are being planted with trees of rapid growth and perennial foliage, which will result in the establishment of long avenues affording grateful shade to the citizens, and proving a lasting ornament to the city.⁷⁷

An understanding that town planning, architecture and landscape might take an increased role in the social, as well as physical, formation of the city was growing. The new century was expected to bring much more ambitious change to the city:

The Perth of the closing days of 1899 is scarcely recognisable beside the Perth of 1897. Method and organisation have been introduced into the municipal government, and the comfort and general well-being of the citizens are cared for in a way that was not considered possible in more primitive and straitened times. Much yet remains to be accomplished, but that Perth may yet become a model municipality no longer seems an ideal too distant for contemplation.⁷⁸

Curbing that *fin de siècle* optimism, and further focusing attention on the city's built environment, two cases of bubonic plague and a 'mild' epidemic of typhoid occurred during the first half of 1904. The contribution of Perth's housing forms and their distribution to occurrences such as these came under increased scrutiny. Comparison was made with other cities and the grounding for reformatory planning measures was laid:

To say that overcrowding in Perth is in any sense comparable to overcrowding in London, or Manchester, or Birmingham, or half a score of other places, is to put oneself outside the pale of serious argument. At the same time, there has been a local awakening to the fact that conditions of living here are, in many instances, a menace to health, and that the absence of a proper drainage scheme is not alone responsible.⁷⁹

The residential environment thus became a vital problem of the day, despite the generally favourable conditions within which Perth's population was housed. It was

considered that the threat of overcrowding was certainly present, particularly in East Perth, where lodging houses and cramped row-housing sat amongst industrial operations such as factories, brickworks and a tannery. This accommodation, rented by Perth's poorer inhabitants, was considered unhealthy and a danger to the city, characterising Perth's conception of a slum. Subiaco, similarly, was essentially working-class: "Being so handy to the town, Subiaco is much affected by the artisan class, many of whom have been able to acquire the freeholds of their residences."⁸⁰

In contrast, the suburbs on the outer edges of the city were more populous, considered more appealing, and they accommodated a range of social classes. Claremont could be described as middle-class:

A pleasantly situated suburb ... a prosperous municipality, containing a number of handsome villas and residences erected by professional and businessmen, whose means enable them to live in comfort in a locality possessing the charms of a rural district, which is yet within easy distance of town.⁸¹

This preference for the suburban environment would later impact upon the implementation of the ideas of local Garden City proponents, providing a receptive context and speeding its acceptance. Although high building costs were a barrier, the developing peripheral suburbs were seen as the best mechanism for ensuring a healthy, prosperous population. The primary issues it was felt needed to be addressed concerned making these areas accessible, physically and financially:

In every case their advancement as residential centres is dependent on the tram and train facilities provided. The solution of the housing problem in Perth is, therefore, comparatively simple. It resolves itself into a matter of allowing the wage-earning class to settle themselves in the suburbs, with the knowledge that they will be able to travel in and out of town with sufficient promptness and despatch to get through their daily work. The more closely the suburbs can be brought into communication with the city, the better from every point of view it must be for the people.⁸²

As the ambition of Perth's reformers reached beyond utilitarian measures such as sewerage to address the form of the city's expansion there emerged, alongside the question of housing, a more general concern with the aesthetic qualities of Perth's built environment. The subject of town planning was increasingly discussed and its scope debated. Developments overseas, particularly in Britain, were reported and the broad benefits to society's "moral and material interests" from these new

ideas about planning became common knowledge - if vaguely defined.⁸³ Thus the West Australian Institute of Architects, formed in 1896, campaigned for aesthetic control of new building work in the city. They proposed an “Aesthetic Board of Control” that would include artists, architects and elected officials in order to guard the quality of future public buildings, parks and gardens. The general public was also to be kept informed of new works in order to ensure comment was allowed and that a sense of communal pride in the city’s fabric might be generated.⁸⁴

Aspirations to encourage enterprise and economic activity within the city, ameliorate the living conditions of workers and provide for the correct conditioning of future generations were synthesised by the articulation of a desirable civic character for the city. In at least one case, this was achieved by considering Perth’s appearance from the ocean:

The stranger standing upon the deck of a steamer while nearing our shore at present can see nothing but a long, low and barren coast line. His first impression is distinctly unfavourable but with this scheme [a seaside resort] an accomplished fact a line of residences would break the monotony by day and at night would be enlivened by the lights along the shore.⁸⁵

Thoughts such as this prompted exploration of formal techniques required to “blot out the memory of old Perth with its dust and sand and general air of too acquiescent neglect.”⁸⁶ Plans and ideas for improving both “Greater Perth” and the city centre itself were put forward, and the ability to aid in governance became a common part of descriptions of proposed city improvements. Planning proposals generally advocated a strong link between physical interventions, such as road widening, and the future financial, social and aesthetic wellbeing of the community. Key proponents were William Hardwick, George Temple-Poole and the Town Clerk, William Bold, who in 1911 presented a detailed report to a council committee outlining extensive civic works (and proposed building design guidelines) in order to “shape the growth of the city on lines of beauty and utility.”⁸⁷

The architect William Hardwick was particularly concerned with the central city and drew up a plan for its reconfiguration, premised by a proposal to lower the railway in the central city. Were this to be achieved, his scheme enabled the

creation of a “mall” nearly two miles long, stretching from Delhi Square in the west to Wellington Square in the east. It was to be 130 feet wide with the space adjacent “laid out in beautiful gardens and planted with ornamental trees and shrubs, and adorned with statuary.”⁸⁸ This grand gesture was combined with radiating avenues, new parks and the location of all civic and government buildings along the mall edge.

Hardwick’s scheme was an ambitious proposal that ostensibly remodelled central Perth along City Beautiful lines.⁸⁹ Emphasis was placed on the scenic and symbolic arrangement of buildings, streets and landscape in order to achieve a grand effect that would “preserve and intensify what Nature has so bountifully provided.”⁹⁰ Like many of Perth’s other town planning advocates, Hardwick referred to overseas precedents for support, particularly those in Britain. Edinburgh was one such reference that for Hardwick evidenced the strong arguments for such planning schemes:

Edinburgh presents ... an example of the display of the artistic sense and foresight of her rulers of over a hundred years ago, who invited competitive designs (these plans are in existence to-day) for the laying out of the city ... Edinburgh is one of the most beautiful cities in the world, and this is largely owing to careful town planning early in the nineteenth century.⁹¹

Thus, reflecting the increasing profile of city and town planning concepts, his plan was a springboard for discussion of Perth’s metropolitan growth and a declared need for comprehensive planning. Potential disciplinary boundaries and administrative structures for the future practice of town planning in Perth began to be outlined in similar proposals. Hardwick’s own suggestions revolved around the establishment of a single controlling body to direct the development and growth of the city; its tasks including:

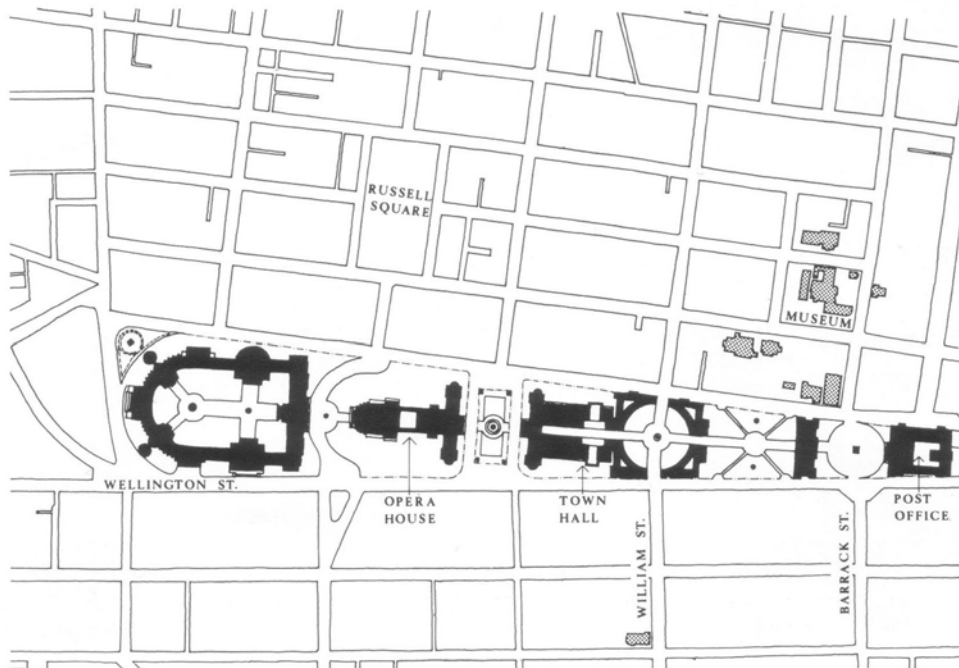
...contemplating all the possibilities relating to the development and growth of the city, our tramways, street traffic, lighting, sewerage, the location of civic and other public buildings, the beautifying of the river fronts and the provision of adequate reserves or “lungs” to the city, the careful planning, arrangement and widening of our streets in relation to the future, and the inevitable increase of the population.⁹²

The first president of the WA Institute of Architects and colonial architect since 1884, George Temple-Poole had a strong interest in town planning and advocated a similar set of solutions to the potential problems of Perth's growth.⁹³ Although he did not specify who might take responsibility for the measures he proposed, their substance was not dissimilar to Hardwick's ideas. Temple-Poole also described the creation of a civic place in the heart of the city (differing in his call for the relocation of the railway station), coupled with the adjacent construction of civic and governmental buildings and the creation of wide, tree-lined boulevards extending out from the centre.

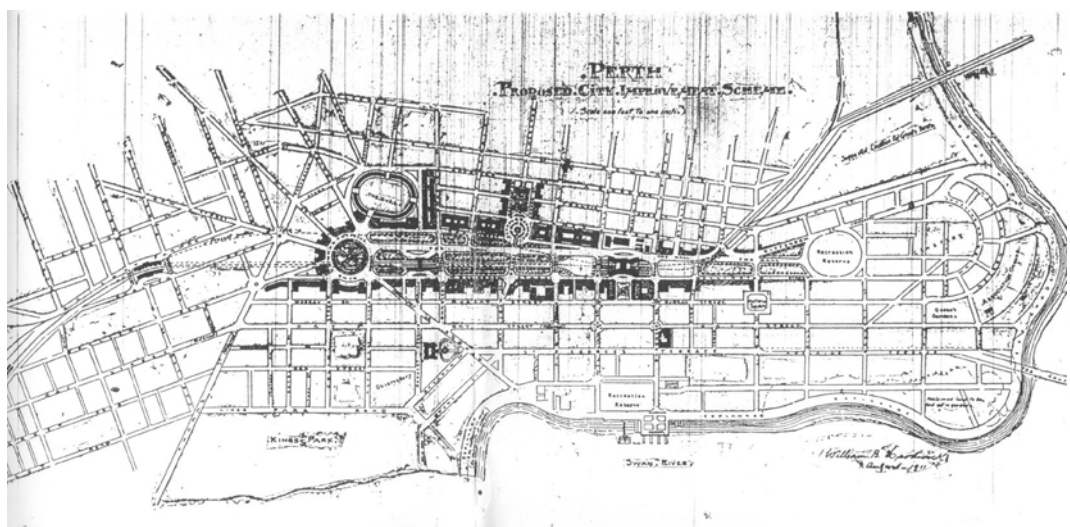
Both Hardwick and Temple-Poole placed great importance upon the role of the suburbs. Hardwick suggested the creation of a "small town planning scheme" to properly control their growth along with the "preservation and beautifying" of suburban lakes, the development of "adequate reserves" and their linkage to provide appropriate recreational "oases" for the city surroundings.⁹⁴ Temple-Poole held grave concerns for Perth's cramped suburbs: "ill-provided with public areas of gardens or parks, and possessing narrow streets and often slum localities of a low type."⁹⁵ The most well-known of his proposed solutions for rectifying this tendency was the creation of an urban greenbelt. As reported in the *West Australian*:

...he considered that it would be advisable because of the expansion that must take place in the suburbs at some later period for the Government to at once reserve a belt of open country, say a quarter of a mile wide, running in more or less of a circle at a radius of five miles from the heart of the city. Such a girdle would in his proposal link up with existing reserves and provide an everlasting playground and health resort for the people of the metropolitan area.⁹⁶

The public pronouncements of Temple-Poole and Hardwick regarding the contemporary deficiencies of the city's design, and speculation on its future, are representative of the public planning discourse present in early twentieth century Perth. In addition to the morally and socially affective parameters of urban form, attention was directed also to the administrative and professional structures that



19
*George Temple-Poole's proposal for central Perth,
 1911.*



20
*William Hardwick's scheme for central Perth,
 1911.*

might define its role. This parallel debate was manifested through attempts to define the concerns and responsibilities of any town plan. It marked an early endeavour in the life of the city to circumscribe the position and function of architects, and eventually planners, in the production of Perth's urban form.

The elements of the built environment considered to function affectively were delimited through an evolving public discourse. A consensual framing of town planning's aims and legitimate scope emerged from this. The techniques for a new profession began to be laid out:

A town plan lays down the lines of the scheme upon which the extension of urban districts, shall proceed, defining parks, gardens, open spaces, the direction and width of roads, and, broadly, the architectural form of the houses.⁹⁷

The aims and parameters of planning were also developed:

The necessity exists for...a scheme, or schemes for the improvement or remodelling of the city and its suburbs, form traffic, aesthetic, and sanitary points of view...[inquiring] into the advisableness of extending or increasing the railway and tramway facilities, widening existing streets, making new streets, providing for parks and reserves, and sites for public purposes, and generally to make such suggestions as to ornamentations and improvements as will tend to add to the attraction and beauty of the city and its suburbs.⁹⁸

The process of reform that was beginning in Perth was closely aligned with debates and activities occurring nationally. As Robert Freestone has described, the limited planning visions of colonial administrators, lack of development controls, economic expansion and the urban focused growth of cities created an uncoordinated sprawl in Australian cities.⁹⁹ The focus of the nascent town planning discipline's concerns were issues associated with this growth, such as sewerage, open space, noxious trades, civic beautification, housing and subdivision. By the end of the nineteenth century a modern town planning literature had emerged and model suburbs were being constructed in cities like Sydney and Melbourne.

Although economic depression in the 1890s slowed urban growth and the possibilities for reform measures, in the first decades of the new century activity increased again. The Garden City movement was highly influential at this point

and provided a focus for planning advocates. The theories and publications regarding garden cities and suburbs (particularly the work of Raymond Unwin) brought together the varied interests and concerns of reformers. The movement's establishment of a coherent critique of the city, an associated set of planning tools, presentation methods and realised projects, provided a paradigmatic model for local planning promotion and experiments.

Within this process overseas precedents provided exemplary planning schemes and theories that could be appropriated for transcription to Perth. William Bold's study tour to Europe and America of 1914 was an important source of information in this regard. He visited a number of town and regional planning projects, including some of the Garden Cities, and attended a Town Planning conference in London.¹⁰⁰ He heard Raymond Unwin and Ebenezer Howard speak as well as viewing the Civic Exhibition organised in Dublin by another prominent planning identity of the nineteenth century, Patrick Geddes (Geddes personally guided him through the exhibits).¹⁰¹

Freestone has outlined the manner in which, at that time, the concept of the garden city was imported, translated and filtered in Australia to generate a pervasive and influential planning model.¹⁰² Through an extensive distribution of information, including study tours, conferences and the circulation of books and journals, the garden city ideal became synonymous with a healthy, decent, well-ordered residential environment. Eventually recast as the garden suburb, in Perth the Garden City provided an ideal promotional vehicle for the formalisation of the planning profession as well as a vocabulary of techniques and models.

Charles Reade's lectures for the *Garden Cities and Town Planning Association* tour of 1914 were a key point in the development of this local awareness and an indication of the intensity with which the Garden City was publicised. Reade was the organiser of a delegation from the British Association which visited Australia and New Zealand, giving free public lantern lectures ("illustrated by 1000 slides") in order to promote the valuable principles of garden cities and town planning.¹⁰³ The list of lectures undertaken gives an idea of their scope:

Thursday October 29 – Town Hall, Perth; “Garden Cities v. Australian Slums and Suburbs.”
Friday October 30 – West’s Picture Hall, Hay St., Subiaco; “The Message of Garden Cities and Town Planning.”
Monday November 2 – Town hall, Perth; “What Europe can teach Perth.”
Wednesday November 4 – Victoria hall, High St., Fremantle; “Economic and Aesthetic Aspects of Town planning.”
Friday November 6 – Town Hall, Perth; “Town Planning for Perth.”
Monday November 9 – Victoria hall, Fremantle; “The Message of Garden Cities and Town Planning.”¹⁰⁴

At the last lecture, presided over by Temple-Poole, Reade outlined some planning proposals for Perth that he had developed during his stay. His call for the removal of the railway from central Perth and the establishment of a green-belt on the city’s perimeter, so similar to Temple-Poole’s own thoughts, suggest either a close alignment in objectives between (or a carefully prepared promotional exercise for) local planning advocates and the visiting lecturer.¹⁰⁵

Meetings had been held the previous year between representatives of government bodies and professions relevant to town planning, resulting in the establishment of a Conference of Town Planners and a draft parliamentary bill to obtain powers for a city improvement plan. Following the instructive lantern slides of Reade’s lecture tour, the now-submitted draft bill still awaited approval, but the Conference was dissolved in 1916 for the creation of a more ambitious Western Australian Town Planning Association (TPA).

This organisation attempted to broaden public knowledge of town planning and secure town planning legislation. Dominated by architects, surveyors and city administrators, its key figures were often prominent in public dialogue. Their input into the discussion concerning Perth’s urban form synthesised a multitude of concerns, including economic growth, hygiene, moral order and civic character. Often published in the *West Australian*, the planning proposals and projects of the TPA were critical in defining parameters for the emergent debate concerning urban reform, and the creation of formal instruments to effect that reform. Satellite residential development within the City of Perth’s Endowment Lands, for example, evolved contemporaneously with much of this planning reform activity and

involved a number of TPA members.¹⁰⁶ As such, it presented an ideal opportunity to realise hopes for both a model development and the application of new controls to Perth's urban growth.

While the emergence of a town planning profession was driven by utilitarian concerns, such as the need for the formation of a governmental body to control the city's development and the parameters for planning's application, it was shaped also by the broader social aims that characterised the British projects described earlier. Most importantly for this thesis, ideas of moral regulation through affective form structured the promotion of town planning and became accepted as part of planning's sphere of governance.

The City of Perth's Endowment Lands

The Endowment Lands project provides a useful example of the transformation of the Garden City planning model to establish appropriate local urban form as well as the beginnings of its instrumentalisation within legislation and professional orthodoxies. In examining that process the main theme remains the way in which a local understanding of the suburban environment as affective form is developed.

First publicly proposed in 1901, the realisation of a plan for the Endowment Lands through suburban subdivision did not occur until 1928. In the interim the suburb (particularly the garden suburb) was further established as the ideal residential environment in Perth. The promoters of town planning advanced their own ambitions through the proposal of a model garden suburb in the Endowment Lands, linking its planning, landscape and building form with the moral regulation of the community.

The following examination of the Endowment Lands project describes the manner in which the spread of the suburbs in the early part of the twentieth century and the simultaneous work of planning advocates helped embed the garden suburb as ideal form. In that process local understanding of affective form became intimately linked to the environmental unit of suburban house and garden.

Planning discussions at the turn of the century were characterised by increases both in concern about the urban form of the City and pressure for urban expansion.¹⁰⁷ Within the Perth City Council, this led to the formation of a Parks and Gardens Committee in 1900, the idea of developing the commonage (expressed in a letter to the *West Australian* in 1901), and the contemplation of a “Garden City” (apparently initiated by Bold) as early as 1902.¹⁰⁸ Even before his visits to the Garden Cities of Letchworth and Welwyn in 1914, Bold was pressing for the implementation of measures from contemporary European planning developments to be applied in Perth:

One of the most prominent features in municipal politics at the present day is the close attention which is given to the housing of the people and town planning ... Until the last decade it has been practised to a greater extent on the Continent of Europe than in England, but the efforts made in the old country in the direction of improving the housing conditions of the people have led to the widening of streets, and the improvement of traffic facilities, in order that the people may be expeditiously and cheaply conveyed from the centres of large population to the outlying suburbs, where they may be housed economically and in comfortable and attractive surroundings.¹⁰⁹

Bold was the Town Clerk during this period, as well as a co-founder of the TPA. He was highly influential in the general development of planning activities in Perth, including the Endowment Lands project, which specifically drew upon the Garden City model.¹¹⁰

The site identified for Perth’s first Garden City was an area of Council land to the west of the city centre, located along the coast to the west of the city. The State Government had granted the city commonage rights to this land in 1855, although negotiations for its complete control, including the coastal strip, were carried out over a number of years. In 1883 the state redefined and slightly reduced the area of this land which, due to its remoteness from the city and the Council’s inability to grant more than ten year leases, was used primarily for the extraction of timber and limestone.

In 1916, as the TPA was being formed, the Perth City Council purchased the Limekilns Estate, on the recommendation of Bold, in order to connect the Endowment Lands to the existing City.¹¹¹ In this year it also committed itself to

building a road linking the city and the coast in the hope that it might stimulate support for suburban development from the state government. Two years later the Ocean Road (a temporary, single lane of jarrah sleepers also known as the Plank Road) was opened, and proved very popular for day trips to the coast. Early in 1918 a committee was set up by the TPA to formulate proposals for the Endowment Lands and the Council, following the TPA's advice, commissioned a contour survey of the land. The state government, however, ruled out assistance for either a road or a tramway, based on an assessment of the benefits of such a development being limited to the City Council.

Critical progress towards development of the Endowment Lands occurred in 1920 with the passing of the "Endowment Lands Act." This was an important step in Perth's planning history as it gave the city comprehensive new development powers over all its land, including the Endowment Lands estate. Subsequently, a committee was formed by the Council to deal with all matters pertaining to the Endowment Lands and to advance its development.

Development was limited, however, by the beachfront reserve (5 to 10 chains – approximately 100-200 metres - wide). The State had given Council power to develop the land and grant leases of 21 years, but retained the right to rescind this at any time. The City thus delayed development plans, focussing instead on lobbying the State Government. While Council was successful in obtaining a verbal agreement for the transfer of a significant portion of the reserve in return for other land within the Estate (25 acres) being given over to the Government for public uses, the Parliamentary Bill required to enact this never appeared.¹¹²

Frustrated but not discouraged, Council continued with the planning for this land in readiness for its eventual development. Guidelines were drawn up for a design competition for the Endowment Lands project and a board of assessors appointed in 1921.¹¹³ The guidelines drew upon the knowledge of the TPA, and the potential powers of the Endowment Lands Act, to structure a comprehensive and detailed development vision. Although given design freedom, the entrants would be steered toward a more coordinated planning approach than in Perth's previous urban

development. The suggested location of each townsite was to be noted, servicing (water and power for example) was to be coordinated with subdivision, zoning of business, residential and recreational areas was required, the road network was to be categorised and given hierarchy, and public open space had a high priority. Despite the enthusiasm of the city to start the project, continuing negotiations with the State Government over the land transfer delayed commencement of the competition.

Finally, in 1925, the Council decided that it must proceed with development: the Ocean Beach at the end of the Plank Road had become increasingly popular, with reports of up to 4000 people visiting on summer weekends. In September, Council produced a first definitive proposal for the Endowment Lands, despite firm statements from the new State Government that it would not alter the coastal reserve.¹¹⁴

The competition guidelines drawn up four years previously were revisited and a publicity plan prepared. However, before the competition could be launched, the accuracy of the contour plan was called into question. It was feared that, even with a more accurate (and expensive) re-surveying, problems such as those experienced with the Burley-Griffins' winning scheme for Canberra would require re-casting of entries submitted to conform to the true site conditions. On the strength of these fears the competition was cancelled. Instead, through the instigation of Bold, the surveying partnership of Hope and Klem was commissioned in 1917 to fix the alignment of the main road through the estate and prepare a more general design for the area.¹¹⁵ Once again the Town Planning Association proved a pivotal influence: its members had played a significant role in steering the political planning of the development, and were now being appointed to carry out its design.

Hope and Klem enthusiastically embraced this opportunity to design a model settlement, producing a plan that strongly evidenced their reform ideals. Residential subdivision in Perth at the time was largely a piecemeal, unregulated process. In contrast, Hope and Klem's proposals for the Endowment Lands project and garden suburbs of the early 1900s were attempts to provide an alternative

development standard. This standard accorded with the visions of the city's town planning advocates, giving urban form a key role in social governance.

Subdivisions in Perth at this time were typically planned with rectangular gridded streets and lots, whether carried out by government or private developers, on the periphery or in "pocket-handkerchief" estates, and regardless of site topography. The lack of controls and large number of people involved in the process meant that there were a wide variety of lot sizes, a profusion of short, narrow streets and an intense process of re-subdivision. A number of estates (Belmont, for example) were established on the outskirts of the city where servicing and access was poor, or even non-existent. The tendency was to provide smaller lots nearest major roads or train stations with the size increasing as access became more difficult. This, along with the re-subdivision process, created an unstructured mixture of adjacent residential, agricultural and commercial land use.¹¹⁶

By contrast, Hope and Klem's subdivision designs broke from this orthodoxy and began to draw formally from the socially progressive town planning concepts in favour at that time. Beginning with the Dalkeith Estate of 1913, their designs featured more elaborately designed street networks, including curved vistas, crescents and spaces given over as public reserves.¹¹⁷ The success of that subdivision ensured a large number of commissions for the partnership, and their continued exploration of similar design ideas. During an extremely productive period that lasted until the end of the 1920s, suburbs, including Victoria Park, Monger's Lake, Redcliffe, Coolbinia and Menora, were designed and profitably marketed, establishing the firm as an innovative and progressive practice. This background, along with their direct links with the TPA and Council, is the likely

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reason the firm was commissioned so readily to design the Endowment Lands development.

The overall development process for the Endowment Lands was an application of comprehensively designed and controlled urban expansion envisaged as a blueprint for the city's future. It was a unique project, differing radically in structure and form from the more *laissez-faire* processes operating elsewhere in the city. The process initiated by the Council, using the powers of the new Endowment Lands Act, characterised the beginning of a formal, institutionalised town planning system in Perth. The close involvement of TPA members in the scheme, coupled with its contemporaneity to many of Perth's early planning landmarks, made its accomplishment emblematic. The energy with which Hope and Klem approached the project contributed to its singularity and was enthusiastically received by the Council, being remarked upon in the Lord Mayor's Report of 1925:

... both members were particularly enthusiastic in the matter and devoted themselves wholeheartedly to the task not only to just comply with the instructions given to them, but of submitting a scheme which would be an object lesson in town planning and garden city development.¹¹⁸

Accordingly, the proposals submitted by Hope and Klem (principally designed by Klem) went far beyond the terms of their commission and emphasised its innovative character:

I found it necessary to design more than a skeleton plan in order to protect those ideals so dear to the hearts of town planners, and vitally necessary when it is considered that the embodiment of these ideals will influence in a very large measure the social, moral and physical welfare of future generations.¹¹⁹

Hope and Klem expanded and elaborated upon the initial brief in their "tentative design of proposed layout", envisioning two planned communities: a seaside town and a residential town.¹²⁰ The residential (or dormitory) town was at the city end of the endowment lands. The plan for this section used the beach road (the Boulevard) as its main axis and was laid out almost symmetrically, in an extremely formal arrangement of curvilinear streets. The seaside town lay at the terminus to the main road and its arcing streets radiate out from the central promenade, deformed to

accommodate the contours of the land. The terminus of the Boulevard and the Return Drive lies at the centre of this promenade, cradling a small business area and “stadium.” The two towns were separated by the green-belt of public lands with public reserves, a golf course and a pine forest, and, although areas were set aside for civic uses and local business, there was no provision for a rail link or factories. Hope and Klem were “... convinced that they would both prove detrimental to the best interests of the proposed scheme of development.”¹²¹

The residential town provided the greatest opportunity for the application of Klem’s interpretation of the Garden City, or garden suburb. The plan suggests a broad interpretation of Unwin’s concepts as articulated in projects like Letchworth, combined with an appreciation of other formal models and local exigencies. It was centred on a formal civic centre, whilst branch roads separated the residential areas from the busy main road. Within these sections there can be seen an inversion of Unwin’s quadrangle, by which small open spaces and playgrounds were provided within the interior of the house groups. However, the interlocking circular streets that form these spaces are less related to the planning types developed by Unwin. Roger Clark has traced this motif to Klem’s awareness of various American City Beautiful planning schemes and their attempt to provide a suitably grand and formal character for urban environments.¹²²

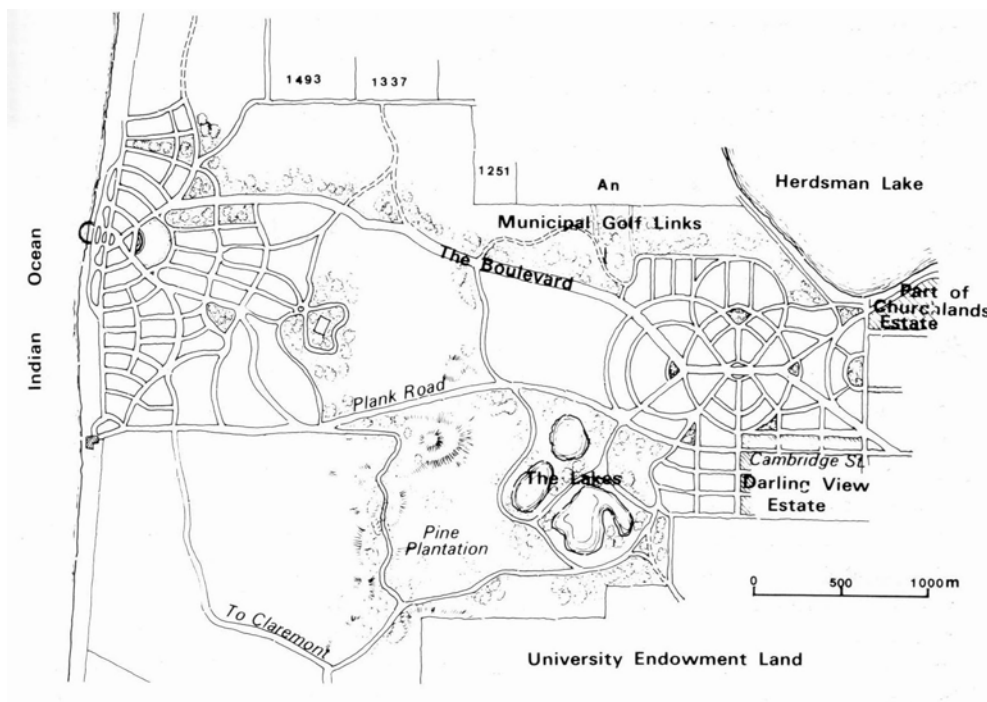
Indeed, it appears that the most vital concern of the overall plan was to set in place an ordered arrangement of public space (predominantly parks) to define each residential settlement. The links with any Garden City notions reside in this concern with the structuring of the two towns through carefully landscaped streetscapes (a cross-section of the Boulevard “parkway” is provided on the plan), a number of formal parks and reserves within the suburbs, and the sizeable green belt. The proposed housing areas, suburbs disconnected from the city, in visually harmonious, verdant surrounds, were proffered as ideal residential environments.

Thus, the plan presented by Hope and Klem introduced a far more explicit concern with the social role of the development, beyond merely providing a pleasure resort.



22

The site for the Endowment Lands project prior to development - Photograph of Limekilns Estate and Endowment Lands, 18 January, 1918.



23

Hope and Klem's initial scheme for the Endowment Lands, 1925.

The “satellite towns” were regarded as a mechanism by which the city could control and direct future development for the betterment of the community.¹²³ The possibility of a straggling settlement along the beach road was defined as undesirable because it would be costly to service and administrate. However, perhaps more importantly, it would also threaten the ideal, autonomous communities that were being described in the plan. The towns were intended to have their own characters; the seaside development would be a “pleasure resort, with exceptional facilities for business, recreation and amusement”, whilst the residential town would have its own specific cultural, social and economic life. Thus, each would become “ideal...with decided characteristics of its own, yet retaining some sort of relation or dependence on its parent city.”¹²⁴

Hope and Klem’s vision outlines the way in which affective form was conceptualised locally, emphasising the societal benefits of rational transport networks, zoning and, particularly, the need for discrete, autonomous communities. The tensions evident in implementing the plan are also illuminating. The description of the proposed towns suggests considerable concern in determining the balance required between the separation of the residential environment from the ill effects of the city, and a necessary relationship with that “parent city.”

In this way, the suburbs to be created were attuned to contemporary Australian concerns regarding the role of the residential environment in the production of ideal citizens. The encouragement of national enterprise and efficient, healthy workers was a significant part of the moral uplift to be generated by garden cities and suburbs.

During the years it took to eventually establish the Endowment Lands development the understanding of its governance objectives and their relation to the project’s urban form shifted. As Robert Freestone has noted, Garden City (or garden suburb) concepts were often employed for more diffuse motives:

The Australian connection involves a selective adoption of concepts and liberal use of an attractive term to further specific interests such as town planning and housing reform, industrial co-operation, property speculation, and decentralization. There

were professional and other rewards in 'garden cities', and more especially in 'garden suburbs', but the direct reform achievements were limited.¹²⁵

At this time, it was widely held that the sites within which the nation's physical and moral growth (ostensibly that of its children) could most effectively be governed and nurtured were intimately linked to the promotion of town planning principles. The role of the home, inevitably meaning the home in the suburb, was central.

We must do better than we have done in conserving our baby life by taking greater care of the mothers of the nation ... by getting [them] ... out ... to zones ... where the children, in their garden villages, will grow up taller, stronger, deeper in the chest, freer from physical defects, happier, more likely to be stalwart effectives in the wealth-creating forces of the State, and less likely to be a burden on the community.¹²⁶

Jenny Gregory has traced the impact of social reform movements in Perth's middle-class suburbs after World War I, identifying a local belief in these linkages of ideal residential environments with notions such as national efficiency.¹²⁷ Fears in both Britain and Australia regarding the physical decline of its urban population were often linked to housing conditions. Consequently, the growing influence of technocratic management methods within commerce and industry ('scientific' principles of management, streamlined and standardised work practices and a general application of technical rationality) was also felt in the sphere of housing and planning.

The late nineteenth and early twentieth century saw the establishment and expansion of numerous organisations directed toward the reform of family and personal behaviours. These ranged from temperance, morality and educational reform groups (the kindergarten movement for example) to those concerned primarily with hygiene and physical health. The 1920s and 1930s were the most active and profitable years for such groups and the emergent class of professionals, technocrats and experts, who led such reforming efforts, effectively extended the principles of science and instrumental reason to the ordering of the urban environment and operation of the household. Although the original reform efforts had been primarily directed at working class families, by the inter-war period the middle-class household was also undergoing reconstruction. Kereen Reiger, in her

account of the modernisation of the Australian family, has detailed the manner in which household management, family relationships, and the environment within which they operated, were reconfigured in this way to become consistent with the demands of modern, industrial society.¹²⁸ The suburban home was becoming the foundation of national stability, and critical to the production of good citizens:

The influence of the home plays a very large part in the social life of the community. Environment eliminates or develops those traits in character which keep the Police, Children's, Criminal and Divorce Courts of the state busy[.]

The parents of the West must strive to make a home of their house, and create that 'Home Influence' which does not distort but beautifies; which makes *good citizens*, and not bad parasites or dangerous criminals.¹²⁹

The plan for the Endowment Lands by Hope and Klem was an exemplary scheme in this regard, featuring many of the current town planning orthodoxies: separation, zoning, public space, housing restrictions. Separating the new towns from the city and ensuring strict zoning regulations bolstered land values and a confidence that the suburbs could not be polluted, either literally or metaphorically, by the intrusion of factories or other undesirable land uses. The parks and open space were vital for access to the sun and healthful breezes, safe recreational spaces for children, and the psychological effect of such aesthetically pleasing surrounds.

Restrictions on the size, location and design of houses were also considered a vital part of the development process:

To assist in the evolution of the Estate on the lines of a model suburb, unspoiled by the errors of the past, and for the mutual protection and benefit of all, protective restrictions, which have been neglected in many suburbs, were imposed in respect to the sale of these residential lots.¹³⁰

These restrictions featured minimum lot sizes and setbacks, requirements for building orientation, and a ban on terraced houses. Additionally, the expressed desire to produce a model settlement, and to exercise close control on its form, prompted more extensive requirements, including:

That all buildings, outbuildings, fencing etc. be of modern design, approved as to position, material etc. by the Council, and to cost not less than £600 for each dwelling

(with usual offices and outbuildings) in the 'wood' area and £800 in the 'brick' area ... That no two buildings of similar or near design be approved if adjoining on either side.¹³¹

The Endowment Lands Committee also attempted to put in place aesthetic controls that would have given significant power to TPA members. A license for construction within the Estate was to be contingent on the approval of a "Special Advisory Committee." This Committee would assess each building's "design, construction, and general lay-out [sic], with a view to securing its artistic merit, and due regard to the amenities of the Estate."¹³² While the Council approved of the suggestion, it balked at a Committee consisting of, potentially, three TPA members (the TPA president, the Town Clerk, and the President of the Architect's Association). In place of the suggested committee it resolved to appoint "official staff as shall be approved by the Council."¹³³

Thus, the planning, regulation and formal control of the development was given critical importance in its proposed role as an exemplary residential environment; an ordered setting for the home life of the family to produce "effective" citizens. The rational tools of science - emphasis on precision, measurement and calculation - were exercised in planning for the seclusion of the private household, reinforcing its vital role as a haven from the industrial, commercial world.¹³⁴ The dedication and effort of town planning reformers to this effect hinged upon their linking of social reform with environmental conditions.

As Leonie Sandercock has pointed out, from the 1920s a pragmatic, technocratic tendency amongst the majority of planners outweighed the initial idealism and emphasis on affective form, derived from precedents such as the Garden City. Planning became increasingly justified in terms of economic productivity and cost-saving to the state.¹³⁵ However, the possibility of mental and physical improvement of the community through reform of the built environment remained a core belief: "Better homes help to make better citizens and better citizens inevitably raise the standard of social and national life."¹³⁶

Implementation and Implication

There was a considerable lag between professional interest in the formalisation of planning in Perth and its implementation by the state government. Although a proposed Town Planning Bill had been submitted as early as 1915, there was no positive action supporting it from the Government whilst the Endowment Lands development was first being formulated. Seven drafts were prepared, and a number of promises made by Premiers of successive governments, before a Bill prepared by William Bold and the TPA was introduced to Parliament in 1928. Another year would pass before the gazettal of the Town Planning and Development Bill in November 1929.¹³⁷ The significance of the Endowment Lands project for a discourse regarding reformatory architecture and urban form is heightened in such a climate.

Hope and Klem's scheme functioned as a catalyst for local planning ideas, contributed to the demarcation of a professional planning discipline in Perth and demonstrated a confidence in the extent to which social, moral and economic conditioning could be effected through the design of the built environment. The plan synthesised a notion of affective urban form with prevailing economic and political exigencies. Thus, the facilitation of economic activity, efficiency of transport routes and production of a healthy, virtuous citizenry came to be seen as the possible results of forceful town planning and, in this manner, became the axioms by which the discipline was constituted. This section of the chapter will examine the way those issues played out in the contemporaneous establishment of local town planning legislation and the piecemeal implementation of Hope and Klem's scheme - a process that saw the dissolution of the larger Garden City in favour of garden suburbs as the preferred development model in Perth (and a planning focus from that point forward).

Despite the commitment and enthusiasm of the TPA and Perth City Council, the implementation of the Endowment Lands development was shaped to a large extent by external factors. Financial and construction difficulties, coupled with the disastrous effects of the Depression and the Second World War, delayed its progress and forced changes to the design. Although the project was a unifying and

exemplary phenomenon during its gestation, the result of these changes and delays was a less inspiring physical manifestation, bearing only a partial resemblance to the influential vision.

The establishment of a loan to proceed with development proved difficult: inquiries to financial institutions were unsuccessful, and the Council itself was discouraged from providing such a large sum by public reaction to recent attempts at raising money for other purposes.¹³⁸ After long debate, and the expenditure of much energy on pursuing alternative financing schemes, it was decided that the scale of the development's first phase should be dramatically curtailed to reduce the funds required. Instead of a broad civic parkway, the Boulevard was reduced to a fifteen feet wide, one-way road with a temporary surface, and the number of lots for release was reduced to 250 (at the western end of the site). These changes reduced the cost of works from an initial estimate of £100 000 to around £35 000, so that the Council could provide funding from an overdraft, rather than a public bonds issue.¹³⁹ As John Selwood has noted, despite these restrictions the initial subdivision (City Beach Estate No. 1) was unique at that time in its stringent building requirements, and the level to which existing contours dictated the layout (providing lots with more even grades and varied vistas).¹⁴⁰

The initial response to the subdivision was fairly enthusiastic: sixty-nine lots were sold and four business sites leased at auction on February 9, 1929.¹⁴¹ However, the promise of this start was short lived. The Depression halted almost all building and postponed ideas of further subdivision. The City Beach Estate's first house (with a foundation stone laid by the Mayor) remained unfinished in 1930.¹⁴² Development in this area would not take off until after World War II: with no proper road it was considered too far away from the city for a permanent residence.

Despite such setbacks, the Council continued working toward developing its Endowment Land holdings, and in 1933 it was decided to commence work on the satellite town for the inland portion of the Endowment Lands, at the end of the tram line. The first subdivision, Floreat Park No. 1, was very small but notable for its connection with the garden suburb tenets that had first informed the project as a

whole. It followed from a suggestion of Harold Boas (acting as Chairman of the City's Economic Council) that a model garden suburb be developed, in order to stimulate local industry and "provide for a shortage of homes for the workers at a rental within their capacity and on modern town planning garden suburb lines."¹⁴³

Unable to fund construction of a complete suburb, the City held a competition to design two model homes.¹⁴⁴ Designed by J.L. Ochiltree and H.M. Henderson, the winning houses were intended to demonstrate the merits of brick and timber construction respectively, as well as the skills of the building industry. Hope and Klem were, once again, the subdivision designers and further distinguished Estate No. 1 through the inclusion of an internal recreational reserve, as Parker and Unwin had done at Letchworth and Hampstead. Ringed by the residential lots, the reserve was accessed via gates at the rear of these houses, or two narrow laneways from the surrounding streets. This seclusion was considered at the time to be a desirable feature and appeared in a number of Australian model suburbs during that period. Indeed Walter Burley Griffin envisaged such reserves as providing for:

... the diverse needs of various kinds of families as to accommodation for children, for pleasure gardens, or for horticulture, and for individual preferences as to separate responsibility or neighbourhood co-operation in any of these directions.¹⁴⁵

Thus, despite the small scale of the endeavour, Hope and Klem continued to lay out designs underpinned by a reforming agenda. Their last project for the Endowment lands, Floreat Park No. 2, also contained an internal reserve, as well as formal planning elements from the earlier Endowment Land scheme. While Hope and Klem's personal input ceased after the dissolution of their partnership in the face of the pressures of the Depression, the continuation of their influence is clearly visible.¹⁴⁶ The later completion of the Floreat Park "Garden Suburb" by the City's Town Planning Board, in particular, continued to feature formal, curving street layouts, with an emphasis on symmetry and closed vistas; neighbourhoods were defined, small recreational reserves were an integral part of the design, and public sites (churches and community hall) were placed at high points with streets leading up to them. Thus, although subsequent subdivision designs and building restrictions were necessarily altered, the process itself continued.¹⁴⁷

The impetus for the formalisation of town planning in Perth was also carried forward through such activity. As Freestone has noted:

By the late 1920s Perth could point to planning achievements of national significance: the beginnings of the remarkable Endowment Lands development, the establishment of a Town Planning Commission, and the passage of the country's first comprehensive town planning legislation. By the early 1930s the Town Planning Association had metamorphosed into Australia's first professional planning institute.¹⁴⁸

Regardless of its inconsistent physical achievements, the Endowment Lands development helped to instigate this process of institutionalizing town planning through its focusing and development of the necessary economic, design, and statutory techniques. The project also strengthened the link between planning (including architecture and landscape design) and affective form: the power of the built environment for moral regulation was a key part in establishing a governmental body for its control.

Inspired by the Commission already operating in Melbourne, in 1930 Perth's newly-formed Metropolitan Town Planning Commission released its first report. Its objectives were:

The enquiring into and reporting on the present conditions and tendencies of urban development in the Metropolitan Area with recommendations with respect to the better guidance and control of such development and other varying broad and more detailed matters related [there] to.¹⁴⁹

Encouraged by this activity, the Council asked its Town Clerk, William Bold, to submit a report on the necessary steps to form a Town Planning Scheme for the City: a report was submitted in July of 1931, and its recommendations accepted in August of the same year. This process represented the continued enmeshing of town planning advocates' reformative ideals within the emerging technical rationality of a profession. Included within the City's new planning vision were a City Plan, a Town Planning Committee, Town Planning Policy, plans for a Road System, Zoning (in the form of by-laws), and a Park System.¹⁵⁰ The comprehensive scope of this scheme, and the speed of its assembly, indicates the extent to which the

process of developing the Endowment Lands helped constitute a local planning process.

The institutionalisation of reformative concepts that occurred during the development of the Endowment Lands marks a dramatic shift from the overtly idealistic projects proposed by Howard and Owen, and reflects still wider changes in the planning discipline. The radical political and social transformations explored by these British experiments, already diffused in projects such as Letchworth, were further dislodged in the translation to Perth. The “purity” of Ebenezer Howard’s ideas dissipated as their influence spread: unconsciously, and consciously, his proposals were reinterpreted and redefined, serving varied purposes. As Leonie Sandercock points out, by the 1920s the more radical, social reform elements of the town planning movement (such as the ardent Garden City advocates) were being outweighed by a pragmatic, technocratic tendency amongst the majority of planners. This majority, who firmly establishing planning as a bureaucratic process, increasingly justified their proposals in terms of economic productivity and cost-saving to the state.¹⁵¹ An underlying assumption of urban form as affective remained to some extent, but was transfigured by its application as a neutral, instrumental technique. The essential, transformative role first envisaged for planning was subsumed into increasingly systematised public policy.

The “selective adoption” of concepts, and the reconfiguration of the model for statutory implementation, is particularly demonstrated by the issue of housing design. As Freestone has noted, whilst the Australian garden suburbs conceived of during the 1920s were often exemplary planning exercises, they were less concerned with the subsequent housing. This was certainly true of the Endowment Lands where, despite the installation of fairly strict development standards and unlike the holistic conception of its precedent, Letchworth, there was no clearly articulated vision to integrate its planning, architecture and landscaping.

While narrower in conception than their British precedents, the first developments within the Endowment Lands did generate a powerful and influential model of suburban form that bonded notions of peripheral, zoned residential development at

low density with the arcadian landscape setting and curvilinear layout suggested by popular notions of the garden suburb. Intimately coupled with these parameters was the overwhelming preference for single family, single level, detached housing. While an architectural vision for this housing was not specified by the developers of the Endowment Lands development, broader social changes produced a degree of uniformity as the norms for houses (beyond the simple stipulation of materials and construction cost) were refined and reaffirmed. The increasing rigidity of conventions and forms associated with suburbanisation ensured that certain themes were consistent in the production of garden suburb homes.

By the time development in the Endowment Lands was established, the preoccupations within national discussions on housing that had dominated the late nineteenth century were noticeably altered. As Nicholas Brown has noted, “The colonial scrutiny of health, over-crowding and self-improvement was becoming the modern scrutiny of the intelligence and social adjustment of those who lived in the nation’s housing.”¹⁵² The personalised arrangement and equipping of the suburban home by a growing middle class, in order that it provide a nurturing environment for refinement and taste, was gaining greater import than the discussion and proscription of minimal, model forms.

The expectations for housing form within the garden suburbs of the Endowment Lands were critically different to that developed by Parker and Unwin as the model of a Garden City residential environment. The implied governance through its affective form was less related to the aesthetic education and spiritual uplift of working class inhabitants and more attuned to the expansion of self-directed cultural consumption. The garden suburbs as they developed in the Endowment Lands became a site for the playing out of new concerns for the home as the place of private recreation, self expression and moral instruction for the middle class family. The segregated, commercialised and modernised suburban villa emerged as Perth’s urban building block, defined and arranged by its new planners.

Conclusion

The model communities of the eighteenth and nineteenth centuries provided early conceptions of the governance of societal relations through the form of the urban environment. Ideal form was given the power to regulate all aspects of urban life, banishing the spaces where iniquity developed. Directed primarily at the poor and working classes, projects such as Robert Owen's Parallelogram were proffered as a means of reconstructing the inhabitants of the metropolis by relocating them to a healthier moral and physical environment.

The Garden City emerged from that history of model communities and its most important legacy was the generation of the garden suburb as an ideal residential environment, separated from the city. Particularly following the work of Parker and Unwin, the garden suburb developed as a middle landscape, between town and country, of low density housing nestled in a picturesque, leafy environment. The garden suburb has proved to be a powerful model of affective form, strongly associated with a healthy and moral family setting. It has also proven a flexible concept, the overarching environmental image being recast many times whilst retaining an implication of social governance.

Although first applied in Perth ostensibly as a means to provide a civilised suburban society, the broad notion of the Garden City (and suburb) also functioned as a tool for the establishment of a town planning profession. Indeed, in Perth it can be seen that the early enthusiasm of Bold for a "model township" in the Endowment Lands, and its evolution in Hope and Klem's plan and beyond, was a vital influence in the formation of a local planning discipline and its statutory mechanisms. The Endowment Lands demonstrated a growing process of detachment and abstraction (where the tools of reform eventually became tools for marketing). The forms and models borne of concerns for housing the working classes, for reforming and "perfecting" communities, were eventually embedded within an emergent profession that had apportioned itself the task of rational and pragmatic planning.

The development of the Endowment lands in the early twentieth century provided a testing ground from which an archetypal suburban model for Perth could be drawn. Consolidating changing expectations of housing form, and associated residential landscape preferences, the Garden Suburb as it was formulated during that period provided an ideal arrangement of public and private space, the harmonious and orderly grouping of homes, and, through separation and setback, a comforting middle landscape. However, understanding of the embodiment, and production, of suburban ideals through these forms was starting to be loosed from the more rigid, and holistic, structuring of elements that made up the British Garden City, and subsequent garden suburb.

The harmony of community and built environment was starting to become associated with a more abstract representation of the garden suburb. With future reiteration this ambiguous conception would be able to accommodate and absorb modern developments in conceptualising the home, and an increasing atomisation of society; it would form a ductile image that could be employed as political contrivance, marketing tool or social mediator.

The following chapter will address the manner in which the new values ascribed to domestic space identified above were further refined and transmuted in the post-World War II garden suburb. That discussion, in turn, will form the grounding to Chapter Four's analysis of the athletes' housing developed as part of the 1962 Commonwealth and Empire Games in Perth, assessing its significance as a synthesis of Modernist housing and planning concerns with the established garden suburb model (and image) in Perth.

Notes

¹ From the diary of Emma Thompson (1857), an early settler in Perth. Reproduced in Marian Aveling (ed), *Westralian Voices: Documents in Western Australian Social History*, UWA Press, Perth, 1979, p. 277.

² Robin Evans, "Rookeries and Model Dwellings," in Robin Evans, *Translations from Drawing to Building and Other Essays*, The MIT Press, Cambridge, Massachusetts, 1997, p. 94.

³ Anthony Vidler, "The Scenes of the Street: Transformation in Ideal and Reality, 1750-1871", in Stanford Anderson (ed), *On Streets*, The MIT Press, Cambridge, 1978, pp. 29-113.

⁴ Anthony Vidler, *The Writing of the Walls: Architectural Theory in the Late Enlightenment*, Princeton Architectural Press, Princeton, 1987, pp. 35-51.

⁵ James Silk Buckingham, *National Evils and Practical Remedies, with the Plan of a Model Town: Accompanied by an Examination of Some Important Moral and Political Problems*, (microform) P. Jackson, late Fisher, London, 1849, pp. 224-225.

⁶ This discussion of the emergence of civil society draws extensively from M. Becker, *The Emergence of Civil Society in the Eighteenth Century: A Privileged Moment in the history of England, Scotland and France*, Indiana University Press, Indianapolis, USA, 1994; K. Kumar, "Civil Society: An Inquiry into the Usefulness of an Historical Term", in *The British Journal of Sociology*, vol. 44, September 1993; H. Wach, "Civil Society: Moral Identity and the Liberal Public Sphere, Manchester and Boston 1810-40", in *Social History*, vol. 21, October 1996; A. Seligman, *The Idea of Civil Society*, Free Press, New York, USA, 1992.

⁷ The thinking of both the Scots and English regarding notions of society versus the individual is grounded in the explorations of French thinkers of the seventeenth and eighteenth century, including Nicolas de Malenbranche and Hugo Grotius.

⁸ A. Ferguson, *An Essay on the History of Civil Society* (Originally published 1767), Transaction Publishers, New Brunswick, 1980, p. 225.

⁹ Adam Smith, *An Enquiry into the Nature and Causes of the Wealth of Nations*, 6th edition, Methuen, London, 1950.

¹⁰ Ferguson, *An Essay on the History of Civil Society*, p.57. Seligman, in *The Idea of Civil Society*, notes that this positing of the social space of human interaction as a moral sphere governed by an "inner-worldly" logic rather than a transcendental reality was a fragile synthesis

that was later destabilised by the expansion of capitalism and growth of rationality. Through those processes the public sphere was increasingly seen as a neutral space of contractual exchanges without implicit moral values. The associated loss of eighteenth century ideas of "natural" sentiments and morals made it ever harder to root the individual in a community.

¹¹ Some of the proposals in the document, and other, similar ideas, had been entertained previously, but not presented in such an ambitious and complete form.

¹² *Proposals for carrying on certain Public Works in the City of Edinburgh*, quoted in A.J. Youngson, *The Making of Classical Edinburgh: 1750-1840*, Edinburgh University Press, Edinburgh, 1966, pp. 3-12.

¹³ *The Scots Magazine*, 1752, quoted in Cliff Hague, *The Development of Planning Thought: A Critical Perspective*. Hutchinson and Company, Melbourne, 1984. p. 131.

¹⁴ See Youngson, *The Making of Classical Edinburgh*, pp. 70-80, and A.C. Chitnis, *The Scottish Enlightenment: A Social history*, Rowman and Littlefield, New Jersey, 1976, pp. 22-43, for accounts of the reaction to the planning and architecture of the New Town.

¹⁵ Youngson, *The Making of Classical Edinburgh*, p. 71.

¹⁶ Youngson, *The Making of Classical Edinburgh*, p. 77.

¹⁷ John R. Hume, "James Craig's New Town," *Rassegna*, Vol. 64, No. 4, 1995, p.24

¹⁸ John Lowrey, "From Caesarea to Athens, Greek Revival Edinburgh and the Question of Scottish Identity within the Unionist State," *Journal of the Society of Architectural Historians*, Vol. 60, No. 2, June 2001, pp. 148-149

¹⁹ Quoted in Hague, *The Development of Planning Thought*, p. 131.

²⁰ Quoted in Hague, *The Development of Planning Thought*, p. 131. The public buildings that were built in the New Town embodied the interests of a civil society: Church, Assembly Rooms, Theatre and Physicians Hall.

²¹ T. Carlyle, *Signs of the Times* in R. Williams, *Culture and Society: 1780-1950*, The Hogarth Press, London, 1990, p. 72.

²² Henry McNab, writing at the time, considered Owen's educational system to be "adequate to the great purposes of forming the character of individuals and collective bodies, civil, moral and religious, of nations and empires." Henry

Gray McNab, *The New Views of Mr Owen of Lanark Impartially Examined* (1819), quoted in Harold Silver, "Owen's Reputation as an Educationist," in Sidney Pollard and John Salt (eds), *Robert Owen: Prophet of the Poor*, The Macmillan Press, London, 1971, p. 65.

²³ R. Owen, *An Address to the Inhabitants at New Lanark*, in *A New View of Society and Other Writings*, J.M. Dent and Sons, London, 1927, p. 98.

²⁴ Wording of the original title to the first edition in 1813.

²⁵ Owen, *A New View of Society and Other Writings*, p. 17.

²⁶ Owen, *Report to the Committee for the Relief of the Manufacturing Poor* in Owen, *A New View of Society and Other Writings*, p. 163.

²⁷ Owen, *Report to The County of Lanark* in Owen, *A New View of Society and Other Writings*, p. 267.

²⁸ Owen, *Report to the Committee for the Relief of the Manufacturing Poor* in Owen, *A New View of Society and Other Writings*, p.162.

²⁹ Owen, *Report to The County of Lanark* in Owen, *A New View of Society and Other Writings*, p. 268.

³⁰ Published as R. Owen, *A Development of the Principles and Plans on which to Establish Self-Supporting Home Colonies*, Home Colonisation Society, London, 1841 (microform).

³¹ Robert Owen and Robert Dale Owen (eds), *The Crisis*, vol. ii, No. 5, Saturday February 9, 1833, quoted in A. Vidler, "The Scenes of the Street" p. 61.

³² Owen imagined the "self-supporting home colonies" being developed by a joint-stock company that would allow the tenants to eventually buy them out. See Owen, *A Development of the Principles* pp. 37-40.

³³ Owen and Owen in Vidler, "The Scenes of the Street", p. 61.

³⁴ Owen, *Report to The County of Lanark* in Owen, *A New View of Society and Other Writings*, p. 285.

³⁵ Obviously this discourse involved a number of other figures; Alison and Loudon represent perhaps the most explicit, early, considerations of the concept of association within Britain. A more detailed discussion is carried out in George L. Hersey. *High Victorian Gothic: A Study in Associationism*, John Hopkins Press, London, 1972. Even earlier than these two figures were a number of French architectural theorists, including Blondel and Ledoux, who

identified and advocated forms of an architectural physiognomy. However, Hersey notes that these architects tended to focus on the notion of "poetic feedback"; written interpretation that guided the perception of a building. This aspect is covered more extensively in an article: Hersey, "Associationism and Sensibility in Eighteenth Century Architecture" *Eighteenth Century Studies* Vol. 4 1970. pp. 71-97.

³⁶ Augustus Welby Pugin. *An Apology for the Revival of Christian Architecture in England* (first published in 1843), St. Barnabas Press, Oxford, 1969. p. 5.

³⁷ Augustus Welby Pugin, *Contrasts* Leicester University Press, Leicester, 1969, p. 5.

³⁸ Pugin, *Contrasts*, p. 5.

³⁹ Pugin, *Contrasts*, p. 7.

⁴⁰ John Ruskin, *Lectures on Art*, cited in Williams, *Culture and Society*, p. 136.

⁴¹ John Ruskin. *The Stones of Venice-Volume the Second: Sea Stories*, (first published in 1853). J. M. Dent & Co, London, 1907, pp.12-13.

⁴² Ruskin, *The Stones of Venice – Volume the Second*, p. 13.

⁴³ John Ruskin, *The Stones of Venice-Volume the First: The Foundations* (first published in 1853), J. M. Dent & Co, London, 1907, p. 21. Ruskin and Pugin differed dramatically in terms of their faith: When Pugin refers to a "Christian Architecture" he alluding to the Catholic church, Ruskin's Protestant background caused him to see the degeneration of Gothic architecture as symptomatic of the "corrupted papacy".

⁴⁴ John Ruskin, *The Stones of Venice- Book Two* (1853), Edited and abridged by J.G. Links, Penguin, London, 2001, p. 238.

⁴⁵ Ruskin, *The Stones of Venice- Volume the Second*, pp. 150-151.

⁴⁶ Ruskin, *The Stones of Venice- Volume the Second*, p. 148

⁴⁷ William Morris. *How I Became a Socialist* in Holbrook Jackson (ed). *William Morris, On Art and Socialism: Essays and Lectures*, John Lehmann Ltd, London, 1947, p. 278. My italics.

⁴⁸ Lauren Weingarden, "Aesthetics Politicized: William Morris to the Bauhaus," *Journal of Architectural Education*, Vol. 38 No. 3 Spring 1985. p. 99.

⁴⁹ William Morris. *Art and Socialism* in Jackson, *William Morris, On Art and Socialism*. p. 106.

⁵⁰ William Morris, "The Revival of Architecture," in Chris Miele (ed.) *Morris on Architecture*, Sheffield University Press, Sheffield, 1996, p. 139.

⁵¹ As well as manipulating the internal and external disposition of buildings to facilitate surveillance and an ideal of communal life, Owen also envisaged employing the latest building technology. His plan of 1817 proposed to utilise "Strutt's most modern valve-controlled heating and ventilation system." Thomas Markus, *Buildings and Power: Freedom and Control in the Origin of Modern Building Types*, Routledge, London, 1993, p. 290.

⁵² *The Garden City*, October 1904, pp. 15-16.

⁵³ Reprinted in 1902 as Ebenezer Howard, *Garden Cities of To-morrow* The MIT Press, Cambridge, 1965.

⁵⁴ For an extensive discussion of the formation of the GCA and the contribution of Neville and Adams see S. Buder, *Visionaries and Planners: The Garden City Movement and the Modern Community*. Oxford University Press, New York, 1990, pp. 77-95, and Mervyn Miller, *Letchworth the First Garden City*, Philimore & Co, Chichester, 2002, pp. 7-27.

⁵⁵ D. Hawkes "The Architectural Partnership of Barry Parker and Raymond Unwin 1896-1914," *Architectural Review* Vol. 163 No. 976, June 1978.

⁵⁶ S. Buder, *Visionaries and Planners*, p. 84.

⁵⁷ Recorded by Unwin in "The Royal Gold Medal – Presentation to Sir Raymond Unwin," *J.R.I.B.A* 3ss, 144(12), 24 April 1937, p.582, quoted in Miller, *Letchworth*, p. 40.

⁵⁸ R. Barry Parker, *The Dignity of All True Art*, quoted in Hawkes "The Architectural Partnership of Barry Parker and Raymond Unwin," p. 327.

⁵⁹ Both partners were involved in the radical politics of the period. Unwin joined the Sheffield Socialist League and wrote for William Morris's *Commonweal*, whilst together they were active in the Socialist Church and joined the Fabian Society.

⁶⁰ R. Barry Parker and Raymond Unwin, *The Art of Building a Home*, quoted in Standish Meacham, "Raymond Unwin", in Susan Pedersen and Peter Mandler (eds), *After the Victorians: Private Conscience and Public Duty in Modern Britain*, Routledge, London, 1994, p. 84.

⁶¹ Raymond Unwin, "Cottage Plans and Common Sense", in Walter L. Creese (ed) *The Legacy of Raymond Unwin: A Human Pattern*

for Planning, The MIT Press, Cambridge, 1967, p. 67.

⁶² Unwin, "Cottage Plans and Common Sense" in Creese, p. 61.

⁶³ Sir Frederic J. Osborn cited in M.G. Day, "The Contribution of Sir Raymond Unwin and R. Barry Parker" in A. Sutcliffe (ed), *British Town Planning: The Formative Years*, St. Martin's Press, New York, 1981, p.157.

⁶⁴ In "The Art of Building a Home," for example: "It is this crystallisation of the elements of the village in attendance with a definitely organized life of mutual relations, respect or service, which gives the appearance of being an organic whole, the home of a community, to what would otherwise be a mere conglomeration of buildings." Reproduced in Creese, *The Legacy of Raymond Unwin*, p. 51.

⁶⁵ Raymond Unwin, "On the Building of Houses in the Garden City", quoted in Robert Beevers. *The Garden City Utopia: A Critical Biography of Ebenezer Howard*, The Macmillan Press, London, 1988, p. 110.

⁶⁶ R. Barry Parker and Raymond Unwin, "The Art of Building a Home," reproduced Creese, *The Legacy of Raymond Unwin*, pp. 51-53

⁶⁷ For examples and a discussion of these regulations see C. B. Purdom, *The Garden City: A Study in the Development of a Modern Town*, Garland Publishing, London, 1985, pp. 65-72; also Miller, *Letchworth*, Chapter 6.

⁶⁸ Unwin, "On the Building of Houses in the Garden City", in Beevers, p. 116.

⁶⁹ Parker and Unwin's garden suburbs included Hampstead (1906), and Brentham (1905).

⁷⁰ R. Unwin, "The Cheap Cottage: What is Really Needed," *Garden City* 1(4), July 1906, in Miller, *Letchworth*, p. 61.

⁷¹ D.R. Scott, "Evolution of a Landscape-Manufacturing," pp. 467-468 and D.S. Houghton, "Population Trends and Patterns," pp. 313-314, in J. Gentili (ed) *Western Landscapes*, UWA Press, Nedlands, 1979.

⁷² *The West Australian*, October 31, 1899.

⁷³ Martyn J. Webb, "Urban Expansion, Town Improvement and the Beginning of Town Planning in Metropolitan Perth," in Gentili, *Western Landscapes*, pp. 359-382.

⁷⁴ "Vigilans Et Audax", *The West Australian*, October 7, 1912.

⁷⁵ "Vigilans Et Audax", *The West Australian*, October 7, 1912.

⁷⁶ "Vigilans Et Audax", *The West Australian*, March 29, 1899.

⁷⁷ "City Improvements", *The West Australian*, June 30, 1899.

⁷⁸ "Vigilans Et Audax", *The West Australian*, November 28, 1899.

⁷⁹ "Vigilans Et Audax", *The West Australian*, July 8, 1904.

⁸⁰ *Twentieth Century Impressions of WA*, 1901, quoted in T. Stannage, *The People of Perth*, Perth City Council, Perth, 1979, p. 244. Home ownership was generally aspired to in Perth, although it was not so easy to achieve as was promoted at the time- in the pamphlets of boosters and the advertisements of land agents. Still, some suburbs had home ownership levels of 50-60% round the turn of the century, an especially high figure in comparison to eastern colonial cities.

⁸¹ *Twentieth Century Impressions of WA*, quoted in Stannage, *The People of Perth*, p. 244.

⁸² "Vigilans Et Audax", *The West Australian*, July 8, 1904.

⁸³ "Proposed Greater Perth", *The West Australian* June 2, 1910.

⁸⁴ "Proposed New Railway Buildings", *The West Australian*, August 30, 1904.

⁸⁵ "Seaside Resort", *The West Australian*, March 7, 1908.

⁸⁶ "Vigilans Et Audax" *The West Australian*, November 28, 1899.

⁸⁷ "Vigilans Et Audax" *The West Australian*, November 11, 1911.

⁸⁸ "Greater Perth", *The West Australian*, August 9, 1911.

⁸⁹ The description of a "City Beautiful" approach to planning derives from the concern that appeared during the 1890s for the "adornment" of cities with "civic design," and municipal art. The strongest influences on its exponents were the Beaux-Art planning of Washington by L'Enfant, the work of Haussmann in Paris, as well as the writings of Ruskin, Morris and the city planning studies of Camillo Sitte. It is generally characterised by grand public buildings and expansive boulevards with an architecture tending towards the use of neo-classical and neo-baroque styling.

⁹⁰ "Greater Perth", *The West Australian*.

⁹¹ "Greater Perth", *The West Australian*.

⁹² "Greater Perth", *The West Australian*.

⁹³ "Perth As It Should Be", lecture by George Temple Poole, cited in *The West Australian*, August 26, 1911.

⁹⁴ "Greater Perth", *The West Australian*.

⁹⁵ "Perth As It Should Be," *The West Australian*.

⁹⁶ "Perth As It Should Be," *The West Australian*.

⁹⁷ "Vigilans Et Audax", *The West Australian*, October 7, 1912.

⁹⁸ "City Expansion and Future Requirements", *The West Australian*, October 17, 1911.

⁹⁹ Robert Freestone, "An Historical Perspective on the Design of Residential Environments in Australia." *Urban Futures*, Special Issue No. 3, November 1991.

¹⁰⁰ Webb in Gentilli, *Western Landscapes*. p. 378-379.

¹⁰¹ Barrie Melotte, "Planning in the Perth Metropolitan Region 1900 – 1970," in Freestone, Robert (ed). *The Twentieth Century Planning Experience: Proceedings of the 8th International Planning Society Conference and 4th Australian Planning/Urban History Conference*. Faculty of the Built Environment, University of New South Wales, 1998, p. 610.

¹⁰² Robert Freestone, *Model Communities: the garden city movement in Australia*, Nelson, Melbourne, 1989.

¹⁰³ Battye Library (WA): Town Planning Association of Western Australia, *Records 1915-1935*, MN16 641A.

¹⁰⁴ Battye Library (WA): Boas, Harold. *Papers 1916-1978*. MN47 881A.

¹⁰⁵ Battye Library (WA): Boas, Harold. *Papers*.

¹⁰⁶ Frank Rea (then Mayor of Perth) was its first president. Other founding members included: William Bold, George Temple-Poole, William Hardwick, Harold Boas and William Saw. Carl Klem, one of the designers of the Endowment Land's garden suburbs, became secretary in 1919/20. Battye Library (WA): Town Planning Association of Western Australia, *Records*.

¹⁰⁷ *The West Australian* October 29, 1900.

¹⁰⁸ "The City and its Commonage", *The West Australian* March 23, 1901; City of Perth, *Lord Mayor's Report 1902-1903*. p. 6.

¹⁰⁹ "City Expansion and Future Requirements", *The West Australian*, October 17, 1911.

¹¹⁰ William Bold was Town Clerk from 1900 to 1944; he produced a number of town planning reports for the City of Perth and was intimately involved in town planning activity during this period. Barrie Melotte in Freestone, *The Twentieth Century Urban Planning Experience*.

¹¹¹ Battye Library (WA): Town Planning Association of Western Australia. *Records 1915-1935*, MN16 641A.

¹¹² State Records Office (WA): Perth City Council. *Endowment Lands Committee, Minutes*. AN 20/1, Con 2891. Item 1.

¹¹³ Unsurprisingly, the TPA was heavily involved, Saw and Bold were both on the Board of Assessors. State Records Office (WA): Perth City Council. *Endowment Lands Committee, Minutes*.

¹¹⁴ An extensive account of the land acquisition and administration process for the project can be found in H. J. Selwood. *Patterns and processes of residential subdivision in the Perth metropolitan region, 1829-1969* Thesis (PhD) Geography Department, University of Western Australia, 1981. pp. 250-300.

¹¹⁵ Hope and Klem's appointment was remarkably straightforward. Once a competition was decided against, it was suggested a surveyor be appointed, Hope and Klem were the only firm suggested, and were subsequently engaged without debate. State Records Office (WA): Perth City Council. *Endowment Lands Committee, Minutes*.

¹¹⁶ Peet & Co., *Plans of Land for Sale by Peet & Co., Architects, Estate Agents and Financial Agents, 159 William Street Perth*. Mining Journal Print, Perth, 19--; Selwood, *Patterns and Processes of Residential Subdivision*, pp. 351-354; John Selwood, "Residential development Processes in Perth: Two Case Studies", *Geowest*, No. 14, 1979.

¹¹⁷ Peet & Co., *Plans of Land for Sale*; See also various maps of Hope and Klem subdivisions held in the Battye Library(WA).

¹¹⁸ City of Perth, *Lord Mayor's Report 1924-1925*.

¹¹⁹ "City Endowment Lands: Plans for Two Towns", *The West Australian* September 29, 1925. The design criteria suggested a seaside town, planned "on Garden City lines", with guesthouses, concert halls, a promenade and a beach enclosure, a new road linking the resort to the city and a green-belt with public reserves, a golf course and a pine forest, could be established between the two. City of Perth, *Lord Mayor's Report 1916-1917* pp. 7, 9.

¹²⁰ "City Endowment Lands: Plan for Two Towns," *The West Australian*.

¹²¹ "City Endowment Lands: Plan for Two Towns," *The West Australian*.

¹²² Roger K. Clark, "The City Beautiful: Promise and Reality," *The Architect* (WA), June, 1969, pp. 40-44; and "The Garden City Movement and Western Australia", *The Architect* (WA), December, 1969, pp. 25-32.

¹²³ "City Endowment Lands: Plan for Two Towns," *The West Australian*.

¹²⁴ "City Endowment Lands: Plan for Two Towns," *The West Australian*.

¹²⁵ Robert Freestone, "The garden city idea in Australia," *Australian Geographical Studies*, V. 20, April 1982, p.25.

¹²⁶ W.A. Saw, "Some Aspects of Town Planning", *Journal and Proceedings of the Royal Society of Western Australia*, Vol. V, 1989-19, p.41.

¹²⁷ Jenny Gregory, *The Manufacture of Middle Class Suburbia*. Thesis (PhD), University of Western Australia, 1988; also Jenny Gregory, "Protecting Middle-Class Suburbia," *Studies in Western Australian History*, No. 17, 1997, pp. 77-91.

¹²⁸ Kereen M. Reiger, *The Disenchantment of the Home: Modernizing the Australian Family 1880-1940*, Oxford University Press, Melbourne, 1985.

¹²⁹ *Western Homes*, November 1929, p.7, cited in Gregory, "Protecting Middle Class Suburbia," p. 88.

¹³⁰ City of Perth, *Lord Mayor's Report 1928-1929*.

¹³¹ State Records Office (WA): Perth City Council. *Endowment Lands Committee, Minutes*, 9 July 1926.

¹³² City of Perth, *Lord Mayor's Report 1926-1927*.

¹³³ City of Perth, *Lord Mayor's Report 1926-1927*.

¹³⁴ The contradictory nature of the separation of the home, as a retreat from the world, whilst it was still being reconfigured by new notions of domestic science and management, drawn from industry and commerce, is taken up by Reiger, *The Disenchantment of the Home*, pp. 32-55.

¹³⁵ Leonie Sandercock, *Cities for Sale, Property, Politics, and urban Planning in*

Australia, Melbourne University Press,
Melbourne, 1975.

¹³⁶ F. Oswald Barnett & W.O Burt, *Housing the Australian Nation*, Ruskin Press, Melbourne, 1942, p. 5.

¹³⁷ Melotte in Freestone, *The Twentieth Century Urban Planning Experience*, pp. 611-612;
Battye Library (WA): Town Planning Association of Western Australia. *Records 1915-1935*,

¹³⁸ State Records Office (WA): Perth City Council. *Endowment Lands Committee, Minutes*, 28 October 1926–9 August 1927.

¹³⁹ State Records Office (WA): Perth City Council. *Endowment Lands Committee, Minutes*, 28 October 1926–9 August 1927.

¹⁴⁰ Selwood, "Residential development Processes in Perth", p. 36.

¹⁴¹ State Records Office (WA): Perth City Council. *Endowment Lands Committee, Minutes*, 20 February 1929.

¹⁴² Perth City Council, *Lord Mayor's Report*, 1929-1930.

¹⁴³ Perth City Council, *Lord Mayor's Report*, 1932-1933.

¹⁴⁴ Perth City Council, *Lord Mayor's Report*, 1932-1933.

¹⁴⁵ Burley Griffin quoted in: Robert Freestone and David Nichols, "A 'Particularly Happy' Arrangement?: Idealism, Pragmatism and the Enclosed Open Spaces of Perth's Garden Suburbs", *Limina*, Volume 7, 2001, p. 67

¹⁴⁶ Freestone and Nichols, "A 'Particularly Happy' Arrangement?" p. 73.

¹⁴⁷ For detailed discussion of the continuing subdivision process, see Selwood, "Residential development Processes in Perth", pp. 36-56.

¹⁴⁸ Freestone and Nichols, "A 'Particularly Happy' Arrangement?" p. 68.

¹⁴⁹ Cited in Melotte in Freestone, *The Twentieth Century Urban Planning Experience*, p. 612.

¹⁵⁰ City of Perth, *Lord Mayor's Report*, 1930-1931.

¹⁵¹ Sandercock, *Cities for Sale*.

¹⁵² Nicholas Brown, "Making Oneself Comfortable, or More Rooms than Persons," in Patrick Troy (ed), *A History of European Housing in Australia* Cambridge University Press, Melbourne, 2000, pp. 120-121.



Some Notes on Form - The Post-War Suburb

Chapter Three

It is immensely, overpoweringly important to the Australian nation that its city folk should live in their own houses around the towns, and that every house should have its garden (so much so that it would be worth while to make a law of it and remit the tax on gardens). It means everything in the world for the health and spirit of the children that they should have this home life.¹

The Australian housing system can be characterised by three particular elements: the relative youthfulness of the stock (67 per cent built since 1945); the low density of construction (77.5 per cent of dwellings in 1986 were single detached); and the dominance of owner occupation as a tenure type.²

As the previous chapter outlined, the abstracted representation of the Garden City ideals in Perth's garden suburbs allowed developing notions of proper moral behaviours to be projected on to its forms. Revealing the aspirations of planners for decency, good order, health and domestic privacy, the resultant composition of verdant landscape and detached houses was understood by its promoters to influence the way people conducted their lives, both through the structuring of the private sphere, and its intersection with the public. With future reiteration, this ambiguous conception would be able to accommodate and absorb developments in conceptualising the home, and an increasing atomisation of society; it would form a ductile image that could be employed as political contrivance, marketing tool or social mediator. The garden suburbs of the Endowment Lands contributed greatly

to expectations of Perth's residential environment as well as its power as an affective environment.

By the inter-war period during which the Endowment Lands developments were constructed, the aspirations of planning reform had shifted from a nineteenth century focus on moral and physical health to encompass regulation of the community in relation to notions of national efficiency and productivity. In Australia the suburban home as a generator of healthy, productive, moral families was an important part of this aspect, and increased in importance as the twentieth century progressed. The image and projected role of the garden suburb as a tool of moral regulation, seen in the Endowment Lands project, shifted emphasis after World War II. The home in the suburb gained significance as a means of personal financial investment and source of individual and family stability based on economic security, especially the regulating habits of financial propriety.

This chapter concentrates on the linking of post-war suburban form with images of the responsible, privatised family, focusing and expanding on some of the aspects of moral regulation already touched on in my discussion of the suburb as affective form. The strong links between the developing concepts of dispersed, owner-occupier suburbs and an Australian way of life are examined and explored, particularly in relation to the establishment of this planning model during the 1950s and 1960s.

The first section of this chapter outlines the way in which the concept of privatism has been implicated in suburban growth and is important to an understanding of the suburb as affective form. It will also sketch the growing prominence of privatism as an idealised component of Australian suburbanisation after World War II, expanding the country's strong suburban tendencies. Following on from that discussion attention will be paid to the growing importance of home ownership in the pursuit of a privatised life, from eighteenth century Britain up to the Australia of the 1960s. In particular, an understanding of the socio-economic influence of home ownership as intertwined with the affective form of the suburb will be described. Emphasis will be placed on the importance attached to the suburban home during

the rapid post-war urban expansion and its role in improving the national condition. The chapter will conclude with an outline of the sources for Australian planning models at the time, in particular the importance of British town planning principles. This provides a context and an introduction to Chapter Four which, like Chapter Two, uses a local planning and architectural project to examine the understanding and expression of affective form operating at the time.

Middle Class Suburban Housing

It was in the early part of the twentieth century that the essential components of the Australian suburban home coalesced. Changes in the form and arrangement of the home following the nineteenth century were driven by a number of intersecting forces, including a widening culture of consumption and technological change. Evolving health concerns, stretching back to the reforms of the nineteenth century, sat alongside shifts in family structuring and further contributed to transformation in the role of the home and its form. Although housing reform was still ostensibly centred on the rehabilitation of working-class morals and hygiene, a growing interest was also evident in the reconstitution of what might be termed middle-class housing. In the housing boom that followed WWII, these transitions in housing form and new values ascribed to domestic space were further refined and reshaped.

Australia's longstanding history as a suburban nation is widely acknowledged.³ As Graeme Davison envisions it: "Australia was urban and quickly grew suburban."⁴ The particular period of settlement, coupled with the country's strong links to Britain and planning precedent there, go some way to explaining the particular urban (or suburban) formations that initially developed. Davison writes:

Australia, to use the language of Louis Hartz, was a 'fragment society'. A distinctive part of the Old World has been transplanted to a new and more hospitable environment, where its inner potential could unfold without the inhibitions and conflicts that had curbed its growth at home.⁵

He goes on to argue that underlying convictions about domestic life fostered in the UK shaped the expectations and desires of nineteenth century immigrants to Australia, particularly the predominant aspiration of a small-scale, typically rural,

landholding. Only a few English city-dwellers are estimated to have attained home ownership in the mid-to-late nineteenth century; as low as one or two per cent of dwellings in larger cities like London were owner-occupied.⁶ Coming from this background, and similar situations in Scotland and Ireland, Australia offered the working class the best hope of obtaining the sanctuary of the detached suburban home. As Davison summarises it:

What the immigrants sought, and what their homeland often denied, was domestic independence. Freedom from the neighbours, freedom from the landlord, freedom from the boss: these as much as the moral, aesthetic, sanitary and social ideals of the English middle class, were the homeland dreams on which the Australian home was founded.⁷

The strength of this ideal, and the vigour with which it was pursued, ensured that when the major metropolitan centres expanded in the twentieth century flats were rarely regarded as the ideal home for the average Australian.⁸ In Perth they were strongly associated with cramped, unsanitary housing, particularly the subdividing of aging houses to form tiny lodging rooms.⁹ A preference for the privatised suburban home emerged very early in Australia's urban history.

During the early decades of the century the predilection for detached houses was assisted by the availability of land and firmly grounded in the social, moral and scientific reasoning of the time. One royal commission on housing conditions in Melbourne reported that:

In a general view, it is regarded as insanitary, and otherwise undesirable practice, for two or more families to occupy at the same time a dwelling house of ordinary design and size, when evils due to overcrowding are to be looked for. So it is agreed amongst sanitarians that similar evils, on a larger scale, are to be expected where dwellings are built on allotments having dimensions so limited as to leave insufficient space for entrance of sunlight and fresh air around and into the house, or for privacy, or for adequate yard space, clothes drying ground, play area for young children, or for fire breaks for the spread of fire from house to house, to say nothing of possible advantage presented by such open spaces in reducing risk from supposed aerial convection of infection.¹⁰

In the period between the wars, the appropriate design of the “small family home” became a focus of architects and developers. As Kerreen Reiger has outlined in detail, the ideal of the detached suburban home became the locus for an

intertwining of domestic science, technical development and changing lifestyle.¹¹

An increasing emphasis on the home as the site of personal fulfilment, the recognition of adolescence and its particular demands and the disappearance of servants in the typical household contributed to the forces remaking the ideal of home during this period.

Associated with these economic and social changes was the transformation of the suburban home as it became more segregated, commercialised and modernised. By the 1920s the average private home in Australia had 5 rooms and 4.15 occupants.¹² It was increasingly focused on the needs of a single family, it was more often owner-occupied, better serviced, and becoming more individualised. A number of architectural, economic and sociological accounts have addressed this evolution.¹³ The consequences of the broader social context that framed these shifts, for the role of the home, were an increased emphasis on its role as the site for recreation, psychological comfort, self-expression and moral instruction (in concerns such as industry and sobriety).¹⁴

Room by room, changes in social identities, including gender and generational characteristics, were being transcribed; the affective aspirations for each space shifting. In this regard Brown has identified the evolving nature of the drawing room as an example of these processes. By 1919 home design journals were advocating the replacement of this space of Victorian comfort by a study for the husband, and sewing room for the wife. The drawing room itself might be reconstituted by the introduction of more informal furniture (such as cushioned window seats) to promote relaxed discussion amongst visiting friends. The impact of radio provoked further evolution; the space becoming a living room centred on consumption of the new mass media. Eventually the strict, formal deportment advised in the drawing room (behaviours that related to the careful mediation of home and external society) became anachronistic. Magazines in the 1920s were enthusiastically relating the manner in which celebrities created highly individualised homes, and the possibilities for wider imitation of this privatised comfort.¹⁵

Building on changes in housing form, as well as values already ascribed to the domestic realm, the personalisation and reshaping of such spaces marked an emerging modern concern with the expression of self through the design, construction and styling of the home. It was a process that stretched beyond the assembly of allusive objects and careful monitoring of behaviour that marked earlier modes.¹⁶ Nigel Thrift and Paul Glennie, in discussing the theorisation of contemporary consumption, have emphasised environment as one of the factors characterising the emergence of modern consumption. New consumption practices are closely linked to setting, as much as the techniques of mass production, and encompass consumption, architecture and leisure skills in the making of an urban lifestyle.¹⁷

The garden suburbs as they developed in the Endowment Lands became a site for the playing out of new concerns for the home as the place of private recreation, self expression and moral instruction. The segregated, commercialised and modernised suburban villa emerged as Perth's urban building block, defined and arranged by its new planners. As their development progressed, the Endowment Lands demonstrated a growing process of detachment and abstraction from the idealism of the British Garden City projects: increasingly, the tools of reform became tools for marketing. These transitions in housing form and new values ascribed to domestic space were further refined and transmuted in the post-World War II garden suburb.

After years of deprivation brought by economic depression in the 1920s and '30s, then high unemployment and war, the opportunity to enter into the suburban lifestyle was seized by many families in the 1950s and 1960s. The resultant boom saw development patterns and housing forms change from the earlier period of the Endowment Lands' garden suburbs, along with the affective properties associated with them. The suburbs that developed in Australia during this time, and the houses within them, reflected developments such as the continuing dramatic impact of the car, the interpretation and institutionalisation of Modernist planning and architectural ideals, and a burgeoning consumerism. In the years following the end

Model kitchen (featuring Formica Sofiglow throughout) by Fellex Colour Planning Bureau, Fellex House, Sydney. Kitchen fabricated by Murray Bros. Ltd., Alexandria, N.S.W. Accessories by Frouds Ltd., Sydney. Decor by Ruth Sleane.

FORMICA makes the difference . . !
DECORATIVE LAMINATE

24
Formica advertisement in Home Beautiful, mid-1950s – conspicuous consumption and the suburban home.

of World War II the economy expanded and life became increasingly comfortable for a great many people; television arrived in 1959, car ownership swiftly increased, consumer durables became more accessible and varied. The associated widespread consumerism had the effect of altering the understanding and experience of the home, enabling a fuller implementation of concepts such as privatism

Privatism

Within this context of change, the relationship of privatism to the affective form of Perth's garden suburb ideal will be examined. Privatism, within this discussion, can be understood as primarily referring to "home-centredness," encapsulating a world-view where employment, kinship and neighbourhood are secondary to the home, which functions as a central focus and the source and expression of identity.¹⁸ This tendency towards privatism is also linked to consumption patterns and the increased commodification of the private sphere, along with the effects of the changing nature of work, standards of living and politics.

The emergence of a widespread privatism has been identified as far back as the eighteenth century. Davidoff and Hall have shown the emergence of new conceptions of the home amongst the English middle class in the period 1780 – 1850. As the workplace was separated from the home, they describe the identification of the home as a private place, in which familial relationships were most valued.¹⁹ Conceptual boundaries were erected between public and private realms, physically represented by the increasingly segregated housing. With the construction of gates, drives, hedges and gardens, certain key foundations for the modern domestic ideal were being laid.

The idealisation of domestic life was also extended to large numbers of the English working class. Dauntton has observed that shorter working hours and increased real wages in the last quarter of the nineteenth century played a large part in this process.²⁰ Changing definitions of 'public' and 'private' accompanied the housing developments of the time, especially reform housing for the urban working class. As noted in Chapter One, in the context of the discussion of model housing, this saw

the construction of homes that were more self-contained and separate from others. To benefit inhabitants' health, and the morality and propriety of social relations, these houses were primarily intended to be the exclusive domain of a single family. The extension of gas and electricity into the home, the provision of better sanitary conditions, higher wages and the gradual emergence of new markets for domestic goods also contributed to an increasingly privatised existence for the family. Further separation of private, domestic space from public spaces such as the workplace came through the improvement of public transport (and, later, the introduction of the car) which allowed increased, individual mobility.²¹

The process continued into the twentieth century. It has been suggested that from at least the 1920s onward, in addition to the physical conditions of the suburbs and the emphasis on consumption, the changing nature of conjugal relations impacted upon the experience and valuing of the home environment. An increased emphasis on sexual compatibility, companionship and the rearing of children also added to the increased privatism of the small nuclear family.²² As a result, "primacy was increasingly given to the material well-being, the social cohesiveness and the autonomy of the conjugal family over and against the demands or attractions of wider kinship and community ties."²³ Most importantly for this discussion, these attitudes became embedded in understandings of the affective power of the suburban home. These processes, leading to a valorisation of the privatised home and home ownership, were paralleled in countries such as Britain, New Zealand and Australia.²⁴

Such changes in the social construction of the "home" necessarily affect those who dwell within. Despite the increased role of the home as retreat, the family occupying its own private space in the home remained connected with the public world. The notion of privatism, in relation to my examination of the suburb as affective form, provides a framework that allows the placing of private space in relation to public space. The development of the model suburb as the context for the ideal home, and their integration as a means of governance is made clearer. It has been noted that:

While we can point to the household 'retreating' into the home we must also acknowledge the ways in which that sphere has been penetrated and the household 'reorganised' by it. The home is no impenetrable bastion.²⁵

Notions of what it meant to be a citizen in Australia during the 1950s and '60s were powerfully shaped by sentiments regarding domesticity. Post-war prosperity confirmed the existing trend toward home and family-centredness. Private emotional investments in marriage, in children and in ideas of the home were critical to the social experience of this period and part of the reorganisation of the urban landscape. The conservative Liberal policies of Robert Menzies represented most forcefully the post-war ideal of an independent, domesticated citizenship. Home-ownership became both desired as a form of participation in the consumer boom and representative of the civic virtues of domesticity. The home possessed as property was a sign of autonomy and investment but also an affective realm, structuring private commitments and the individual's relation to public space. As John Murphy describes it, for the middle class of this period, "the good citizen was intimately connected with the civic virtues of the family; the experience of domesticity was thought to produce citizens as willing workers, as protective soldiers, and as mature and adjusted men or women."²⁶

A particularly modern notion of affectivity is suggested by these functions of the home. Owner-occupation of a suburban house implied good citizenship by that owner through an active, responsible participation in the country's economy, "stoking" the economy whilst also acting as an agent in their own financial well-being. As Lizabeth Cohen has observed for post-WWII America, mass consumerism at that time was not an indulgence but a civic responsibility.²⁷ New house construction provided the foundation of the post-war mass consumption economy, both through turning "home" into an expensive commodity for purchase by many more consumers than ever before and by stimulating demand for related commodities. The purchase of a new single-family home almost always obligated buyers to acquire new household appliances and furnishings; growing disaggregation of the city meant at least one car was usually required as well. At the same time, the investment in the home could be regarded as providing financial security through the accumulation of equity. This sat alongside a sense of social and

psychological security gained through escaping the vicissitudes of landlords and obtaining the ontological security associated with control over the personal environment of the home.²⁸

This particular model of privatised domesticity became powerfully linked with the housing and development forms of the suburbs as they came to be seen as the generators of a new form of community. In Australia, the landscape of the suburbs and their relation to the urban form of city were considered key elements of a unique national lifestyle, one which was actively promoted by the Menzies government of the 1950s and '60s. The following section will establish the particular affective powers invested in the ideal of home ownership (as part of a privatised lifestyle) as a background to an examination of the government's role in assisting its growth in Australia. I will suggest that its actions strengthened the link between the affective power of home ownership and the form of the suburb.

Home-Ownership: the Foundation of Sanity and Sobriety²⁹

One of the best instincts in us is that which induces us to have one little piece of earth with a house and garden which is ours, to which we can withdraw, in which we can be amongst our friends, into which no stranger can come against our will.³⁰

Prime Minister Robert Menzies' strongly held beliefs about the affective power of the suburban home may be linked with the expansion of the suburbs in the 1950s and 1960s. Building on theories dating back to the seventeenth century, Menzies' government valorised privatisation and, particularly, the extension of home ownership to all sections of society. The suburbs were intimately connected with this, and were thus significant in the production of both urban form and social ideals.

Belief in property ownership as both emancipatory and stabilising has a long history. The many Freehold Land Societies that rose to prominence in mid-nineteenth century England, for example, developed with the purpose of securing the right to vote for their members through property ownership. As one prospectus

proclaimed: "This society, however, submits a plan for obtaining 'Land for the People,' thus conferring on working men the power of possessing 'FREEHOLD QUALIFICATIONS AS COUNTY VOTERS.'"³¹ Earlier still, the actions of the Norfolk Land Buyers' Society (c.1630) were criticised for their potential, amongst other things, to contribute to "the making of a parity between gentlemen and yeomen," and the "general begetting of pride and stubbornness."³² As Martin Pawley has noted, the development of freehold land societies and building societies facilitated the growth of home-ownership in Britain from the nineteenth century onward. This was linked to a recasting of the social conditioning of the general populace envisaged, for example, in the above complaints. In 1864 Samuel Smiles described the aims of the building society movement more positively in relation to such an emancipatory agenda:

The accumulation of property has the effect which it has always had upon thrifty men; it makes them steady, sober and diligent. It weans them from revolutionary notions, and makes them conservative. When workmen by their industry and frugality have secured their own independence, they will cease to regard the sight of others' well-being as a wrong inflicted on themselves; and it will no longer be possible to make political capital out of their imaginary woes.³³

The writings of Smiles demonstrate the common praise, at that time, of regulatory techniques and didactic measures that would encourage the bettering of individual character, but more importantly, that would instill qualities of self-governance in ordinary people.³⁴

These associations between home ownership and the individual's relation to society were addressed in the work of social theorists such as Friedrich Engels who, in his articles on the nineteenth century housing shortages in Germany, argued that class-consciousness is affected by home-ownership. He claimed that "the worker who owns a little house to the value of a thousand talers is certainly no longer a proletarian."³⁵ Rather than provide stability, Engels felt that home-ownership deprived the working class of their only advantages in the labour market: flexibility and freedom to seek out work in alternate locations. He worried about the effect such a situation would have for the socialist cause, as the worker who owned their own home would surely become a petty capitalist. Engels explained that:

...the ownership of house, garden and field, and security of tenure in the dwelling-place, is becoming today, under the rule of large-scale industry, not only the worst hindrance to the worker, but the greatest misfortune for the whole working class.³⁶

Engels' objections aside, from the eighteenth century onward an understanding of housing tenure as a positive influence on social and political formations developed and became widespread. As Peter Saunders has noted, owner-occupation today is still predominantly seen as a stabilising force in society, a force for moderation and conservatism that can be projected as either beneficial or detrimental, depending upon one's perspective and politics. Although the fashioning of the linkage is variously described, it has continually been expressed as a significant influence on individual character by being the means whereby good citizenship can be governed.³⁷

The advocacy of home ownership in Australia, especially during the 1940s, was underpinned by a belief in the positive influence of this tenure on a person's independence, economic advancement and stability. In promoting the primacy of the individual, especially property-owners, as a powerful social force Robert Menzies explained that:

The best people in the world are not those who 'leave it to the other fellow', but those who by thrift and self-sacrifice establish homes and bring up families and add to the national pool of savings and hope one day to sit down under their own vine and fig tree, owing nothing to anybody.³⁸

Considerable agreement existed during the 1940s that home-ownership was a conservative political and social tool in capitalist societies, capable of encouraging thrift, pride of ownership and civic responsibility. In Australia the wider effects of the home-ownership were frequently praised, and admired regardless of political persuasion. The then Premier of Victoria, Albert Dunstan, exemplified this belief in a speech made in 1943. Despite Labour holding supposedly antithetical beliefs to Menzies' Liberals, Dunstan's speech proffered very similar sentiments regarding home-ownership:

I know of no saying with more significance and real wealth of meaning than 'an Englishman's home is his castle'. Pride of ownership, security of tenure, sanctuary and contentment, are all bound up in that expressive phrase. Invariably, the man who

owns his own home is an exemplary citizen. His outlook on life is immediately changed from the moment when the first nail is driven into the structure that is eventually to become his 'castle'. In reality, it is a symbol of achievement, purpose, industry and thrift. The homeowner feels that he has a stake in the country, and that he has something worth working for, living for, fighting for; something he has never had in the past, something that he has to look forward to in the future...The fact that a man owns his own home gives him a sense of added responsibility, an urge to improve the locality in which the house is situated...The value of housing schemes for the people cannot, therefore, be measured in ordinary terms of pounds, shillings and pence. The indirect benefits far outweigh any direct monetary loss that might be entailed.³⁹

While debate arose in post-war Australia regarding the desirability of this influence on the character of Australian society, recognition of its power remained a continuing theme. In contrast to the views of Labor politicians expressed just a few years before, the introduction of programs to increase ownership levels in the late 1940s by the Liberal party were criticised by a prominent Labor Minister for being "...deliberately designed to place the workers in a position in which they would have a vested interest in the continuance of capitalism".⁴⁰ The claims of Engels can be seen reiterated here, 70 years later.

The advance towards a property-owning democracy was most rapid from the 1940s to 1960s when construction and lending was increasingly directed towards new, detached houses in newly-developing suburbs. While the focus for their potential effect shifted, broadly speaking, from hygiene and morality-consciousness to one of citizenship and financial sobriety, the significance of housing type and the residential landscape in post-war Australia was understood in a similar manner to that of nineteenth century reform housing. The hegemony of the suburb continued to be seen as a means to govern behaviours and contribute to a cohesive society. Thus, the view became reinforced that possession of detached homes and gardens was a stabilising and conservative influence: reinforcing thrift, industriousness, occupational and geographical stability, good citizenship and other virtues, whilst also providing economic security. In the '50 and '60s, the period defined by Menzies' government, the image of the suburb in relation to the nation was re-evaluated and became increasingly seen as its defining characteristic.

Even subsequent criticism of Australian suburbs, and their homeowners, has targeted those very attributes. In this sense, they are seen as ultimately producing narrow, self satisfied, materialistic and parochial inhabitants, whose ideal extends no further than, as one satirist described: “a spurban house of more than fourteen squares, containing fridge, telly, wart wall carps, payshow, and a kiddies’ rumps room”.⁴¹ Within these views the suburb as affective form is undisputed, it is only the desirability of its effects that remain to be contested.

Up until the Second World War, despite wide faith in the suburbs’ “improving” properties, especially in the professionals and politicians that promoted them, there was significant intellectual criticism of the stultifying social effects of their growth. However, the post-war urban expansion saw a shift in the evaluation of the suburbs’ effect to a more broadly positive appraisal. Tim Rowse has outlined the changing attitudes to the Australian suburb and its role in Australia’s “civilisation,” identifying three periods of intellectual criticism. The first related to those critics who “matured” just before, during or just after the First World War. The second period was defined by those whose writing appeared after World War II, and the third was defined by writings in the ‘60s and ‘70s. As he summarises it:

In the first period suburbia is portrayed as the antithesis of the fine place that a particular writer hopes Australia will be. In the second, the memory of this antithesis persists in an ironical *acceptance* of Australia’s unquestionably suburban fate. In the third, the suburban home is reborn as a crucible of a more humane civilisation.⁴²

While Rowse’s presentation of this process of attitudinal change is perhaps too smooth, neatly dividing the views by generation and skirting some of the conflicting figures, the essential shift in attitude to the suburbs was undoubtedly present.⁴³ Accordingly, prior to World War II a generation of intellectuals can be discerned for whom the suburb represented a social and spiritual decline for Australia. Their hopes for a vibrant and adventurous culture were felt to be crumbling in the face of a soulless prosperity represented by the suburb. Sydney Barrett, a character created by playwright Louis Esson, captured this feeling:

The suburban home must be destroyed. It stands for all that is dull and cowardly and depressing in modern life. It endeavours to eliminate the element of danger in human affairs. But without dangers there can be no joy, no ecstasy, no spiritual adventures. The suburban home is a blasphemy. It denies life. Young men it would save from wine, and young women from love. But love and wine are eternal verities. They are moral. The suburban home is deplorably immoral.⁴⁴

However, during the 1950s and 1960s the social conditions associated with the continued rise of the suburb started to become increasingly accepted by critics as the dominant expression of life in Australia - where the 'real' Australia might lay. As well as remaining a populist ideal, the suburban milieu also came to be framed in more positive terms via social commentary.

Supporting this was a shift in the manner in which broader Australian culture was described. As Richard White has proposed, the post war period encompassed entailed a change of emphasis from a national character to a way of life.⁴⁵ The essence of "Australianness" and national identity became less defined by the characteristics of its working man (the stockman for example) and more by the environment within which its average family lived. This new emphasis on a manner of living unique to Australians had social implications that strongly relate to the reassessment of the suburb. The use of the phrase 'way of life':

... was indicative of a number of broad changes that had been taking place in discussion about Australia: interest in a national 'type' was being replaced by interest in a broader social pattern; economic man and his standard of living acquired new moral and cultural dimensions[.]⁴⁶

It is in the assessments of what might constitute this Australian way of life that the form of the suburb became commonly invoked. The suburb was the catalyst, and measure, of an Australian standard of living. What an Australian way of life might mean was never clearly defined. It presupposed a certain homogeneity and a status quo to be preserved, but the traits that rested behind it were often vague, intangible essences. White described some of the most common features used in descriptions of a national identity. These tended to define some sort of moral basis for "Australianness," often related to themes of individualism, security and social justice. Oeser and Hammond, writing in the 1950s, saw Australians as valuing most highly: "the right to self-determination, and the comfort of their existence as

compared with that in other lands.” These aspects were valued by the nation over and above “traditions or international power, or cultural contributions.”⁴⁷ Such assertions about a democracy of the spirit were common but it is also critical to note the reference to a comfortable existence; this links closely with another common belief in Australian living as essentially urban.

Despite a strong urban bias in the development of Australia, in the late nineteenth and early twentieth century a national character based on a rural ideal had been promoted, valorising the “independent Australian Briton.”⁴⁸ The post-war shift to contemplation of an Australian way of life finally saw that urban situation reflected as suburbia become described in a more positive light, losing some of the pejorative connotations of the past. White sees the concept as “part of the intellectual framework that accompanied the shift of perspective in Australian capitalism from a rural to industrial base[.]” And whilst that industrialisation was making a higher standard of living possible “the division between work and leisure, and the isolation of the family home as the centre of leisure activity, became more marked.”⁴⁹

That settling of a mass consumption society into suburban life was an issue that Robin Boyd addressed in *Australia's Home* (1952). As White points out, he was one of the first Australian intellectuals to “come to terms with, or draw the maps of suburbia.”⁵⁰ Boyd contended that while “factory, shop, office, theatre and restaurant were not radically different the world over ... in the suburb was experienced that essentially Australian part of town life which lay between work and home.”⁵¹

It was felt by many commentators that such separation and privacy, developed in the suburb, were crucial to aspects of this Australian way of life, such as individuality and responsibility. The detached family dwelling in the suburb became emblematic of the power of this retreat from the public world to nurture ideal citizens. Design of the house and suburb reflected this sense of the home as private, domestic retreat and emotional centre for the family unit. From the early part of the twentieth century, the development of the Australian suburban home

was affected by a variety of factors including developments in building materials and the labour market, as well as the increased influence of architects and planners. The home was also adapted to changing social patterns such as smaller, nuclear families, and to new concepts regarding hygiene and domestic management.⁵²

The ideal of the single family house on its own spacious block in verdant surrounds was well established by the time of the Second World War. In the post war environment, as the level of owner occupation rose dramatically, the early twentieth century ideal of the garden suburb as an exemplary environment that might aid the production of a wholesome community was further embedded with associations of self-discipline and responsibility that focused private financial wellbeing. A home was the affective realm of private commitments, but was also possessed as property; increasingly as the ideal sign of autonomy and investment. The aspirations of one young, 'owner-builder' couple in the 1950s demonstrate the interplay between these elements:

Because a home is the happiest place in the world, and the only perfect setting for family living, we decided that we'd do without anything to have a better-than-average house. [But] No young couple likes to borrow without careful consideration ... Especially when repayment depends on the health and earning capacity of the breadwinner.⁵³

The following section will underline the way in which socio-economic circumstances after World War II, especially the outcomes of government housing policy, strengthened the relationship between the ideals of home ownership and suburban development patterns in Australia. The affective form of the house and suburb in turn reinforced the desired pattern of ownership, facilitating the dominant landscape of autonomous nuclear families. A tracing of the planning sources for that post-war suburban environment will conclude the chapter.

Home Ownership and Housing Policy

One of the major social aspirations associated with visions of suburban Australia is home-ownership. In fact the country is not only one of the most highly suburbanised but also has one of the highest rates of home-ownership.⁵⁴ The

connection between one circumstance and the other was not inevitable. The link between home-ownership and the detached, single-family suburban home was consolidated during the housing boom of the 1950s and 1960s through factors including full employment, real wage gains, a post-war baby boom and government policy. Significantly, the nature of the housing provided, or encouraged, by government shifted from one where broad provision of public rental housing was a key part of maintaining a minimum standard of living to one where the government's concern was only "welfare" housing for the "deserving poor." These factors intersected with a strong existing preference for the suburb and post-war planning and architectural tenets that reinforced its dominance of the urban landscape.

It is recognised that the public provision of infrastructure provides a major force in structuring our cities and indeed government action was critical in the shift towards homeownership described above.⁵⁵ The manner in which governments across Australia developed transport infrastructure, community facilities and public housing estates, combined with the particular conditions of the private urban development market, crucially influenced the physical form of the suburb. At the same time, symbolic attachments to these suburbs were being encouraged as government policy helped to link the formal ideal of the modern suburb with an image of community formed by autonomous, nuclear households.

Conventionally, home-ownership is believed to be a contributing factor in social and political behaviour. A long standing assumption within Australia has been that home-ownership is a trait of a truly egalitarian society and that full participation in citizenship is bound up in some way with property rights as exercised through home-ownership.⁵⁶ Thus, the promotion of home-ownership has been a particular focus of government policy within Australia, while contemporary social research has started to question the level, and manner, of its influence.⁵⁷

Although ownership of a house in the suburbs, and particularly one in variations of the garden suburb, had developed as the ideal, levels of new homebuyers between 1921 and 1947 actually dropped. As Jim Kemeny points out, the levels of home-

ownership remained around 52% but the declining rate of newly formed households signalled a possible decline, in the long run, of home-ownership.⁵⁸ Factors involved in this decline included not only the Depression and the impact of war, but also the particular intent of the Labor Government's housing policy at that time.

The Curtin Government, and the Labor movement in general, saw public housing as necessary on a significant scale in the long term to guarantee an acceptable minimum standard of housing. The first decade of housing policy under Labor may be seen as broad in its support for both rentals and home-ownership, as well as in its recognition of housing as a determinant of lifestyles and a shaper of development. Through the War Service Homes Scheme (WSHS) and the Commonwealth-State Housing Agreement (CSHA) roughly equivalent numbers of Australians were assisted into affordable housing during the period 1945 to 1956. 113 000 loans were made under the WSHS (which assisted in the purchase of new or existing dwellings) and 120 000 dwellings were constructed through the CSHA via the State Housing Authorities (SHAs, agencies tasked with the provision of public rental dwellings with rents related to household income).⁵⁹ Together, these accounted for over 20% of total dwelling completions.⁶⁰ While the proportion of flats was greater than that provided in the private sector, the majority of homes built under these programmes were simple bungalows.

As it was felt that the WSHS catered for home purchasers, the CSHA initially focused on the provision of rental accommodation; sales of dwellings were effectively prohibited.⁶¹ The function of the State for the then Federal Labor Government was "to provide adequate and good housing for the workers; it is not concerned with making the workers into little capitalists."⁶² This arrangement arose in response to the final report of the Commonwealth Housing Commission (CHC) which placed the role of housing in a broad context; it was seen as a major determinant of lifestyle that should be integrated with planning to foster national objectives.⁶³ The CHC recognised the need for integrated transport and land-use planning to allow public transport to run efficiently, for state control to curb land speculation and for strategically located medium and high density housing to

provide for groups such as singles, the aged and the infirm, and to avoid "...the mass migration of the rehoused population to outer areas...spreading out cities so that they become even less efficient than at present." ⁶⁴

However, the sense of urgency created by Australia's post-war housing shortage meant that the majority of the CHC's recommendations were not included in the 1945 CSHA. ⁶⁵ Addressing these shortages was primarily achieved through the construction of new housing estates on the fringes of the metropolitan area, paving the way for similar development by owner-builders and private developers. Coupled with factors such as increasing prosperity and the dominance of the car, the housing strategies of government would further accentuate the pattern of urban sprawl in the cities. ⁶⁶

Also starting to occur at this time, Kemeny argues that the complete reversal of the downward trend in home-ownership was essentially engineered by political will. In the late 1940s the Menzies Government embarked on a number of new programmes to encourage private home-ownership and reduce the level of public rental housing. By 1954 the home-ownership rate had leapt to 63 percent and, although it then slowed slightly, by 1961 it was 69.9 percent. In just twelve years the tenure system had been transformed and private home-ownership was completely dominant.

In contrast to the Labor government, conservatives saw the provision of public housing to be a purely temporary measure while the building industry recovered from depression and war, and believed that public housing would be necessary in the long term only on a minimal scale for the 'deserving' poor. ⁶⁷ Owner-occupation was preferred as "a bulwark against communism and a source of social satisfaction and stability." ⁶⁸ This stance meant that the change of government in 1949 saw housing policy alter significantly.

The new Menzies administration began a reorientation of government policy away from a broad public housing provision toward home-ownership. The 1956 CSHA was a turning point in this regard. Under this agreement (and the subsequent 1961



25

War Service Homes – Nollamara, Perth, 1956.

and 1965 CSHAs) the states were allowed to sell dwellings on whatever terms they saw fit, contributions to rent rebates ceased, funding for rental construction was considerably reduced and funds were provided to assist people in constructing private, owner-occupied dwellings. In Kemeny's view: "Federal housing policy after 1949 can therefore accurately be described as based on aggressive interventionist measures aimed at subsidising the expansion of the owner-occupied market."⁶⁹

Although not denying the ideology of privatism behind conservative government housing policies, Michael Berry argues that the drive toward home-ownership can be seen rather as resulting from more basic structural forces that these policies expedited. After World War II, the global capitalist economy recovered quickly and the rising demand for new houses derived more directly from: "the upward phase of a new accumulation cycle, driven by a high profit rate, plentiful labour, a recovered financial sector and the aftermath of repressed wartime demand."⁷⁰ This situation saw an expanding 'social consumption norm' and a rapidly increasing social demand for housing, particularly home-ownership. Initially the advantages were seen, primarily, as security of tenure (compared to renting) and financial stability in old age. However, they were increasingly focused upon the prospects for wealth accumulation that resided in the continuing inflation of house prices due to the spatial pattern of urban development. Berry writes:

The availability of cheap, subdivided land on the urban fringe encouraged new house construction at affordable prices. Households were, in fact, trading off the locational advantages of tenant status in the inner suburbs in favour of the demonstrable individual benefits of suburban home-ownership.⁷¹

By 1961 the home-ownership rate in Australia had passed 70 percent. The policies implemented by both federal and state governments facilitated this growth and maintained the high rates of owner-occupation despite increasing negative pressures. This encouragement included government performance in areas such as planning, where suburban development dominated. As Berry explains: "The poorly developed state of urban planning and weak subdivision controls, at the state and local levels, effectively boosted the supply of poorly serviced but cheap

subdividable urban land and facilitated the continuing 'sprawl' of low density, predominantly owner-occupied suburbs."⁷²

Belief in home-ownership as a means of moral regulation shaped government policy and, regardless of its efficacy, the correlation of its fostering of privatism with the factors shaping a stable, high rate of home-ownership saw a consolidation of the link between suburban housing forms and the socio-economic gains of the post-war period. A confidence in the universal benefits of home-ownership was widely disseminated, along with an understanding of the permanence of those benefits and the future achievability of near-universal home-ownership. Increasingly, the growth of fully detached suburban home-ownership became impossible to reverse.

The perceived benefits of suburbia were reiterated and reinforced after the war; it was seen as a physically, economically, morally and psychologically superior environment for living. Separated from the degradation of the city and industry, giving "air, sun, comfort and quiet," and now joined with the self-respect, responsible citizenship and contentment of increasingly achievable ownership, the low-density, owner-occupied housing of the suburb became the preferred development form. Thus, the model regularly presented as the Great Australian Dream moved from ideology to reality for most Australians in the early post-war era. That process linked the development of the suburb, and the detached house, with the perceived benefits of home ownership, shifting the manner in which urban and architectural form was understood as affective.

The development of these suburbs, commensurate with a renewed impetus for comprehensive metropolitan development, required significant architectural and planning input. The escalation of housing demand after the war, along with wider economic expansion, contributed significantly to pressures for rapid urban expansion. The coordination of urban growth, particularly the laying out of new residential communities, was a key concern for professionals and government. In this regard, the resultant activity drew significantly upon post-war British planning expertise. Strong political, professional and personal linkages between Australia and Britain resulted in a direct and comprehensive flow of concepts. Just as the

Garden City concept was absorbed and recast in the Australian context, the tactics of post-war British planning were appropriated and embedded locally.

Post-War Modernism in Britain

The British New Towns developed in the decades following the Second World War represent another well known attempt to construct model communities, the conception of which provided important grounding for post-war planning and architecture in Australia. An understanding of the aims, benefits and techniques of Modern British planning, if not the precise forms, was to have a significant impact on the form of Australia's own urban expansion.

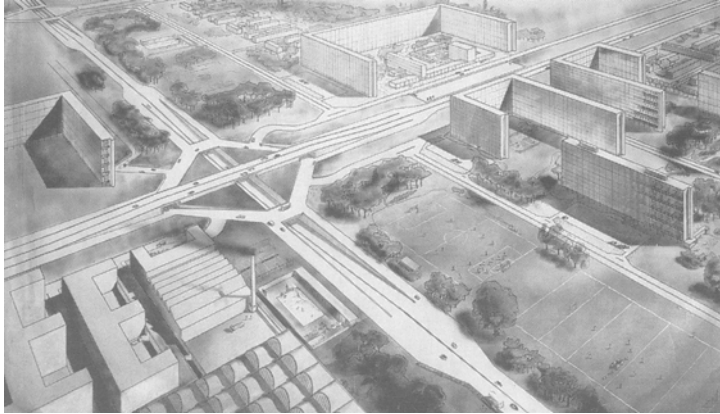
In the aftermath of the Second World War, Britain, and Europe generally, were engaged in a massive task of reconstruction and rehabilitation. Issues regarding housing, land planning and urban design were critical, generating much discussion and speculation. In Britain the urgency of postwar social and economic needs encouraged the introduction of a statutory town and country planning system. The 1947 Town and Country Planning Bill was particularly important in this regard, marking the beginnings of a planning system that moved well beyond development control to guide private development towards actively managing and shaping the future city. This legislation extended public rights in land (through resumption and nationalisation) and instituted co-ordinated statutory controls.

The provision of adequate housing was seen by many as the most pressing domestic challenge facing the country in the aftermath of the war. There was an enormous demand for planners which led to a significant number of architects, interested in the urban scale, being attracted to work in the public sector. Their appointments were primarily in municipalities or central government agencies that were involved in the planning process. The 'crisis' generated by the requirements for both reconstruction to replace housing stock destroyed and new residential development spurred the production of exhibitions of model planning and housing. Thus, architects as well as planners produced schemes that attempted to provide a template for the form of Britain's future communities. These included unrealised

schemes exhibited at the RIBA “Building Now” exhibition in 1946 by figures such as Max Lock and the Tecton firm.⁷³ Along with later projects, such as the Golden Lane housing proposal (1952) by the Smithsons, this activity represented the assimilation of modernist planning ideas, particularly as espoused by CIAM, into post-war development visions.

However, the Smithsons and their allies were worried by the utopianism of Le Corbusier and warned that Modernist architecture and planning was in danger of damaging communities, eliminating neighbourliness, and ignoring the basic human need of “belonging.” The Smithsons attempted to rectify the shortfalls they saw in Modernist theory and instead facilitate, through their housing proposals, the vibrant community life they documented in the city’s “slums.” Their Golden Lane Housing Plan consisted of low-rise “streets in the sky” in which it was hoped that wide elevated galleries (“streets”) and a generally greater proximity to the ground would eliminate the worst failures of Modernist orthodoxy.

The broad CIAM theories regarding issues of zoning, urban housing and building rationalisation that had previously been adopted by many Modern British architects and reflected in contemporary planning theory were questioned after the war, particularly the simplification of urban activities into basic categories and a strict separation of these activities in space by planning and design measures (i.e. functional zoning of land uses, and space configurations specially designed to accommodate these activities). The effects of translating these theories to a local context, as well as developments within CIAM itself, resulted in a heightened concern with the smaller scale of the neighbourhood and the effect of proposed urban forms on social relations in the post war period. The desire to create communities, in a more traditional sense, through new development, infused the discussion and work of these Modern protagonists, as well as planners more aligned with the vestiges of the Garden City movement.⁷⁴ When CIAM first convened after the war’s end in England it redefined its objectives, preparing to work for “the creation of a physical environment that will satisfy man’s [sic] emotional and material needs and stimulate his spiritual growth.”⁷⁵



26
*Urban traffic system – British Army Bureau of
 Current Affairs, mid-1940s.*



27
*Golden Lane Housing competition, London –
 photomontage, Alison and Peter Smithson, 1952.*

The British New Towns programme (1946-51) melded concepts associated with both the Modern movement and Garden City ideals. In 1946 a committee chaired by Lord Reith produced the *Interim report: New Towns*, its stated aims being:

To consider the general questions of the establishment, development, organisation and administration that will arise in the promotion of New Towns in furtherance of policy of planned decentralisation from congested urban areas; and in accordance therewith to suggest guiding principles on which such Towns should be established and developed as self-contained and balanced communities for work and living.⁷⁶

Although most often associated with the evolution of the Garden City movement, the New Towns also demonstrate, to some degree, the vision that Modern British architects and planners, such as the MARS group, had for Britain's future cities.⁷⁷ These commonalities included tenets such as: the need for comprehensive master planning, the separation of functions like industry and residences, establishment of an urban hierarchy, the abolition of the traditional street by segregated circulation systems, and the creation of neighbourhood units. The aims of decentralisation and containment, the purchase and ownership of land by public authorities, an ideal population of between 30 000 and 50 000 persons and provision of a green-belt were also common to both and can be linked directly to the writings of Ebenezer Howard. However, Modernist hopes of higher density, more compact entities and urban rather than suburban centres drove their involvement and even prompted an excursion to two of the New Towns by the delegates of CIAM VIII.

Continuing a long tradition of environmental reform, the 1946 committee envisaged the New Towns as instruments of social reconstruction; the careful modulation of architectural and urban form coupled with superior amenity was again projected as a means of producing an improved community. Supporting such aims was the intention to provide facilities such as: a concert hall, an art gallery, and two cinemas - one for popular fare and the other for films of high culture and serious content. Meryle Aldridge has described the vision as one of miniature societies promoting a sense of individual belonging, social cohesiveness, and educational and cultural uplift.⁷⁸

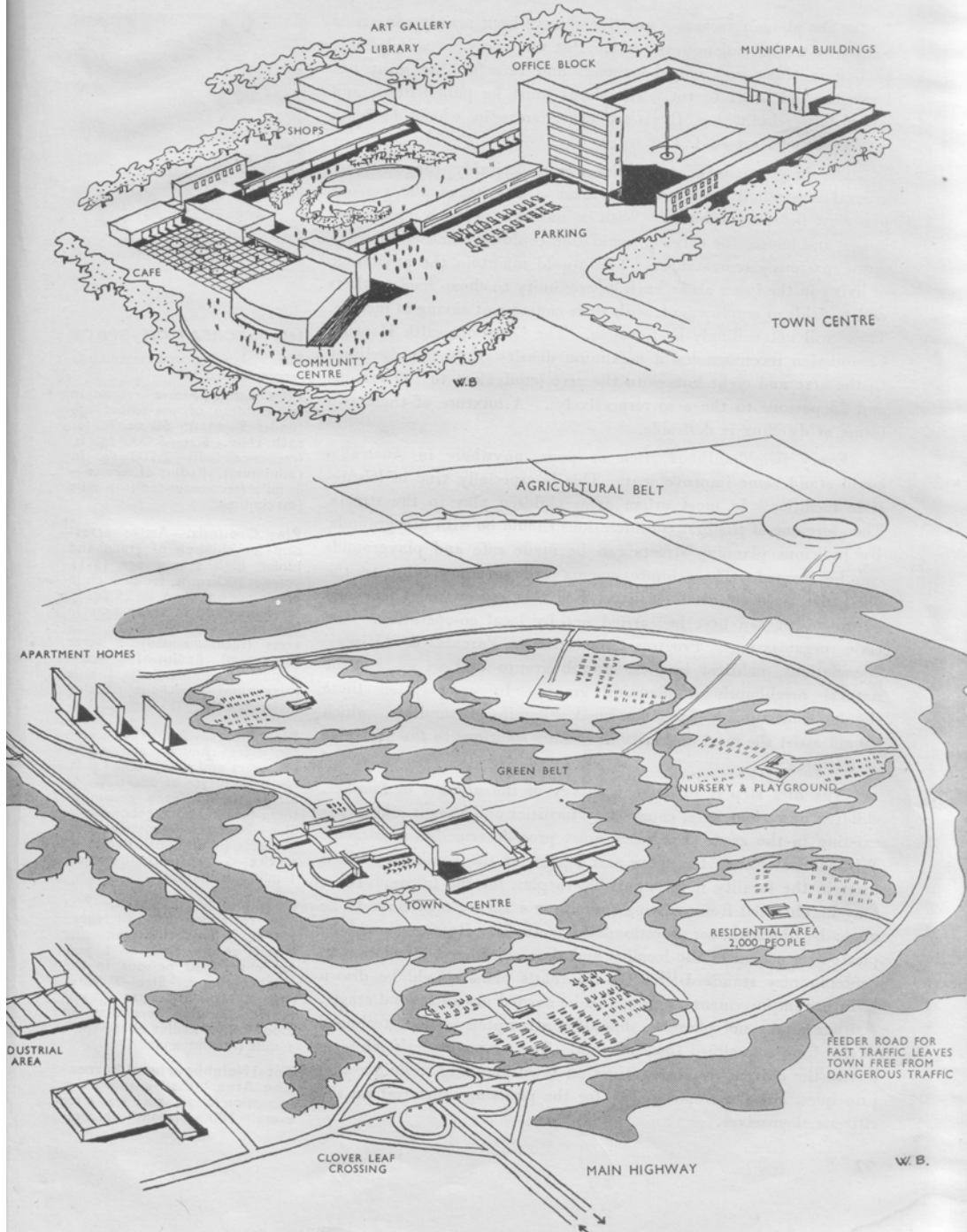
In execution, the objectives of the first phase of New Towns were broad, but more modest. The planner Frederic J. Osborn, who served on the Reith committee, evaluated the aims more pragmatically, describing a limited, but potentially national, role for the project. His assessment outlined what were to be the fundamental goals of the post-war metropolitan planning process in Britain. This centred on providing good housing, enabling a supportive family environment, the means for an active social and civic life, and eliminating extensive commuter travel through decentralisation. Nationwide, the aim was a distinctively Modern pattern of metropolitan planning that focused on low-density development and the preservation of open space. The development was also intended to stimulate regional growth whilst expanding economic activity.⁷⁹

The ideals, and techniques, that characterised such planning proposals operated similarly within planning activity occurring in Australia. As in Britain, the ethos of post-war reconstruction animated political, bureaucratic and professional circles, legitimising proposals for strong state intervention in a variety of fields, including planning. The formation of the Commonwealth Housing Commission in 1943 was part of a government effort to cope with post-war reconstruction. Its broad terms of reference were to inquire into existing national housing conditions and requirements during the post-war period. What emerged was a set of recommendations that envisioned an integrated structure of housing, land use planning and community development.

In the past, national development has been largely in the hands of private enterprise, and has thus been governed by the possibilities of profit-making rather than by the needs of the community. We consider that national, regional and town planning is an urgent national need.⁸⁰

The principles outlined in the Commission's Final Report were popularised and given historical context by Walter Bunning, an architect and planner who had helped establish a MARS group in Sydney and served as executive officer of the CHC.⁸¹ Bunning is characteristic of a generation of Australian Modernist planners

A SATELLITE TOWN FOR 10,000 PEOPLE



28

Walter Bunning- A Satellite Town for 10 000
People, 1945.

and architects who gained academic and professional expertise in Europe (particularly the UK) and returned to apply that experience at home.⁸²

His book, *Homes in the Sun* (1945), was written as a primer for progressive ideas on the better planning of homes, communities, towns and regions. Bunning identified key problems, such as housing shortages, suburban sprawl, urban blight and high land costs, and presented solutions to these that reflected specific Australian climatic, historical and political conditions. Describing a course for Australian reconstruction efforts that echoed the work being undertaken in Britain, Bunning also outlined an historical narrative linking the Garden Cities of Howard, American planning experiments such as Radburn, and the Modernist planning ideals of Le Corbusier (and CIAM). He argued that these precedents had developed a set of general planning principles, equally applicable in Australia as they were elsewhere.

The options for residential neighbourhoods were described as peripheral suburbs or new satellite communities. In either case the road network played a crucial role in segregating the elements of the city: “Town Centre,” “Residential Area,” “Nursery and Playground,” “Industrial Area,” and “Apartment Homes.” High speed feeder roads kept “dangerous traffic” out of the towns and residential areas; clover leaf junctions connected to main highways, allowing the suburban dwellers to speedily access the rest of the city. All these components were screened and separated from one another by “Green Belts” of parkland.⁸³ Importantly, Bunning outlined an application of the principles that was modified for Australia’s particularities. Fifteen pages were devoted to outlining the way forward in designing modern suburban houses (including a number of example designs), whilst only four pages were spent discussing and illustrating the possibilities of apartment living (considered appropriate for limited sub-sections of the population- singles and the elderly for example).

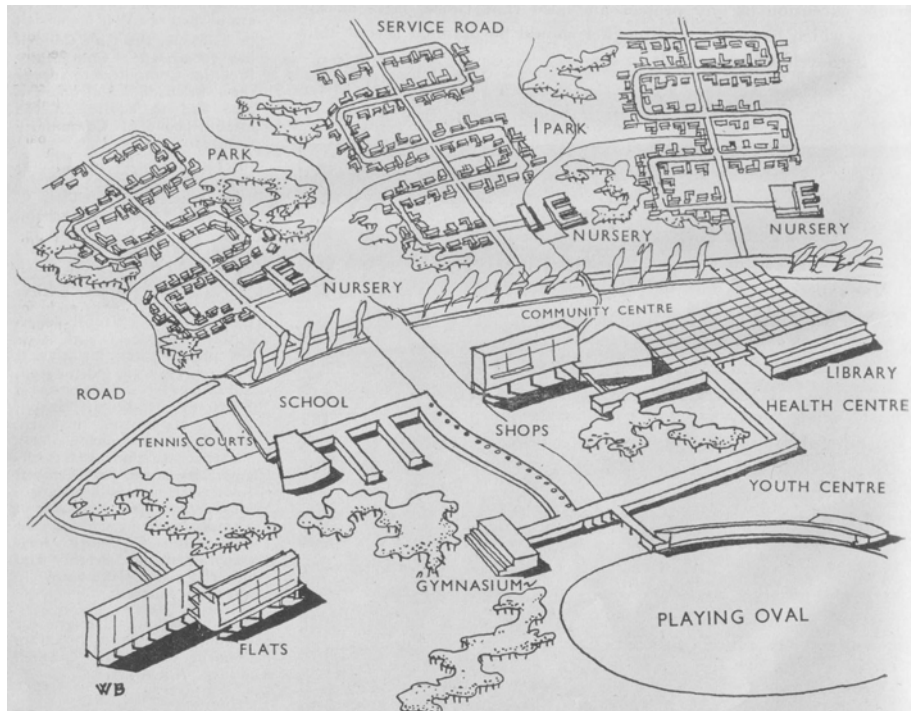
A modern way of suburban life was also implicit in the design of the model homes, or “Suntrap Houses” as Bunning termed them. His designs focused on a rational and scientific planning of the house in order to maximise the benefits of the Australian climate. Correct orientation for maximum winter sunlight, shade for the

summer sun, and the planning of the house's living areas were all to contribute to a "fusion of house and garden." Articulation of the house plan was also used to reinforce the privacy of the backyard, where the family might relax (sunbathers are a recurring element in Bunning's sketches of the homes). Often the garage, for the essential car, was used to help screen the garden from the street. Internally this structuring of family life continued; the house plans allowed for extension as more children inevitably arrived and it was considered important, as Bunning explained, that:

The kitchen should overlook the outdoor playing area so that the mother may supervise while she is cooking. It is also a great convenience if the kitchen can overlook the child's room, either with a glass door or observation window.⁸⁴

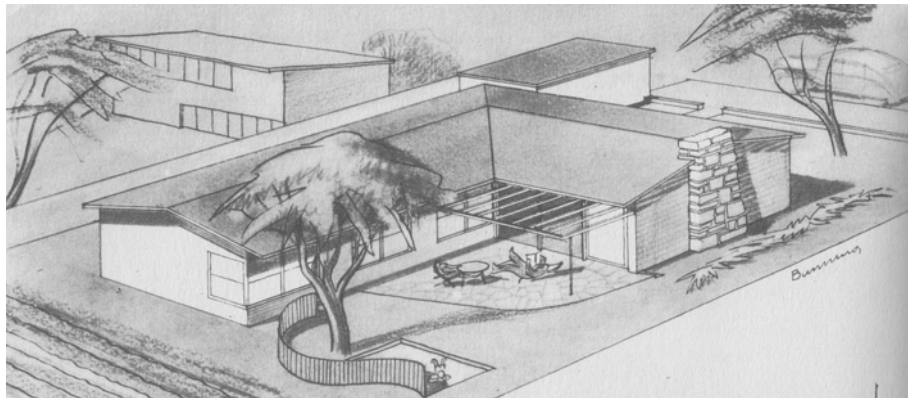
Bunning's model houses assumed the privatised, suburban, nuclear family as the Australian norm and ideal. His careful articulation of plans that would efficiently fulfil the expected desires of young homebuyers intertwined the prospects of financial independence, sobriety and rational Modernist design. They accommodated and reinforced the expected lifestyle of the "average" Australian family; as affective form they were a means of governing understandings of the ideal "Australian lifestyle" and its social composition.

Within the 1940s climate of intense concern regarding town planning, Bunning's book served to further public interest. Along with other publications, such as Harold Smith's *Planning the Community* (1944) and F. Oswald Barnett's *Housing the Australian Nation* (1942), it encouraged a vision of post-war planning as a means to produce modern, efficient, scientifically planned cities.⁸⁵ British town planning principles, along with extremely influential traffic engineering models from America, would form the basis for proposals, and techniques of implementation, developed by Australian planning bodies during that period; including those in Perth.



29

Walter Bunnings 1945 model proposal for a neighbourhood of 10 000 people, surrounded by a greenbelt.



30

Walter Bunnings 1945 "Suntrap House 1" – a "new approach to house-planning."

Conclusion

Following the Second World War, suburban form in Australia was powerfully linked with images of the responsible, privatised family. The growing landscape of dispersed, owner-occupier suburbs and became established as a key part of a developing “Australian way of life.” Planning models developed during the 1950s and 1960s contributed to the development of the suburb and the reinforcement of its place at the heart of Australian family life. An understanding of those suburbs as affective form was closely linked to the notions of privatism that encouraged suburban tendencies.

From eighteenth century Britain up to the Australia of the 1960s a growing importance was placed on the role of home ownership in the pursuit of a privatised life. In particular, an understanding of the socio-economic influence of home ownership as intertwined with the affective form of the suburb was established. During the rapid urban expansion after the Second World War the role of home ownership - and by extension the development of the suburbs – was implicated in the improvement of the national condition.

Australian planning models developed during that post-war period were importantly influenced by British town planning principles. The models developed in England to address the post-war reconstruction of its cities, such as the New Towns, were recast to provide structure and form to Australia’s developing suburbs. Through the work of architects and planners such as Walter Bunning those models were modified in relation to local climate and culture, particularly the preference for suburban living. That process served to reinforce notions of the suburb as affective form – representing an appropriate setting for responsible, privatised family life and the pursuit of individual dreams.

The following chapter describes the creation of the athletes’ housing for the 1962 British Empire and Commonwealth Games, held in Perth. The athletes’ village was planned as a model development that would display the high standards of local

living to an international audience as well as providing public housing at the completion of the Games. Analysis of the project provides a context for tracing the impact of modernist planning and architectural ideas on Perth's suburban form, and an associated shift in the conception of the local garden suburb ideal. It also examines the way in which the link between the suburban landscape and home ownership's social implications, outlined within this chapter, was expressed and unfolded locally.

Notes

¹ C.E.W. Bean, *In Your Hands, Australians*, Cassell and Company, London, 1918, p.72.

² Chris Maher and Robert J Stimpson, *Regional population growth in Australia : nature, impacts and implications*, AGPS, Canberra, 1994.

³ As Tony Dingle has explained, the term suburb is applied in a particular way within Australia: "The word 'suburb' is commonly used in Australia to refer to a residential area. This usually means that the area possesses the characteristics classically associated with suburbia, such as detached houses set in their own gardens. This is, indeed, the dominant form of Australia's housing stock; but in the old 'inner suburbs' it can also include terraces and flats. Most of Australia's major cities suffer from fragmented local government, with many municipalities existing within the metropolitan area; and suburbs are usually known by the name of the municipality in which they are located. There is, consequently, no sense of a suburb being something outside of and apart from the city, as is the case in the United States." Tony Dingle, "Gloria Soame" in Richard Harris and Peter J. Larkham (eds), *Changing Suburbs: Foundation, Form and Function* E & FN Spon, London, 1999, p.199.

⁴ Graeme Davison, *The Past and Future of the Australian Suburb*, Urban Research Program Working Paper No. 33, 1993, p. 2.

⁵ Graeme Davison, "Colonial Origins of the Australian Home" in Patrick Troy (ed), *A History of European Housing in Australia*, Cambridge University Press, Cambridge, 2000, p. 7.

⁶ Graeme Davison, "Colonial Origins of the Australian Home," p. 12.

⁷ Graeme Davison, "Colonial Origins of the Australian Home," p. 20.

⁸ F. Costello, "Development in flat life: its sociological disadvantages", *Architecture*, 1 January 1936, p. 5.

⁹ Jenny Gregory, *City of Light: a history of Perth since the 1950s*, (Perth, Western Australia, City of Perth: 2003), pp.56-57.

¹⁰ Report of the Royal Commission on the Housing of the People of the Metropolis, *Victorian Parliamentary Papers*, Vol. 1, No. 29, 1917, pp.25-26 quoted in Graeme Davison, "Colonial Origins of the Australian Home," p.15.

¹¹ Kereen Reiger, *The Disenchantment of the Home: Modernizing the Australian Family 1880-1940*, Oxford University Press, Melbourne, 1985. pp. 33-55.

¹² Nicholas Brown, "Making Oneself Comfortable, or More Rooms than People", in Patrick Troy (ed), *A History of European Housing in Australia*, Cambridge University Press, Cambridge, 2000, p. 111.

¹³ These include: Brown, "Making Oneself Comfortable"; Anthony King, *The Bungalow: the production of a global culture*, Routledge and Kegan Paul, London, 1984; Alistair Greig, *The Stuff Dreams are Made Of: Housing Provision in Australia 1945-1960*, Melbourne University Press, Carlton, 1995. This subject is treated in more detail within the following chapter.

¹⁴ This shift will be discussed more fully in Chapter 3 and 4.

¹⁵ Brown, "Making Oneself Comfortable", p. 119.

¹⁶ Brown, "Making Oneself Comfortable", pp. 112-114.

¹⁷ Nigel Thrift and Paul Glennie, "Historical Geographies of Urban Life and Modern Consumption," in Gerry Kearns and Chris Philo (eds), *Selling Places, the City as Cultural Capital, Past and Present*, Pergamon Press, Oxford, 1993, pp. 34-36.

¹⁸ D. Lockwood, cited in Peter Saunders and Peter Williams, "The Constitution of the Home: Towards a research agenda." *Housing Studies*, Vol. 3, No. 2, 1988. pp.88-89.

¹⁹ L. Davidoff and C. Hall, "The Architecture of Public and Private Life: English Middle-Class Society in a Provincial Town, 1780 -1850," in D. Fraser & A. Sutcliffe (eds), *The Pursuit of Urban History*, E. Arnold, London, 1983; L. Davidoff & C. Hall, *Family Fortunes: Men and women of the English middle class, 1780 -1850*, Hutchinson, London, 1987.

²⁰ Martin James Daunt, *House and home in the Victorian city: working class housing, 1850-1914*, E. Arnold, London, 1983.

²¹ Martin James Daunt, "Public and Private Space: The Victorian City and the Working-class Household" in D. Fraser and A. Sutcliffe (eds) *The Pursuit of Urban History* E Arnold, London, 1983.

²² Ann Game and Rosemary Pringle, "The Making of the Australian Family" in Ailsa Burns, Gill Bottomnly and Penny Jools (eds), *The Family in the Modern World: Australian Perspectives*, George Allen & Unwin, Sydney, 1983.

²³ Goldthorpe, quoted in Fiona Devine, "Privatised Families," in G. Allan & G. Crow, *Home and Family: Creating the Domestic*

Sphere, The MacMillan Press, Houndsmills, 1989, p.98.

²⁴ Ann Dupuis & David C. Thorns, "Home, home ownership and the search for ontological security," *The Sociological Review*, 1998, pp. 24-47.

²⁵ Saunders and Williams, "The Constitution of the Home", p.89.

²⁶ John Murphy, *Imagining the Fifties: Private sentiment and political culture in Menzies' Australia*, University of New South Wales Press, Sydney, 2000, p.15.

²⁷ Lizabeth Cohen, *A Consumers' Republic*, Alfred A. Knopf, New York, 2003.

²⁸ I. F. Megbolugbe and P. D. Linneman, "Home Ownership," *Urban Studies*, Vol. 30, Nos. 4/5, 1993.

²⁹ Robert Menzies, *The Forgotten People*, Melbourne 1942, quoted in Judith Brett, *Robert Menzies' Forgotten People* Macmillan Australia, Chippendale, 1992. From a description by Menzies outlining the importance of the home to the national condition.

³⁰ Brett, *Robert Menzies' Forgotten People*, p.73.

³¹ Prospectus quoted in Martin Pawley, *Home Ownership*, The Architectural Press, London, 1978, p.33.

³² Seymour J. Price, *Building Societies*, London, 1958, quoted in Pawley, *Home Ownership*, p.33.

³³ Samuel Smiles quoted in Pawley, *Home Ownership*, p. 34.

³⁴ See: Samuel Smiles, *Self-Help* (first published in 1859), John Murray, London, 1953; Samuel Smiles, *Thrift*, John Murray, London, 1892.

³⁵ Freidrich Engels, *The Housing Question*, Martin Lawrence Limited, London, 1937, p.51.

³⁶ Engels, *The Housing Question*, p.15. Through the work of figures like David Harvey and Manuel Castells the attitude has been maintained that owner occupation produces a vested interest in the system and that the associated chronic indebtedness ties individuals into the job market and into society in a most repressive way. See Manuel Castells, *The Urban Question: A Marxist Approach* Edward Arnold, London, 1977, and David Harvey, *Social Justice and the City*, John Hopkins University Press, Baltimore, 1973.

³⁷ Peter Saunders, *A Nation of Home Owners* Unwin Hyman, London, 1990.

³⁸ *Sydney Morning Herald*, 11 November 1949.

³⁹ Victorian Parliament (House of Assembly), *Parliamentary Debates* (Hansard) Vol. 216, 1943, quoted in Jim Kemeny, "The Ideology of Home Ownership" in J. Brian McLoughlin and Margo Huxley (eds) *Urban Planning in Australia: Critical Readings*, Longman Cheshire, Melbourne, 1986, pp. 256-257.

⁴⁰ Minister for Post-War Reconstruction, John Dedman, quoted in Kemeny, "The Ideology of Home Ownership", p. 255.

⁴¹ Afferbeck Lauder, *Let Stalk Strine*, Ure Smith, Sydney, 1974, p. 20.

⁴² Tim Rowse, "Heaven and a Hills Hoist: Australian Critics on Suburbia" in Richard White and Penny Russell (eds) *Memories and Dreams: Reflections on Twentieth Century Australia: Pastiche II* Allen & Unwin, Sydney, 1997, p.215.

⁴³ Exceptions to Rowse's account include town planning campaigner C.E.W. Bean who, in 1918, saw suburbs as places that could transcend the 'dullness of country life' as well as the strains of city life which bred 'small, nervous and weak' inhabitants. His vision was of a middle-class suburbia as Australia's ideological heartland. See: Paul Ashton, "This Villa Life': Suburbs, town planning and the new social order 1914-1929." in Robert Freestone (ed), *The Twentieth Century Planning Experience: Proceedings of the 8th International Planning Society Conference and 4th Australian Planning/Urban History Conference*, Faculty of the Built Environment, University of New South Wales, 1998.

⁴⁴ Louis Esson, *The Time is Not Yet Ripe*, 1973, quoted in Rowse, "Heaven and a Hills Hoist," p. 216. The play *The Time is Not Yet Ripe* was written in 1912.

⁴⁵ He describes this change as "part of a broader change of emphasis in the social sciences from heredity to environment, the same change that saw the demise of eugenics. The assumption had been that social conditions were the product of a predominant character type. That assumption was now being reversed, largely under the influences of modern sociology and psychology[.]" Richard White, "The Australian Way of Life" *Historical Studies*, (18) 73, 1978. p.530.

⁴⁶ White, "The Australian Way of Life," p.534.

⁴⁷ O. A. Oeser and S. B. Hammond (eds) *Social Structure and Personality in a City*, 1954,

p.25, quoted in White, "The Australian Way of Life," p. 541.

⁴⁸ W. K. Hancock quoted in White, "The Australian Way of Life," p. 529.

⁴⁹ White, "The Australian Way of Life," pp. 542-543.

⁵⁰ Richard White, "Boyd, the Suburb and the Australian Way of Life", *Transition*, No.38, 1992, p. 105.

⁵¹ Robin Boyd, *Australia's Home*, Penguin, Sydney, 1968, pp. 12-14.

⁵² Reiger, *The Disenchantment of the Home*.

⁵³ Murphy, *Imagining the Fifties*, p. 27.

⁵⁴ Australia's levels of suburbanisation and home ownership (proportional to population) match, and sometimes exceed, those of countries like the USA, England and Canada. See Blair Badcock, "Home Ownership and the Illusion of Egalitarianism" in Patrick Troy (ed), *A History of European Housing in Australia* Cambridge University Press, Cambridge, 2000, and Tony Dingle, "Gloria Soame."

⁵⁵ Max Neutze, *Urban Development in Australia* George Allen & Unwin, Sydney, 1981; M. Logan, J. Whitelaw and J. McKay, *Urbanization: the Australian Experience*, Shillington House, Melbourne, 1981; R. Stimson, *The Australian City: a welfare geography*, Cheshire, Melbourne, 1982; P. Williams, *Conflict and Development*, George Allen & Unwin, Sydney, 1984; Clive Forster, *Australian Cities: Continuity and Change*, Oxford University Press, Melbourne, 1995; Patrick Troy, *Australian Cities: Issues, strategies and policies for urban Australia in the 1990s*, Cambridge University Press, Melbourne, 1995.

⁵⁶ Badcock, "Home Ownership and the Illusion of Egalitarianism".

⁵⁷ A recent study of homeowner's voting behaviour and political views suggested that home-ownership has little or no impact. John I Gilderbloom and John P. Markham, "The Impact of Homeownership on Political Beliefs", *Social Forces*, Vol 73, No. 4, 1995.

⁵⁸ Jim Kemeny, *The Great Australian Nightmare: A Critique of the Home-ownership Ideology*, Georgian House, Melbourne, 1983, p. 8.

⁵⁹ Economic rents aim to cover costs while keeping well below market prices. A. Beer, "A Dream Won, A Crisis Born? Home-ownership and the Housing Market" in C. Paris, *Housing in Australia*, Macmillan Education Australia, Melbourne, 1993, pp. 147-172.

⁶⁰ Beer, "A Dream Won, A Crisis Born?" p. 153.

⁶¹ Sales were to be at full cost and the proceeds to be returned immediately to the Commonwealth.

⁶² John Dedman, quoted in C. Lloyd, "The Commonwealth State Housing Agreement", *HIRS Housing Bulletin* No. 11, 1984, p. 4.

⁶³ Report of the Commonwealth Housing Commission, 1944. The CHC was one of a number of review bodies set up by the Ministry for Post-War Reconstruction to guide policy once the war had ended.

⁶⁴ Commonwealth Housing Commission, *Final Report*, Ministry for Post-War Reconstruction, 1944, p. 33.

⁶⁵ Commonwealth-State Housing Agreement, 1945.

⁶⁶ Thorpe, A, *More than a roof over their heads: state housing and urban form in Perth*. Honours thesis, Murdoch University, 2000.

⁶⁷ Michael Berry, "To Buy or Rent? The Demise of a Dual Tenure Policy 1945-60" in Renate Howe (ed), *New Houses for Old: Fifty Years of Public Housing in Victoria 1938-1988*, Ministry of Housing and Construction, Melbourne, 1988, p. 97.

⁶⁸ S. Lloyd, "There Goes the Neighbourhood", *The Independent Monthly*, December 1994-January 1995, p.35.

⁶⁹ Kemeny, *The Great Australian Nightmare*,. p. 16.

⁷⁰ Berry, "To Buy or Rent?" p. 113.

⁷¹ Berry, "To Buy or Rent?" p. 114.

⁷² Berry, "To Buy or Rent?" p. 117.

⁷³ John R. Gold, *The Experience of Modernism: Modern Architects and the Future City, 1928-53*, E & FN Spon, London, 1997.

⁷⁴ See: Gold, *The Experience of Modernism*; Eric Mumford, *The CIAM Discourse on Urbanism, 1928-1960*, The MIT Press, Cambridge, 2000; Stanley Buder, *Visionaries & Planners: The Garden City Movement and the Modern Community*, Oxford University Press, Oxford, 1990.

⁷⁵ Quoted in Gold, *The Experience of Modernism*, p. 201. CIAM VI was held at Bridgewater, England, in 1947.

⁷⁶ UK Parliament, *Interim Report: New Towns*, 1946 (Lord Reith, Chairman), Cmd.6759/Cmd.6794/Cmd.6786, London.

⁷⁷ For an example of this understanding of the New towns, as an extension of the Garden City Movement, see Buder, *Visionaries & Planners*.

⁷⁸ Meryle Aldridge, *The British New Towns: A Program Without a Policy*, Routledge & Kegan Paul, London, 1979, pp. 32-34.

⁷⁹ Buder, *Visionaries & Planners*, p. 185.

⁸⁰ Commonwealth Housing Commission, *Final Report*, p. 26.

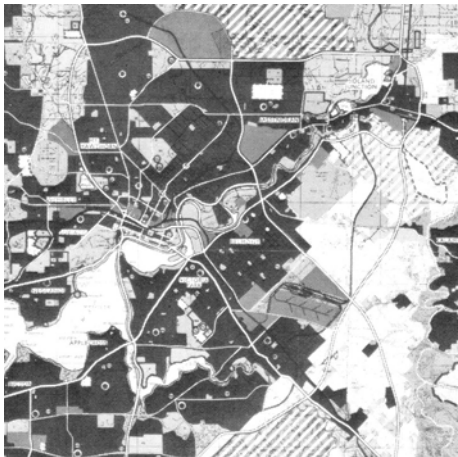
⁸¹ Robert Freestone, "The Shattered Dream: postwar modernism, urban planning, and the career of Walter Bunning" *Environment and Planning A*, Vol. 28, No. 4, 1996.

⁸² Bunning worked overseas during the late 1930s for a number of architects and completed a postgraduate planning course at the London Polytechnic.

⁸³ W. Bunning, *Homes in the Sun: the past, present and future of Australian housing*, W.J. Nesbit, Sydney, 1945, p. 91.

⁸⁴ Bunning, *Homes in the Sun*, p. 57

⁸⁵ Barnett is known particularly for his work as a founding commissioner of the Victorian Housing Commission. *Housing the Australian Nation* and *We Must Go On: A Study of Planned Reconstruction and Housing* (1944) were written in conjunction with others, and argue for centralised planning of economic development, urban infrastructure and housing. See Renate Howe, "Building a New Order: Oswald Barnett and Postwar Planning" in Robert Freestone (ed), *The Australian Planner, Proceedings of the Planning History Conference Held in the School of Town Planning 13 March 1993*, University of New South Wales, Sydney, 1993.



Modernism and the Games Village

Chapter Four

By 1945 walls between front halls and sitting rooms and sitting rooms and dining rooms had already gone. The new and exciting openness was defeated by two new forces: the 1940-60 birth rate and TV. Six people couldn't find true happiness in the New Space so a wall was sent up between the dining room and the living room, and the family room was born in 1961.¹

This chapter examines the convergence of a number of the planning processes described in the preceding chapters and their consequences for Perth's suburban form. As Chapter Two described, the translation of the model of the Garden City, its social ambitions tempered by the drive for economy and expediency, created an ideal residential development type for Perth. While this was only partially implemented in subsequent subdivisions (curving scenic streets and an accommodation of the existing topography were among the elements commonly repeated), the vision of detached homes in an Arcadian setting was more enduring. Chapter Three discussed the rapid construction of such houses after World War Two. This was facilitated by socio-economic forces that also pushed Australia towards a mono-tenural society, as well as new planning, infrastructural and architectural developments that encouraged a particular type of suburban form-

making. The following discussion considers the implications of these developments through an examination of the Athletes' Village at the 1962 British Empire and Commonwealth Games, held in Perth.

The village is a compelling subject for study as it links a number of themes within this thesis. Specifically: it was built as a model housing development, by the influential State Housing Commission (SHC); it explored the application of international planning and architectural ideas, in this case Modernism; and it became a testing ground for a new variant of the local garden suburb ideal. Tracing the planning and design of the village also allows for a discussion of the different conceptions of the suburb as affective form in operation at the time. Its role in metropolitan planning of the 1950s and 1960s as a tool for constructing communities will be examined. This will sit alongside an exploration of the suburban home's power as a symbol of good citizenship and its changing design to accommodate changing ideals about family life in the home. The Games Village, as a model development, is a good vehicle for examining such ideals.

Large cultural and sporting events such as the Great Exhibitions, festivals, Expositions, Olympics and Commonwealth games are often catalysts for significant architectural and planning works. These projects frequently mark the intersection of private and public patronage and become emblematic for the communities within which they are constructed. They provide artefacts that can be examined in order to suggest the values and aspirations of a community at particular moment: the manner in which it wishes to be perceived, as well as the influence and effect of international conditions. As a type, athletes' villages at Olympic or Commonwealth Games provide an opportunity to demonstrate the contemporary standard of architectural practice and the particular social aspirations of that society. As a scene of representation and projection such villages display to an imagined international audience the housing priorities and standards of the host city. They also have the potential to demonstrate innovative, progressive design and provoke catalytic urban design exercises.



31
Modern Perth – Council House, 1962.



32
Modern Perth – St. George's Terrace, 1956.

The athletes' village for the Perth Empire Games of 1962 presents an Australian example of this type and is of particular interest for its relation to the Australian reaction to post-World War II Modernism and the production of an ideal suburban development model. The hosting of the Empire Games in Perth will be viewed as the catalyst for a significant project that can be examined for the values and aspirations of the local community at the time. The account of its planning and construction, and the tensions involved, demonstrates the way the city wished to be perceived along with the influence and effect of international ideas, as well as local political constraints. The houses in the Perth Athletes' Village were to be an integrated part of a subdivision intended to meld with its suburban surrounds, providing a development model reflecting the vision of a wider metropolitan planning scheme. The housing designs submitted for the Village also reflected the changing use and social meaning of the modern home whilst extending the distinctive development of the garden suburb model in Perth.

The significance of the village is contextualised in the first section of this chapter by a discussion of some important developments in urban planning for Perth during the 1950s and 1960s, particularly the Stephenson-Hepburn Report. That contextualisation will also include discussion of the contemporary work of the SHC and the impact of its large-scale housing production on Perth's suburban form.

The second section of the chapter focuses the discussion on the village itself. The combination of an expanding economy and city, along with the cultural boost of securing the Games, is suggested as contributing to a sense of city-wide confidence, which encouraged the experimental aspects encountered in the design of the Athletes' Village, particularly its housing. The expectations for the Village's housing and its relationship with surrounding residents will also be examined and the athletes' village at the 1956 Melbourne Olympic Games will be used as a comparison in this regard.

The final sections of the chapter will describe the processes involved in the planning of the subdivision and the design of the houses. The role of the village as a model suburb, its associated recasting of the local suburban ideal and the way it functioned as affective form will be key elements of those discussions.

Planning a Modern Perth

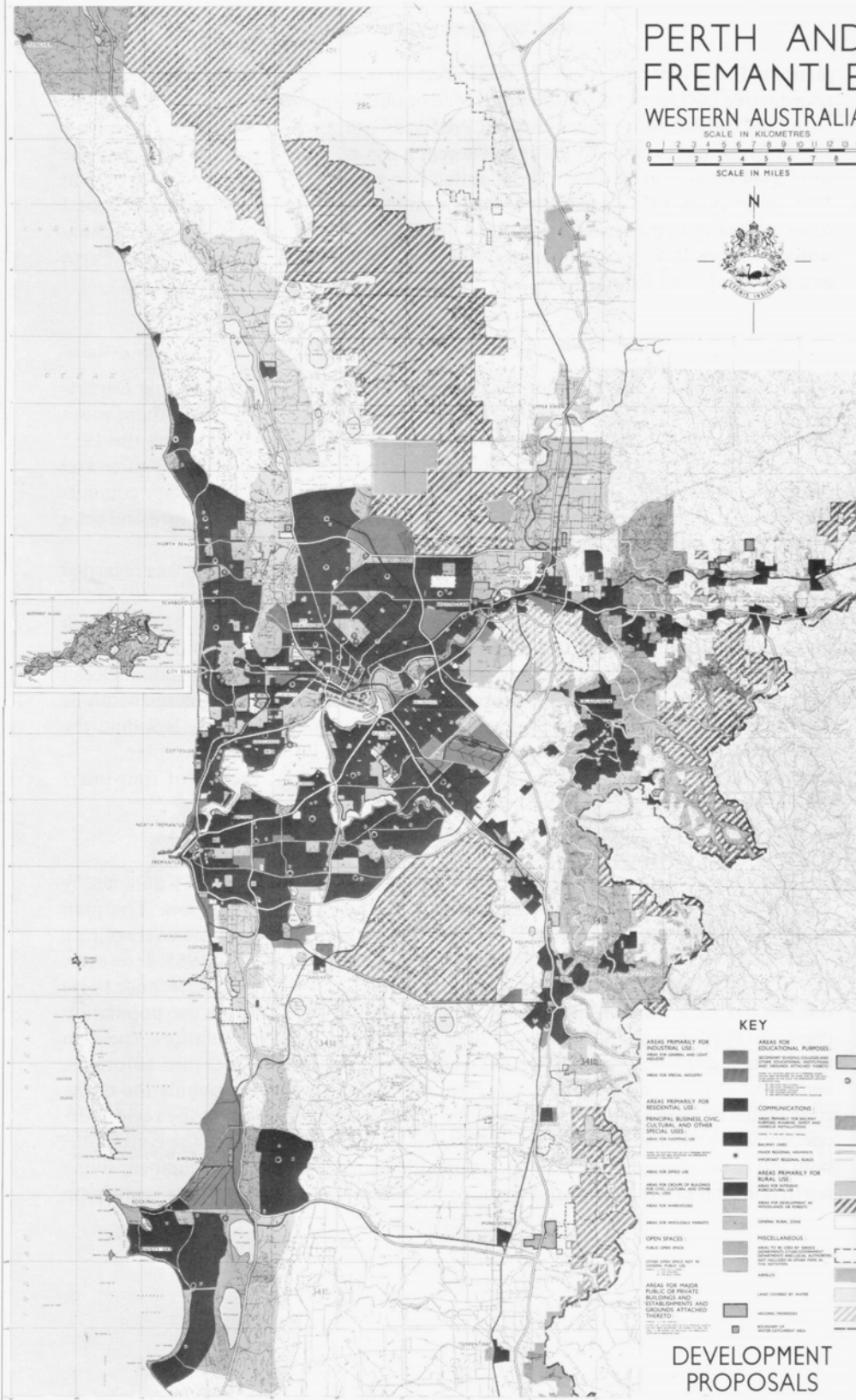
Rapid expansion of Perth's suburbs, coupled with growing congestion in the centres of Perth and Fremantle in the 1940s and 1950s, led to an Honorary Royal Commission on the subject in 1952. During this period agreement was reached between the government and BHP to begin works on a refinery at Kwinana, which was to be the site of a new town serving the needs of this emerging industrial area. Thus, the BHP refinery and other works in this region were expected to have considerable repercussions on the structure of the metropolitan region and this provided further impetus for a defined plan for the urban expansion of Perth.² This was provided by the Plan for the Metropolitan Region of Perth and Fremantle, Western Australia of 1955 (the Stephenson-Hepburn Report).

The 1955 plan envisaged the metropolitan area growing as a series of "identifiable and self-centred" communities.³ Each would have the basic elements of local shops, schools and community facilities whilst being connected to workplaces by the main roads system. Thus, the city was remapped and its form redefined into an interconnected, hierarchical series of nodes. Given optimism for the imminent expansion of Perth into an international metropolis, a new city was inscribed on the landscape that stretched over one hundred kilometres along the coast. The accompanying masterplan was planned to account for the growth of the city by a million people into the next millennium.

PLAN FOR THE METROPOLITAN REGION

PERTH AND FREMANTLE WESTERN AUSTRALIA

SCALE IN KILOMETRES
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14
SCALE IN MILES
0 1 2 3 4 5 6 7 8 9



The planning team, in the introduction to the report, defined the task of the scheme:

With or without a comprehensive plan, the region will continue to grow ... With a Plan ... the cities and the communities in the Metropolitan Region could grow in a spacious and orderly arrangement on either side of the broad Swan River as convenient places ... Decisions taken now will mean much to this as well as succeeding generations. It is a time for practical men, but also for bold and courageous action ..."⁴

The co-author of the plan, Gordon Stephenson, provided a direct, personal link between the post-war planning principles developed in Britain and the shaping of Perth's urban form from the 1950s onward. He had been employed in a number of positions within the Ministry of Town and Country Planning in the UK, participated in the planning of one of its New Towns (Stevenage) and held the Lever Chair of Civic Design at the University of Liverpool. Stephenson was specifically invited to Perth in order to apply that experience to the question of planning Perth's future urban growth.

Space was made for a much larger city while problems were solved that had not yet occurred. Stephenson had worked for Sir Patrick Abercrombie on the Greater London Plan of 1944 and was determined to produce a vision with a similar resonance for Perth. The two plans were comparable in at least one respect, namely the effort to define the limits of a metropolis:

It is always hard, if not impossible to define a metropolitan region, but for administrative reasons boundaries have to be established. Alistair Hepburn and I discarded the notion, in everybody's mind that we should confine the plan to the statistical region of some 400 or more square miles. We looked for natural limits ... it was agreed that we were to examine a region of some 2000 square miles. This was as large as that studied by Sir Patrick Abercrombie when he prepared the Greater London Plan, for a population of 10 million.⁵

The decision to plan Perth in an area the size of London is significant when the enormous difference in population between the two cities is acknowledged. The size of the region studied and planned for along the Indian Ocean was determined precisely to avoid the conditions of London; building was to be dispersed through space left purposively open. The infrastructure that was projected, particularly the transportation network and extensive parking provision, were intended to maintain

the social ease of the small city. They were not simply the result of a desire for a city that was spread out in formal terms. Stephenson argued that “Only in this way can the centres of activity be freed of danger, noise and smell, in order to allow people to go about their business and enjoy themselves, as they did in more leisurely times.”⁶ Thus, the population increase expected for Perth would not see the conditions of the core replicated. Rather, neighbourhoods and roads would stretch out, interspersed with open land. The suburbs of Perth would be clearly defined as ‘other’ to the City; a network of villages connected by lines of circulation (no longer streets defining place). These villages would function as affective form- generating ideal suburban communities.

The concept of plot ratios was suggested by the Stephenson Hepburn plan in order to control the form and density of this development. It represented a new approach to the way housing was planned in Perth. The allowable plot ratio, or density, decreased the greater the distance from the city centre. Metropolitan residential areas were envisaged as a landscape of predominantly single-family homes at a density of around fifteen persons per acre. This was a lower average density than that proposed by Raymond Unwin for the Garden City developments, where he suggested “twelve houses to the net acre of building land, excluding all roads, has been proved to be about right.”⁷

Paradoxically, the expansion and disaggregation of Perth permitted the possibility that the integrity of this planned community might be destroyed. Stephenson’s assessment of Perth harboured an anxiety about the outcome of this process:

Relatively new and small ... People were generous and kind ... there was a friendly community spirit. The problems of the big city region are beginning to appear. It is no longer safe to leave the key in the front door ... The corner shop is disappearing, and the inchoate suburb is appearing. A car is required to go to many work places, to go to church ...⁸

Thus it was not merely growth in cities that appeared as a potential problem, but equally dispersed suburban growth that wasn’t controlled. Careful control and arraying of the affective form of the suburban community were seen as the means to

avoid the problems Stephenson feared. A confidence in the power of this control shaped Perth's suburban expansion during the 1950s and 1960s.

Contemplating the prospect of positive outcomes of suburbanisation, Reyner Banham would later compare Perth's future to that of Los Angeles; the newfound freedom of the freeway (symbolised by the controversial Narrows interchange in Perth) connected city, suburb and beach.⁹ However, despite similarities between these "cities-on-the-shores", especially the dominance of personal mobility afforded by car use, Perth remained more distinct in its formation. The role of the central city as an economic hub to the metropolitan region, and the suburbs as a purely residential environment, was more clearly defined. The planning of Perth in the mid 1950s projected a clearly defined region with internal hierarchies; the antithesis to the Los Angeles of no centre, where:

Everyday commuting tends less and less to move by the classic systole and diastole in and out of downtown, more and more to move by an almost random or Brownian motion over the whole area.¹⁰

The 1955 plan was ostensibly an overall metropolitan strategy, though the scope of the actual document addressed a number of levels of development, from a regional scale to issues of individual building design. The process of suburban design received a particular focus; new approaches and standards for subdivision design emerged that would be applied in the post-war development boom.

Stephenson attempted to minimize the possibility of uncontrolled urban expansion in the future: the density and formal 'texture' of the region was to be carefully controlled. Land use zoning was one approach applied to separate inappropriate uses and protect the character of the residential environment. Development within the plan's boundaries was to reflect a community planning emphasis (a feature of contemporary British town planning) whereby each residential area would feature local open space, shops and community facilities. The specification of these amenities for each suburb codified what was understood as a 'community.' A recommendation was also made that selected, outlying communities should be encouraged to grow and become satellite centres largely independent of the parent



34

"Recent housing: Scarborough. The monotony of excessively long straight streets is apparent." - Plan for the Metropolitan Region, Perth and Fremantle Western Australia, 1955.



35

"Part of an informal layout: Dalkeith. A more interesting street scene." - Plan for the Metropolitan Region, Perth and Fremantle, 1955.



36

"Maylands. An example of monotonous 'gridiron' development typical of many parts of the Region."
- Plan for the Metropolitan Region, Perth and Fremantle, 1955.



37

"Floreat Park. The retention of natural features and successful landscaping make this a very attractive estate."
- Plan for the Metropolitan Region, Perth and Fremantle, 1955.

city. This would have the effect of protecting the suburban nature of the overwhelming majority of the metropolitan region. The differentiation and identification of localities and districts, and the services required to bind these communities together, were carefully outlined in a plan that, whilst an ostensibly pragmatic document, displayed a prominent social agenda aimed at planning and constructing suburban communities. The affective form of Perth's garden suburb ideal and the method of its arrangement, to form a "Garden City," began to be codified.

The transport network was seen as an integral component in achieving the projected vision of the region. The impact of the automobile on Perth was already extensive and the plan understood it to be the means of future movement for a majority of residents within the city. This would have an enormous impact on the form of the envisaged communities, and their interrelation with one another and the infrastructure system. A network of "major regional highways" was proposed along with a system of "important regional roads" that would link important employment nodes and encircle the urban zone. Extensive parking areas were also proposed, especially on the edges of Perth's Central Business District.¹¹ Although proposals were also made in regard to the expansion of the rail system for public transport and freight, the Stephenson-Hepburn plan favoured the automobile, and planning decisions in the 1960s would serve to reinforce this approach.¹²

At the new metropolitan scale described by the Stephenson-Hepburn Plan the traditional function of the street in defining tangible space, and particularly civic space, was lost. Instead, they became more like lines of communication- conduits to transport people from one activity to another rather than occupiable spaces in themselves. The representational space described in a figure/ground plan was flattened out and the lines of the 1955 plan describe vectors of movement. Graham Crist has observed: "In this context, the map of the new region defined by the Stephenson Hepburn plan can only be seen as a discontinuity; there are no streets, only an implied means of movement cutting through a territory."¹³

The new model for development at a suburban scale reinforced pre-war initiatives, particularly the “curvilinear symmetric” and “contour controlled” work of Hope and Klem discussed in Chapter Two. However, the impact of the automobile and associated changes in social patterns, which further disaggregated the city, also critically altered the planning techniques and criteria for suburban development.¹⁴ The curving streets of the new garden suburb were disconnected remnants of the scenic carriageways they obliquely imitated, as streets were increasingly shaped by the new geometries of traffic engineering. The suggested new approach was comprehensive, and pragmatically engineered:

In particular, attention is drawn to the defects of the rigidly geometric system of grid iron planning when applied to housing estates. The main criticism is that of inflexibility and monotony when the system is repeated over large areas. It tends to overlook all physical conditions of the site and often results in excessive road gradients, blind intersections and drainage difficulties. With a lack of differentiation between streets of different traffic value, estates laid out on this system become traffic warrens ... it should be possible to design housing layouts which are convenient, economical and visually satisfactory. Street layout should be considered in relation to the function of the various streets ... Many devices are available to the designer to achieve good results- the use of curved streets following contours, the inclusion of a number of short loops and cul de sacs, the avoidance of over-long streets, the carefully considered intermixing of varied housing types, and the subtle use of small open spaces and tree masses to achieve variety in layout. To ensure greater safety and convenience, increased use should be made of staggered intersections ... and the number of intersections with major roads should be reduced to a minimum ... Purely residential streets should always be arranged in such a way as to discourage through traffic.¹⁵

The translation of such ideas to Perth involved adjustment to local conditions. Stephenson had to recast his own experiences of the English New Town projects to accommodate local preferences. For example, although high and medium density group housing had been an important aspect of post-war reconstruction plans in Britain, it was less prominent in Australia. The Stephenson-Hepburn report recognised the powerful image of the detached home in Perth as an ideal desired by the majority of the population and, despite the possible advantages accompanying more dense forms of development, the general aversion of many people to group dwellings:

Detached houses will, however, form the considerable majority for many years to come, and only a small proportion of other types is suggested ... as being a reasonable estimate of probable future demand. The bulk of new building will take the form of individual houses.¹⁶

Thus, new planning concepts and tactics were intertwined with underlying preferences, local perceptions of the garden suburb continued to structure understandings of the ideal residential environment. The population would continue to be accommodated in the manner to which they had become accustomed; the Stephenson-Hepburn Report only suggesting an appreciable increase in dwelling densities within the inner city.

The influence of these new planning theories is evident in the post war development of the Endowment Lands. In Floreat Park, which experienced the most activity initially, contemporary ideas about neighbourhood planning led to the construction of a community shopping centre and service station in the early sixties.¹⁷ While Floreat was virtually built out by the late sixties, City Beach developed at a slower pace (it was not until 1957 that any new lots were subdivided at the beach) and was thus able to accommodate more of these new theories.

A planning scheme for City Beach was developed by Gordon Stephenson which, while shaped by the original concept of the area as a satellite development and mindful of the recent designs of the City's staff, bore traces of the techniques he brought to the overall planning of metropolitan Perth. New subdivisions were laid out to create neighbourhoods of single family housing, for instance. Centres for commercial activity and higher density housing were located adjacent to the larger highways, creating a buffer for the family housing. The proposed highway system itself expanded significantly on existing conditions to cater for the now dominant automobile. A hierarchy was envisaged, from minor local roads and cul-de-sacs to major arterial highways and railway lines.

These, and other traces of the metropolitan plan, were to contribute to a quiet, secluded residential environment nestled in natural vegetation (its preservation being encouraged) and separated from incompatible activities by a green belt of

natural landscape.¹⁸ This work by Stephenson reflected the continuing influence of the garden suburb idea within the Endowment Lands and continuity in the idea of affective suburban form. Hope and Klem had projected a seaside resort whilst Stephenson applied the Modern ideal of the neighbourhood unit. The visions of English cottage gardens were now replaced by stands of native vegetation and the curving streets now calmed traffic whilst maintaining the romantic vista of detached houses in the landscape.

Shaping Post-War Suburban Form in Perth

Western Australia's State Housing Commission (SHC) played a fundamental role in changing the form and character of suburban development in post-war Perth. The manner in which the policies described in the previous chapter, particularly the shift in funding from rental housing to home ownership assistance, impacted upon suburban development form in Perth will now be addressed.

It has been noted that the critical need for housing in the immediate post-World War II period was a primary consideration of Federal and State authorities. The State Government of Western Australia responded to the lack of adequate housing with initiatives that were to have a significant impact on Perth's subsequent development. These included a massive public housing programme and the further institutionalisation and growth of its planning powers with the emergence of the Metropolitan Region Planning Authority in 1959. Like the policies of the Federal Government, they contributed to the growth of the suburban environment as the home of most West Australians.

John Selwood, in his study of Perth's residential planning processes and their history, identifies the activities of the SHC as a critical factor in Perth's physical growth, describing it as: "a major force in shaping the direction and character of the region's residential sector."¹⁹ The Commission built more homes than any other single development organization, creating dozens of suburbs at the same time. By the mid-1950s the Commission had built over 25 000 dwellings, which represented around 40% of total post-war construction in WA.²⁰



38

SHC housing - workmen engaged on the SHC project at Medina, the first neighbourhood of the Kwinana New Town.

From its conception, the Commission was primarily concerned with the construction of housing. Its major aim was to expand on the work of its predecessor, the Worker's Homes Board (WHB), to provide affordable rental accommodation for families on moderate incomes. The SHC was also responsible for the construction of homes for purchase under the War Service Homes Scheme.²¹ With substantial support from the Federal and State governments, the SHC was able to make significant progress in regard to this objective during the first decades after the war. Its focus on housing families meant that, other than a handful of projects, the SHC's residential development work consisted almost solely of detached cottages on fairly large lots (around 800m²).²² The Commission only in a very narrow sense calculated the impact of such activity on Perth's urban form and social fabric. Its only stated objectives were to support advances in building technologies and the efficiency of Perth's building industry as a whole.²³ However, simply by building the detached house in such large numbers (and contributing to its affordability) the SHC was important in establishing it as the dominant, favoured and expected dwelling type in Perth.²⁴

In the years immediately after World War II the Commission continued the WHB's purchase activities, with small scale acquisitions in existing, surveyed areas (those that were already subdivided or built upon). By 1950, difficulties in obtaining readily serviceable, subdivided lots prompted the decision to embark upon broadacre development on undeveloped land on the fringes of the metropolitan area as the best tactic to address the housing shortage. Significantly, at that time no serious consideration was given to an alternative planning strategy that would entail higher density development in Perth.²⁵ This approach, one consistently taken throughout Perth's history, might be seen as a contributor to the resistance to higher density development that is now typical in Perth. By the mid-1950s nearly 12 000 acres (4858 hectares) of land had been acquired or was being negotiated for purchase, facilitating the development of extensive peripheral suburbs.²⁶

The design of the Commission's subdivisions at that point underwent a shift as planning concepts from Britain once again infused professional practice within Perth. Prior to the resurgence in planning activity, factors such as the Depression of

the 1930s, and the Second World War shortly after, had seen a lull in notable, planned developments. The Garden Cities proposed by Hope and Klem for the Perth Endowment Lands in the late 1920s remained the most significant attempt at comprehensive residential land development for a long time. Subsequently, Perth had grown in a relatively piecemeal manner, with individual developers predominantly constructing small-scale subdivisions.

As discussed above, the 1950s marked the reemergence of metropolitan planning concerns, and the projection of large-scale development schemes.²⁷ A renewed impetus for comprehensive metropolitan planning resulted in activity that drew both upon post-war British planning concepts and professionals. The concepts regarding metropolitan and neighbourhood planning that permeated the Stephenson-Hepburn Report, including ideas about subdivision design, appeared in the post-war work of the SHC. As a major developer, both in residential subdivision and the construction of single-family dwellings, the SHC's efforts during this period thus helped cement these concepts as the development standard for Perth.

The development of Mirrabooka was the most comprehensive of the Commission's projects of this period (and in Perth as a whole until 1969), and represented the most cohesively planned project since the Endowment Lands. Mirrabooka enabled the Commission to develop techniques of land development at a large scale, and in doing so to impose an influential model for residential neighbourhoods in Perth. Indeed the principal designer for the Mirrabooka project, Margaret Fielman, was responsible for a significant number of SHC subdivisions during this period; she also prepared many designs for local town planning schemes and served as a consultant to several major development companies.²⁸ The techniques she employed were aligned closely with the tenets that Stephenson described in the 1955 report, her planning education in Britain undoubtedly contributing to this.

The Mirrabooka project consolidated a large area of land, approximately 7 kilometres from the city centre, that had been purchased or resumed by the SHC since 1950. An outline plan was produced in 1960, although some building had

already begun, which attempted to provide cohesive relationships between housing, shopping, community facilities, public open space and lines of transportation. This envisaged a number of residential neighbourhoods (with lots designated predominantly for single family homes) serviced by a regional community and shopping centre. Access to this centre was defined internally by feeder roads whilst the neighbourhoods were defined by major highways and areas of open space. The highway network provided links to the wider region. This systematic planning approach displayed clearly the tenets of the Stephenson-Hepburn report.

While planning the Mirrabooka development, the SHC was invited by the Perth City Council to participate in the development of Athletes' Village for the 1962 Empire Games. The site for the Village was a wooded area within the Endowment Lands, in the suburb of City Beach. The site was only eleven kilometres from the city centre, but was a relatively undeveloped with little existing infrastructure, particularly transport.²⁹

The Council was thus keen to involve the State Government in the development of the Village with the hope that this would facilitate the broader development of its holdings.

The whole programme for the village, therefore, appeared to have very favourable characteristics to the Council, and the houses and other buildings would revert to ordinary requirements of the State Housing Commission after the Games and would thus provide over £300,000 worth of rateable properties...the establishment on this site would give more incentive to the Government to extend better water and electricity service west of Floreat Park. The site would be sufficiently far away, buffered by the Golf Links, as to have no effect whatsoever on Floreat Park land values.³⁰

Initially, the intended scale and standard for the village, expressed through the papers of the day, was quite modest. With the site already earmarked by the Council for "multi-dwelling unit houses" it seemed that medium density public housing was an appropriate outcome.³¹ This would follow the model developed at West Heidelberg, where the Victorian Housing Commission had developed

athletes' accommodation for the 1956 Olympic Games that was subsequently retained as an area of low-cost housing.

'Brick and tile houses to be built by the State Housing Commission would consist of about 130 living units. These would include some two-storey flats...This village will compare favourably with the Olympic Games Village in Heidelberg, Melbourne' he (Sir Harry Howard) said, 'After the games it will revert to the Commission for allotment to applicants for homes.'³²

In 1960 the Athletes' Village became a project shared by Perth City Council and the State Housing Commission, which undertook to build the accommodation on land provided by the City. By this time both agencies had come to focus on the application of modern planning concepts, particularly the production of a city constituted by suburban neighbourhoods. The ideal of the garden suburb, tempered by the modern planning concepts presented in the Stephenson-Hepburn report, would thus be important in the conception of the Village.

"The City of Light Lays Out the Red Carpet"³³

The hosting of the 1962 Empire Games in Perth can be seen as a marker of a growing civic confidence and an important element in the projection of a self-image for a city that aspired to international significance. It built on the optimism generated by a burgeoning economy and significant metropolitan growth since the end of the Second World War. In terms of the urban form of the city, concurrent with social, economic and political transformations, the growth generated physical characteristics and associated processes that had previously been linked with the urban centres that Perth compared itself to. An expanding transport infrastructure based primarily on the car, a residential population decentralising in a shift to the suburbs, increased land-use zoning, and the introduction of high-rise office buildings in the CBD gave Perth a sense of maturity.³⁴ This was conveyed in promotional material for the Games:

[Perth] is noted for its fine and modern architecture, picturesque homes and friendly people and for the scenic beauty and broad expanses of sheltered reaches of the Perth

and Melville estuarine waters at the point of confluence of the Swan and Canning Rivers.³⁵

They have a remarkable master-plan of city development which will be progressively carried out. Perth's unique Kwinana Freeway, envy of motorists everywhere, is one striking feature of this developmental blueprint. Known as the Stephenson -Hepburn Plan, the scheme co-ordinates the city's pattern of growth on the basis of its foreseeable needs for many decades ahead.³⁶

The confidence Perth had in its new paradigm of modern, professional, technical planning along with the relatively small scale of the city led to the envisioning of the city as a well ordered and planned metropolis, which would continue to grow that way indefinitely.³⁷

Where else, too, can the city worker step into his car a few yards from his office and one minute later enter a 50-miles-an-hour expressway (complete with traffic-sorting 'clover leaves') that whisks him clear of the city and homewards without a hitch...No smog cloud ever hangs over Perth. Because of its geographical situation the clarity of the air is quite remarkable³⁸

Coinciding with this infrastructural expansion, and expressive of the new civic confidence, were a number of large-scale architectural and urban projects. Most significant were the competitions for the Perth City Council's new headquarters (1960) and for the design of government offices at the edge of King's Park, adjacent to the State Parliament (1962). The completion of Council House was planned to coincide with the Empire Games, and the building was publicly opened at that time. The hosting of the Games was seen as an opportunity to increase the international stature of Perth and accelerate this process of modernisation:

To the community as a whole, the benefits which will accrue over the years cannot be fully estimated. Perth will be put on the map of the world. Its good reputation of hospitality and kindness of West Australians that is already established, will be emblazoned on the minds and the inhabitants of all Commonwealth countries...Approached in the right spirit, the Games could bring about a harmony and concord throughout the West which could transform the existing social and business structure, in ways that would otherwise take many years to accomplish.³⁹

This optimism and belief in the transformative power of such an event was important in sustaining Perth's bid during an acrimonious battle with Adelaide for

the right to be the Australian host for the Games. It also provided the impetus for new construction, including Perry Lakes Stadium, Beatty Park Swimming Pool and the Athletes' Village. These projects were to be exemplary representations of the state of Perth's architecture and planning, confirming their international standing. Once again a vision of Perth as a progressive, modern city was elaborated, underpinned by the design of the built environment:

The games village could thus become a model of what is best for the purpose. The need for the main buildings to be impressive as well as functional makes it imperative that we give full scope to architectural talent...More recognition needs to be given to the significance of architecture in the developing city. The profession would be encouraged to seek still wider horizons if it were free to submit ideas for all governmental buildings- Federal and State- calling for bold conceptions..⁴⁰

Thus, the manner in which the projects were to be carried out, and their potential role as models for public architecture and planning, came under immediate scrutiny from the professional bodies responsible for them. Calls were made to involve architects and planners in the Games preparation:

Few will dispute that architects and town planners are the logical people to advise on selection of sites and planning of amenities for the Games. But in spite of offers of help they have been completely ignored..⁴¹

The advice being proffered was not limited to the individual design of the architectural projects but extended to an analysis of the potential urban role for the Games infrastructure as a whole. The WA Chapter of the Royal Australian Institute of Architects (RAIA) was most vocal in its belief that situating the Games facilities in the comparatively undeveloped western edge of the city would unnecessarily contribute to suburban sprawl. Reacting against the projection of a dispersed, low-rise metropolis the architects made a short-lived proposal that envisioned a city centre more akin to those of Modern Europe. Indeed, Harold Krantz had imagined Perth as a city of apartments in the 1930s:

The architectural possibilities of flat buildings properly controlled in their grouping and detailed design are far greater than those of unending rows of suburban villas on small allotments.⁴²

The institute saw a role for its members in developing just such a vision. They proposed that consolidating the various projects nearer the city centre would reduce sprawl, enable the redevelopment of neglected inner city sites and centralize the facilities for both visitors and residents of Perth. The Athletes' Village, as they saw it, was an ideal opportunity for the State Housing Commission to construct high density, inner city housing.⁴³

Their vision was an isolated one and, along with others that suggested inner-city locations, met with no success.⁴⁴ The Perth City Council proceeded with its original plans for building the main stadium, Athletes' Village, pool and velodrome in suburbs to the west and north of the city. The development of these facilities, especially the new neighbourhood of athletes' housing, within the existing suburban fabric resonated with the vision of Perth described in the Stephenson-Hepburn Report. Continuing the low-scale density and texture of Perth's metropolitan form it aligned with Stephenson's view that: "only in this way can the centres of activity be freed of danger, noise and smell, in order to allow people to go about their business and enjoy themselves, as they did in more leisurely times."⁴⁵ However, the Institute continued its pressure, shifting focus from the overall planning of the Games facilities to concentrating on the Village as a model town planning and architectural project.

This discussion even drew an international reaction. The British architect E. Maxwell Fry exemplified a Modernist approach, codified by CIAM, to such architectural and planning projects. Fry had been working on the planning and construction of the Indian city of Chandigarh, alongside Le Corbusier, since the early 1950s. Through this, and other work, he stressed that "there is now an approach to architecture that is common to all countries": Modernist "functional analysis as preceding the act of creation" had "evolved a method that could be applied to all manner of architectural problems."⁴⁶ Thus, with professional, and Modernist, self-confidence he positioned the architect as a specialist technician, able

to control all aspects of development. In commenting on the Athletes Village, he supported the view of the institute and proposed that:

...One architect should be put in charge of the project from its inception. He should be selected by competition and have a group of architects working for him. They should lay out the streets, do the landscaping and design the homes. A competition for individual houses would be the death of the project.⁴⁷

Indeed the WA Chapter of the RAIA was strongly in favour of a single competition for both the layout of the subdivision and the architectural design of the houses, seeking a controlled, planned environment administered in a manner similar to Chandigarh. A chance was sought to control the development of the Games Village in just such a way; providing an exhibition of the Modernist architect's expertise in designing the residential environment. They lobbied the government and gained agreement from the Minister for Housing that a single competition would be preferable. However, later representations from the Perth City Council convinced the Minister to reverse that decision and call for two competitions. The Council argued that there was not enough time to hold a comprehensive competition as the road layout and tree planting must commence immediately.

Subsequently, separate competitions were held for the subdivision layout and the design of the housing. This did not prove the death of the project as Fry envisaged but did provoke discussion regarding the integration of the architecture and planning. The concerns aired by people, both prior to the development being built and after completion, focused on the visual unity of the development. For the architects particularly, the form and aesthetic of the Village as a singular entity was deemed as important as the individual house designs: "Let us hope that 150 houses to be put up don't turn out to be 150 different houses, even if they are all well designed, some sort of unity is essential."⁴⁸

Ultimately, it was this overarching organic image that was generally felt to be the least successful element of the completed Village. Hopes of establishing a totally controlled environment that would demonstrate the full benefits of Modernist

planning and architecture were never fulfilled, the architects working as project coordinators deeming the Village a “fragmented development lacking in visual coherence”.⁴⁹ The antithesis to these desires for a model Modernist Village was those who found the completed development too modern and too confronting. For them it was a shocking thing to have “row after row of houses built in the same style”.⁵⁰ The effect, they felt, was as if the Village had “come off a mass production line”.⁵¹

The reactions suggest a tension between the understandings of affective form held by the architects and those public critics. The designers sought a controlled and consistent form and aesthetic for the housing. For them the modernist architect’s guiding hand improved the residential landscape through creating harmonious form, which meant a consistency and regularity to the architecture.⁵² The public reaction was underlain by a sympathy for the more organic forms associated with the garden suburbs- the picturesque and varied roof lines and house forms promoted by Parker and Unwin.⁵³

In addressing specific aspects of the Village’s design the comments also point to differing ways in which post-WWII Modernism was integrated within Perth’s efforts to develop as a progressive, modern city. The attempts to transpose a systematised, regulated form were modulated by a strong, underlying local inclination towards the picturesque garden suburb. Thus, the planning and development of the Village provides a useful focus through which to examine the impact of overseas planning and architectural theories on the continuing evolution of suburban environmental ideals in Perth.

Although the Village was to be a State Housing Commission project, the circumstances surrounding its development resulted in something far more ambitious arising than the austere housing of a typical SHC subdivision. During the time between the bidding for the Games and the eventual completion of the village the approximate cost of the construction rose from a first estimate £100 000 to a final cost of £865 000. The marked difference between the two figures is obviously the result of a number of factors; amongst them being an underestimation of the scope

of the facilities required (particularly the number of units). However, most relevant is the extent to which the eventual design of the houses varied from the standard SHC housing stock of the period; which, whilst contributing to the significant cost increase, suggested a revised model for suburban development.

Building on the parameters set out by Stephenson, and in the development work of Feilman, the relatively small Games Village project, like the original Endowment Lands scheme, was significant in that it projected an ideal suburban development form. It once again drew upon overseas planning concepts and adjusted Perth's embedded garden suburb model- attempting to create a particular vision of house and landscape setting. Like the Endowment Lands scheme, it was an attempt to provide a modern solution to the task of housing the people of Perth; one that reflected their particular housing preferences. The understanding of the affective form of the suburb became altered in the Games Village in relation to the new ideas about zoning, the amenities required for a neighbourhood, and the impacts of the car described in previous sections. Changing understandings of the way families might occupy the home combined with the formal concerns of local architects in the production of the houses and suggested a new model for the affective form of Perth's suburban homes.

Melbourne's Olympic Village

The Melbourne Olympic Games Village of 1956 provides a useful counterpoint to the analysis of the Perth project.

Both villages were products of an intensely debated design process and their significance lies within the built form, unbuilt proposals and the dialogue surrounding their construction. The contrasts between the two projects are distinct; Melbourne's Olympic construction was undertaken in an atmosphere of economic scrutiny and conservatism whilst Perth's village received an unusually high level of support. The translation of post-World War II architectural and planning tenets to Australia, and their impact on extant development models, can be discerned in this work. Thus, the degree to which these projects, especially the Perth village, were

developed as exemplary housing models, or intended as generators of urban reform, will be examined.

The completion of the Olympic Games Village for Melbourne as permanent housing, fully functional after the Games, was an innovative project. For other, previous Olympics, athletes' accommodation were predominantly barracks-like structures of limited use after the conclusion of sporting events. At Helsinki, in 1952, the first move away from this model had started with the construction of 14 three-storey apartment blocks. Melbourne's fully functioning 'village' was an ambitious concept- developing a housing estate complete with shopping centre and public buildings to house a complete community after the games. In examining the outcome of this project it is also important to note that the Village was reluctantly built by a State Government under extreme pressure to use public monies efficiently and alleviate a severe housing shortage.

The West Heidelberg site, selected in 1953, was about 12 kilometres from the City of Melbourne and had no sewerage, water, electricity, phone service, gas or roads. The large scale envisaged for the village, and its role as public housing, prompted debate about whether it was an extravagance that shouldn't be publicly funded. The State government of the time initially rejected the proposal for the village from the Games Committee, suggesting that the athletes (an estimated 3000 at that point) could be housed in the University of Melbourne.⁵⁴ Discussion of various solutions to the housing problem (including co-operative houses and inner-city flats) continued for months whilst the confirmation that there would be approximately 6000 athletes, and that International Olympic Committee rules required them to be housed together, prompted the state government to commit itself to providing a village.⁵⁵

The Victorian government faced the problem of funding this addition to its public housing construction programme. The estimated 600 houses could not be built within the budget provided by the CSHA and so the Federal government was approached for financial aid. However, being committed to the reduction of public housing, the government of Robert Menzies would not provide any further aid. A compromise was eventually reached: the State government received a £2M advance

on future CSHA funding to enable the construction of the Village. This process highlights the pressures surrounding the construction of the Village during this period. The State government was primarily concerned with the extreme housing shortage of the time and required that any project it undertook must have that need as its focus. Thus, the affordable construction of a maximum number of housing units, of an efficient form, was the highest priority; talk of the responsibility engendered by accepting the games, and the importance to international standing of providing progressive, model housing, receded from focus.

The eventual design of the West Heidelberg Village was undertaken by a panel of Melbourne architects. Five firms cooperated in the tasks of design and construction supervision of the 841 houses and flats, on an approximately 30-hectare site. These consisted of one and two-storey duplexes, quadruplexes and row houses arranged to form, what was termed a “pleasant garden suburb.”⁵⁶ The houses were standardised, several using a pre-cast concrete panel system the Commission had developed and which was produced in the Commission's own factory. This simple, concrete construction replaced the red, clinker-brick housing of 1930s Housing Commission projects as well as the more eclectic detail of the latter. Thus, the stark, minimal nature of the Games Village houses would prompt *The Heidelberg News* to comment that the “new buildings...often have a rather raw look”⁵⁷

The gabled one-and-two storey forms were largely responsible for generating the image of the Village as a garden suburb, their scale reminiscent of British housing models. These were clustered around shared, open green-space and set within an insular street layout, often at the end of cul-de-sacs. This arrangement further contributed to associations between the site and connotations of an ideal garden suburb. In addition to the houses and flats, permanent buildings connected with the Village included a modern shopping area and a theatre to seat more than 1000 people. The temporary buildings, such as kitchens, dining halls and other facilities for the athletes, were replaced by more housing after the completion of the Games.

As noted, this diluted model of a permanent garden suburb, with its minimal, concrete walk-up flats and simplistic site planning, was a strong influence on the

expectations for Perth's Empire Games Village. However, the conditions under which the Perth Village developed resulted in differing expectations regarding the standard of housing to be provided and the building typology to be used. The more favourable economic climate, a different planning environment, along with pressure exerted by various community groups in Perth at the time, shifted the focus of planners and government officials away from the image of a village composed of minimal, public housing towards the provision of a modern, attractive suburb for the private market. Thus, the organisers in Perth could more confidently proclaim:

An outstanding feature of the general preparations- provision of a Games Village for the quartering of visiting athletes- resulted in an entirely new permanent garden suburb development coming into being in an ideal location ... These homes, financed by the State Housing Commission, were built with an eye for later selling to home-seekers.⁵⁸

Home Ownership, Investment and Ontological Security

While the City of Perth saw benefit in inviting the SHC to develop the Games Village, the residents of Floreat were not so enthusiastic. The fears of local residents regarding the character of the Games Village reflected this increasing role, and recognition, of the family home as an asset, and a primary form of investment (its value ensured by an attractive suburban environment). The pressure that Floreat residents exerted upon the council reflected the development of particular attitudes to suburban form-making (recognising the position of the home as investment) that can be seen in relation to the Games Village. The consequences of this connection were an important factor in the determining the eventual form of the games village.

The rise of urban home-ownership in the second half of the Twentieth Century is closely associated with the increased use of the mortgage as a credit instrument for home purchase.⁵⁹ The development of a home finance sector in Australia, in addition to the influences on the expansion of the suburbs mentioned previously, contributed to the emergence of owner-occupation as the dominant tenure.⁶⁰ Augmented by policies of the Menzies' Coalition governments in the 1950s, owner-occupation entailed major financial advantages and developed as a sound investment strategy for the family. The previous chapter also highlighted the

manner in which this financial propriety of home investment also became strongly linked to ideas about good Australian citizenship at that time. The discussion and promotion of the suburban family home by public figures like Menzies developed an image of the ideal Australian family (and its values) tied to the suburban home.

During the immediate post-war period, when the home-ownership rate was rising, government intervention in the financial activity structuring the housing market was significant. The Commonwealth and State Savings Banks were catalysts whereby savings for house purchase could be encouraged. Government housing funds were increasingly channeled into co-operative building societies, rather than the construction of public rental housing; and these provided low interest mortgages to purchasers. In the 1960s private financial institutions built on these foundations and became increasingly important in the market, particularly in regard to finance for older dwellings. However, the government maintained close control over the sector, influencing the purpose for which deposits could be lent (strongly biased towards home mortgage advances) and the lending rates that could be levied (generally well below market interest rates). Its own finance provision remained focused on the purchase of new housing; funding the spread of the suburbs.⁶¹

In addition to the apportioning and direction of funds within the CSHAs, the federal and state governments used further incentives to boost the financial advantages and stability of home-ownership. Michael Berry has identified a number of these:

For example, the federal government introduced the Home Savings Grant Scheme in 1966, which offered first-home-buyers a tax-free grant on a scale related to personal savings ... The federal government also set up the Housing Loans Insurance Corporation in the 1960s, which insures mortgage loans against default, therefore encouraging private lenders to provide housing finance ... Furthermore, the controls of state governments over (and their support of) building societies has fostered the general belief among investors that the former will, in the last instance, protect individual building societies from financial collapse, further improving the security of the building society sector as an avenue of investment.⁶²

It can be seen that post-war government housing policy, primarily established in the 1950s, was concentrated in the field of housing finance and aimed at encouraging a rapid growth in the construction of new dwellings for owner-occupation. The interventions in the housing finance sector were to increase the supply of funds available to finance home-ownership, and to minimise the deposit needed to gain this tenure as well as the mortgage interest rate payable.

This nurturing of home-ownership reflected its widely perceived links with the qualities of responsible citizenship; the exemplary citizen displayed self-reliance and independence, which home-ownership encouraged, and symbolised powerfully. In magazines and advertising of the period the lifestyle of post-war prosperity was defined in relation to the modern home and its ideal position. Connell and Irving have suggested that such a connection made a strong impact on consumption patterns:

Home ownership in the suburbs as a desirable form of life, as well as the equipment necessary for it, was actively sold to the working class ... Popular magazines after the war spread the gospel of 'modern' styling, along with the message of high consumption; the electrical equipment increasingly invading the household spread the same tastes.⁶³

However, the ideas about everyday life being reinforced through this media were not simply those of a frivolous consumerism as one might imagine. In addition to the more obvious associations with conspicuous consumption, and as the sphere of private retreat (with its intimate, emotional fulfilment and domestic dignity), the home also came to represent a more public morality- the financial autonomy of the family. Home-ownership implied frugality and saving, and generated independence and a spirit of self-help; which were critical to the definition of good citizenship being projected.

These associations also fostered a feeling of, what Saunders terms, "ontological security" as they came to be intimately linked with the suburban family home.⁶⁴ Drawing on Anthony Giddens' description of ontological security as the confidence most human beings have in the constancy of their social and material environments,

Saunders proposes the home as the key locale in modern society where ontological security is sought.⁶⁵ In Australia, and particularly Perth, it is the detached home in the suburb that becomes the affective form linked with just such ontological security. The ideal of the garden suburb provided the form most powerfully linked to the qualities of privacy, stability, independence and fulfilment.

In post-World War II Australia the suburban home was increasingly represented as a place where people felt most in control of their environment. It was a special place, free from surveillance, where residents were free to be themselves and at ease in the deepest psychological sense. The home was a retreat from a world that at times seemed threatening and uncontrollable.⁶⁶ The government was keen to shift its role in the provision of housing, to encourage such a financially responsible, autonomous citizenry, and so embarked on the policy measures outlined above that made home ownership (and especially ownership of a suburban home) more financially accessible.⁶⁷

This vision of home-ownership echoes the sentiments, outlined earlier, of Samuel Smiles regarding the effects of the accumulation of property had on making the thrifty 'steady, sober and intelligent'. The changes in public rhetoric and sentiment during the post-war period in Australia from state provision of housing to the fostering of a nation of homeowners indicated changes in ideas of citizenship. The shift from public provision to private (though state-subsidised) self-help in the manner of Smiles also encouraged a move from identity based on class and state entitlements to identity based in the family and domesticity.

In Australia during the 1950s and 1960s this civilising influence of home-ownership became bound up in the particular model of the detached suburban, owner-occupied house. More precisely the populist ideal of a 'garden suburb', exemplified by the initial subdivision of the Perth Endowment Lands, represented the most desirable landscape to situate this family home within.

In this context, residents of the areas adjacent to the proposed Games Village were worried by the announcement that the project would be undertaken by the SHC, with the houses to be transferred to public tenants at the conclusion of the Games:

When the Council announced the site for the Games Village in Floreat Park, the decision was received with apprehension by the residents of the Floreat Park area because of their home investment and the fear that the promises of the authorities concerned may be departed from and the by-laws created to ensure their value weakened.⁶⁸

This concern highlights another influence on the development of the Games Village, one that had wider implications for the post WWII formation of the suburb in Perth. The reaction of the home-purchasers of Floreat Park to the possibility of adjacent public housing, particularly the proposal for walk-up flats, reflected the reinforcement of the role of the home as investment, an idea which had gained in importance since the 1950s. In addition to its status-value, and contribution to personal autonomy, the home increasingly represented a potential source of profit and, in the form of built-up equity, a source of financial security.⁶⁹ The consequences of this have been pointed out by John Agnew, writing:

For all but the most affluent in our society, a house is not only a home, it is typically a major repository of capital investment and stored equity. As any imaginative architect will testify, houses are purchased to be sold not to be lived in. Their ultimate sale represents an edge which makes Social Security and Old Age Pensions endurable.⁷⁰

The fears of local residents regarding the character of the Games Village reflected this increasing role, and recognition, of the family home as an asset, and a primary form of investment (its value ensured by an attractive suburban environment). The development of the Games Village was a potential threat to property values if it did not maintain these expected development standards within the area, which were framed by moral, as well as material, terms. The restrictions on building standards represented a way of ensuring a certain type of owner as much as a specific quality of construction. It suggested a community of particularly house-proud owners and committed citizens. Depreciation in the value of the home would have obvious financial implications but was also understood as reflecting poorly on the image of the local community as a whole. It followed that the flats initially suggested for the

Athletes' Village not only suggested a lowering of building quality in the area but also the introduction of a discordant social element.⁷¹

In countries such as Australia and the United States the prevalence of the suburb as the site of family life increasingly rendered the idea of higher density development as unsatisfactory, and potentially damaging if introduced to an established neighbourhood. The association of flats and renting heightened negative sentiments amongst homeowners; those who rented came to be seen as transient, lacking concern for property maintenance and potentially disruptive to a residential area.⁷² Hence, the initial plans for the Perth village, featuring 'two storey flats', and reverting to the use of the State Housing Commission after the Games, were distressing to local residents because the form of housing being proposed represented a threat to their expected residential environment and, particularly, their personal investment. The threat perceived by the Floreat residents was similar to the one imagined by Subiaco residents seven years earlier. The first State flats in Subiaco, named Wandana, were designed in 1954 by the architectural firm Krantz and Sheldon and were labelled as "slums of tomorrow" by anxious neighbours.⁷³

These fears, about the degrading of land values, aesthetic qualities of the suburb and the stigma of a Housing Commission development, prompted the requisite concern from the Council: "No sub-standard buildings or roads would be built in the Empire Games Village area at Floreat Park...It would not be allowed to deteriorate into a slum after the Games."⁷⁴ The promise to prevent the erection of sub-standard buildings, and the making of a slum, was manifested through the re-casting of the project. It was not simply a matter of improving the building standards; the architectural form of the village itself, and the expectation of its surrounding environment, changed.

As previously mentioned, the RAlA was vigorously lobbying at this time to expand the ambitions for the Village in its calls for an open competition to design the development. The institute's hopes for an innovative, modern demonstration suburb found favour with the Minister for Housing and a State Government that was keen to involve the private sector in its significant building projects.⁷⁵ This

support emphasised that the Village had become a more ambitious project than initially envisaged. To that effect, it depended on increased funding, and the State Government announced its support for the Village very early in the process. The Minister for Housing assured the Lord Mayor that the Perth City Council had Government support and that, following a discussion with the Premier, he could promise increased funding. This offer, he stated, “supercedes that originally made and is virtually a blank cheque.”⁷⁶

This enthusiastic involvement and the commensurate level of funding from the State Government ensured that the village surpassed the first visions of hostels, flats, or frugal State housing. The scope for the project was broadened; encouraging progressive and innovative work from the architects and allaying the fears of neighbouring property owners regarding land values (and, by inference, social standards). The eventual prices for the houses when auctioned ranged from £4900 to £6985, contrasting with contemporary advertising of the time which boasted house and land packages for around £2800.⁷⁷ The focus of the village had definitely shifted, seeming rather less in alignment with the principal function of the SHC; being the “statewide provision of low cost housing for purchase or rental for families of low and moderate means.”⁷⁸ The vision for the village now seemed to be more akin to a model middle-class suburb, emphasised by the various descriptions of the village as its construction eventually progressed. Articles in various newspapers claimed:

Already it is obvious the village will be one of the showplace suburbs of Perth. The whole area has been planned from the first. Individual homes have been designed and judged as almost ideal for a near-bushland area of gentle slopes only a short distance from the white breakers of the Indian Ocean.⁷⁹

Floreat Park is now Perth’s garden suburb. It is ‘the thing’ to live there. It is doubtful if any district in the whole of Australia has so many eye-catching modern homes in such a tasteful layout.⁸⁰

A Model Plan

The competition held in 1960 for the planning of the village subdivision did not result in innovative submissions like those of the later competition for the design of homes.⁸¹ This was not simply a measure of a lack of talented planners but reflected the conditions by which the competition was conducted. The scope for innovation and experimentation was severely circumscribed - the Competition Committee had decided before nominating finalists that no entry would be accepted without some modification as required.⁸² The stated ambition of the competition was the production of a relatively unremarkable subdivision.

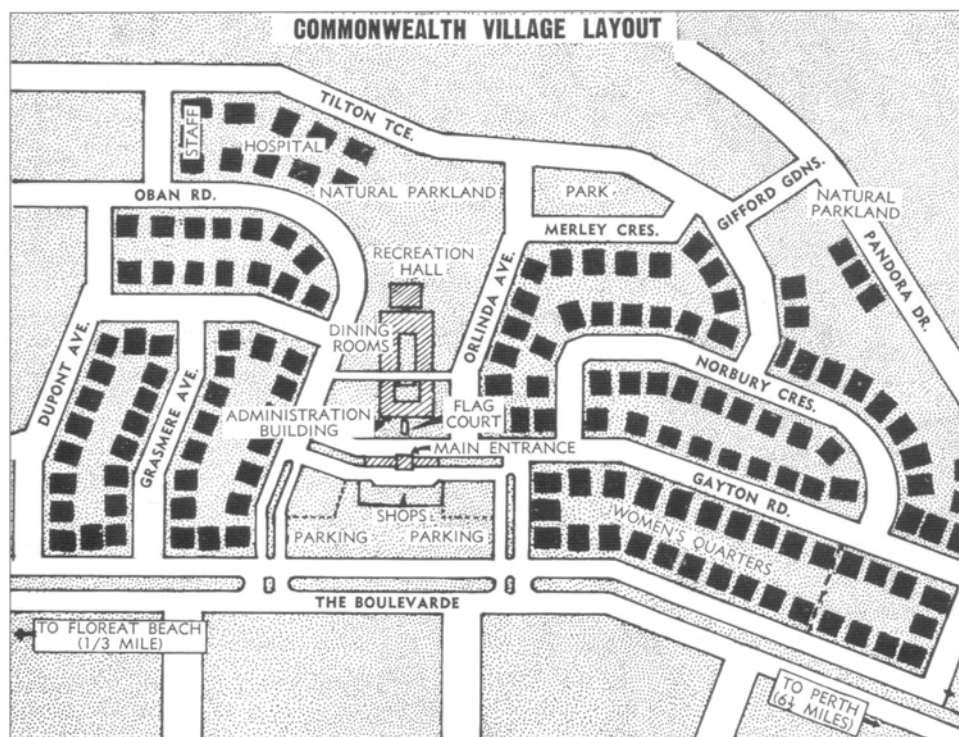
General Aim of the Competition

The aim of the promoters is essentially the design of a residential subdivision affording reasonable road connection to the pattern of roads established for the land west of the competition site and shown on the base plan. *The design should be a section of an ordinary residential layout and should not be treated as a separate entity.* [my emphasis]

Subject to A. above, the area should be designed as far as possible on a form adaptable to the needs of the Empire Games. For this purpose ready access should be available from the housing lots to the park area...in which temporary facilities will be located for the period of the Games.

The assessors will look for economy of layout and avoidance of excessive developmental costs so far as those objects are not inconsistent with a pleasing and effective use of the site.⁸³

The design of an ordinary residential layout, in this case, required a focus on the role of the road network in defining the residential landscape. The subdivision was intended to fit neatly into Stephenson's vision of Perth as a mobile city- a network of



39
Plan of the Athletes' Village, 1962.

neighbourhoods linked by roads as lines of communication. The village layout that eventually emerged was modelled on the winning design of Harold Walker and Keith Thomas, two Gosnells Road Board members. Their design fitted neatly into the competition site, which formed a broad asymmetric amphitheatre with slopes rising up from the Boulevard to a surrounding ridge. A small shopping and community centre was placed adjacent to the Boulevard at the foot of the slope and formed a nucleus for the village. This lay adjacent to the main recreation reserve that extended through the centre of the site, up the slope. Each side of this the streets ran in series, parallel to the contours. The assessor's comments regarding Walker and Thomas's plan point to its mixed reception:

(a) Design sets out a practical road system, fully recognising contours of the land.

It also recognises the high point on the Northern and Eastern boundaries.

The suggestion that the Eastern triangle be incorporated in the golf course is sound.

It provides an economical subdivision layout.

Generally, the design has been competently executed, and, subject to amendment, will meet the needs of the Empire Games Village.

The suggested natural bush park on the Herdsman's drain line seems an awkward solution and provides an area difficult to maintain.

Design is extravagant in areas set aside for public use.⁸⁴

It is clear from these comments that the competition sought a layout that would continue the process of residential subdivision already underway in the area. The subdivisions undertaken by Hope and Klem in the 1920s and 1930s had already established a landscape of similar suburbs with curving streets that responded directly to the contours of the land. The plan for the Games Village continued in this tradition, but with an increased focus on contemporary planning and engineering ideas, especially regarding the control of traffic.

The general disposition of the elements within the layout was considered adequate. The centrally located park and shopping area, the roadways' adjustment to existing

land contours and the predominant use of T-junctions (to prevent the increased delays and perceived dangers of four-way intersections) aligned with the governmental expectations for the plan. The modifications that were made generally focused on traffic planning aspects, reflecting the importance of the transport network to the plan for Perth and the high degree of influence this discipline had at that time.⁸⁵ Significantly, in the period between the publication of the Stephenson-Hepburn report and the conversion of its recommendations into the Metropolitan Region Scheme the major change to the plan concerned the road system. Stephenson's inner ring road around the city was altered by local traffic engineers, and the US consultants De Leuw Cather. The geographer Martyn Webb has suggested that the alteration "turned Stephenson's English Road system into a California Freeway system."⁸⁶

In response to assessors' comments, the road geometries of the scheme were smoothed out and the intersections further simplified in order to make driving safer, according to traffic engineering logic of the time. Through-roads were eliminated where possible in order to deter traffic from cutting through the subdivision; a hierarchy of local street, feeder road and highway that aligned with the prevailing planning models. The neighbourhood became a node reached by travel along the fluid lines of the streets. The ultimate aim was the provision of a quiet, secluded environment for the family, with an emphasis on the privacy of the family home, the separation of inappropriate land uses and the inclusion of local amenities, such as public open space and neighbourhood shops. Walker and Thomas' original plan featured substantial recreation and garden areas throughout, including a central park. Changes made by the Town Planning Department saw this aspect reduced, but the intention remained to "maintain a park effect throughout the village."⁸⁷

This use of the landscape as a visual amenity contrasts with the communal pocket parks that Hope and Klem designed for Floreat Park; envisaged as healthful spaces of play and relaxation. Apart from the central parkland the green verges and stands of retained trees of the village were used as *mise en scene*. The feeling of driving through an arcadia of private villas set in garden surrounds was the aspiration;

relaxation and play were to take place almost exclusively in the private rear garden (or in an organised fashion at the regional reserve).⁸⁸ To this effect the connection to the city and the region was focused on the use of the car and, as was often the case during this period, the subdivision was constructed without any pedestrian pathways.

This conception of an atomised community continued at the level of the individual lot setout. The village was envisaged as offering a unique level of privacy through its unusually wide blocks (some as much as eighty feet) and a specification that building alignments be staggered; increasing visual privacy and reducing the sense of built mass.⁸⁹ These aspects would also allow an unprecedented flexibility in terms of individual house orientation, unlike traditional subdivision practice.⁹⁰ The predominant image of the suburb, exemplified by previous SHC subdivisions, dominated by rows of houses set back at a consistent distance, and all oriented directly toward the street, would be replaced.⁹¹ Instead, the level of family privacy and disconnection from the surrounding houses would be further amplified through this increased physical separation of houses by distance, orientation and architectural measures such as screening walls.

Thus, the precepts and priorities that underlay the development of the subdivision demonstrate the influence of international, particularly British, planning and architectural thought. The concerns regarding residential density, the neighbourhood unit, functional zoning, urban recreational space and extensive traffic planning all reflect the contemporary tenets of the resurgent post-war planning and architectural professions. When applied locally, these ideas were largely used in the refining of Perth's suburban condition: development densities were lower, the neighbourhood unit was essentially conceived as a suburb, and zoning was applied primarily to protect its isolation.

In Perth, suburban development remained at the forefront of this new era of planning activity and the Games Village represented an experiment in suburban form-making. The modern planning and subdivision techniques (laid out by documents such as the Stephenson Hepburn Report) reconfigured the garden

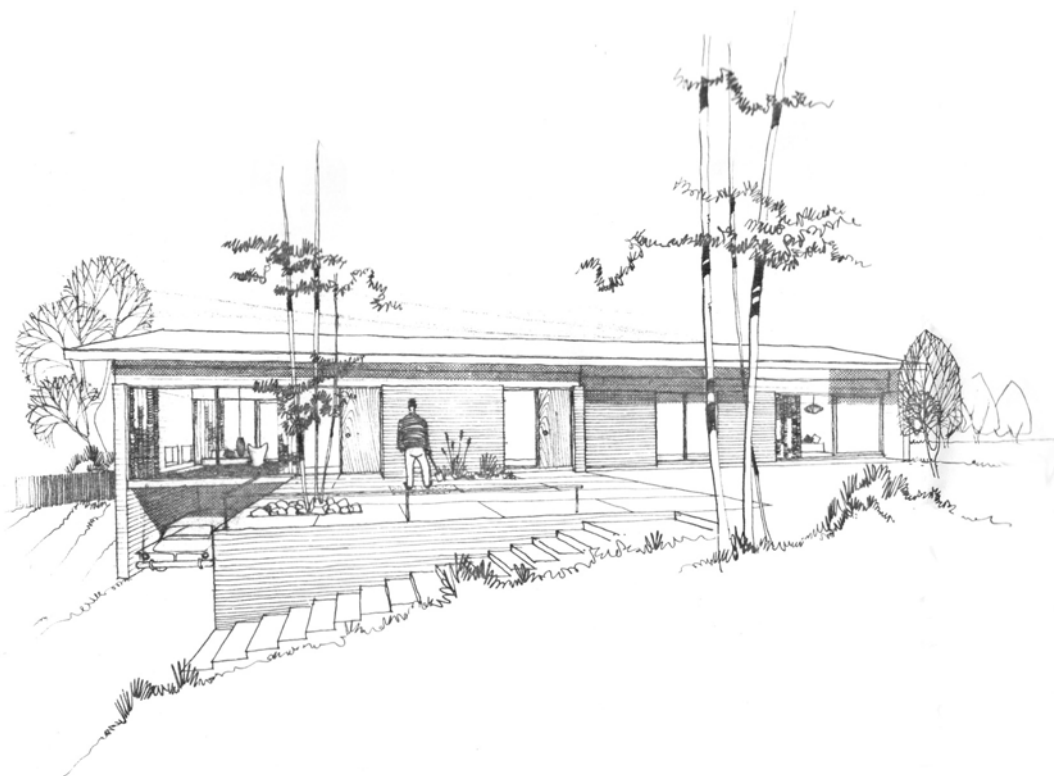
suburb model as experienced in Perth in order to facilitate an ideal middle-class suburb. The curving streets of the Empire Games Village, with their ocean views, provided generous, well serviced lots in quiet landscaped surrounds, and the quality of the dwellings built for the Games ensured that adjacent property values were not affected.⁹² Thus, the socio-economic condition and amenity of the area was maintained, ratepayers were appeased and the Perth City Council had a model development to stimulate further growth in the area.

Model Houses

Ostensibly, the design of the houses themselves proved more progressive than the planning of the village. The architects' attempts to develop a Modernist suburban blueprint were more controversial than debates over the amount of public open space or street layouts within the village. Their progressive nature was recognised by local paper the *Daily News* in its report on the exhibition of the winning designs:

You could almost call Perth's Commonwealth Games village "Sunlight Village." The aim of the ten winning designs seems to be to make the most of the famous WA sunshine. Floating roofs, wide skylights, open courtyards and terraces, expanses of windows ... Many of the village houses will include the latest in housing trends- an informal family room for TV viewing, as well as a formal lounge for visitors."⁹³

The housing for the village embodied the desire of local architects to introduce and translate architectural Modernism to post-war Perth. The major architectural competitions of the period (the City Council Offices: 'Council House' of 1959, the Empire Games Village of 1961 and the Government Offices Competition of 1962) demonstrate the shift in the local profession to an acceptance of Modernist architecture as an appropriate design methodology. However, the Games Village project was unusual in this context because, rather than being instigated by the sponsor organisation, the competition was lobbied for by the RAlA. It was seen as an opportunity to demonstrate their understanding of Modern architecture, and the possibility of applying it to the wider housing market, particularly State Housing which remained, at that point, relatively unexposed to Modernist projects.



40

*Cameron Chisholm and Nicol, Type B3 house -
perspective.*

The attention focused on the project by local architects reveals the emphasis that was placed on the village providing an opportunity for model designs. As discussed above, early calls were made for architect control of the entire project and the later concerns of the project architects were about the lack of aesthetic consistency they were able to prescribe for the buildings. Thus, the desires of the local profession can be seen to reflect the tradition of using exhibition (or special event) housing as a tool for promoting reform and renewal in home design more generally. Previous demonstration dwellings of the Great Exhibitions (such as Henry Robert's model cottages of 1851), World Fairs and housing exhibitions such as the Stuttgart Weissenhofsiedlung (1927) provided prototypical models for new forms of dwelling, often conceived also as a means of social regeneration. The Institute anticipated the Village would provide a similar opportunity to demonstrate what they perceived to be the design principles appropriate to the modern world and, particularly, Perth.

The aspirations of the architects, and the Institute, most closely resemble the foundations for the Case Study Housing project in post-war California conducted in the first two decades after the Second World War. Continuing the long tradition of exhibition housing, John Entenza (editor of *Arts & Architecture* magazine) organised the design and construction of a series of display houses in Los Angeles during this period. From 1945 to 1964 various architects attempted to produce superior housing for the 'typical' American family; incorporating changes inherent in the conception of a modern lifestyle and exploiting new materials and building processes offered by advancing industrialisation.⁹⁴

Like this Californian experiment, the paramount aim of the architects in Perth was to achieve innovation in the building process and to economise through the rationalisation and standardisation of plans. Opportunities were also sought to exploit prefabrication and the use of mass-produced parts. Through this medium of the reconstituted dwelling, a new and resolutely contemporary lifestyle was to be fostered. For each dwelling, an active, house-centred family was assumed; one with

diverse interests but little need for formality. Thus, another corresponding aspect to the Case Study program (and most exhibition housing projects) was the design of the houses for ideal occupants. Within this tradition, rather than being commissioned for a specific individual or family, dwellings were usually intended for general categories of users such as the average working-class family, as they were occasionally endowed with more specific occupational or personal traits. Such was the case for the house for a childless couple for example. Indeed, once the Empire Games were completed the Village houses were intended as part of the “ordinary housing programme” and intended to reflect the general mix of types of residents found in the broader community.⁹⁵

It is important, given the similarities in these model projects, to note the particular concerns and approaches of the local practitioners. The concepts and models addressed in the Modern housing of the early 1960’s reflected international concerns, but were placed firmly in a local context. Issues of climate, local construction techniques as well as conceptions of “typical” family lifestyle contributed to the particularities of the Perth housing. Constructional and formal ideas proposed in the village housing, as new ways of producing Perth’s mass suburban housing, would later influence the local understanding of affective form. The typical suburban home in Perth was eventually built by very similar methods and employed many of the same planning ideas.

Research by local academics and students has emphasised that architecture in Western Australia at that time, although also responding to wider social change, cannot be understood as simply a response to ideas received from the eastern states, as is often portrayed.⁹⁶ It has been argued that architectural ideas have often been derived directly from overseas experience, often due to travel by young graduates. Geoffrey London and Simon Anderson have suggested that: “the isolation of Perth has meant that no priorities in the world of received ideas have been allowed to Sydney and Melbourne ahead of any other part of the world.”⁹⁷ In Perth after the Second World War, academic education replaced the previous system of indenture for architects and the practice of overseas travel for graduates became commonplace. This exposure to different lifestyles and alternative architectural

approaches, along with the increased availability of international architectural journals contributed to the influence of Modernist ideas within the profession locally.⁹⁸

Geoffrey London and Duncan Richards, in their work on Modernist architect designed housing in Perth during that period, have noted a strongly empirical approach in design and construction that produced very localised results. Generally, the housing produced by architects during the 'fifties and early 'sixties became technically inventive, responsive to the climate and the site, and concerned with simple construction and economy.⁹⁹ At the same time, the planning models described earlier in this chapter were being applied in the metropolitan area and shaping the context for these innovative West Australian houses.

In comparison, Dolores Hayden has noted that the programme for the Case Study Houses did not "define a model neighbourhood in which the model houses would find their social and physical context."¹⁰⁰ Instead, it increasingly focused on large houses on choice hillside sites and, despite the ingenuity and openness of these, many issues of mass suburbia were not addressed. Although striving to outline a new mode of urban living these projects often belied their urban setting, particularly in the distancing and romanticising of Julius Shulman's panoramic views.¹⁰¹

In Perth the houses were an integrated part of a subdivision that was intended to meld with its suburban surrounds, providing a development model reflecting the vision of the wider metropolitan planning scheme (propelled by the Stephenson-Hepburn Report). The housing designs submitted (and subsequently completed) for the Games Village reflected the changing use and social meaning of the modern home whilst also extending the distinctive transference of the Garden Suburb model to Perth.

This desire to produce a model suburban environment is apparent in the Empire Games housing resulting, as it did, from a competition that drew an enthusiastic and progressive response from the local profession (61 firms or individuals entered). It is further reinforced by the stated aims of the Government, rather than a typical

SHC project: "The purpose of the Architectural Competition is to obtain a number of designs for homes for a first class housing development of approximately 150 houses in an outstanding situation."¹⁰² The work of architects, such as first-placed Silver Fairbrother and Associates and second-placed Cameron Chisholm and Nicol, differed markedly from the standard housing that the SHC was producing at this time.¹⁰³ The discussion of the Village housing that follows will concentrate on designs submitted by these two firms, particularly the more innovative homes designed for larger families.

In contrast to the houses designed for the village, most housing types being offered by the SHC were still based largely on the English-bungalow prototype, variously modified since the nineteenth century, centred on the block and spaced equally from its neighbours. Only attenuated attempts were made to provide a modern approach in planning and materials. This type of dwelling predominantly located the main bedroom and formal living space to the front of the house (divided by the entry hall) and utility rooms towards the rear, often externally.¹⁰⁴ The forward rooms created a formal 'front' that was invariably oriented directly to the street and separated from it by a tidy garden.

Further, as George Seddon has described, the gardens of these houses generally had a particular quality: "Neatness is the primary virtue; shrubs are clipped, lawns are cut, edges are trimmed, weeds are expelled."¹⁰⁵ This type of suburban Australian garden was more caustically described by Robin Boyd as the product of the "Arboraphobe." He saw it as an expression of a typically Australian, suburban attitude that prized neatness and was a cultural remnant of the European "civilising" of nature. Boyd observed that in the Australian suburb of the 1950s "progress is measured by the number of acres transformed from the native state of sloppiness to the desirable state of clipped artificiality."¹⁰⁶

In contrast, the architects' perspectives of the Games Village houses depicted gardens with a more informal, 'naturalistic' landscape of Eucalypt trees and grass. They offered a stylised "Australian" landscape to suit the houses they had designed with the local environment in mind. It is interesting to note that the finished

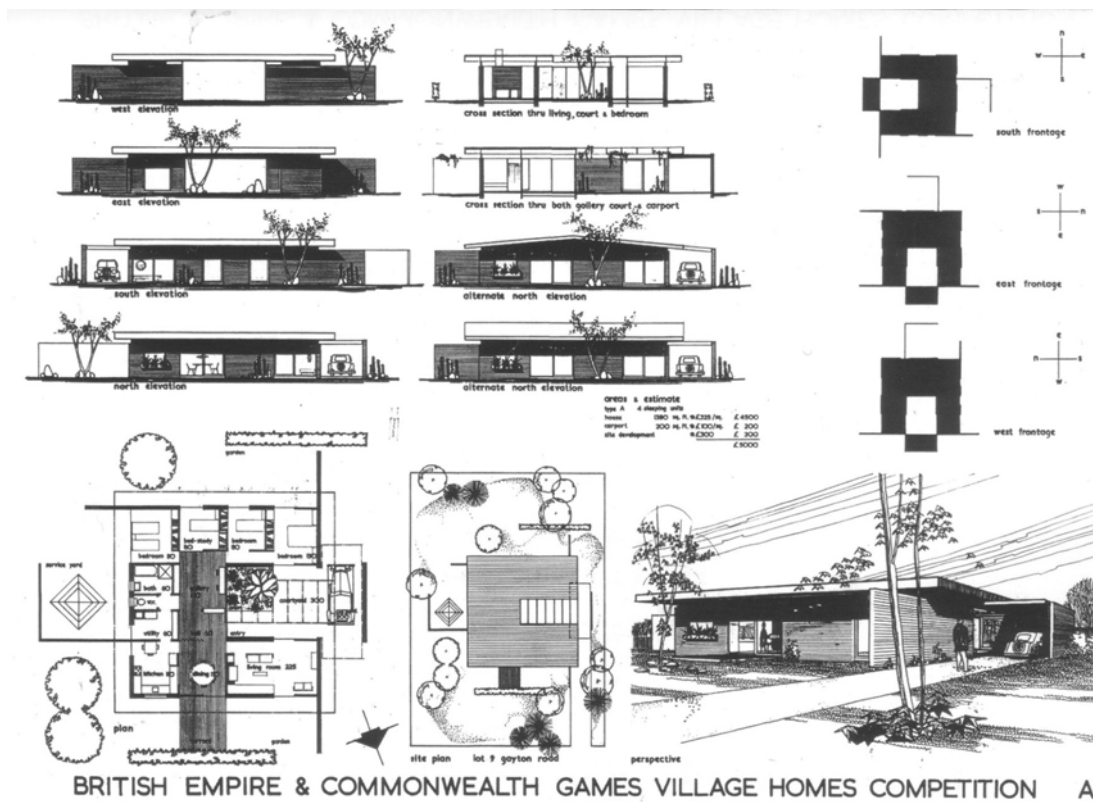
houses, when rephotographed a year after construction, featured gardens more attuned to Seddon's description- the turn of the century English cottage garden was applied to these modernist houses to satisfy the inhabitants desires for something closer to their suburban landscape ideal.

To the rear of those typical suburban houses that Seddon described, the garden took on a more utilitarian demeanour; vegetable gardens, clotheslines, lemon trees and chicken-sheds often appeared. Again, the Games Village houses offered an alternative model- one based on a more recreational use of the back garden and a screening of remnant utilitarian functions. That model will be taken up in more detail below.

The design of contemporary suburban houses tended to reinforce the spatial divisions and separation of uses that Seddon describes. The articulation of windows and external doors maintained a distinct hierarchy between internal and external spaces. The formal front rooms were positioned to survey the street, as well as provide a wholesome domestic diorama from without. At the rear, the verandah and utility rooms generally created a division between inside and out, shielding the internal habitable rooms from the garden's spaces of production. In comparison to such housing types, the Empire Games Village housing was innovative from constructional, spatial and planning points of view. It represented an unusual experiment for the State Housing Commission.

The Designs

The architects whose designs were selected from among those of competition entrants were keen to embrace modern construction techniques and attempted to utilise mass produced materials, standardised components and new fabrication methods. These included post and beam construction rather than load bearing walls, low-pitched asbestos roofs, concrete raft slabs and glazing in unit joinery. The intention was to build these innovative homes at an economical cost, in order to demonstrate the practicability of modern architecture.



41

Cameron Chisholm and Nicol, Type A house – competition drawings.

The push towards standardisation also extended to the replication of each design “on at least four (4) sites” within the village.¹⁰⁷ In that way the architects also confronted emerging issues related to the place of the project home in Perth’s housing market, in a similar manner to the contemporary work of builders such as Corser Homes.¹⁰⁸ Although seeking the benefits of standardisation and repetition in the design and construction of the houses, a need to differentiate each house and provide a variegated streetscape was identified. The architects specified varying colour schemes, alternative orientations, finishes and materials to provide this, although subsequent public comment suggested they were not altogether successful.

The Garden Suburb model in Perth had been established in developments like the original Endowment Lands subdivision and the vision of individual bungalows set in leafy surrounds was ingrained; providing a measure for the ideal living environment. Responses to the completed village from nearby residents exposed this attitude:

I think I will like them once the gardens are in ... but the houses could have been alternated better.

... the houses look like public conveniences ... but Australians are clever with their gardens ...

I reckon they are alright ... and are up to the standard of houses around this area. I felt the designs could have been scattered more in The Boulevard.

... some of the houses are better inside than outside. If you lived in the area, you would know they needed the courtyard walls, the winds are terrific. My only grizzle is that they put too many of the same designs together.¹⁰⁹

Continuing the experimentation that had been undertaken by local architects in the 1950s and occasioned by schemes for one-off homes for sympathetic clients, the Village houses were, on the whole, designed to be as open and flexible as possible. In line with what have been identified as the other primary concerns of site and climate the architects developed plans that were oriented to capture prevailing breezes, provide ample light and especially utilise northern light whilst avoiding the summer sun. At the same time they were intended to be flexible enough to adapt to

different lot orientations and single level construction was intended to minimise site works. Living areas and bedrooms were integrated with private gardens and courtyards and utility areas were screened. To achieve this screen walls were used extensively and the houses were located and oriented on the block according to these criteria, rather than a relation to the street. Many of these techniques were applied as architects also recognised changes in the ways that houses were being lived in by families (and wished to influence these moves towards a 'modern' lifestyle). The most conscious response to this concern included the design of the houses to accommodate the growth of families, entailing the expansion of the house to include additional bedrooms.

However, the most obvious changes occurred in the internal planning, and the relation of interior and exterior spaces. Orienting the house around a dominant hallway, and a linear progression of rooms, was avoided; instead rooms were typically grouped into 'day and 'night' zones. Howard Bonner's 'type A' house most effectively demonstrates this tendency, providing a separate pavilion for each zone, in the manner of Marcel Breuer's well-known bi-nuclear house plans. The kitchens, with built in cabinetwork and modern appliances, also reflected an increased openness within the modern house, and their expanded role as the domestic social centre. James Johnson's 'type B' house had a kitchen that opened directly onto the 'family' area, whilst the Silver Fairbrother & Associates designs positioned the kitchen as a hinge between living and dining spaces (with direct visual connection over a workbench to at least one of these spaces). Reflecting the change in lifestyle, the impact of the television, and the desire to provide children a recreational space, some of the house types also included both a 'formal' and 'family' living area.

In addition to the internal changes, these spaces became more integrated with the exterior. Living rooms flowed into outdoor recreational areas, bedrooms had private courtyards and external utility areas were screened from each of these. A number of techniques contributed to this integration. Glazing to rooms was more extensive than in standard SHC houses, providing a stronger visual link between interiors and the outdoors. This connection was also strengthened by the

continuation of materials from the interior to exterior and in particular, the use of screen walls that were an extension of internal dividing walls. External recreational spaces were designed for outdoor entertaining (with sites for barbeques and pools) and were positioned and screened to provide for privacy. Consideration was given to making these recreational spaces visible from interior spaces such as the kitchen, to allow the supervision of playing children by parents. Courtyards in some Silver Fairbrother & Associates and Cameron Chisolm Nicol houses were further defined by openings in an extended, sheltering roof plane. Kim Dovey, in an article analysing such changes in the planning of suburban houses has suggested that: "this transformation of the backyard is an extension of the dream of a spatially extensive privatised freedom, from the cultural symbols of the interior to the natural symbols of the barbeque area."¹¹⁰ These aspects of the Village houses have been subsequently repeated and developed in Perth's suburban housing.

Such planning devices were, in large part, a response to the more privatised home life led by the post-war nuclear family.¹¹¹ This can be seen in the designs for the Games Village as part of a more general withdrawal of the house from the public realm, one that altered the formal qualities of Perth's Garden Suburb ideal. The low-density character of this model; the expectation of single family homes arrayed through quiet, curving streets and green surrounds, was maintained, but the relation of these houses to the public realm was shifting. The large, wide blocks facilitated siting of the houses according to issues of climate and privacy, rather than a relation to any notion of a public street life. The entry to the house was shifted in a number of plans to provide a more secluded access to the home. Often hidden from the street, it prioritised direct access from car to interior, just as the increased setback of the houses, removal of footpaths, the engineering of the roads and intersections prioritised the external movement of the car.¹¹²

This reduction in the connection of the house to the street (other than the driveway) was the exterior manifestation of the changes in lifestyle marked out internally. The articulation of the residential environment in this way suggests a mode of living where the occupants experience the home as an isolated node. The circulation network of roads (laid out in the Stephenson-Hepburn Plan) then connected this

node itself to the recreational nodes of regional reserves; to the commercial nodes of the emerging shopping centres; to the commuter node of the CBD. The “identifiable and self-centred” villages envisaged by the plan were to be bound together, not by the street as a place, but by the street as a vista that reassures whilst travelling to and from the private retreat of the home.

The experimentation and innovation undertaken did not prevent these homes from being entirely appropriate to the traditional Australian suburban pattern in that they remained detached, single-family dwellings in a verdant landscape. The essentially pragmatic concerns of the houses produced a shift in the physical structuring of the architecture, and a questioning of traditions. However, as has been outlined, the scope for questioning or experimentation in terms of the village’s planning was severely limited by the development process, particularly as that process required a subdivision that would meld with the surrounding suburbs.

Conclusion

The Empire Games Village stands as a unique experiment in model housing within Perth. The desires of the local architectural profession to provide a blueprint for modern housing production were largely unfulfilled as the SHC did not comprehensively apply the models in future development. However, many aspects of the project would later be used in a ‘piecemeal’ fashion in residential subdivision. Whilst the formal and constructional aesthetics of this local architectural modernism were not widely assimilated, the overarching organic form represented an ideal translation of the properties of the Garden Suburb within the exigencies of post-war planning.

Rather than being created as a radical, oppositional point of difference in the residential landscape the project attempted to provide a standard model for the modern suburb. The houses were conceived both as an experiment for the SHC and as pragmatic models by the architects- designed to be reapplied in future suburban development. The village was envisaged as a logical extension of the modernising process that Perth was experiencing. The community of detached, single family

dwelling that formed earlier garden subdivisions was reconstituted to reflect the recent shifts in family life, organisation of public activity and, particularly, modes of transport. As noted, one of the specified aims of the planning competition was that the design should be a section of an ordinary residential layout and not a separate entity.¹¹³

The opportunity for the architects to propose alternatives to the standard housing types being built at the time, in effect, depended on the ability of their designs to fit in to an orthodox subdivision: the potential for experiment extended only as far as the lot boundary. Thus, the village saw the consolidation of planning and architectural techniques considered as effective, modern solutions. They were to embody Perth's developing self-image as a progressive city whilst still producing a conventional, middle-class suburb for the local housing market. The Village's importance as model housing derived from its roles as both exemplary accommodation for the Empire Games, and as a State Housing Commission subdivision. These roles and restrictions in regard to the project suggest that it be interpreted as a testing ground where Perth's own particular translation of the Garden Suburb model was fused with an emerging vision of modern housing. In this way (particularly because it was a State Housing project) the Games Village reinforced the Garden Suburb as an ideal residential model; confirming the form as a measure, in Perth, of any living environment.

This account of the Games Village's history also suggests some consequences for understanding the idea of affective form. The design parameters set out by the competition and the architects' aspirations for the project, as well as the public reaction to the houses, suggest varying conceptions of the suburb as affective form were held. These variations reinforce, in their overlap as well as discord, that understandings of affective form are fluid. For example, within this chapter's history of the Games Village, the understanding of how a "garden suburb" should be formed changed, along with the affective properties ascribed to it- without the understanding of its power being necessarily diminished or compromised.

Despite changes to the planning of the suburb in Perth, and the architecture of its houses, the garden suburb ideal remained in place. The suburbs of the Stephenson-Hepburn plan envisioned a city of self-contained satellite communities- a distinct structural change from the commuter suburbs of the early twentieth century. The houses of the Games Village embodied architectural shifts during the 1950s and '60s: the growth of the house as a symbol of financial propriety, as a vehicle for conspicuous consumption and as a means of constructing personal identity. However, these broader changes being advocated and implemented by government and professionals were ultimately configured to suit the local garden suburb ideal. Visions of a city of apartments and of walk-up SHC flats at the Games Village quickly fell away. As for the "stark" Modernist villas of the village, the *Sunday Times* reported a year after completion that:

"Today with ingenuity, adaptation, and attractive gardens- many still in the formative stages- the Village is taking on an identity of its own."¹¹⁴

The example given in the article was a house in Yolanda Way that had been provided with a new flower box and patio as a means of individualising the home and bringing it closer to the ideal home of the garden suburb. The understanding in Perth of that organic form as affective was a robust one: despite the effects of modernisation, "home" in Perth still fundamentally referred to a single-family detached dwelling in a leafy suburb.

The following chapter takes as its starting point the international critique of the modernist planning during the late twentieth century. From the late 1950s onward the critique of modern architecture and urbanism expanded and arguments calling for the recognition of a crisis in the way the urban environment was constructed - environmentally, economically and socially- were mounted. The continued application of modernist urban form (particularly in the pursuit of technical, rational planning) during the large-scale peripheral expansion of cities during the late twentieth century produced what was often termed "placeless" sprawl. That development created a sense that the possibilities for meaningful urban form had been severely circumscribed.

Chapter Five will address two responses to that sprawl condition that emerged in the 1990s and posited quite different approaches to the reassertion of affective urban form.

Notes

- ¹ Neil Clerehan, letters to the Editor, *The Weekend Australian*, 31 January-1 February 1998.
- ² Gordon Stephenson, *On a Human Scale, a Life in City Design*, Fremantle Arts Centre Press, Fremantle, 1992, pp. 134-135.
- ³ Stephenson, *On a Human Scale*, p. 144.
- ⁴ Gordon Stephenson and Alistair J. Hepburn, *Plan for the Metropolitan Region, Perth and Fremantle, Western Australia, 1955*, Government Printing Office, 1955, p. 6.
- ⁵ Stephenson, Professor Gordon, "Plan for the Metropolitan Region of Perth and Fremantle 1955", conference paper given Perth, August 1968, (manuscript), p. 2.
- ⁶ Stephenson, "Plan for the Metropolitan Region of Perth and Fremantle 1955", p. 2.
- ⁷ R. Unwin, *Town Planning in Practice*, T. Fisher Unwin, London, 1909, p. 320.
- ⁸ Unwin, *Town Planning in Practice*, p. 6.
- ⁹ Reyner Banham, *Los Angeles: The Architecture of Four Ecologies*, Penguin Books Ltd, Hammondsorth, 1971, p. 37.
- ¹⁰ Banham, *Los Angeles*, p. 36.
- ¹¹ Stephenson and Hepburn, *Plan for the Metropolitan Region, Perth and Fremantle, Western Australia, 1955*, p. 177.
- ¹² Stephenson and Hepburn, *Plan for the Metropolitan Region, Perth and Fremantle, Western Australia, 1955*, p. 132.
- ¹³ Graham Crist, *ReSetting a City: three modern buildings and the uncertainty of place*, Thesis (M Arch), University of Western Australia, 1993, p. 35.
- ¹⁴ The terms "curvilinear symmetric" and "contour controlled" are used by John Selwood to describe Hope and Klem's subdivision designs of the inter-war period. Reflected in work such as the planning of Perth's Endowment Lands, the first term refers to the use of curved, arcing streets and symmetrical layouts to generate subdivisions with a particular aesthetic appeal; the latter to the layout of streets to conform with existing contours- reinforcing this romanticised, 'organic' streetscape whilst also reducing the cost of earthworks. See Selwood, H. John, *Patterns and processes of residential subdivision in the Perth metropolitan region, 1829-1969*, Thesis (PhD) Geography Department, University of Western Australia, 1981, pp. 354-356.
- ¹⁵ Stephenson & Hepburn, *Plan for the Metropolitan Region, Perth and Fremantle, Western Australia, 1955*, p. 149.
- ¹⁶ Stephenson & Hepburn, *Plan for the Metropolitan Region, Perth and Fremantle, Western Australia, 1955*, p. 148.
- ¹⁷ A considerable number of the houses built in the area at the time were War Service Homes built by the SHC. Selwood, *Patterns and Processes*, p. 52.
- ¹⁸ Selwood, *Patterns and Processes*, pp. 56-60. Selwood also notes that McKay Green, the former City Architect and Town Clerk, had been instrumental in bringing Stephenson to Perth to work on the metropolitan plan and thus the city was able to procure his services for their own ends.
- ¹⁹ Selwood, *Patterns and Processes*, p. 158.
- ²⁰ State Housing Commission, *Annual Report 1957*, pp. 21-22.
- ²¹ In 1973 the War Service Homes Scheme was transferred to a separate authority.
- ²² Amelia Thorpe, *More Than a Roof Over Their Heads: State Housing and Urban Form in Perth* Thesis (Honours), Murdoch University, 2000, p. 33. The few developments that differed from this form were directed at specific groups, e.g. flats for 'working women'.
- ²³ Thorpe, *More Than a Roof Over Their Heads*, p. 34.
- ²⁴ Thorpe argues design problems within the SHC's later, high-density, tower block developments (built since the mid-1960s) actually provided a reinforcement of the preference for single detached dwellings through negative sentiment in regard to higher density projects.
- ²⁵ Selwood, *Patterns and Processes*, pp. 161-162.
- ²⁶ Selwood, *Patterns and Processes*, p. 163.
- ²⁷ Selwood, *Patterns and Processes*; D Hedgcock and T Hibbs "Perth's suburban traditions, from orthodoxy to innovation", in Hedgcock, David. and Yiftachel, Oren. *Urban and Regional Planning in Western Australia: Historical and Cultural Perspectives*. Paradigm Press, Perth, 1992.
- ²⁸ Selwood, *Patterns and Processes*, p. 209.
- ²⁹ During the Games a special bus service had to be run to transport athletes to the various venues. This peripheral location even prompted the Australasian Post to ask if

photographs of the site depicted “a busy day in central Australia?” “Place For A Village” *Australasian Post*, February 1, 1962.

³⁰ PCC Archives: Empire Games File, Perth City Council Meeting Minutes (For the purpose of hearing an explanation by the Town Clerk in respect to the financial proposals relating to the Empire Games 1962), May 12, 1958.

³¹ PCC Archives, Minutes May 12, 1958.

³² “Work Soon on Games Site”. *The West Australian*, September 6, 1958. This comment is typical of the level of information about the village supplied in articles about the progress of the Games preparations at that time.

³³ *Pacific Neighbours* January 30, 1962.

³⁴ In 1957 the MLC building on St. Georges Terrace saw the first taller, freestanding tower set back from building lines.

³⁵ PCC archives, “Final consolidated claim for Empire Games,” p. 1.

³⁶ Esso Standard Oil (Australia) Pty Ltd, *Perth and the West, Games State, 1962. A look around and a look ahead* Sydney, 1962.

³⁷ Signified by the Stephenson-Hepburn plan of 1955 and the subsequent establishment of the Metropolitan Regional Planning Authority in 1959.

³⁸ Esso, *Perth and the West Games State*. p. 2.

³⁹ PCC archives, H.R. Howard (Lord Mayor) Press release, June 7, 1958.

⁴⁰ Editorial, *The West Australian*, August 12, 1958.

⁴¹ “Games: Govt. Must Act To Kill Doubts” (Article written by Mervyn Parry, on behalf of the W.A. Chapter of the Royal Australian Institute of Architects) *The West Australian*, May 19, 1959.

⁴² H. Krantz, “Flats: Sociological and Economic Aspect” [sic], *The Architect* (WA), December 1944, p. 19.

⁴³ The suggestions are outlined in a letter from O.V. (Ossie) Chisholm to (Sir) Charles W. Court, 27.04.1959, Ministry of Housing Archives, Empire Games Village, Perth City Council- Land Acquisition and General Policy Vol. 1; and Parry, “Games” in *The West Australian*. It is interesting to note that the wording of the two documents when discussing the positioning of the Games facilities is almost identical, suggesting a consensual representative view had been forged by the WA Chapter.

⁴⁴ Including a suggestion from a Councillor Frame that the Village should be located on the Oxford Street frontage of the Lake Monger beautification area. PCC Archives, General Purposes Committee Minutes, May 5, 1958.

⁴⁵ Stephenson, “Plan for the Metropolitan Region of Perth and Fremantle 1955”.

⁴⁶ *Marg*, Dec. 1961, p. 20, quoted in Kiran Joshi, *Documenting Chandigarh: The Indian Architecture of Pierre Jeanneret, Edwin Maxwell Fry, Jane Beverly Drew* (Vol. 1), Mapin Publishing Ptd Ltd, Ahmedabad, 1999, p.15.

⁴⁷ “A Call For Experts In Village Plan” *The West Australian*, May 16, 1959.

⁴⁸ Peter Parkinson quoted in Richards, D, “Faded Roses? The Commonwealth Games Village: City Beach, 1961”, *The Architect*, February 1987. p. 10.

⁴⁹ Richards, “Faded Roses?” p. 11.

⁵⁰ “Games Houses Like Sheds, Says M.L.A.” *The West Australian*, October 5, 1962.

⁵¹ “Games Houses Like Sheds, Says M.L.A.” *The West Australian*.

⁵² The desire for an aesthetic consistency between the houses is consistently mentioned in Interviews from the 1980s with some of the architects. History 566 file, Resource Centre, School of Architecture, Curtin University of Technology, Date Unknown.

⁵³ D. Hawkes “The Architectural Partnership of Barry Parker and Raymond Unwin, 1896-1914,” *Architectural Review*, V. 163, No. 976, June 1978.

⁵⁴ “Plan For Olympic Village Vetoed: Premier Says Expense is Unnecessary”, *The Age*, January 16, 1953.

⁵⁵ “Village Must House 5500”, *The Age*, February 19, 1953; “State Must Build Olympic Village”, *The Age*, February 27, 1953; “City Council Members Plan Olympic Village”, *The Age*, February 28, 1953; “Doubt On Housing Plan For Games: Site Problem Faces Co-operative Group” *The Age*, February 28, 1953; “Mr Cain Promises Olympic Village: Assurance Given to Control Committee”, *The Age*, March 4, 1953.

⁵⁶ *The Heidelberg News*, July 20, 1956, quoted in Graeme Butler, *Heidelberg Conservation Study: Part 1- Heidelberg Historic Buildings & Areas Assessment*. Banyule City Council, 1985, p. 171.

⁵⁷ Butler, *Heidelberg Conservation Study*, p. 171.

- ⁵⁸ Esso, *Perth and the West Games State*, p. 8.
- ⁵⁹ Esso, *Perth and the West Games State*, pp.80-85; Pawley, *Home Ownership*, The Architectural Press, London, 1978.
- ⁶⁰ Andrew Beer, "A Dream won, a crisis born?" Home Ownership and the Housing Market" in Chris Paris, *Housing Australia*, Macmillan Education Australia, Melbourne, 1993.
- ⁶¹ Jim Kemeny, *The Great Australian Nightmare*, Georgian House, Melbourne, 1983, pp. 8-22; John Murphy, *Imagining the Fifties: Private sentiment and political culture in Menzies' Australia*. University of New South Wales Press, Sydney, 2000, pp.136-146; Alastair Greig, *The Stuff Dreams Are Made Of: Housing Provision in Australia 1945-1960*, Melbourne University Press, Melbourne, 1995; Michael Berry, "To Buy or Rent? The Demise of a Dual Tenure Policy 1945-60" in Renate Howe (ed), *New Houses for Old: Fifty Years of Public Housing in Victoria 1938-1988*, Ministry of Housing and Construction, Melbourne, 1988, pp. 110-111.
- ⁶² Berry, "To Buy or Rent?" pp. 110-111.
- ⁶³ R.W. Connell & T.H. Irving, *Class Structure in Australian History*, Longman Cheshire, Melbourne, 1983, p. 298.
- ⁶⁴ Peter Saunders, *Social Theory and the Urban Question*, Hutchinson, London, 1986; Peter Saunders, *A Nation of Homeowners*, Unwin Hyman, London, 1990.
- ⁶⁵ Anthony Giddens, *The Consequences of Modernity*, Stanford University Press, California, 1990.
- ⁶⁶ The entrenchment of such feelings in Australia and overseas (in countries with similar patterns of suburbanism and home-ownership) has been the focus of much sociological research and survey e.g. Lyn Richards, "Family and Home Ownership in Australia: The Nexus of Ideologies", *Marriage and Family Review*, No.14, 1989; Ann Dupuis and David C. Thorns, "Home Ownership and the Search for Ontological Security", *The Sociological Review*, 1999; Constance Perin, *Everything in its Place: Social Order and Land Use in America*, Princeton University Press, Princeton, 1977.
- ⁶⁷ Further aid to home-ownership was proposed, including tax incentives, but conflict between the desire to reduce dependency on the government, and the acute need for housing (blamed on the government), the requirement for accommodation to match the immigration program and the current model of macroeconomic management being applied, prevented its implementation. See Murphy, *Imagining the Fifties*.
- ⁶⁸ PCC Archives, Letter from Town Clerk to Minister for Mines and Housing, March 1, 1960.
- ⁶⁹ Particularly under inflationary conditions, the house becomes a more immediate source of capital accumulation and often provides a superior return-on-investment to other investments.
- ⁷⁰ John Agnew, "Home Ownership and Identity in Capitalist Societies" in James S. Duncan (ed), *Housing and Identity: Cross-cultural Perspectives*, Croom Helm Ltd, London 1981, p. 80.
- ⁷¹ Richards, "Family and Home Ownership in Australia"; J.I. Gilderbloom & J.P. Markham, "The Impact of Home Ownership on Political Beliefs," *Social Forces*, Vol. 73, No. 4, June 1995; L.J. Miller, "Family Togetherness and the Suburban Ideal," *Sociological Forum*, Vol. 10, No. 3, September 1995.
- ⁷² Perin, *Everything in its Place*.
- ⁷³ *Subiaco Weekly Gazette*, March 11, 1954.
- ⁷⁴ "Green: No Slums In Games Site" *The West Australian*, May 6, 1959.
- ⁷⁵ Between 1959 and 1962 the Government held three major architectural competitions: 'Council House' 1959, the Empire Games Village 1961 and the Government Offices Competition 1962.
- ⁷⁶ PCC Archives, Letter from Minister for Housing to Lord Mayor of Perth, May 30, 1958.
- ⁷⁷ Upset prices for the auction of the Games houses are taken from *The Sunday Times*, January 27, 1963. Comparison prices for house and land taken from *The West Australian* include £2745 (11.07.1962) and £2900 (11.05.1963).
- ⁷⁸ Government of WA, *State Housing Act*, 1947 p. 1.
- ⁷⁹ "Games Village Is Buzzing, Showplace Soon" *The Sunday Times*, May 22, 1962.
- ⁸⁰ A Melbourne journalist quoted in *The Daily News*, March 22, 1960.
- ⁸¹ If there were any innovative plans they did not survive the judging process.
- ⁸² Ministry of Housing Archives, Notes of Meeting of Empire Games Village Committee, March 9, 1960.
- ⁸³ Town Planning Board of Western Australia, *Empire Games Village Competition: Conditions and Schedule of Requirements*, Government Printer, Perth, 1960.

⁸⁴ Town Planning Board of Western Australia, *Empire Games Village Competition*.

⁸⁵ Ian Manning. *The Open Street: Public Transport, Motor Cars and Politics in Australian Cities*. Transit Australia Publishing, Sydney, 1991. See especially Chapter 6 "Urban Roads 1949-1970".

⁸⁶ Martyn Webb quoted in J. Gregory, *City of Light: A History of Perth Since the 1950s*, City of Perth, Perth, 2003, p. 105.

⁸⁷ "Prize-Winning Games Village Plan Changed" *The West Australian*, October 28, 1960.

⁸⁸ S. Reidy, "Something for Everyone: How Recreation and Sport Bowled into the Australian Garden," in G. Whitehead (ed), *Planting the Nation*, Australian Garden History Society, Melbourne, 2001.

⁸⁹ Selwood notes that the use of staggered alignment had not been used previously and was almost unique in Perth.) John Selwood, "The City of Perth's Endowment Lands" *Geowest*, No.14, 1978, p. 62.

⁹⁰ "No peeking at the village: Privacy is big feature," *Weekend News*, July 12, 1961.

⁹¹ For example, Nollamara.

⁹² Despite the retention, wherever possible, of existing vegetation the village did not immediately live up to the projected image of villas set in bush surrounds. The stark nature of the site when first completed was commented upon, but soon gave way to re-evaluation. A year later it was proclaimed: "Today with ingenuity, adaptation, and attractive gardens- many of them still in the formative stages- the Village is taking on an identity of its own." *The Sunday Times*, January 27, 1964.

⁹³ *Daily News*, June 14, 1961.

⁹⁴ See Howard Singerman (ed) *Blueprints for Modern Living: History and Legacy of the Case Study houses*, The MIT Press, Cambridge, 1990.

⁹⁵ PCC Archives, Presentation by Sir Harry Howard to the Australian British Empire and Commonwealth games Association, April 11, 1958. Also, the conditions for the competition stated: "Competitors are to note that the designs should not be influenced in any way by the proposed temporary use for the housing of athletes." See Town Planning Board of Western Australia, *Empire Games Village Competition*, p.3.

⁹⁶ A brief discussion of the work of local scholars and the assumptions of others

interstate can be found in: Geoffrey London. "Modern Houses" in G. London and D. Richards, *Modern Houses: Architect-designed houses in Western Australia from 1950 to 1960*. Exhibition Catalogue, School of Architecture and Fine Arts, University of Western Australia, Nedlands, 1997, p. 2.

⁹⁷ Geoffrey London and Simon Anderson. "The Western Edge", *Architecture Australia*, May 1990, p.48.

⁹⁸ Duncan Richards, "The Sources of Modernism: The Development of Modern Architecture in Western Australia 1939-1969", unpublished research paper, Curtin University of Technology, Western Australia, 1982; Ian Molyneux, "Building in Western Australia 1940-1979" in Margaret Pitt Morison & John White (eds) *Western Towns and Buildings*. UWA Press, Nedlands, 1979, pp. 137-138.

⁹⁹ Molyneux, "Building in Western Australia 1940-1979", pp. 7-10; Duncan Richards "Mirror, Mirror on the wall" in Margaret Pitt Morison & John White (eds) *Western Towns and Buildings*. UWA Press, Nedlands, 1979.

¹⁰⁰ Dolores Hayden, "Model Houses for the Millions: Architects' Dreams, Builders' Boasts, Residents' dilemmas." In Singerman, *Blueprints for Modern Living*, p. 199.

¹⁰¹ Shulman photographed a number of the Case Study houses for *Arts & Architecture* magazine. His night shot of Pierre König's Case Study House No. 22 is probably the best known image of the programme.

¹⁰² Town Planning Board of Western Australia, *Empire Games Village Competition*.

¹⁰³ Silver, Fairbrother and Associates won First Prize for their "C" house and Cameron, Chisholm and Nicol for their "B1" house.

¹⁰⁴ A succinct and entertaining account of the general variations in plans of this form is found in Robin Boyd, "Survey and Sketch Plans" in *Australia's Home* Penguin Books, Melbourne, 1968.

¹⁰⁵ George Seddon, "The Suburban Garden in Australia" *Westerly*, No.4, December 1990, p.9.

¹⁰⁶ R. Boyd, *The Australian Ugliness* (first published 1960), Penguin, Sydney, 1963, p. 95.

¹⁰⁷ Town Planning Board of Western Australia, *Empire Games Village Competition*, p. 9.

¹⁰⁸ Corser Homes operated in WA from, approximately, 1956 to 1975. They provided innovative, modern project housing for suburban Perth that reflected similar design and constructional concerns to many architect-designed houses of the day. This was due, in

large part, to the design work of architect Peter Overman within the firm. They aspired to change the character of Perth's suburban housing- providing better-designed, affordable houses that reflected the local climate and lifestyle. A history of Corser Homes can be found in Yun Nie Chong. *Clean Lines and Clinker Bricks: Corser Homes 1956-1965* Thesis (Honours), School of Architecture and Fine Arts, University of Western Australia, 1999.

¹⁰⁹ Comments drawn from West Australian newspaper articles, 1962. Compiled in Duncan Jordan. *VIIIth British Empire and Commonwealth Games Village. Perth 1962.* (unpublished research paper) Curtin University, Perth, 1990.

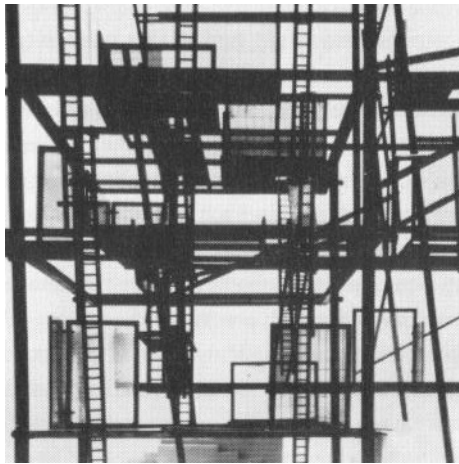
¹¹⁰ Kim Dovey, "Model Houses and Housing Ideology in Australia" *Housing Studies*, Vol. 7, No. 3, p. 182.

¹¹¹ As shown by a number of accounts of the post-war period, the clichéd image of a middle Australia populated by nuclear, commuter, families, surrounded by their new consumer appliances, in suburban homes is grounded in substantial truth. O'Callaghan, Judith. *The Australian Dream: Design of the Fifties* Powerhouse Publishing, Sydney, 1993; Lees, Stella and Senyard, June. *The 1950s: How Australia became a modern society and everyone got a house and car.* Hyland House, Melbourne, 1987; Fiske, John, Hodge, Bob and Turner, Graeme. *Myths of Oz: reading Australian popular culture.* Allen & Unwin, Sydney, 1987.

¹¹² Almost all of the constructed designs featured car parking integrated into the house itself; usually under extended eaves.

¹¹³ Town Planning Board of Western Australia, *Empire Games Village Competition.*

¹¹⁴ *Sunday Times*, 1964 (date unknown).



Some Notes on Form - The Contemporary

Chapter Five

*Modernist architects, planners, engineers- Faustian heroes, all- saw themselves as experts who could utilize the laws of development to provide societal guidance. The hubris of the city-building professions was their faith in the liberating potential of their technical knowledge and their corresponding belief in their ability to transcend the interests of capital, labour and the state, and to arrive at an objective assessment of the 'public interest.'*⁴

The above quote, taken from Leonie Sandercock's *Towards Cosmopolis* (1998), outlines a common contemporary assessment of the confidence underlying modernist planning and architecture such as that described in the previous chapter. Urban design of the 1950s and 1960s in countries such as Australia, America and the UK was consistently grounded in an assuredness regarding the affective power of form. This chapter addresses some recent responses to the loss of the "faith" that Sandercock noted. It will be argued that criticism of the modernist ideologies and techniques underlying planning and architecture since that time has resulted in a search for alternative models of affective form. Two recent urban design responses to the "post-modern city" will then be outlined- the various projects and writings that I have termed "Flow Urbanism," and the self proclaimed "New Urbanism." Both approaches will be discussed in relation to their understanding of an ethical

role for urban design; the degree to which they address the possibility of urban design as a means to ameliorate social conditions - its power as affective form - is the focus of this chapter.

Crisis

The period discussed in the previous chapter represented, for Perth, a high point in the translation and application of international, modernist architectural and planning ideas. From the construction of the Narrows Bridge (as part of a new freeway system) and the landmark Council House to the development of the Empire Games Village and the government offices of Dumas House, the late 1950s and 1960s saw concerted efforts to transform the city into a modern metropolis. Building on the planning work embodied in the Stephenson Hepburn plan, this flurry of activity demonstrated the potentiality that Banham would later identify for Perth as a 'City-on-the-Shore.'²

At the same time, however, the urban models that were structuring development in countries like America and England and which were being redeployed in Perth began to be criticised internationally. Initially, isolated groups of critics, drawn from fields such as planning, architecture, social sciences, philosophy and literary criticism, began to identify what they saw as the destruction of the city through the instruments of modernism. Primarily, they described the dissolution of the "city centre," the destruction of the urban fabric by architectural modernism in that buildings were increasingly anonymous and lacked human scale, an alienating relationship arising between buildings and their surrounding spaces, along with the socially and architecturally stultifying environment of the modern suburbs.³

Over time this critique of modern architecture and urbanism has expanded and extensive arguments calling for the recognition of a crisis in the way the urban environment is constructed - environmentally, economically and socially- have been mounted.⁴ The negative impacts of mono-functional zoning, the car and its associated infrastructure, the increasing privatisation of public space, as well as the loss of bush and agricultural land to suburban expansion have been extensively documented. The continued application of modernist urban form (particularly in

the pursuit of technical, rational planning) during the large-scale peripheral expansion of cities during the late twentieth century – producing what is often termed “placeless” sprawl - has served to heighten the sense that the possibilities for meaningful urban form have been severely circumscribed.⁵ Particularly for architects, this has forced a reconsideration of the interface between the built environment and its users. Confidence in the ability to successfully plan the “good” city as defined by modernism, especially the potential for social change or reform through the built environment, has been substantially weakened and alternative models for structuring this nexus have been sought.

Two recent, contrasting responses to this crisis are discussed within this chapter. Firstly, there is the work carried out by designers whose projects and theories I have grouped under the term “Flow Urbanism.” These include the Dutch architectural firms MVRDV and Van Berkel and Bos, the American architect and theorist Greg Lynn and the London based firm Foreign Office Architects (FOA). Despite their philosophical and stylistic diversity, the work of these designers contains similar attitudes to the possibilities of generating form through abstract analysis of the “flows” of the city. The approaches include form-making that owes much to the Situationists’ notion of *dérive*, and Deleuze and Guattari’s concept of “smooth space” - two terms that will be discussed in this chapter – as well ideas about the processing and reinterpretation of codes, regulations and statistics to generate unexpected architectural form.

Within the ostensibly disparate approaches of Flow Urbanism it will be suggested that there is a common tendency to portray the conventional pursuit of significant, mnemonic form in the architectural process as outmoded and associated with overly rigid social structures. Instead, Flow Urbanism links the interpretation and processing of data – the contextual parameters of a project – with the production of artless, pragmatic forms, ideologically-emancipated spaces of mobility, and ambiguous notions of liberty and personal autonomy.⁶ Within this chapter I will argue that Flow Urbanism, in its deferral of form-making to an abstract, diagrammatic process, avoids the question of affective form- deferring an ethical function for urban design.

In contrast, the planning and architectural work often described as “neo-traditional” - the self-proclaimed “New Urbanism” - is addressed in relation to the manner in which it represents a continued application of a conventional conception of affective form. It will be suggested that the proponents of New Urbanism, although offering different planning models to those of the garden city ideal and modernism, also view urban and architectural form as a catalyst for societal reform. In New Urbanist work urban form is regarded as communicative and representative: embodying stable social relations and ideal community values.

Importantly, a key part of the solution New Urbanism offers to the social and environmental ills of the post-modern city is a reforming of the professional structures of planning and architecture. It is argued by New Urbanists that designers in these fields must be more active in creating built environments that are socially and environmentally sustainable; a particular emphasis is placed on developing “community” through the use of “traditional” planning and architectural forms. Their proposals will be discussed in relation to the manner in which these notions (such as “community”) are conceptualised and the way that an ethical role for urban design is subsequently articulated and promoted by New Urbanism.

Despite their extreme differences, both New Urbanism and Flow Urbanism could be termed post-modern, in that they offer responses to the perceived failure of modernist planning and architecture. The focus of both responses is the environment produced by bureaucratically-driven, modernist architecture and planning “so universally conditioned by optimized technology that the possibility of creating significant urban form has become extremely limited.”⁷ That kind of disillusionment with modernism’s built environment has severely circumscribed the belief in a potential for urban form, through the interventions of disciplines such as architecture, to induce a synaesthetic effect- in the sense that occupying urban space might produce an awareness of wider community. The relevance of my central discussion, the tracing of certain forms of aspiration for affective architecture, is found in this contemporary crisis of form. Recent commentators on contemporary

architecture struggle to define the means by which to ground the discipline and often project a nihilistic trajectory.⁸ The possibilities for collective meaning, figurative content, or even a discipline of architecture itself, seem irrevocably circumscribed by such skepticism, leaving us with what Anthony Vidler describes as a “fashionable but rootless and immaterial architectural culture.”⁹

As Ignasi Sola-Morales would have it: “the fitting silence of today’s architecture is one that corresponds, as in the obsessive images of science fiction, to the surface of the moon; lunar spaces in which recognition of the topography affords us a knowledge that is as disturbing as it is useless”.¹⁰ The “silence” that Sola-Morales speaks of suggests that contemporary architecture struggles to provide urban spaces that contain or symbolise stable and consistent meanings for their occupants- that can positively affect a community. The vacuous space we now traverse seems to deny a role for the concept of affective form.

Flow Urbanism and New Urbanism lie at the extremes of reactions to this crisis of form. On the one hand, Flow Urbanism often suggests an expected decline of architecture as figurative form, in favour of architecture as the spatialisation of diagrams- sophisticated infrastructure. New Urbanism, on the other, consistently proposes a search for redemptive, symbolic form and building practices- largely based on the revival of “traditional” planning and architectural tropes. Both reactions demand a change in the conception of architectural practice and theory in order to integrate with, or transform, the contemporary situation. Ultimately, they offer opposing prognoses for the role of form to change or improve society.

Outlining and contrasting the virtually antithetical understandings of the contemporary potential for affective form within New Urbanism and Flow Urbanism will provide a context for discussion of recent suburban form in Perth in Chapter Six, which focuses on the implications of post-modern urban form making for Perth’s distinctive garden suburb ideal.

The Post-Modern Landscape

The recent crisis of form that I have connected with the emergence of New Urbanism and Flow Urbanism is closely related to contemporary theorising about post-modern cityscapes. The possibility for architecture to carry collective meaning and function as affective form is often questioned in recent writing on the landscape of the post-modern city. This section will outline some of that discussion in order to clarify in what sense a crisis of form, particularly affective form, may be discussed- as well as providing a critical background to the recent projects that will be discussed later in the chapter.

The opacity of much commentary about post-modern urbanism is indicated by the following passage:

For me, architecture is just about to loose [sic] everything that characterized it in the past. Step by step it loses [sic] all its elements. In some way you can read the importance given today to glass and transparency as a metaphor of the disappearance of matter. It anticipates the media buildings in some Asian cities with facades entirely made of screens. In a certain sense, the screen becomes the last wall. No wall of stone, but of screens showing images. The actual boundary is the screen.¹¹

The preceding comments by Paul Virilio are typical of his hyperbolic theorising on the dematerialisation of architecture. His explorations of developments in human experience relating to *speed* and *time* suggest a destabilisation of our experience of form is occurring. Virilio argues that architecture's materiality is subverted by the rise of technologies that offer an increasing connectivity (global communications, the screen, electronic surveillance and info-graphic mediums) and enable people to interact with remote locations in "real-time" and with increasing sensorial sophistication. The physical characteristics of the environment within which a person is physically located become increasingly irrelevant beyond their ability to electronically connect with elsewhere. Virilio describes the potential consequences as: "A duplication of sensible reality, into reality and virtuality ... A stereo-reality of sorts threatens. A total loss of the bearings of the individual looms large."¹²

Virilio points to a number of phenomena that outline the impact of this tendency on architecture including, within the realm of construction, an increasing transparency



42
Sprawl – suburban housing.



43
Sprawl – traffic interchange.

in materials and a decreasing depth of the skin of buildings. This is understood as corresponding to an increasing sense of the built environment as osmotic; the spatial divisions previously defined by physical barriers are increasingly replaced by electronic interfaces. As he describes it: “The limitation of space has become commutation: the radical separation, the necessary crossing, the transit of constant activity, the activity of incessant exchanges, the transfer between two environments and two substances.”¹³ This situation is arguably fuelled by the contemporary immediacy of communications- ubiquitous and instantaneous they are felt to cause a collapsing of the physical dimension. Virilio writes:

The old agglomeration disappears in the intense acceleration of telecommunications, in order to give rise to a new type of concentration: the concentration of domiciliation without domiciles, in which property boundaries, walls and fences no longer signify the permanent physical obstacle. Instead, they now form an interruption of an emission or of an electronic shadow zone which repeats the play of daylight and the shadow of buildings.¹⁴

At a city-wide scale these tendencies are often associated with various conceptions of urban sprawl; the formal oppositions of city/country and centre/periphery having broken down.¹⁵ Points of intensity appear in new urban nodes such as the modern airports described by Deyan Sudjic: “an extraordinary mixture of the planned and the unplanned. Built in the scale of the largest new towns, and representing a massive investment, it is free of the usual zoning constraints. You find hotels cheek by jowl with engineering plants.”¹⁶ This kind of urban theorising often suggests that the contemporary city can no longer be defined by spatial distinctions such as that created by city walls and gates, the public-square and ritual processions that fill it; the limits of the historic city have been erased along with the singular ‘heart.’

Instead, urban space is seen to consist of plural centres and complex flowing networks; a new city of artificial grounds that relate to unstable, shifting figures. Commerce, recreation and other social activities spread across a diffuse landscape where interaction is not bound by simple physical constraints. Rem Koolhaas has labelled this urban milieu as the “Generic City.” His descriptions of this phenomenon demonstrate an obvious fascination for the processes at work, and the particular “pleasures” they can provide:

The Generic City is what is left after large sections of urban life crossed over to cyberspace. It is a place of weak and distended sensations, few and far between emotions, discreet and mysterious like a large space lit by a bed lamp. Compared to the classical city, the Generic City is *sedated*, usually perceived from a sedentary position ... The Generic City addresses the 'evils' that were ascribed to the traditional city before our love for it became unconditional. The serenity of the Generic City is achieved by the *evacuation* of the public realm, as in an emergency fire drill. The urban plane now only accommodates necessary movement, fundamentally the car; highways are a superior version of boulevards and plazas, taking more and more space; their design, seemingly aiming for automotive efficiency, is in fact surprisingly sensual, a utilitarian pretense entering the domain of *smooth* space.¹⁷

Again, Virilio has theorised the intersection of social and technical processes that contribute to the forming of such a landscape. The new paradigm he describes is one of "technological space-time" where:

Instead of operating in the space of a constructed social fabric, the intersecting and connecting grid of highway and service systems now occurs in the sequences of an imperceptible organization of time in which man/machine interface replaces the facades of buildings as the surfaces of property allotments.¹⁸

The spatial by-products of these contemporary urban processes are characterised by the strange, residual places forming the city's margins, places that exert a peculiar, visual attraction. Parallel with, or perhaps symptomatic of, the dematerialisation Virilio describes is an increasing obsession with images; the primary language of the mass communication systems with which Virilio engages.

Significantly, it is within a recent photographic trend that Sola-Morales identifies an emerging attitude toward the urban condition that, in some ways, reflects the thoughts of Virilio. He has applied the French term *terrain vague* to the empty, abandoned spaces of the city that have intrigued the urban photographer and, seemingly, impacted greatly upon our attitude to the city. The environments photographed, this *terrain vague*, incorporate places where, at least economically, the "city" has turned its back: industrial wastelands, ports, unsafe neighbourhoods, contaminated areas. These spaces are generally forgotten, in-between, obsolete sites that whilst being part of the urban fabric lie outside of its daily use; they are 'other' to the traditional imagining of the city given its definition through form. As Sola-Morales describes it:



44
Terrain Vague.



45
Terrain Vague.

They [*terrain vague*] are, in short, external places, strange places left outside the city's effective circuits and productive structures... They are its margins, lacking any effective incorporation; they are interior islands voided of activity; they are forgotten, oversights and leftovers which have remained outside the urban dynamic. Converted into areas simply *un-inhabited, un-safe, un-productive*.¹⁹

The increasing interest shown in the recording and examination of these spaces through images has led to critique and analysis of their implications for the production of figurative urban form. They are eyed by surveyors such as Sola Morales with a landscape sensibility where limits and forms are imprecise, blurred and uncertain. This approach continues a tradition, originating in the genre of landscape painting, of observing the area subtended to the eye and vision with the intention of composing it for its aesthetic content and psychological effect.²⁰ The environments that define *terrain vague* are deemed intriguing due to the strong atmospheric qualities and melancholic aura generated through landscapes that are largely devoid of significant, figurative architectural form.

The content of these images subverts accepted notions of visual sensibility, recalling the emergence of the sublime in the nineteenth century as a term to describe a similarly confounding aesthetic shift. In the 1860s Thomas Burnett struggled to understand the pleasure he experienced when crossing the Alps: "How can these objects of nature, so irregular, so out of keeping with formal aesthetic standards, Platonic traditions, be ... most pleasing?"²¹ Analogously, Sola-Morales has similarly pondered why it is that the eye of the photographer "no longer incline(s) toward the apotheosis of the object or the formal accomplishment of the built volume, or the geometric layout of the great infrastructures which make up the fabric of the metropolis?"²² He posits that these spaces, freed from any given obvious or dominating architectural form, perform a particular function. They are:

Reflections of our own insecurity, of our vague wanderings through limitless spaces which, in our position external to the urban system, to power, to activity, constitute at one and the same time a physical expression of our fear and insecurity and yet also expectancy of the other, the alternative, the Utopian, the future.²³

The indeterminacy and “formless” nature of the post-modern city has been deemed problematic for architecture and particularly for the possibility of significant, affective intervention in the built environment. However, at the same time that character has been suggested as an important source for new thinking about architecture’s role in the urban realm – the insecurity also suggesting a certain liberation from previous constraints. The emotive power of movement through these non-figurative, undesignated, or “formless” spaces that Sola-Morales describes relates closely to Flow Urbanism’s underlying valorisation of urban form as pragmatic, organisational infrastructure and the liberating potential of wandering.

Indeterminate Utopia

Before addressing that relationship in detail, and specifically discussing the work that I have labelled as Flow Urbanism, a background to some of the ideas that emerge will be located in the work of the Situationists. The potentiality of the landscapes of *terrain vague* to generate emotional effect recalls the ambitions of the Situationists’ “unitary urbanism,” which envisaged the construction of experimental urban environments influencing mood and behaviour (even producing unpleasant sensations). The experience of undirected wandering that they suggested- the *dérive* - reflected an embrace of urban mobility, and the affective powers of the city’s interstitial spaces, similar to that described by Sola Morales.

Emerging in the 1960s, the urban visions and provocative writings of the Situationists, particularly Constant Nieuwenhuys, aimed at providing techniques for spatially deconstructing the modernist city of functionalism and zoning. As Helen Castle has described it, instead of the rational, deterministic and bureaucratic planning of modernism the Situationists foresaw a future city of “amorphous” urban spaces: “indeterminate sites of leisure and play, they are temporary, emergent and transitory.”²⁴

Thus, the work and writings of the Situationists is important to note in the context of this discussion as they made an early attempt to relate ideas about indeterminate urban space as representative of the potentiality of architectural and urban form to

instigate social change through dissonance, conflict and contradiction- affective anti-form.

The Situationist International can be placed within a lineage of avant-garde movements aiming at an overthrow of conventional society, particularly groups such as the Dadaists and Surrealists. In the case of the Situationists, outrage was directed against the general alienation of people through the workings of capitalism and consumerism. These modern processes produced what Debord termed a “Society of the Spectacle,” where daily life was organised around the consumption of images, commodities and spectacles- producing an increasingly passive society where experiences were always mediated.²⁵ The overthrow of this society was to come through the dissolution of the boundaries between art, theory and social praxis that were felt to permeate the whole experience of life, alienating people from a fuller, organic sense of being.²⁶ Their strategies were aimed at a dynamic city that would subvert the normal logic of the consumerist city.

As part of a programme toward this end, the Situationists’ passionate (although often incoherent) approach to questions of architecture and urbanism is of most interest here. In relation to architecture and planning their primary focus was on an urbanism that avoided didactic form, the programmed spaces of the modernist city, but was instead a catalyst for constantly changing social relations, activities and sensations. As an alternative (non)planning paradigm, that pursuit is echoed in more recent writings and work towards indeterminate architecture and urbanism, such as the flexible and responsive spaces that Dutch firm West 8 pursued in Rotterdam’s Schouwburgplein.²⁷

For the Situationists, concern with the physical form of the city was expressed as a desire to become “psychogeographers” and reach an understanding of the “precise laws and specific effects of the geographical environment, consciously organised or not, on the emotions and behaviour of individuals.”²⁸ In relation to the urban milieu, they reacted against the boredom and utilitarianism of the post-war city, where “darkness and obscurity are banished by artificial lighting, and the seasons by air conditioning; night and summer are losing their charm and dawn is



46

*Contemporary "society of the spectacle" –
Shinjuku, Tokyo.*

disappearing.”²⁹ They proposed an alternative urban vision of an experimental utopian city, occupied by nomadic citizens who would collectively choose their own climate, sensory environment and organisation of space, thus creating “situations” - an indeterminate utopia of unprogrammed space. The aim was playful, fully free activity set in the context of everyday life; not relegated to the sphere of “leisure” as such. Constant’s New Babylon project is the most fully developed proposal for a city of this unitary urbanism. He designed a series of imaginary urban spaces in which spaces of encounter for the inhabitants of the city take precedence over the functional segregation of modernism; those spaces providing a context for shifting, playful activities free from the dictates of utilitarianism and production. As he described it, it would be an environment where:

One can wander for prolonged periods through the interconnected sectors, entering into the adventure of an unlimited labyrinth ... The dwelling spaces, scattered above the rest of the interior space, are best regarded as a kind of residential hotel, although in a no-commercial sense, favouring frequent change of domicile.³⁰

Although its link to the general Situationist movement was always uneasy, the New Babylon project was projected as a framework for the eventual collective construction of situations as envisaged by Debord and others.³¹ It was a utopian scheme that envisaged a state of complete mechanisation, freeing people from the necessity of work; this freedom would see the abolition of all norms, conventions and tradition. The project took the form of a series of maquettes, paintings, sketches, charts and writings that described a new mode of dwelling and a new society. One of the most important aspects of this revolutionary urban schema was a process of continual movement, manifested in the situationist concept of the *dérive*. The term was defined in the first *Internationale Situationiste*:

Dérive: A mode of experimental behaviour linked to the conditions of urban society: a technique of transient passage through varied ambiances. Also used to designate a specific period of continuous *dériving*.³²

This technique of drifting through varied urban environments was the instrument through which the practice of “psychogeography” could be undertaken. Movement through the city would be a wandering without purpose by which the nodes, currents and vectors of the urban environment, that influence the activities and emotions of inhabitants, would be revealed. The idea of free movement remained a

constant theme throughout the various incarnations of New Babylon, despite the numerous disputes over the processes of physically manifesting the ideas of unitary urbanism. The concepts of play, flexibility and nomadism were key:

To the idea of the *ville verte*, which most modern architects have adopted, we oppose the image of the networked city: here, the street system and the individual buildings create the preconditions for the construction of a spatial continuum which, detached from the ground, will include dwelling communities as well as public spaces.”³³

Thus, the process suggests an imagined condition very much akin to the idea of smooth space outlined by Deleuze and Guattari. In relation to the urban environment this notion describes an ad-hoc spatial ordering that is defined by traversal and encounter rather than objectification- the desert space of the nomad rather than the Cartesian space of the engineer (referred to as striated space). If the restrictive and bureaucratised strictures of modernist city planning could be seen as productive of striated space, the pursuit of the *dérive* is the attempt to insinuate an experience of smooth space:

Returning to the simple opposition, the striated is that which intertwines fixed and variable elements, produces an order and succession of distinct forms, and organizes horizontal melodic lines and vertical harmonic planes. The smooth is the continuous variation, continuous development of form; it is the fusion of harmony and melody in favor of the production of properly rhythmic values, the pure act of the drawing of a diagonal across the vertical and horizontal.³⁴

The subversive random movement of the *dérive* expeditions exhibits a smooth condition, where “the points are subordinated to the trajectory.”³⁵ For the Situationists the dynamics of creativity would be impeded by fixed urban form, particularly the fixed forms of a Corbusian functionalism.³⁶ A kind of picturesque non-order was needed to promote the free play of inhabitants. As Simon Sadler points out, a link was made (in relation to “pyschogeography”) between the failure of fixed literary forms and those of politics and urbanism. “Fixed forms ... if they are to continue to be practicable ... might be momentary: the verbal process of drift, the rendering of ambience, the plan of situation.”³⁷

Translated under unitary urbanism the unexpected encounters and occurrences, as experienced by those drifting, would provide continual stimulation. The width of

streets, the heights of buildings, the presence of trees, advertisements and lights, the circulation of traffic, the colour of front doors, and the shapes of windows would continually shift the urban ambience, the “psychic atmosphere.” The pursuit of such continual stimulation included the marginal spaces of the city and the uncomfortable experience; the visions of unitary urbanism included a 'Sinister Quarter', 'Bizarre Quarter' and 'Tragic Quarter'.

The urban visions of the Situationists envisaged the restructuring of the city delivering a commensurate reshaping of society. As a critique and response to the technocratic, rationalised planning of modernism they proposed the development of transitory, indeterminate spaces – a city of shifting experiences. Although its form was difficult to conceptualise or describe, the effects of that environment were clearly envisaged as a liberation from existing social structures and hierarchies. Unitary urbanism proposed a vague theory of affective form.

New Babylon and *Terrain Vague*

The desire for perpetual flux generated problems for the designers regarding its representation. In supplying a visual form for unitary urbanism Constant necessarily had to address issues of form, structure and materiality. This became troublesome when the visions were too prescriptive, suggesting the “methodological vacuum” Sadler has identified at the heart of the Situationist project, and the near-impossibility of constructing a truly Situationist architecture.

Thus, the imagery and techniques Constant used to portray the physical characteristics and atmospheres of his New Babylon project raise issues regarding the contemporary fascination of architects for the landscapes of *terrain vague*. Recent projects that have attempted to co-opt or reproduce the sense of potentiality perceived in those landscapes – especially the potential for establishing activities, organisations and relationships outside the customary bounds of the city - have necessarily had to address the question of creating appropriate form.

The following section will discuss the possibility for creating affective form in relation to Constant's work and the notion of *terrain vague* as a model. An

assessment of the extent to which a subversive or transgressive sense plays a large part in that model of affective form will help ground an assessment of the ethical role seen for Flow Urbanism.

Constant's images for the New Babylon project contain a consistent, underlying appreciation of the visual power of interstitial space: wastelands, industrial buildings, technological and engineering infrastructures. Once again, the contemporary parallel of *terrain vague* is recalled and its power as an affective environment. Some of his most intriguing visions for a "unitary urbanism" are those that draw upon the powerful indeterminacy emanating from such places.

The two house-labyrinths contain a large number of irregularly shaped rooms, escalators, forgotten corners, *terrains vagues*, and culs-de-sac. You go there for adventure. You can recover yourself in the deaf room, covered with sound proof material; the crying room, with its livid colours and crashing sounds; the echo chamber (radio-wave games); the image room (cinematic games); the meditation room (mind games); the relaxation room; the erotic game room; the coincidental room, etc. A long visit to these houses has the beneficial effect of cleansing the mind...³⁸

The techno-utopia of his maquettes and architectural projections, on the other hand, brings to the surface internal contradictions of the new society imagined by the Situationists. It is hard to envisage the collective harmony of this new community, where individual and group interests are seemingly perfectly aligned, existing without some form of sinister coercion. The experiences described by "psychogeography", and architectural visions, could be imagined as disorienting and alienating rather than liberating. Projects such as Constant's experimental studio in Rotterdam were ostensibly searching for the means to broaden peoples' bodily and mental experiences: freeing them from the restrictions, and poverty of stimulation, found in the traditional city.³⁹ However, these explorations of sensory stimulation and altered psychology through architecture begin to seem rather perverse and manipulative, simply requiring a different type of conformity: "There will be rooms more conducive to dreams than any drug, and houses where one cannot help but love. Others will be irresistibly alluring to travellers..."⁴⁰

In comparison to the more concrete visions of New Babylon (such as the Rotterdam experiment, architectural projections and detailed models of various quarters) Constant's drawings and paintings maintained a more ambivalent relationship with the forms of a unitary urbanism. Hilde Heynen has suggested that particularly those produced during the New Babylon period demonstrate a more explicit acknowledgement of the shadows looming over his techno-utopia. Together they formed "a sort of modification of Constant's discourse on a utopian world that is free of oppression and inequality."⁴¹ Paintings such as *Ode á l'Odéon* (1969), *Ladderlabyrinth* (1971) and *Terrain vague* (1973) have an underlying melancholy arising from an understanding that the total dissolution of everyday social ties and structures, to produce a completely transitory existence, extinguishes the possibility of persistent inhabitation:

For dwelling (inhabitation) has to do with developing habits, with habituating oneself to a certain pattern, which is exactly what Constant tells us is impossible in New Babylon. As a utopian vision of the future, New Babylon therefore arouses feelings of dread rather than of desire: dwelling in a situation of pure indeterminacy apparently does not respond to our deepest wishes and desires.⁴²

Heynen observes of *Terrain vague* (a painting of an apparently deserted, scarred wasteland, with fragments of New Babylon in the distance): "The painting's title means 'Wasteland,' but it is clear that this land is not really empty: it is covered with traces and scars that inscribe a very specific history."⁴³ For her, the collaged background of newspaper clippings and the scratchy suggestions of a historically layered space suggest an uncertainty in Constant's relation to New Babylon's eternal present:

One is tempted to see *Terrain vague* as emerging from an understanding of the incompatibilities between the reality of a wasteland that is always occupied by hidden memories and the impossible utopia of New Babylon where memories and history are declared irrelevant. And one wonders whether, after all, Constant does not rather opt for history than for an eternal present.⁴⁴

In this way the drawings and paintings are seen to convey a more sophisticated understanding of the human condition than the Situationist texts. They function as an expression of hope for, and critique of, the ability for a fundamental change in



47

Constant – "Terrain Vague", 1973.

the organization of society (particularly its urban form) to result in a profound change in the nature of human beings.

As well as accepting these points of Heynen's - regarding the images as a commentary on the impossibility of giving utopia a concrete form - I would also suggest that Constant's drawings and paintings can be linked directly to Sola-Morales's discussion of *terrain vague*. This is particularly so in regard to his understanding of the ephemeral, connotative power of such spaces.

As noted earlier, Sola-Morales emphasised a strong potentiality represented in the spaces of *terrain vague*; a power greatly derived from the inhabitant being mentally exterior, whilst physically interior, to the city. These indeterminate places, a fascination of contemporary photography and film, constitute both physical expressions of our fear and uncertainty in the modern metropolis, and markers of alternatives; through their openness and availability. Fundamental to understanding this potential is the relationship between the absence of programmed, productive use and the sense of freedom engendered. "Void, then, as absence and yet also as promise, as encounter, as the space of the possible, expectation."⁴⁵ This sort of quality plays an important part in the conceptualisation of the Yokohama Port Terminal project (by Foreign Office Architects) which will be discussed later as an example of Flow Urbanism. As described by one of its designers, Alejandro Zaera-Polo:

The space of the terminal became an ideal "battlefield" that could be "taken" by the locals or "occupied" by the foreigners ... Varying degrees of intensity diminish the rigid segmentation that social machines - especially those that maintain borders - usually produce.⁴⁶

The enthusiasm for these fluctuating, liminal spaces - refuges from homogeneity and control - is inherently problematic for architecture. This can be seen in the inevitable disjunctions between the ideas of unitary urbanism being pursued by Constant, and the physical or graphic expression of those ideas as New Babylon. If architecture is seen as an instrument of organisation and rationalisation; a tool for the imposition of limits, order and form, then it cannot but dissolve their intangible essence. In this situation the conditions of architecture that relate to the production

of identity; the transformation of the uncivilized into the cultivated, the void into the built, must make profound changes to these environments. Sola-Morales draws on the work of Deleuze to outline this crisis of form:

To employ a terminology current in the aesthetics underlying Deleuze's thinking, architecture would forever be on the side of forms, of the distant, optical and figurative, while the divided individual of the contemporary city would look for *forces* instead of *forms*, for the *incorporated* instead of the *distant*, for the *aptic* [sic] instead of the *optic*, the *rhizomatic* instead of the *figurative*. Intervention in the existing city, in its residual spaces, in its folded interstices can no longer be either comfortable or efficacious in the manner postulated by the Modern Movement's efficient model of enlightened tradition.⁴⁷

Thus, the power that Constant tried to depict harnessed by the urban form of New Babylon is seen by Sola-Morales (and suggested in Constant's own images) as only possible in the vacant, fluctuating spaces of the *terrain vague*. The organizational and ordering role of architecture and planning (even that directed toward liberation as in New Babylon) unerringly imposes limits, order and form:

In this way, when architecture and urban design project their desire onto a vacant space, a *terrain vague*, it seems that they are incapable of doing anything other than introducing radical transformations, changing estrangement into citizenship and striving at all costs to dissolve away the uncontaminated magic of the obsolete in the realm of efficacy.⁴⁸

Constant's paintings and drawings retain a sense of that 'uncontaminated magic' and the photographic images of *terrain vague* reveal the latent qualities of strangeness and the uncanny in these sites; suggesting a potential for unconstrained behaviour and atmosphere through their very formlessness.⁴⁹ What is described in these images is reminiscent of the affective, paradoxical power of the sublime landscape. Liberation, and the potentiality of space, can be suggested by feelings of pain, danger and terror (the traditional sublime), or in this case alienation and absence. The consequences for architecture and urban design in pursuit of such effects – seen in Flow Urbanism – would seem to be the dissolution of traditional approaches to form.

Paul Virilio suggests that the marginalisation of form implied by such a trajectory is, in fact, an established process in our cities. At his most ecstatic Virilio has posited

the disappearance of architecture itself, an environment of high technology substituting the material components of architecture. The engineering of elements such as the elevator is suggested as superseding the design of more corporeal forms like the staircase. This example indicates, for Virilio, a wider phenomenon that will bring about this disappearance of architecture as form-making. He argues that, in fact, “a term like high-tech architecture appears tautological. ‘High technology’ would be enough; it is unnecessary to add ‘architecture.’”⁵⁰ Thus, the rhetorical aspect of architecture as a formal representation of society is deemed outmoded.

As discussed earlier, the extreme vision presented by theorists like Virilio is of a world characterized by fluidity, constant change and an absence of borders. Thus, increasingly sophisticated real-time interaction with distant locations through new technology (referred to by Virilio as action, or *speed distance*) is accorded more importance than any other quality. This perspective, which informs much of the discussion on contemporary communications, politics and economics, suggests a world in which form, as a category, is absent or at least extraneous.

The consequences for architecture of the phenomena that Virilio and Sola-Morales outline seem to involve the dissolution of any capacity for affective, representational form, if not its very disappearance. Its irrelevance is seemingly linked to its perception as static- the “rigid machines” and “borders” described by Zaera-Polo. The conclusion may be drawn that architecture, when it defines a fixed, permanent ordering of our physical environment, is an inadequate means of accommodating new modes of communication and social interaction. Contemporary architecture (such as that of Zaera-Polo and the Flow Urbanists to be discussed later in this chapter) often seems to be conceived with similar sentiments and instead of strong, figurative form seeks the potentiality of indeterminate form inherent in the paintings of New Baylon and photographs of *terrain vague*. Rafael Moneo has attempted to outline the manner in which architects have translated these tendencies:

On the one hand we could talk about an architecture which ignores objects, icons, structural elements, etc. and which is concerned with creating the conditions favouring life and action. It makes sense to speak of an architecture as landscape,

which enhances mobility, without interfering in life. Such an architecture incorporates issues raised by the megastructures, but instead it is inconspicuous, indescribable. It is more about recreating topography. In some ways, in spite of its awareness that only artificiality counts, it is a sure way of replicating nature. But the architect of such an architecture enjoys nothingness, a world without form, something unnecessary and anachronistic in today's world."⁵¹

The following section will introduce the approach to urban form that I have termed Flow Urbanism through a number of projects and texts. I will argue that the emphasis in Flow Urbanism on design processes that suspend aesthetic judgement and defer the act of form-making raises questions about the potential for affective form, and hence the ethical function of urban design.

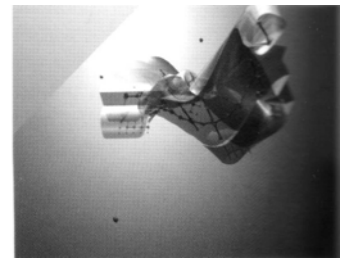
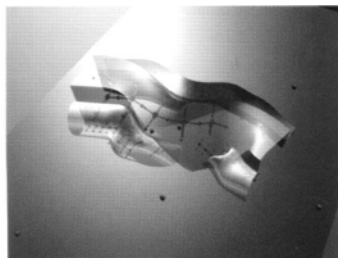
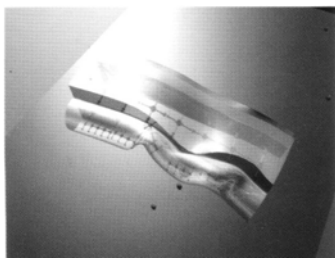
The Possibility of a Formless Architecture

When we speak of "information", we should use the word "form". The scalar measures of information (e.g. energy and entropy in thermodynamics) should be geometrically interpreted as the topological complexity of a form.⁵²

I never draw. I can be very unclever with a pencil in my hand.⁵³

These quotes, from mathematician René Thom and architect-theorist Bernard Cache, point to two defining characteristics of Flow Urbanism - the use of "information" associated with the site, programme or cultural context of a project to "organise" its form, and an associated reluctance to "indulge" in authored form.⁵⁴ This section will explore those characteristics of Flow Urbanism, and how the idea of affective form is incorporated. The projects of Foreign Office Architects, MVRDV and Ben van Berkel with Caroline Bos (discussed here as examples of Flow Urbanism) are indicative of a wider interest in the potential for reducing the role of the architect as "author" and artistic form-maker. They consistently express a concern for incorporating flows and forces, through analysis, to generate form, instead of imposing a representational language of building. Collectively they could be seen to be formulating a new mode of architectural production through the spatialisation of activity and information- the production of action, and events, in artificial landscapes superimposed on the existing city.

Although I will argue that there is a common underlying attitude toward affective form in the work discussed, there are obvious differences in the architecture



48
Greg Lynn – House on Long Island, 1995.

produced. The work of MVRDV reconfigures and subverts conventional construction practice and forms in producing what they refer to as “datascaples.” For example, the VPRO Headquarters the façade is a “result” of the internal spatial organisation and building regulatory codes- the space between floor slabs is simply filled with glazing (different glass types being used where different thermal properties or visual screening is required). These conditions, along with other programmatic, climatic, structural and legal requirements are used to generate form. As they have described it: “We combine the technique of assemblage with strong zoning envelopes, often ‘discovered’ through a recombination of programme and site-specific elements.”⁵⁵

Alternatively, a project like the Yokohama Port Terminal by Foreign Office Architects represents an investigation into the use of dynamic and complex systems of formal organisation; an alternative ontology for architecture. The projected flows of people in the terminal and on its roof (which is also a “ground”) are given an almost literal formalisation in its open, undulating surfaces and the building’s structure, which is integrated with those surfaces. A discussion of the different approaches to Flow Urbanism - the varying attitudes toward the creation of form – will help to clarify both the differences and connections between the different firms and provide a better understanding of the attitude toward an ethical function for urban design.

With its blurring of ground plane and building, abstract contouring and resistance to formal encapsulation works such as the Yokohama Terminal are most easily labelled as formless architecture. An association between indeterminate form and a sense of liberty is imagined in a linking of the analysis of a modern aesthetic of instability, flux and the virtual disappearance of materiality with the production or construction of a similar kind of architecture. The implications of this approach can be seen in an infatuation with the concept of smooth space that has led architects to appropriate it as a trope for giving form to condition of almost unbounded spatial fluidity and material connectivity. Recent theorising has often dwelt on the potential of such a link:

As a viable alternative to the crisis of high modernism, corporate capitalism, and other forms of structural, deterministic thinking, randomness, arbitrariness, formlessness, complexity, contradiction, and incoherence have become the most adequate tools either for approximating the fuzzy existential and productive conditions of late capitalism or for escaping to the deterministic, reductive operation.⁵⁶

Whilst this speculation might provide a useful critical function by addressing the social and aesthetic imperatives underlying the modern metropolis, its application to processes fundamental to the practice of architecture, such as the production of affective form, is problematic. Building strictly on the condition of the amorphous or formless does not constitute a new architecture because such an act removes the possibility of a descriptive geometry or illustrative measure to precede construction. As Greg Lynn describes the problem:

Although these virtualities that precede form do not by definition rely on eidetic or reducible type-forms, the mere presence of dimension and contour that precedes form frustrates any attempt to achieve a formless or nonembodied architecture, in the strictest sense.⁵⁷

Instead, Lynn proposes an architecture that is beyond geometry, not an overturning or annihilation of geometry but a critical speculation on the incorporation and expansion of new techniques and tactics for architectonic ordering and organisation. What Lynn, and much of the work labelled here as Flow Urbanism, has sought is to avoid formal or figurative reference in the design process. Lynn proposes a new term, “blobs”, for the formal outcomes of his particular approach- the representation of architectural form as a complexity of forces, interacting over time, that have no single “idea” (like proportion) organising them. As he has obtusely described it:

The primary characteristic of these blob systems is the continuity or singularity of their composite structure combined with their radical heterogeneity or multiplicity at the scale of local components. The analogy of the body that emerges is one of fusional multiplicity where both heterogeneity and continuity of series are held together simultaneously...Instead of using the metaphor of the body for the isolation and reduction of systems to their constitutive organizational identities, as is the case with the theocentric model, the combinatorial model of the body is founded on the changes in identity that take place with greater degrees of complexity and connection.⁵⁸

Thus, Lynn proposes a *nomadological* space in opposition to the sedentary, delimited space of traditional, rigid architectonic systems and institutions. The theoretical

explorations of FOA tend toward similar outcomes. In their case the tradition of the figure/ground framework is to be superseded: “from the flattening, the ‘domestication’ of the ground that characterizes modern architecture, to its recovery of potentially wild differential intensities.”⁵⁹ Importantly for this discussion, both Lynn and FOA outline a vague sense of liberty and emancipation associated with the absence of formal intentionality in the new spatial models they describe.

Like Lynn, FOA have been dismissive of the concept of the formless in relation to the processes of production and construction specific to architecture. The concept is accepted as useful as a critical tool, but not an appropriate way of generating constructed form.⁶⁰ Echoing the theorisation of MVRDV the Foreign Office team seek to “reverse this process of material disintegration by transferring information into the production of spatial and material organization.”⁶¹ The Yokohama Port Terminal project demonstrates FOA’s strategies aimed at pursuing a more radical spatiality they propose systems that work towards the goal of seamless connectivity, fluidity and freedom of movement. Rather than the formless, they propose the “informal”: producing forms that do not comply with established models but are grounded in the registration of decoded urban information. Similarly to MVRDV measurement, analysis and diagramming of the parameters of a project are used to develop form. As they describe it:

An exploration of production-rather than representational, typological, and signifying techniques- provides the vehicle for the construction of ideas, for the seamless continuity between analysis and production, concept and technique, information and form. Through production we attempt to escape mimetic, symbolic, or typological mediation and the imposition of a priori effects, without renouncing intentionality and determination. For this to happen, the projectual process must become a construction, generated through analyzing and manipulating forms, patterns, geometries, distributions, and other decoded materials that seek order.⁶²

At Yokohama it was the analysis of various urban movements that generated the instructions for the formation of the project. Mapping and registration of pedestrian movements on the waterfront revealed other kinds of activities and linkages between them which were then played off one another and intensified. The terminal was intended to act as a kind of social “solenoid,” attracting people and



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*Foreign Office Architects, Yokohama International
 Port Terminal - competition 1995, completed
 2002.*



50
*Foreign Office Architects, Yokohama International
 Port Terminal - competition 1995, completed
 2002.*

thus extending public space into the bay and mixing ordinary waterfront traffic with visitors using the pier:

Although we did not know how to structure the spires that constitute the solenoid, circulation was crucial to the project. Our aim was to challenge the purely conductive nature of “tubular” spaces - to use a term proposed by Paul Virilio - and create an architecture to host transient rather than static populations. The linear structure of a conventional pier would not produce the desired effect, but turning the pier into an interface rather than a gate enables a gradual change between two states instead of signifying their border, hence the idea of the “no-return pier.” As an alternative to enforcing the pier’s linear structure, the circulation diagram links the different functions via interconnected loops that make the linear structure disappear.

The project demonstrates a recurrent attachment, in Flow Urbanism, to images of the liberating aspects of circulation - expressed through flows, loops, motion and dynamics.⁶³ This aspect is rarely addressed in a clear or explicit manner; however it is one of the key elements that link the works I discuss here. For example, it is implicit in FOA’s descriptions of their desire for an urban form “breaking the polarity between citizens and visitors” that spaces “enforcing” movement and circulation are deemed desirable and, more importantly, affective.⁶⁴ This attitude also demonstrates similarities to the Situationist visions of continual transient passage through varied ambiances (meaning urban spaces that produced particular psychological effects)- as a means to experience the city in a more enriching way. However the phenomenological grounding of the Situationists’ (particularly Constant) visions is absent, or suppressed, in the discussions of Flow Urbanism. Instead, the attempt to create interfaces between different social groups, the removal of polarities between programmatic elements of projects, and the projection of continuous but differentiated surfaces are part of the contemporary fascination with the social potentialities of an unbounded connectivity of urban form or “smooth space.” However, beyond the idea of escaping the strictures of “traditional” architectural form, and by association traditional social structures, the positive social aspects of this connectivity are not elaborated.

Diagrammatic Architecture and the *Petersschule*

Stan Allen has identified a recurring approach to the design process aligned with this work- typified by the Yokohama project. Drawn from Deleuze and Guattari’s concept of the “abstract machine,” and its possible productive techniques, the use of

diagrams as descriptors of possible configurations of form emerges. Allen describes the use of diagrams as “abstract machines:”

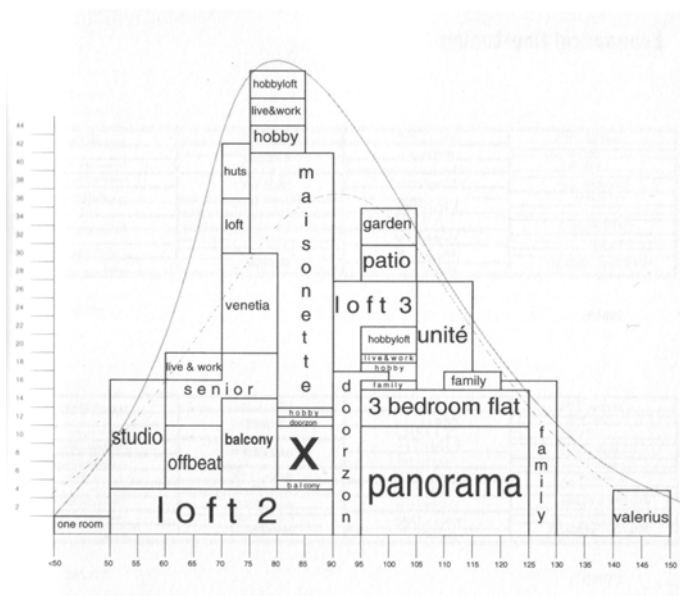
Simplified and highly graphic, diagrams support multiple interpretations. Diagrams are not schemas, types, formal paradigms, or other regulating devices, but simply place-holders, instructions for action, or contingent descriptions of possible formal configurations. They work as abstract machines and do not resemble what they produce.⁶⁵

Allen’s comparison between the use of the diagram in recent architecture and in the work of Hannes Meyer during the 1920s is useful as a means of discussing the understanding of affective form within Flow Urbanism. As the following section outlines, the comparison with Meyer’s *Petersschule* project identifies a shift in the contemporary significance of urban form’s ethical consequences.

The kind of diagrammatic architecture present in work spanning the practices of MVRDV, Van Berkel and Bos, Lynn and FOA establishes a loose fit between program and form. Multiple activities are channelled, but not constrained. They unfold within the envelope of space created by architectural form, a sense of the fixity of their forms belied by the abstractedness of the diagram. For Lynn the parameters of animation simulations are used as abstract analogies for pedestrian and automotive movement, environmental forces, sight lines, alignments and intensities of use; for Foreign Office it is the redefinition of the ground plane as nomadic space:

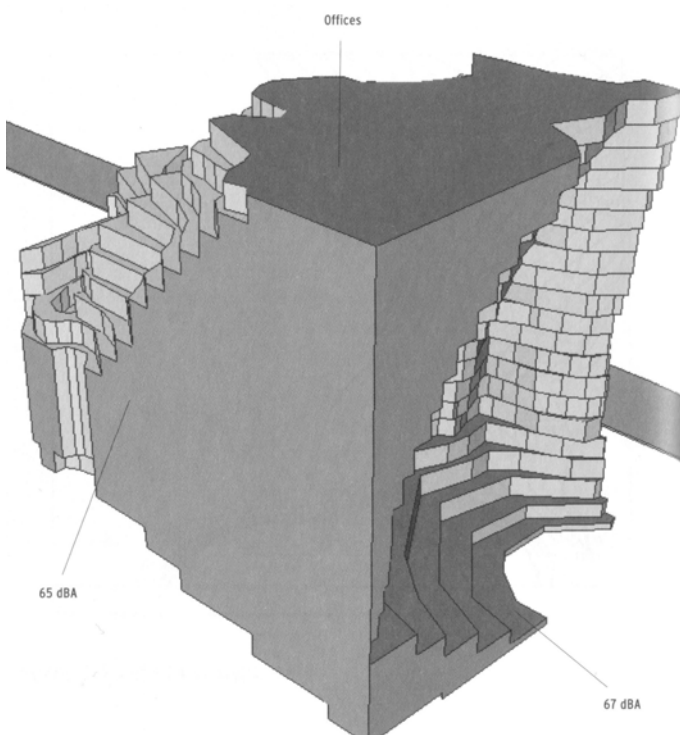
In Yokohama the ground enabled us to embody the no-return diagram. By associating every line with a plane, every bifurcation with a cut in the surface, we transformed the original two-dimensional diagram into a three-dimensional topography that could support the required program.⁶⁶

This diagrammatic sensibility allows its promoter to find pleasure in a directness of procedures. Based on the transposition of information it makes no claims to embedded meaning, interpretation or corrective capacity, looking instead to multiply surface effects (such as channelling movement). The discussion of any potentiality for reformative social effect is submerged. Instead, the flexible space of the informal is sought- avoiding questions of affective form and a critical or corrective role for urban design. According to Stan Allen:



51

Diagramming – MVRDV, “economic negotiations.”



52

Diagramming – MVRDV, “noisescape,” building envelope defined by noise contours of motorway.

It is an architecture that frankly and openly displays its constraints and is comfortable with the limitations imposed by forces of market economy, codes, or the shifting field of the contemporary city. The complexity of these real world constraints is neither held at arms length nor literally incorporated, but reformed as architectural material through the vehicle of the diagram. It is an architecture that travels light, leaving the heavy stuff behind.⁶⁷

Allen traces an important precursor to these contemporary approaches in Hannes Meyer's *Petersschule* project, described by the architect in 1927 through the use of a single page layout, blending diagrams, calculations, formulae and drawings. The building was to house an innovative school, utilising newly described methods for learning based on the child's experimentation, observation, discovery and play. Architecture in this project was an apparatus for the releasing of potential - the distributor of spaces, functions, materials and geometries that would inspire the development of new possibilities for occupation and use. As a social instrument the building was paramount. As Meyer explained it:

In line with the Marxist maxim that "being determines consciousness" the socialist building is a factor in mass psychology. Hence cities and their building components must be organized psychologically in keeping with the findings of a science in which psychology is kept constantly in the foreground. The individual pretensions to perceptions [Empfindungsansprüche] of the artist-architect must not be allowed to determine the psychological effect of the building. The elements in a building that have a telling psychological effect (poster area, loudspeaker, light dispenser, staircase, color, etc.) must be organically integrated so as to accord with our most profound insights into the laws of perception...⁶⁸

The Petersschule project demonstrated this attempt to instrumentalise built form in order to produce desired psychological effects: it was explicitly affective form and a crucial role in the construction of the social life of the community is outlined. Meyer explored the inherent quality of architecture to partition or unite space, to enable or constrain certain functions and effects, with intensity. Form was conceived as a tool conducive to certain outcomes; it was an instigator of responses and performances; a frame to outline possibilities. For Meyer, as Hays has shown:

Form, above all, must be utilized. Form is but the diagram for the production of effects; the arrangement and distribution of experiential and expressive contents whose domain extends from carefully fabricated building details intended to coax out the latent, contradictory, and marginal aesthetic effects of constructed materials to

elementary geometrical systems that construct differentiated spaces and structures for programmatic activities.⁶⁹

Allen's placement of this modernist project within a genealogy of diagrammatic architecture concentrates on the similarities in methodology between the older example and the contemporary manifestations. They are both seen as exploring the architectural project as a directive scaffold for multiple activities and experiences, rather than the functionalist logic that would require a fixed set of actions to be conducted within the formal envelope. The diagrammatic project is a component within a larger urban assemblage that can be reconfigured and recontextualised to allow for changing external forces.

However, I would argue that there is a critical break between the *Petersschule* and the later abstract machines that remains in the background of that analysis. Meyer's desire for the *Petersschule* project was ultimately reformative: the building was to be part of a reconstruction of the old city, with its unsatisfactory physical and social environment, by the use of architectural mechanisms such as this school, producing utopian effects: new pleasures, relations and freedoms. Hays has identified the manner in which Meyer's work is aligned with the potentiality and creativity of Deleuze and Guattari's "abstract machine" in the social realm:

By organizing new spaces and new events, the *Petersschule* participates in the construction of the new world by reprogramming its inhabitants, training them in new perceptual habits, producing new categories of experience, delineating, by way of the architecture itself, new subject positions and hierarchies.⁷⁰

This ambitious schema contrasts with the current expressions of such a process in the projects of Flow Urbanism. These later works display an equal willingness to develop their diagrammatic processes into even more pronounced architectonic expression (the almost literal "flowing" forms), but lack substantial reference to collective social action or processes. Conceptually, the projects merely suggest spatial arrangements that produce an undirected liberty – a deferral of ethical commitment – invested through setting out conditions or parameters for open-ended, transient social processes. A reticence in approaching questions of an ethical function for the urban form generated is demonstrated by the inhibited discussion

of social effect, seemingly prompted by fears of succumbing to the banality of disciplinary authority. As Zaera-Polo explains:

The space of the terminal became an ideal “battlefield” that could be “taken” by the locals or “occupied” by the foreigners. Programs link the flows to the overall scheme, where they become like sediments [sic] in the channels created by the folds on the surface, which in turn integrates the segments of the program through a continuous variation of form. Varying degrees of intensity diminish the rigid segmentation that social machines- especially those that maintain borders- usually produce.⁷¹

The use of diagrams in the design process has been a feature of recent architectural projects that can be associated with Flow Urbanism. The use of the diagram as an “abstract machine” allowed the circumventing of traditional processes of form-making. That use of diagrams has been shown to have a lineage stretching back to the modernist work of Hannes Meyer and his experimental combinations of building science and architectural design in the articulation of form. However, although there are similarities in method between Meyer’s work and that of firms such as Van Berkel and Bos, the overt social role envisaged by Meyer for his projects makes clear the marked silence on the affective implications of form in the description of the more recent work of Flow Urbanism.

Stealth Aesthetics

Returning to the work of the Dutch firm MVRDV it is interesting to note their exploration of spatialising information as a form-making technique - similar to the work of FOA and Lynn. Such a diagrammatic approach, in contrast with more “traditional,” figurative approaches, is suggestive of the representational difficulties that problematise contemporary urban design. The following section explores the use of project “data” within a diagrammatic approach as a means of alternative form-making. Two recent architectural projects for bell towers are then contrasted, one demonstrating a diagrammatic approach, the other a “traditional” approach, to tease out these issues.

MVRDV combine spatialising information with diagramming techniques similar to those exhibited in the *Petersschule* project- marginalising the question of form and privileging instead the role of what they term “datascapes.” The term they have

coined refers to the forces and flows derived from information that might shape a building's construction:

Because of the tax differences the borders between Belgium and the Netherlands are occupied with vast numbers of villas generating a linear town along the frontier. Market demand has precipitated a 'slick' of houses-with-a-small-garden in Holland. Political constraints in Hong Kong generate 'piles' of dwellings around its boundaries [...] Monumental regulations in Amsterdam limit the demand for modern programs, generating 'mountains of program' invisible from the street behind the medieval facades.[...] In La Defense in Paris, to avoid the high-rise rules massive program manifest themselves as ziggurats with 18 meter high accessible 'steps' so that all offices can be entered by the maximum length of the fire ladders. Psychological issues, anti-disaster patterns, lighting regulations, acoustic treatments. All these manifestations can be seen as 'scapes' of the data behind it.⁷²

The "datascape" are seen as a technique or tool that allows the virtual flows of information that figures such as Virilio speak of to be utilised in form-making- the invisible forces shaping modern buildings are made visible. The intention is not simply to initiate the creation of new forms but to analyse the conditions informing projects in a way that questions conventions and precedents and provides unexpected formal solutions. The *da-me* (no-good) architecture of Tokyo, catalogued by a group of local architects, provides pre-existing examples of such a process.⁷³ Buildings such as the "Car Tower," "Highway Department Store" and "Pachinko Cathedral" exemplify the processes valorized by firms such as MVRDV. Rather than an applied aesthetic model the socio-economic forces and exigencies of the urban realm dictate construction solutions devoid of concerns regarding representational, significant form. They are "simply arrived at through a desperate response to the here and now."⁷⁴

MVRDV's architecture is in some ways kindred to this phenomenon but displays a more considered approach. Their design process springs from the analysis of information associated with a project: economic data, building and zoning codes, consumer behaviour, corporate organisation and work habits. This type of data, linking the management of time and space, is assembled and subjected to intensive research, producing abstract diagrams, information maps and statistical analysis that inform an architectural solution. However, that research and production is used to provide an intentional defamiliarisation, striving to loose any formal

solution from conventional modes of association or evocation. The information digested in this process has formal consequences, but the production of architectural form is deferred. As Stan Allen has observed- “Form is explained in relation to the information it encodes. Architecture as a series of switches, circuits or relays activating assemblages of matter and information. Everything explained, nothing invented, nothing arbitrary.”⁷⁵

The intention for architectural form to function as embodiment of symbol or metaphor is stripped from the discussion of these works. The use of a certain form carries no ideological attachment, relating only to programmatic exigencies. Rather, once again, the liminal planning, constructional and socio-economic forces of the city - those producing eddies of *terrain vague*, or structuring the *derive* - are sought as the definitive design parameters. Allen has described the tactics of this approach:

Regularity is a ‘default’ imperative: in the absence of information to the contrary, make it straightforward. Regular form is easier to describe, simpler to build and it costs less. But by the same pragmatic logic, if program, site or *any other forces* tend towards irregularity, or necessitate complex geometry, there is no hesitation in moving the form toward complexity.⁷⁶

What emerge from this process are projects that comprise both buildings and the graphic devices that explain them. These statistics, tables and charts are crucial to the understanding of the architectural solution; defining the internal logic of the project. As self-contained entities these project packages can be seen to define their own grounding; developing a self-referential feedback loop of forces and their representation. The act of conscious form-making and the potential for reformative social effect is deferred.

The work of Ben van Berkel and Caroline Bos’s office also explores the use of diagrammatic techniques as conceptual, rather than formal, tools. As with MVRDV there is a strenuous distancing of the process from ideas of architectural concepts as embodiment, or the representation of a priori ideas; the similarities between the offices lie in the approach towards the influences on a project’s architectural form. Greg Lynn describes a similar interest for van Berkel in the “invisible” parameters informing design:

One of the primary observations about van Berkel's work is his consistent interest in these vague influences on form. The term *vague essences* is meant to indicate the properties of forces, behaviours and relationships that are inherently dynamic and indeterminate.⁷⁷

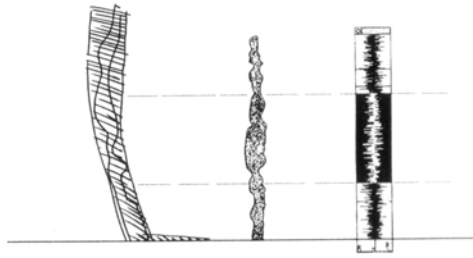
The focus of the design process within this practice is on what Lynn refers to as the “conceptual diagram”, rather than MVRDV's concept of the datascape.⁷⁸ In Van Berkel's case the interest in vague, unseen influences on form is synthesised within these abstract diagrams, which are intended to have a non-linear, non-deterministic influence on the built form. The diagrams are often an interpretation of a dynamic rather than static space of relations, composed through time and motion- the representation of contextual factors such as complex traffic flows, pedestrian movements and acoustic properties of materials. As such they tend to represent forces and influences that cannot simply be mathematically or eidetically stated. Lynn sees potential in this working method:

What is promising about Van Berkel's design method is that irreducible forces are rigorously conceptualized through the use of abstract diagrams of dynamic systems of organization. From interests in structural dynamics that are measured through working models and gestural drawings rather than equations, to responses to automotive traffic through radial diagrams of torsional flexure, his work is persistently affiliated with dynamic rather than static influences.⁷⁹

This process can be seen in the unbuilt design for a Carillon in The Hague where collaboration with acoustic engineers, and analysis of the required aural form, guided the project.

Actually it would be even more accurate to say the immaterial phenomenon of sound is the author, for the visible form of the Carillon is completely shaped by acoustics; the bells are housed in an underground chamber and the sound travels up through an 8 metres tall, glazed tube, the shape of which was acoustically determined. The details too came out of acoustic considerations; the curved glazed panels, the slight inclination in the verticality of the tube, the geometric figure of its diameter- these are all the way they are because that is how the sound wanted them.⁸⁰

Although this method differs in emphasis from MVRDV's use of data presented in diagrammatic form, the work of both firms displays a predilection for typological and programmatic invention based on exploring the “data” associated with a project. The use of formal articulation as the intermediary between data and landscape, city and programme is shunned. The forms that result are the



53

Diagramming – van Berkel and Bos, project for carillon, 1993.



54

Symbolic form – sails in the sun - Hames Sharley, Perth belltower, 2000-2001.

manifestations of demands, logic and rules associated with this data; the product of a particular type of research.

This methodology provides a sharp contrast with the approach outlined by the architects of the Barrack Square bell tower in Perth, Hames Sharley, who won a limited competition to design this civic monument. The design parameters developed by this firm reflect an orthodox, contemporary approach to public architecture such as this; attempting to embody specific cultural values, and produce an iconic structure, relating to its particular community. An examination of the design process of Hames Sharley, in contrast with that of Van Berkel and Bos, clarifies the kind of architectural approach that Flow Urbanism is set in opposition to, as well as comparing the understanding of affective form contained within each.

The architectural form was envisaged as by Hames Sharley as communicative: capable of evoking the historical context of Western Australia, as well as its future cultural conditions. The first design presented for public perusal was an elemental tower. As described by one of the project architects:

...our first design was a slender Egyptian obelisk, a non-Christian image, but interpreted in glass. The glass was all proposed to be gold-coloured, referring to the history of the state, and the structure of it was to be state-of-the-art, a statement for the changing of the millenium. We wanted to say, "This is how good we were in the year 2000." We also decided to locate the bells at a height of 27 metres, the same as the original bells, thus setting up a historical relationship with Saint Martin-in-the-Fields.⁸¹

Public comment forced a review of this design, particularly with reference to its historical context. A perceived lack of historical relevance and contextual association were seen as the project's major faults. A revised scheme attempted a more obvious iconic gesturing:

But we did look at the context of the place, what was significant about it and found that it was a boat-building area. So we developed the current concept, which is all copper against the crystalline tower but is evocative of boats...We went out to the public with two variations on this concept- one with a more old-fashioned sail form and one with a more modern sail. The preference was for the more historic one.⁸²

The project was intended to function much like a nineteenth century public monument: drawing on the collective memory for its affective associations and providing a focal point in a scenographic construction. In celebration of the impending millennium and eulogising the state's character, the government of the time wanted a civic monument to guide the association of rhetorical meaning with the project. It sought a figurative and emblematic architecture, fittingly composed to control its civic message. The tower and chamber that were derived sought to represent idealised aspects of the city: its cultural progress, technological achievement, urban renewal and Western Australia's material prosperity. At a rudimentary level it would seem that the iconography rests upon a tower as a venerable symbol of power and achievement, skirted by sails that purport to relate to a formative Perth characteristic: its relation to the Swan River. These two elements are expressed, architecturally, through structures supposedly detailed in order to emphasise a modern, engineered aesthetic.

There are no historical precedents for non-ecumenical, or non-sacred, bell towers so we chose to project the idea of the millenium tower as representing the technology of the future. We also wanted to overlay meanings that referred to the history of the bells, the site and that of our state, so the tower could be interpreted in all these different ways...We tried to sculpt the bell-housing box in some way, to give it some of the characteristics of a musical instrument- we rounded it here and there, and also wanted it well-integrated with the tower...Yet we wanted it to have some historical association, so we clad it in an ancient material, copper, which also weathers well as a timeless material. The intention was to have modern and old juxtaposed against one another, crystalline and massive; something fragile, the glass, with something robust; solid versus transparent; something with dynamic references (the new scheme with the sails) and something that is static.⁸³

The description of the project reveals a crude desire for affective form in its search for an appropriate typology and the attempted creation of a symbolic, formalistic artifact. Reaching for a monument that might rise organically from a culturally cohesive milieu the architects discovered the intensely problematic nature of grounding a modern urban architectural project. Continued dissent and resistance point to the loss of, as Christine Boyer has expressed it, "any authoritative voice that might orchestrate our civic spaces, any normative design that might bind our spirits together."⁸⁴

Criticism of the project included some aesthetic concerns but focused more intently on its association with political hubris, boosterism and incomplete history.⁸⁵ Despite the concerned attempts to provide a form with social resonance, the tower was easily dismissed as “just a modest earthbound rocket, with a few encased relics of our imperial past that we could probably do without.”⁸⁶ The appeal to a collective memory was problematised by the diversity of opinion on cultural significance of the project and the rhetoric that placed the project as an engaged commitment with the local community lost its effect because of the focus on the city’s image and marketability. The attempt to enhance Perth’s cultural capital, to reinforce a specific sense of place, was short-circuited by the commodified images presented. Boyer’s description of American urbanism provides a summary that is equally applicable to this situation:

By now, traditions have been so thoroughly “invented” or homogenised, and “history” so absolutely marketed or commodified, misrepresented, or rendered invisible, that any oppositional potential rooted in collective memory has been eclipsed completely.⁸⁷

The comparison of Hames Sharley’s hopes for a culturally expressive musical instrument and Van Berkel’s description of a sound wave generated carillon emphasises both the difficulty of grounding a socially affective architecture, and the withdrawal of the more avant-garde practice from this question altogether. The Perth Bell Tower represents a continuing faith in the social significance of architectural form, and that this form making can resonate within the collective memory and contribute to ideals such as civic unity. It also makes the way in which attempting to represent a coherent, homogenous collective vision for such a project is increasingly problematic. The project for a carillon in The Hague demonstrates an approach that simply defers the possibility for communally significant, and affective, form, suggesting meaning must be generated elsewhere.

Thus, the design process and techniques of Flow Urbanism deliberately marginalise or ignore the issue of figurative, authored form, where the final shape of a building is tied to its narrative substance, symbolism or representational quality. Theirs is a “formless” architecture through a denial of its affective power. Within these projects, it is apparent that form is no longer regarded as primarily communicative

or socially reconstructive. Rather, there is a consistent emphasis in this architecture (frequently presented as integrated packages of text, diagrams and images) on an increasingly abstract representation of the relationship between the occupants of a building or space and its form.

New Urbanism and the Continued Role of Reform

But, psychologically shocked or no, most Angeleno freeway-pilots are neither retching with smog nor stuck in a jam; their white-wall tyres are singing over the diamond-cut anti-skid grooves in the concrete road surface, the selector-levers of their automatic gearboxes are firmly in *Drive*, and the radio is on.⁸⁸

This description of Los Angeles by Reyner Banham, written in the 1970s, anticipates the emphasis on movement, and particularly the mobility provided by the car, in descriptions of the post-modern city.⁸⁹ At the time Banham was writing, the impact of the car and the freeway on urban form was already being analysed and terms such as “non-place urban realm” and “urban field” were being used to describe the new landscape of the city.⁹⁰ More recently, the urban lifestyle associated with the “dematerialised” urbanity described in the previous section (the urban landscapes of Flow Urbanism) has exploited a similar liberating sense of mobility, described by figures such as Gilles Deleuze and Rem Koolhaas, and projected in the novels of William Gibson.⁹¹ They envision the cities of America and Europe as dispersed landscapes of post-modern, or post-industrial, suburbs- urban tapestries containing an infinite number of starting points and destinations.

Flow Urbanism has drawn upon the positive readings of such post-modern urban landscapes and their social structures to suggest a new mode of architectural production. Having outlined this approach to architecture that defers the possibility for affective form, and having pointed to the difficulties involved in seeking affective form through the bell tower project, I will now turn to the most confident contemporary approach to the ethical possibilities of urban design, New Urbanism. The following section will address the ideas of New Urbanism as an alternative response to the post-modern urban landscapes described above- particularly the dispersed, car-dominated city.

New Urbanism is based on a faith in affective form as an instrument of social influence- the process of design is grounded in the belief that a collective memory can be drawn upon to derive form, inscribing meaning and symbolic power in the urban environment. Particularly important is the application of that form to the notion of developing community through propinquity- encouraging higher population density, public transport, pedestrian activity and public space. That design approach is set in opposition to a landscape perceived as placeless and socially destructive, as suggested in Rob Krier's assessment of the Flow Urbanists: "The visions of total urban life – unlimited freedom of choice and mobility – are seductive in their deceptive naiveté and nostalgic appeal."⁹²

The New Urbanists have characterised the social effect of the post-modern landscape as overwhelmingly negative- they have decried the placelessness and disposability of its sprawl. For them, the disconnected, displaced, decentralised realm of office parks, malls, strips, corporate campuses and gated communities loosely tethered to suburban arterial roads reflects the destructive exigencies of mobile capital, the service economy, post-Fordist disposable consumerism and financial deregulation. The "Charter of New Urbanism" outlines a concerted response to the problems of such an environment: the ecological degradation, wasteful consumption of resources, automobile dependency, economic and racial segregation, social alienation, redundancy, obsolescence, abandonment, homogeneity and ugliness.⁹³ In response, New Urbanists have proposed a now-familiar alternative pattern that restructures the isolated office parks, strip malls and housing developments into mixed-use, walkable, public transport served districts and neighbourhoods oriented around public town centres.

In relation to the role of architectural and urban form in New Urbanism, that emphasis on its importance for defining civic space is grounded in the writings and projects of various architects since the 1970s who have stressed the importance of affective form, and the role of the architect as form-maker. The theoretical work of Leon Krier has been particularly important, his role as a consultant to the master planning of Seaside reinforcing the link between his ideas about the ethical role of



55
*De Parade, Bergen op Zoom, Netherlands - Rob
Krier, sketch of Josephplein, 1999.*

architecture and those of New Urbanism. His stance in regard to the social role of architecture has been particularly strong:

Cities and landscapes are the tangible realisation of our material and spiritual worth, for good or ill. Each image we draw, each structure we build is an integral statement on how we want or don't want the entire world to be. We either work on its construction or on its destruction, we complete or we fragment it. The first rule of ecology is that we cannot do one thing in isolation.⁹⁴

During the 1970s and 1980s the work of Krier and other architects whose work has been labelled "neo-rationalist," such as O.M. Ungers and Aldo Rossi, pursued the development of architectural and urban form along typological lines.⁹⁵

Compositional and combinatorial rules were sought to enable the production of public spaces that would draw upon a collective memory of architectural form-abstracting from the vernacular to produce places with cultural resonance. The rejection of modernist functionalism in planning and architecture, and the envisioning of urban design as an important aesthetic as well as social practice (recalling the ideas of nineteenth century architect Camillo Sitte), is also present in New Urbanism.⁹⁶

However, in contrast to the focus of neo-traditional urbanism in Europe on the medieval city, New Urbanism has been most concerned with the reformation of the American suburban landscape. To this end it has drawn upon the model of the small American town at the end of the late-nineteenth to early-twentieth century, and its idealised vernacular architecture. Also, in comparison to Neo-Rationalism, New Urbanism has appeared less rigorous in its development of a theoretical basis for the production of urban form. A critical issue has been the extent to which the New Urbanists have developed a design method using certain essential forms, or archetypes, to lend presence and embody meaning to the urban landscape, or whether it has relied more on nostalgic image-building- recalling the post-modern fragmentary, aestheticised cityscapes described by Boyer.⁹⁷

A significant number of developments throughout the USA have helped to consolidate the core principles of a neo-traditional architectural and planning movement under the banner of New Urbanism.⁹⁸ The major figures, including the

architectural partnership of Andres Duany and Elizabeth Plater-Zyberk, and the planner Peter Calthorpe, have sought to produce more responsible, and successful, 'middle landscapes.'⁹⁹ The model of the small town has been analysed and recast, its spatial form and architecture emulated in order to promulgate a supposedly similar sense of community, cohesiveness and stability. For New Urbanism the small, traditional town represents the antithesis of modern, destructive architectural and planning techniques. This approach has been identified in the design for Seaside, Florida (the most well known New Urbanist project):

The overall concept of the development depends heavily upon the strategic exploitation of the conceptual and emotive distance between the 'boards' of architectural (read: modernist, conventional, oppressive, ergo *bad*) abstraction and the contemporary realities of small town America as viewed from the 'big red convertible' (read: neotraditional, unconventional, liberating, ergo *good*) of neotraditional self-consciousness.¹⁰⁰

Thus, despite the diversity of opinion that exists within the ambit of New Urbanism, it is possible to outline, in broad terms, a collective agenda that asserts the importance of public rather than private values. This premise is expressed within a set of integrated planning parameters:

The center of each neighborhood should be defined by a public space and activated by locally orientated civic and commercial facilities. These places should not be relegated to leftover sites at the edge of neighbourhoods, and their form and image should be strengthened by surrounding building form, architecture and street patterns.

Each neighborhood should accommodate a range of household types and land uses. A neighborhood is a place for living, shopping and working. It should include building types varied enough to accommodate this range of activities and flexible enough to be easily adapted as different uses for them emerge.

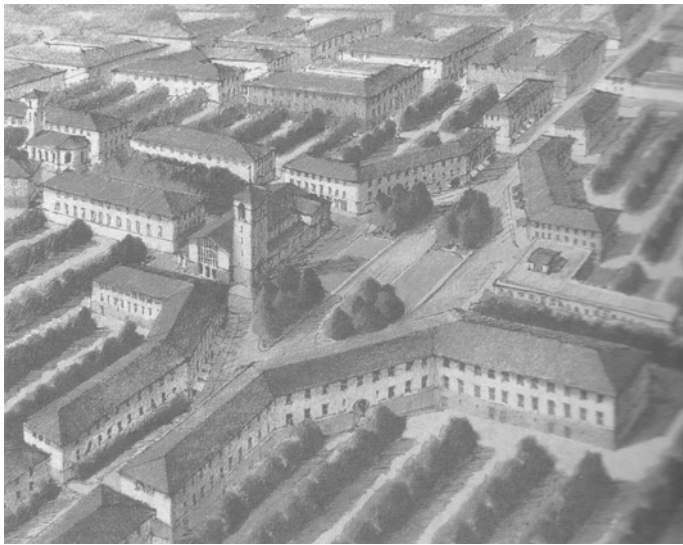
Cars should be kept in perspective. Land use patterns, street layouts and densities should make walking, bicycling and public transit viable alternatives to driving, especially for everyday trips. Streets should be safe, interesting and comfortable for pedestrians. Improving traffic flow should be only one of many considerations in platting streets and designing neighborhoods.

Architecture should respond to the surrounding fabric of buildings and spaces and to local traditions. Buildings should not be conceived as objects isolated from their surroundings; they should contribute to the spatial definition of streets, parks, greens, yards and other open spaces.¹⁰¹

The formal articulation of New Urbanist developments derived from these ideals has developed a set of urban design techniques in order to reform the car-dominated city. Wide cul-de-sacs and wider arterial roads are replaced with gridded networks of narrow streets that calm and diffuse the flow of traffic. Architectural codes govern the basic profile of the building front and are used along with the articulation of pavements and street trees to form a figural public space, or front room, in the space of the street. Front porches are intended to promote sociability amongst neighbours; the close mixing of lot sizes and building types is intended to encourage socio-economic diversity. Increased densities (relative to standard suburban subdivisions) are sought as a means of increasing social interaction, preserving unbuilt land, and supporting public transport and local shops. These overarching techniques are augmented by measures to relate new development to existing markers of local identity: landscape features such as lakes, forests or wetlands, regional building types, materials and planning strategies.

These elements are bound together in New Urbanism by codes and covenants, along with homeowner-run administrative bodies, that are developed to sustain the “character” of a development. The importance attached by New Urbanism to urban and architectural form in the social reformation of the city leads to this strong control- stability, predictability and continuity are intended to counter the “placelessness” and social disintegration of the post-modern metropolis- exemplified in America by the landscape of Southern California. As Leon Krier has described it: “the small town philosophy of the TND (traditional neighbourhood design) is not just an architectural paradigm, but a social synthesis which, if applied nationally, will allow a much larger range of people and talents to become active citizens, in the full meaning of that phrase.”¹⁰²

Thus, it can be readily observed that these reformist objectives of New Urbanism centre on the role of the built environment in the production of community and sociability (and the possibility for change within these). Uninterested in providing a merely critical architecture, they consciously strive for an architecture of reform and the affective potential implied by such.¹⁰³ Duany himself has outlined the



56

*Duany Plater-Zyberk – Project for a town centre,
c1990.*

importance for New Urbanists of a belief in the influence of architectural and urban form:

The built environment's potential to affect human behavior was one of the defining premises of the Modern movement, and was discredited only in the wake of the 1973 demolition of Pruitt-Igoe in St. Louis. The correct conclusion from the failure of Pruitt-Igoe should have been that design has such a powerful affect [sic] on human behavior that it could transform, in very short order, a viable neighborhood society into a self-destructive one. This power, ably documented by sociologists Oscar Newman and William Whyte, was thus abdicated to the mall developers. Accepting this power and wielding it responsibly is a key to New Urbanism's success.¹⁰⁴

A number of sociological theories developed in the late 1960s and early 1970s linked built form and the incidence of crime, with close attention paid to the design of housing and associated crime rates in public housing like that of Pruitt-Igoe. Oscar Newman's ideas of "defensible space" are probably the most well known and influential. Newman, an architect, posited manipulation of built form as a means of social control, generating a new field of research into crime prevention through the design of the built environment. The principles established by such research have profoundly informed the subsequent New Urbanist understandings of affectivity.¹⁰⁵

Following on from this type of environmental determinism, there is a consistently articulated belief in the writings, works, and lectures of New Urbanism's protagonists that a fundamental connection exists between the shaping of spatial order and the foundation of a reformed moral and aesthetic order. Like the urban reformers of the nineteenth century discussed in chapter one, and the even the Modernist architects that New Urbanism explicitly critiques, the New Urbanists demonstrate an underlying belief that the form of the city signifies and establishes the *res publica*. As David Harvey has noted, this connection is made through the relation of architectural design to a certain ideology of citizenship and community. An understanding of architecture and urban design's role in the construction of the city becomes entwined with a desire for the recuperation of history, place, collective memory and identity:

And in what nowadays passes for the New Urbanism (see Peter Calthorpe, *The Next American Metropolis*, 1993, and Peter Katz, *The New Urbanism: Toward an Architecture of Community*, 1994) we witness their deliberate conflation into a programmatic statement. Urban living can be radically improved, made more authentic and less placeless, it is argued, by a return to concepts of neighborhood and community that

once upon a time gave such vibrancy, coherence, continuity, and stability to urban life. Collective memory of a more civic past can be recaptured by a proper appeal to traditional symbols.¹⁰⁶

Thus, certain assumptions, regarding the relation of a spatial frame to social processes, are intrinsic to New Urbanism. There is a powerful belief that pedestrian propinquity to the workplace and shops can provide to a sense of place and encourage the development of a civil society. There is also a belief in the socially integrative power of mixed land uses (especially higher residential densities integrated with commercial uses) to provide a range of housing types and a socioeconomically diverse, yet harmonious, community. Thus, public, civic spaces (particularly those that are pedestrian oriented) and buildings play a crucial role in strengthening social and political institutions. These attitudes are apparent in the “Foundation for Traditional Neighborhoods”, a one page design matrix produced by Duany and Plater-Zyberk:

By reducing the number and length of necessary automobile trips, traffic congestion is minimized and commuters are granted increased personal time.

By bringing more of the needs of daily living within walking distance, the elderly and the young gain independence of movement.

By walking in defined public spaces, citizens come to know each other, and to watch over their collective security.

By providing a full range of housing types and workplaces, age and economic class are integrated and the bonds of an authentic community are formed.

By promoting suitable civic buildings, democratic initiatives are encouraged and the organic evolution of the society is secured.¹⁰⁷

The consistent use (or application) of traditional and vernacular building types, styles and features has also been characteristic of New Urbanism. Advocates for New Urbanism argue that the structuring and urban morphology of developments is far more important in achieving its aims than these aspects. However, New Urbanist projects, and their derivatives, are consistently marketed and discussed in relation to the image generated by traditional architectural forms. Architectural style, as much as urban typology, provides powerful symbolic form that is bound up with the societal images projected.

In assessing Seaside, the development that has become most representative of New Urbanism, Vincent Scully has suggested that it has: “succeeded more fully than any other work of architecture in our time has done, in creating an image of community, a symbol of human culture’s place in nature’s vastness.”¹⁰⁸ Additionally, this “image” exists in three dimensions: “Duany and Plater-Zyberk ... write a code that controls the buildings as well as the plan. They therefore ensure that the three-dimensional reality of the town will fulfil the concept adumbrated in its plat-without themselves having to design every building in it.”¹⁰⁹

In this way the New Urbanists have developed an image of community, and rhetoric of place-based civic pride, that tends to devalue the more fluid processes of the city and their relations to its spatial forms. They have developed projects that are tightly controlled and supposedly embody appropriate civic values in their forms- urban form kindles ‘the spirit of community’ in opposition to any social disorder.

The use of imagery and ideas associated with small-scale communities, as an idealised urban form, has provoked disquiet amongst many urban theorists and historians: “The idea of the urban village or of some kind of communitarian solution ... to our urban ills worms its insidious way into public consciousness, with the New Urbanism as one of its forms of articulation.”¹¹⁰

Indeed, the theories and techniques of New Urbanism have proved highly influential at a national level (within the USA) and internationally (particularly within countries such as Australia, Canada and the UK). Its general appeal resides in the characteristics of traditional neighbourhood development outlined by Audirac and Shermeyen:

It is our contention that, first, it bears the imprint of the postmodern European critique of the Garden City and American New Town movements. Its imitation of premodern, preautomobile urban forms pivots on the notion that social relations and culture follow form. Second, it assumes that significant social consequences follow from the emphasis on pedestrian propinquity as a design synthesis. Third, at a regional level TND has coalesced with the growth management discourse that focuses on the control

of urban sprawl. Fourth, although the movement may fall short of fulfilling all professed social goals, it may contribute to an expansion of currently available suburban lifestyle choices.¹¹¹

Conclusion

In countries such as America and Australia, the large-scale peripheral expansion of cities during the late twentieth century led to a dissolution of the traditional hierarchical structure of the urban realm. The resulting poly-nuclear, low density landscapes were often referred to as “placeless” sprawl. The lack of reference to traditional symbolic and figurative urban form within those landscapes served to heighten the sense that the possibilities for meaningful urban form had been severely circumscribed. Confidence in the ability to successfully plan the “good” city, especially the potential for social change or reform through the built environment, was substantially weakened and alternative models for structuring that nexus were been sought.

The work of Flow Urbanism, a term applied here to firms such as MVRDV, Van Berkel and Bos, the architect and theorist Greg Lynn, and Foreign Office Architects, offered a response to that post-modern environment that sought new forms in its indeterminate status. The work of those designers contained similar attitudes to the possibilities of generating form through abstract analysis of the “flows” of the city. The approaches owed much to the Situationists’ notion of *dérive*, and Deleuze and Guattari’s concept of “smooth space,” as well as ideas about the processing and reinterpretation of codes, regulations and statistics to generate unexpected architectural form.

Alternatively, New Urbanism continued the reformist tendencies of the Garden City movement and the Modernism of CIAM; in a similar way, the physical environment was privileged in the outlining of techniques for social change. Accordingly, architects, planners, and associated professionals were envisaged as critical in providing urban and architectural form that was a catalyst for reform. This comparison also extended to the manner in which the critique was articulated, and the promotion of an alternative formal model. The New Urbanists, focused through

the organisation The Congress for New Urbanism, lobbied government, heavily publicised their work, and made their design principles readily accessible.¹¹²

That promotion and dissemination assisted the development of direct links between the founding professionals in America and their overseas counterparts in countries like Australia; encouraging the appropriation and translation of New Urbanist ideas in addressing local urban design issues. That was certainly the case in Perth where the development of the regional centre at Joondalup, a planned, satellite city first proposed in the 1970s, saw the adoption of neo-traditional, or New Urbanist, ideas and techniques in the design of certain residential areas during the 1990s.

Similar concerns within Perth, regarding the continued extension of low-density suburbs and their associated social and environmental problems, encouraged the translation of ideas and techniques associated with New Urbanism. I have argued within this thesis that the pattern for that low-density development was established in the garden suburbs of the early twentieth century - structuring a growing cultural preference for the single-family detached dwelling on a large lot and defining its setting as a secluded suburban landscape of curving streets and extensive green space. After the Second World War Perth's urban expansion was almost exclusively characterised by that sort of development on the metropolitan fringe.¹¹³

Perth's existing urban form was approaching the characteristics of the dispersed, regional cities described earlier in this chapter as examples of the post-modern landscape. It was dominated by the preference for owner-occupied, detached houses and the use of cars to access activity centres. Perth's relatively small population in 2001 of approximately 1.55 million people was spread throughout a metropolitan region that stretched almost 100km along the coast, and up to 50km inland. That field city, with its continuous, low-rise suburban fabric, had proved difficult to reform:

...Perth's quarter-acre suburban lots spread away from the city at a density that would continuously return to haunt future generations of planners. Suburbia gained enduring traditions of space, independence, privacy and self-containment, traditions that have been difficult to dispel in the face of late twentieth century urban realities.¹¹⁴

The following chapter will explore the process of translating New Urbanism to Perth as an attempt to develop a reformative urban model, concentrating on Joondalup's City North residential area. My particular focus is the manner in which the local model of suburban form, and understandings of suburban amenity, structured and affected the importation of New Urbanist approaches to urban form-making. I will contend that the urban forms and typologies upon which New Urbanism drew, particularly the small urban town, never existed in Perth and thus problematised its importation. I will suggest that the underlying spatial and architectural determinism evident in recent neo-traditional urban design (exemplified by New Urbanism) was moderated by local conditions, and a different understanding of affective form developed.

Notes

¹ Leonie Sandercock, *Towards Cosmopolis*. John Wiley, Chichester, 1998, p. 4.

² Reyner Banham, *Los Angeles: The Architecture of Four Ecologies*. Penguin Books Ltd, Hammondsorth, 1971.

³ Criticism of the built environment produced by "modernism" has been wide ranging, see for example: William H. Whyte, *The Organization Man*, Jonathon Cape, London, 1957; Jane Jacobs, *The Death and Life of Great American Cities*, Jonathon Cape, London, 1962; Lewis Mumford, *The Urban Prospect*, Secker & Warburg, London, 1968; Christopher Alexander et al, *A Pattern Language: towns, building, construction*, Oxford University Press, New York, 1977; Herbert J. Gans, *People and Plans: essays on urban problems and solutions*, Basic Books, New York, 1968.

⁴ More recent writing has often extended the critique of modernist urban design- addressing its failings in terms of feminism and the lack of a voice for various "underclasses." See for example: Dolores Hayden, *Redesigning the American Dream: the future of housing, work, and family*, W. W. Norton, New York, 1984; Mike Davis, *City of Quartz: excavating the future in Los Angeles*, Verso, New York, 1991.

⁵ See, for example: Frederic Jameson, *Postmodernism or the Cultural Logic of Late Capitalism*, Duke University Press, Durham, 1991; David Harvey, *The Condition of Postmodernity* (1980) Blackwell, Oxford, 1989; Charles Jencks, *The Language of Post-Modern Architecture* (1977) Rizzoli, New York, 1984; Andreas Papadakis (ed), *Postmodernism on Trial*, Academy Editions, London, 1990; Peter G. Rowe, *Making a Middle Landscape* The MIT Press, Cambridge, 1991.

⁶ The works I discuss as Flow Urbanism are also linked by the extensive use of sophisticated computer software in the analytical and design process- allowing previously unachievable or overly laborious calculations to be quickly undertaken. However, as Mario Carpo has pointed out, the new possibilities for design and manufacturing that these digital technologies allow, and the changes in social interaction in physical space that they also suggest, can be seen as two separate issues. My concern in this chapter is the implications of those changes in social interaction for the understanding of affective form, rather than the specific possibilities for new construction techniques and architectural styles.

⁷ Kenneth Frampton, "Towards a Critical Regionalism: Six points for an architecture of resistance" in Thomas Docherty (ed),

Postmodernism: A Reader, Harvester Wheatsheaf, London, 1993, p. 269.

⁸ See, for example: Massimo Cacciari, *Architecture and Nihilism: On the Philosophy of Modern Architecture*. (translation by Stephen Sartarelli, introduction by Patrizia Lombardo) Yale University Press, New York, 1993; Hartoonian, Gevork, *Modernity and its Other: a post-script to contemporary architecture*, A&M University Press, Texas, 1997; Hilde Heynen, *Architecture and Modernity: A Critique*, The MIT Press, Cambridge, 1999.

⁹ Anthony Vidler, "The Tectonics of Space" *Lotus International* Lotus International No. 98, 1998, p. 52.

¹⁰ Ignasi de Solá-Morales, *Differences: topographies of contemporary architecture* (tr Graham Thompson) The MIT Press, Cambridge, 1997, p. 25-26.

¹¹ Paul Virilio, "Architecture in the Age of its Virtual Disappearance: An interview with Paul Virilio by Andreas Ruby, Paris, 15 October 1993" in Beckman, John (ed). *The virtual dimension: architecture, representation, and crash culture*, Princeton Architectural Press, New York, 1998, p.181.

¹² Paul Virilio, "Speed and Information: Cyberspace Alarm!" *CTHEORY*, Vol. 18, No. 3, 1995, <http://www.ctheory.net/text_file.asp?pick=72> (12.01.2004)

¹³ Paul Virilio "The Overexposed City" in Leach, Neil (ed), *Rethinking Architecture: a reader in cultural theory*, Routledge, New York, 1997, p. 385.

¹⁴ Virilio in Leach, *Rethinking Architecture*, p. 385.

¹⁵ For example, the "technoburbs" described by Robert Fishman in *Bourgeois Utopias: The Rise and Fall of Suburbia*, Basic Books Inc, New York, 1987; the "edge cities" of Joel Garreau's *Edge City: Life on the new frontier*. Doubleday, New York, 1991; or the "technopoles" of Manuel Castells' *The Informational City: information technology, economic restructuring and the urban-regional process*, B Blackwell, Oxford, 1989.

¹⁶ Deyan Sudjic, *The 100 Mile City*, Flamingo, London, 1993, p. 168.

¹⁷ Rem Koolhaas, "The Generic City" in Jennifer Sigler (ed) *S, M, L, XL*, The Monacelli Press, New York, 1995, pp.1250-1251.

¹⁸ Koolhaas, in Sigler, *S, M, L, XL*, p. 383.

¹⁹ Ignasi De Sola-Morales, "Terrain Vague" in *Quaderns* 212, 1996, pp. 34-43.

- ²⁰ See Denis E. Cosgrove, *Social Formation and Symbolic Landscape*, Croom Helm, London, 1984, especially Chapter 1.
- ²¹ Burnet quoted in Linda Pollack, "The Absent Wall and Other Boundary Stories: Contradictory Constructs of Space and Gender", *Daidalos*, No.67, 1998, p.96.
- ²² Pollack, "The Absent Wall and Other Boundary Stories: Contradictory Constructs of Space and Gender", p.39.
- ²³ Pollack, "The Absent Wall and Other Boundary Stories: Contradictory Constructs of Space and Gender", p.39.
- ²⁴ Helen Castle, "Editorial," *Architectural Design* Vol. 71, No. 3, June 2001, p. 5.
- ²⁵ Debord, Guy, *The Society of the Spectacle*, Black & Red, Detroit, 1983.
- ²⁶ Simon Sadler notes that this attitude was strongly influenced by the thinking of Marxist philosopher Henri Lefebvre, particularly his *Critique of Everyday Life* (1946).
- ²⁷ The Schouwburgplein features multiple surface treatments across the plaza to allow its appropriation for different activities (including soccer, rollerblading and music performance) as well as large spotlight structures that can be controlled by citizens. A more specific discussion of the work of West 8 and its relation to Situationist thought can be found in Julia Chance, "Connections could be made there: Detecting Situationist Tendencies in Adrian Gueze and West 8," *Architectural Design*, Vol. 71, No. 3, June 2001, pp.37-43.
- ²⁸ Guy Debord quoted in Sadie Plant, *The Most Radical Gesture: The Situationist International in a Postmodern Age*. Routledge, London, 1992, p. 58.
- ²⁹ Ivan Chhtcheglov, "Formulary For a New Urbanism" (1953) in Iwona Blazwick (ed), *An Endless Adventure... An Endless Passion... An Endless banquet: A Situationist Scrapbook*, Verso, London, 1989, p. 24.
- ³⁰ "Constant, "Amsterdam," in Patrick Mosconi (ed), *International Situationniste, 1958-1969*, Arthème Fayard, Paris, 1997.
- ³¹ Simon Sadler, *The Situationist City*, The MIT Press, Cambridge, 1998, particularly Chapter 3.
- ³² Sadler, *The Situationist City*, p. 22.
- ³³ Constant, "Another City for Another Life", *International Situationniste*, No.2, 1959, S.37f.
- ³⁴ Gilles Deleuze and Felix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (translation and foreword by Brian Massumi) University of Minnesota Press, Minneapolis, 2000, p. 478.
- ³⁵ Deleuze and Guattari, *A Thousand Plateaus*.
- ³⁶ His Ville Contemporaine project, for example.
- ³⁷ Anon., "Poésie" *Potlatch*, No. 24 quoted in Sadler, *The Situationist City*, p. 181.
- ³⁸ Constant, describing the characteristics of the "Yellow Zone" in the *International Situationniste* #4, June 1960, reproduced in Mosconi, *International Situationniste*.
- ³⁹ See Mosconi, *International Situationniste* pp. 147-151.
- ⁴⁰ Chhtcheglov, "Formulary for a New Urbanism" in Blazwick, *An Endless Adventure*, p. 25.
- ⁴¹ Hilde Heynen, *Architecture and Modernity: A Critique*. Cambridge, Massachusetts, The MIT Press, 1999, p.168.
- ⁴² Heynen, *Architecture and Modernity*.
- ⁴³ Heynen, *Architecture and Modernity*.
- ⁴⁴ Heynen, *Architecture and Modernity*.
- ⁴⁵ Sola-Morales, "Terrain Vague," p. 37.
- ⁴⁶ Alejandro Zaera-Polo, "Forget Heisenberg," in Cynthia C. Davidson (ed), *Anybody*, The MIT Press, Cambridge, 1997, p. 208.
- ⁴⁷ Sola-Morales, "Terrain Vague," pp. 41-42.
- ⁴⁸ Sola-Morales, "Terrain Vague," p. 41.
- ⁴⁹ Uncanny is used here as a reference to unsettling aspects of contemporary architecture that evoke estrangement and alienation, as in: Anthony Vidler, *The Architectural Uncanny: Essays in the Modern Unhomely*, The MIT Press, Cambridge, 1992.
- ⁵⁰ Virilio in Leach, *Rethinking Architecture*, p.181.
- ⁵¹ Rafael Moneo, "End of the Century Paradigms: Fragmentation and Compacity in Recent Architecture" *El Croquis* No.98, 2000. p. 201.
- ⁵² René Thom, *Structural stability and morphogenesis: an outline of a general theory of models*, W.A. Benjamin, Reading, 1975, p. 127.
- ⁵³ "Bernard Cache, Framing the Fold, Architecture, Geography, and the Pursuit of the Virtual: Bernard Cache interviewed by Michael

Speaks" in Beckman, *The virtual dimension*, p. 303.

⁵⁴ Autopoiesis is a process whereby a system produces its own organization and maintains and constitutes itself in a space.

⁵⁵ Luis Moreno Mansilla and Emilio Tuñon, "The Space of Optimism: A Conversation with Winy Maas, Jacob van Rijs and Nathalie de Vries," *EI Croquis* No. 86, 1997, p. 14.

⁵⁶ Zaero-Polo in Davidson, *Anybody*, p. 203.

⁵⁷ Greg Lynn, "From Body to Blob" in *Ibid.* p.163

⁵⁸ Lynn, *Ibid.* p.173

⁵⁹ Foreign Office Architects, "Operatives, Topographies" in *Quaderns*, No.220, 1998, p.35

⁶⁰ Zaero-Polo in Davidson, *Anybody*, p. 204.

⁶¹ Zaero-Polo in Davidson, *Anybody*, p. 206.

⁶² Zaero-Polo in Davidson, *Anybody*, p. 207.

⁶³ See also Greg Lynn's work, such as: House on Long Island (1995), Port Authority Gateway (1995), and UN Studio (an expansion of Van Berkel and Boss practice) projects such as the Arnhem Central master plan (1996-2007) or Nieuwegein Master Plan (1997-1998).

⁶⁴ Zaero-Polo in Davidson, *Anybody*, p. 207.

⁶⁵ Stan Allen, "Stealth Diagrams" in *Any* No.23, 1998, p.16.

⁶⁶ Zaero-Polo in Davidson, *Anybody*, p. 207.

⁶⁷ Allen, "Stealth Diagrams," p. 18.

⁶⁸ Hannes Meyer, "Über marxistische Architektur," quoted in K. Michael Hays, "Diagramming the New World, or Hannes Meyer's 'Scientization' of Architecture," in Peter Galison and Emily Thompson (eds), *The Architecture of Science*, The MIT Press, Cambridge, 1999, p. 246.

⁶⁹ Hays, "Diagramming the New World," p. 234.

⁷⁰ Hays, "Diagramming the New World," p. 249.

⁷¹ Zaero-Polo in Davidson, *Anybody*, p. 208.

⁷² MVRDV, "Datascapes" FARMAX Texts, 1997, quoted in Stan Allen, "Artificial Ecologies: the work of MVRDV" *EI Croquis* No. 86, 1997, p. 28.

⁷³ Yoshiharo Tsukamoto, Momoya Kaijima, Junzo Kuroda, "Made in Tokyo," *Architectural Review*, Vol. CCXX, No. 1256, October 2001, pp. 80-83.

⁷⁴ Tsukamoto, Kaijima and Kuroda, "Made in Tokyo," p. 83.

⁷⁵ Allen, "Artificial Ecologies," p. 27.

⁷⁶ Allen, "Artificial Ecologies," p. 30.

⁷⁷ Greg Lynn, "Forms of Expression: the proto-functional potential of diagrams in architectural design" in *Quaderns*, No.72(i), 1995, p. 18.

⁷⁸ Lynn, "Forms of Expression," pp. 16-17.

⁷⁹ Lynn, "Forms of Expression," pp. 19.

⁸⁰ Ben van Berkel in Greg Lynn, "Conversation by modem with Ben van Berkel" in *Quaderns*, No. 72(i), 1995, pp. 7-8.

⁸¹ Bill Hames, et al, "Interview: Hames Sharley on the bell tower," *The Architect* (WA), Vol. 39, Spring 1999, p. 36.

⁸² Hames et al, "Interview."

⁸³ Hames et al, "Interview," pp. 36-37.

⁸⁴ M. Christine Boyer, *The City of Collective Memory: Its Historical Imagery and Architectural Entertainments*, The MIT Press, Cambridge, 1996, p. 4.

⁸⁵ Public debate through letters to the *The West Australian*, local papers and magazines made much of the bell tower's image as a monument to Richard Court's (the Premier of WA at that time) personal vanity, its role as kitsch tourist attraction, and a denial of local aboriginal connection to the site.

⁸⁶ Kevin Robertson, "An Earthbound Rocket," *The Architect* (WA), Winter 2001, p. 15.

⁸⁷ Boyer, *The City of Collective Memory*, p. 5.

⁸⁸ Banham, *Los Angeles*, p. 216.

⁸⁹ Robert Venturi, *Learning from Las Vegas*, The MIT Press, Cambridge, 1972; and Donald Appleyard, Kevin Lynch & John R. Myer, *The View from the Road*, The MIT Press, Cambridge, 1964, are also important to note here.

⁹⁰ Melvyn Webber (et al), *Explorations into Urban Structure*, Philadelphia University Press, Philadelphia, 1964; J. Friedman and J. Miller, "The urban field", in *Journal of the American Institute of Planners* Vol. 31 No. 4, 1965.

⁹¹ Deleuze and Guattari, *A Thousand Plateaus*; Koolhaas, in Sigler, S, M, L, XL; William Gibson, *Virtual Light* Viking, London, 1993.

⁹² Rob Krier, *Town Spaces: Contemporary Interpretations in Traditional Urbanism*, Krier Kohl Architects, Birkhäuser, Basel, 2003, p. 9.

⁹³ Congress of New Urbanism, *Charter of New Urbanism*, 1998.
<http://www.cnu.org/cnu_reports/Charter.pdf>

⁹⁴ Léon Krier, Richard Economakis, Demetri Porphyrios, David Watkin, *Léon Krier : Architecture & Urban Design 1967-1992*, Academy Editions, London, 1992.

⁹⁵ Kenneth Frampton, *Modern Architecture: A Critical History* (1980), Thames & Hudson, London, 1985, pp. 294 – 300.

⁹⁶ Camillo Sitte, *City Planning According to Artistic Principles* (1889), Translated by George R. Collins and Christiane Crasemann Collins, Phaidon Press, London, 1965. On the relationship between neo-traditional urbanism in Europe and the US see: Phillip Meuser, “Experiments with Convention: European planning from Camillo Sitte to New Urbanism,” in Rob Krier, *Town Spaces: Contemporary Interpretations in Traditional Urbanism*, Krier Kohl Architects, Birkhäuser, Basel, 2003.

⁹⁷ Boyer, *The City of Collective Memory*.

⁹⁸ Peter Katz (et al), *The new urbanism : toward an architecture of community*, McGraw-Hill, New York, 1994; Beth Dunlop, “The New Urbanists: The Second Generation,” *Architectural Record*, Vol. 185, No. 1, 1997, pp. 132-135.

⁹⁹ My arguments concentrate on the shared values of New Urbanist practitioners but it should be noted that there are also very real differences in approach. Of particular note is the more regional focus of Peter Calthorpe’s transit oriented developments (TOD’S), which place more emphasis on the integration of mixed-use development centres with public transport infrastructure (particularly light-rail). These projects place less emphasis on the smaller scale elements, such as architectural codes, than Duany and Plater-Zyberk’s traditional neighbourhood developments (TND’s).

¹⁰⁰ Karen Falconer Al-Hindi and Caedmon Staddon, “The Hidden Histories and Geographies of Neotraditional Town Planning: The Case of Seaside, Florida”, *Environment and Planning D: Society and Space*, Vol. 15, 1997, p. 354.

¹⁰¹ Bressi, “Planning the American Dream” in Katz, *The New Urbanism*, McGraw-Hill, New York, 1994.

¹⁰² Leon Krier, “Afterword,” in Alex Kreiger & William Lennertz (eds), *Andres Duany and Elizabeth Plater-Zyberk: Towns and Town-*

Making Principles, Rizzoli, New York, 1991, p. 119.

¹⁰³ Andres Duany, “Our Urbanism”, *Architecture*, Vol. 87, No.12, 1998, p. 39.

¹⁰⁴ Duany, “Our Urbanism”, p. 38.

¹⁰⁵ Newman’s theories primarily focused on the division of space into manageable zones: public, semi-public and private. The clear demarcation and delineation of space - by physical or symbolic barriers - was intended to provide residents with ‘defensible space’ that they could survey, control and maintain ‘ownership’ of. See: Oscar Newman, *Defensible Space*, Architecture Press, London, 1972; B. Poyner, *Design Against Crime: Beyond Defensible Space*, Butterworths, London, 1983; B. Hillier and J. Hanson, *The Social Logic of Space*, Cambridge University Press, New York, 1984; T. Crowe, *Crime Prevention Through Environmental Design: applications of architectural design and space management*, Butterworth-Heinemann, Boston, 1991.

¹⁰⁶ David Harvey, “The New Urbanism and the Communitarian Trap”, *Harvard Design Magazine*, Winter/Spring, 1997, No.1, p.1.

¹⁰⁷ Foundation for traditional Neighborhoods cited in Daralice D. Boles, “Reordering the Suburbs”, *Progressive Architecture*, Vol. 70, May 1989, p.87.

¹⁰⁸ Vincent Scully, “The Architecture of Community” in Katz, *The New Urbanism*, p. 226.

¹⁰⁹ Katz, *The New Urbanism*.

¹¹⁰ David Harvey, “The New Urbanism and the Communitarian Trap”, p. 3.

¹¹¹ Ivonne Audirac and Anne H. Shermeyen, “An Evaluation of Neotraditional Design’s Social Prescription: Postmodern Placebo or Remedy for Suburban Malaise?” *Journal of Planning Education and Research*, Vol. 13, p.165.

¹¹² Apart from the published Charter for New Urbanism, and many articles detailing the work of the movement, The Congress for New Urbanism has a website that effectively markets their techniques as easily, and universally, applicable. The principles are also increasingly being taught within schools of architecture and planning. These moves build upon the extensive promotional work undertaken by Duany and Plater-Zyberk, which included extensive lecture tours and design workshops (reminiscent of the lantern slide shows undertaken in the early twentieth century to promote the Garden City).

¹¹³ Western Australian Planning Commission, *Greater Perth: Population and Housing, Discussion Paper Two*, WAPC, Perth, 2003; Western Australian Planning Commission (prepared by SGS Planning & Economics), *Costs of Urban Form: Discussion Paper*, Perth, WAPC, 2003.

¹¹⁴ D. Hedgcock and T. Hibbs, "Perth's Suburban Traditions: From Orthodoxy to Innovation," in David Hedgcock and Oren Yiftachel (eds), *Urban and Regional Planning in Western Australia: Historical and Cultural Perspectives*, Paradigm Press, Perth, 1992.



Post-modern Urban Pastoral

Chapter Six

Inevitably the Australian ideal of a five-roomed detached villa for every family will recede further during the remaining years of the century. It will be threatened by more flats, perhaps a revival of terraces, by cluster housing and other multiple dwelling types yet to be invented. One day historians may decide that the heyday of the private separate home was the first half of the 20th Century, and by the 21st it may have reverted to type. It may only be a prize for millionaires or a bush refuge for hermits.¹

Robin Boyd's 1952 predictions for the composition of Australia's residential landscape have proved inaccurate. In 2001 the detached, single family dwelling that Boyd imagined would be so scarce represented 80% of all dwellings in Australia. Perth itself had one of the highest percentages of detached dwellings in relation to that national statistic, with approximately 75% of all dwellings being detached houses.² The dominant urban landscape in Australia remains the suburb.

As earlier chapters have described, Perth's suburban ideal has drawn upon the garden suburb as an enduring source of ideas about the built environment and its influence on human behaviour and wellbeing. This chapter examines recent urban development in the metropolitan region that, whilst having some parallels with the earlier Endowment Lands Development and Empire Games village, reveals more

recent changes in local attitudes to suburban form making. Joondalup, a satellite city approximately 20 kilometres to the north of Perth, has been a site for continuing experimentation in urban design and planning aiming to control Perth's sprawling suburbs. First planned in the mid 1970s, Joondalup was intended to help structure suburban growth, providing an alternative economic, recreational and cultural focus to Perth's central city.

The development of Joondalup has important implications for the future of Perth's metropolitan area. Its role as a planned regional centre has been a critical part of the response to Perth's increasingly problematic growth during the second half of the twentieth century. In more recent decades the expansion and form of Perth's suburbs has been closely associated with negative social and environmental impacts, leading to planning measures that have concentrated more on reducing suburban growth than simply directing its expansion. Joondalup has also been a key part of these efforts, being promoted as a more sustainable urban form for Perth and containing model residential developments intended to reconfigure the typical suburb.

This chapter is focused on the promotion during the 1990s of Joondalup as an ideal city, a "city in harmony" as its marketing proclaimed. The context for the development of Joondalup, in the post Second World War critique of the suburb, is discussed initially. The early conception of Joondalup along the lines of the English New Towns is then addressed in order to contextualise the later analysis of the city's development. Following that description of its planning context, the way in which Joondalup was presented and marketed as affective form, incorporating the ideal of a "city in harmony," is discussed. Emphasis is also placed on the critical role that landscape played in creating a place-image that would appeal to Perth's suburban population. It is suggested that an urban pastoral ideal underlay the selling of Joondalup - linking the salutary effects of "green space" with idealised neo-traditional city forms.

Further, it is argued that the marketing of the city represented a means of extending the impact and understanding of affective form. Joondalup's ideal "lifestyle"

characteristics were conveyed and reinforced by advertising and informational literature that linked those characteristics to the city's urban form. The importance of that marketing and the development of place-image to the conception of affective form is examined, and those issues are discussed with particular reference to the development of the City North precinct within Joondalup.

City North is a predominantly residential area within Joondalup's city centre, developed in the early 1990s. The project was envisioned as a model residential and mixed-use precinct, drawing on the ideas of New Urbanism to structure its form. As a model development City North was created to provide an alternative form to the sprawling suburbs of Perth. Its design drew upon recent urban design and planning concepts, such as New Urbanism, that promoted neo-traditional urban form as a means of generating more integrated, harmonious communities. The planning and design of the built environment was deployed in City North as a tool to shape residents' social relations and their moral lives, reinforced by marketing and media promotion. As such, it is suggested in this chapter that City North's role extended beyond simply providing a more physically compact development model to establishing affective urban form. City North is discussed in relation to that conception of affective form that underpins its planning and design and functions as a critique of Perth's garden suburb ideal.

This thesis has been concerned with a number of themes: the importation of urban design ideas to Perth, their transformation locally, the enduring influence of the garden suburb ideal in Perth, but particularly the tracing of ideas of affective form through each of those processes. This chapter is concluded by an examination of the model of affective form that emerged in City North and its implications for Perth's urban form. Particular attention is given to the role of image and place-selling in the underlying understanding of affective form and its relation to Perth's future urban development.

Reforming the Suburb

Since World War II, population growth in combination with a powerful residential development model of low-density suburbanism has meant a rapid geographic

expansion of Australian cities. As discussed previously, this situation has produced an environment integrally associated with the positive aspects of an 'Australian way of life.' The social, economic and health benefits of the Australian suburb perhaps have been most famously championed by Hugh Stretton in *Ideas for Australian Cities* (1970), where he writes:

Most Australians choose to live in the suburbs, in reach of city centres and also of beaches or countryside. Many writers condemn this choice, and with especial anger or gloom they condemn the suburbs. Planners' debates often concentrate their disagreements on the same issues: the question of urban density, and the quality of suburban life.³

Stretton felt the need to defend the idea of the suburb because of growing criticism of the expanding suburbs as 'urban sprawl,' assuming a similar trajectory in their growth to the dysfunctional suburbs of North America. However, that comparison must be carefully addressed; there are critical differences in the development of American and Australian suburbia. Along with the low-density suburban development that metropolitan planning in Australia has always facilitated there have also been recurrent attempts to recast the urban form of the city so that the inequalities, inefficiencies, and waste entailed in such expansion might be avoided.⁴ Criticism of the suburban landscape's spatial features is tied to animosity towards the sociological ills post-Second World War urban development has engendered. Appearing from the 1950s onwards (even as the conditions of sprawl described were first being formed) a considerable amount of debate has focused upon the loss of the traditional city centre, and the social conditions of the suburbs - where those without a car are often socially isolated.

Joondalup was conceived in the suburban landscape, and planning system, that developed after World War II. The 1950s and 1960s in Australia saw the consolidation of the suburban development process and witnessed an institutionalisation of the planning profession - which concentrated on providing improved local environmental amenity through rationalisation and efficiency.⁵ Existing zoning and density controls are the most obvious evidence of this process; their bounding of everyday life introduced new socio-spatial borders of inclusion and exclusion codified in law.

The dominant predilection catered for in the planning of those post-war residential communities was the preference for the fully detached house in its own block of land, separated from the noise, dirt and congestion of the city. In Perth the desires for generous lot sizes and open space in the suburbs were codified in the planning standards established after the Stephenson-Hepburn Report (1955). The prevailing expectation for Perth's suburbs has since been defined by those standards; since the late 1950s metropolitan growth has been characterised by lots sizes of approximately 750m² and 10% of land in residential areas being set aside for public open space.⁶

The report paid particular attention to suburban design and, as detailed in the previous chapter, new approaches and standards for the subdivision of land emerged. The initiatives were utilised in the post-war development boom, adopted and applied in a sustained manner. Controls over zoning, building bulk, plot ratio, daylighting and building lines became integral parts of the planning vocabulary along with an increasing emphasis on accommodating growing amounts of traffic. Those new planning techniques, alongside the ability to control the release and development of land for a wide range of public facilities, gave planners the power to conceive of new communities, and the urban landscape that they would dwell in. Suburban growth in the 1950s and 1960s was rapid but its form was also being strongly directed.

In the decades following the Stephenson Hepburn Report a suburban planning and subdivision model became entrenched, based on public open space, school sites and commercial facilities integrated with housing and street layouts. A loose grid of arterial routes defined residential cells with community facilities grouped towards their centres and the street hierarchy isolating housing from other land uses. For the inhabitants of Perth during this period the suburban environment offered much of what they aspired to in their lives. Cheap, well-serviced land, with easy access (via car) to jobs, shops and schools, was consistently designed and developed to structure a fast-growing metropolis.

In *The Australian Ugliness* Robin Boyd saw the suburban development of the 1950s as the aesthetically vulgar result of mass free-enterprise society: “urban, technological, and mass squalor is in: ugliness au go go.”⁷ Whilst Boyd may have despaired of the lurid, disordered visual qualities of this landscape, Australia did develop relatively strong state and local planning systems to regulate its form. The Stephenson Hepburn Report was a significant marker of Perth’s progress in this regard.

During the latter part of the twentieth century the suburbanisation of Australia’s major cities saw their predominantly mono-centric urban form dissipate and shift toward multi-nucleated metropolitan regions. In Perth the urbanised area of the metropolitan region more than doubled between 1962 and 2002, still characterised by the low-density suburban development at the fringe.⁸

The history of planning intervention described above has meant that suburban growth in Australia, particularly Perth, has not necessarily produced the extremely disconnected and uncoordinated landscape that characterises North American “sprawl.” It is true that at a broad scale Australia has experienced many of the problems associated with such suburbanisation, but spatial regulation during the post-war period shaped cities in significantly different ways to the American models. The intervention of government agencies, through planners and architects, has been a consistent influence on the development of Australian cities and their suburbs.

America’s twentieth century suburbs were strongly defined by their political autonomy. Social services and infrastructure were provided by local governments and special districts, whilst in the 1990s private property owner associations started to fulfil those governmental obligations.⁹ This confined tax base of American cities and their localised services contrasted with the broad tax base and state controlled servicing of Australia. The distinction contributed to differences in national conceptions of suburbia’s significance; in that regard it has been suggested that in America the suburb has been especially valorised for its fostering of grass-roots democracy and civic virtue.¹⁰

More importantly for this discussion, those distinctions in suburban governance also have physical implications for the city. In the US the suburbs' political independence has increasingly translated into disaggregated and disassociated development, leading to descriptions of its current form focused on a sense of disintegration: "Post-Suburban America is fragmented and multi-nodal, with mixed densities and unexpected juxtapositions of forms and functions."¹¹ Australia's suburbs have been conceived and developed primarily as an extension of the city's fabric, albeit a stretching and thinning out of that material. Almost all Australians would consider themselves as living in a suburb of some kind. What would be referred to in America as city neighbourhoods are, in Australia, thought of as "inner" or "older" suburbs.¹² Planning controls locally have continued to regulate that relationship of centre and periphery.

In Perth, metropolitan growth during the late twentieth century has been directed by successive planning schemes into urban "corridors." Joondalup's development was tied to the changing patterns of development within those corridors. As shifted from areas of dormitory suburbs to a more diverse landscape - including nodes of commercial, industrial and recreational usage - Joondalup's form and role was also recast.

Thus, whilst the analysis of urban conditions in America has had a significant influence on such discussion, often providing useful parallels with the Australian experience, it should be approached carefully. Issues highlighted in the recent New Urbanist critique of the modern metropolis are a manifestation of this crossover. However, Australian cities have not simply developed in a manner derivative of North American urban morphology. Culturally sensitive analyses of Australia's metropolitan restructuring are important.¹³

Metropolitan Growth

Before addressing Joondalup and City North, including their translation of New Urbanist ideas onto the west coast of Australia, the planning and cultural conditions from which Joondalup emerged will be briefly outlined. That outline will help in

assessing the way in which the overseas ideas have been recast when used in Perth. Emphasis is therefore placed on the way in which governmental control of Perth's suburban development differentiates it from the more variegated American landscape. It is suggested that efforts by planning authorities to control Perth's urban form and development standards have helped to emphasise the suburb's role as the preferred residential environment.

The transformation from bushland to a new city has taken place in just 18 years, and Joondalup's progress has exceeded all expectations...Joondalup is a modern, carefully planned city, its designers sought a harmonious balance of residential, recreational, commercial, entertainment and educational elements. Together, they add up to a community in which lifestyle and progress coexist comfortably, within an infrastructure designed to support rapid and dynamic growth.¹⁴

Perth's urban development, in response to post-Second World War socio-economic conditions as well as prevailing planning and architectural ideas, has been broadly outlined (particularly in Chapters Three and Four). Particular attention has been given to some substantial shifts in the envisioning of the suburb- the ways in which the form of the garden suburb ideal altered over time. These were placed in the context of a rapid expansion of the metropolitan region, associated with Modernist development, planning and architectural strategies.

While the more recent role of Joondalup as a model development is the focus of this chapter, Joondalup was first conceived as a response to the problems arising from the urban expansion of the 1950s and 1960s. An outline of its evolving role as a tool in late twentieth century planning strategies reinforces the importance placed on its form as a way of restructuring the metropolitan region's growth.

It has been noted that the Stephenson Hepburn Plan had considerable repercussions for the formal qualities of the suburbs as Perth expanded.¹⁵ The series of "identifiable and self-centred" communities envisaged by the plan were intended as a strongly defined network, relating to the definite core of the city.¹⁶ However, the plan's assumptions about population growth, and the increasing influence of the automobile, underestimated the speed of population increase and the rise in use of the car. This, along with the lack of implementation of public transport systems

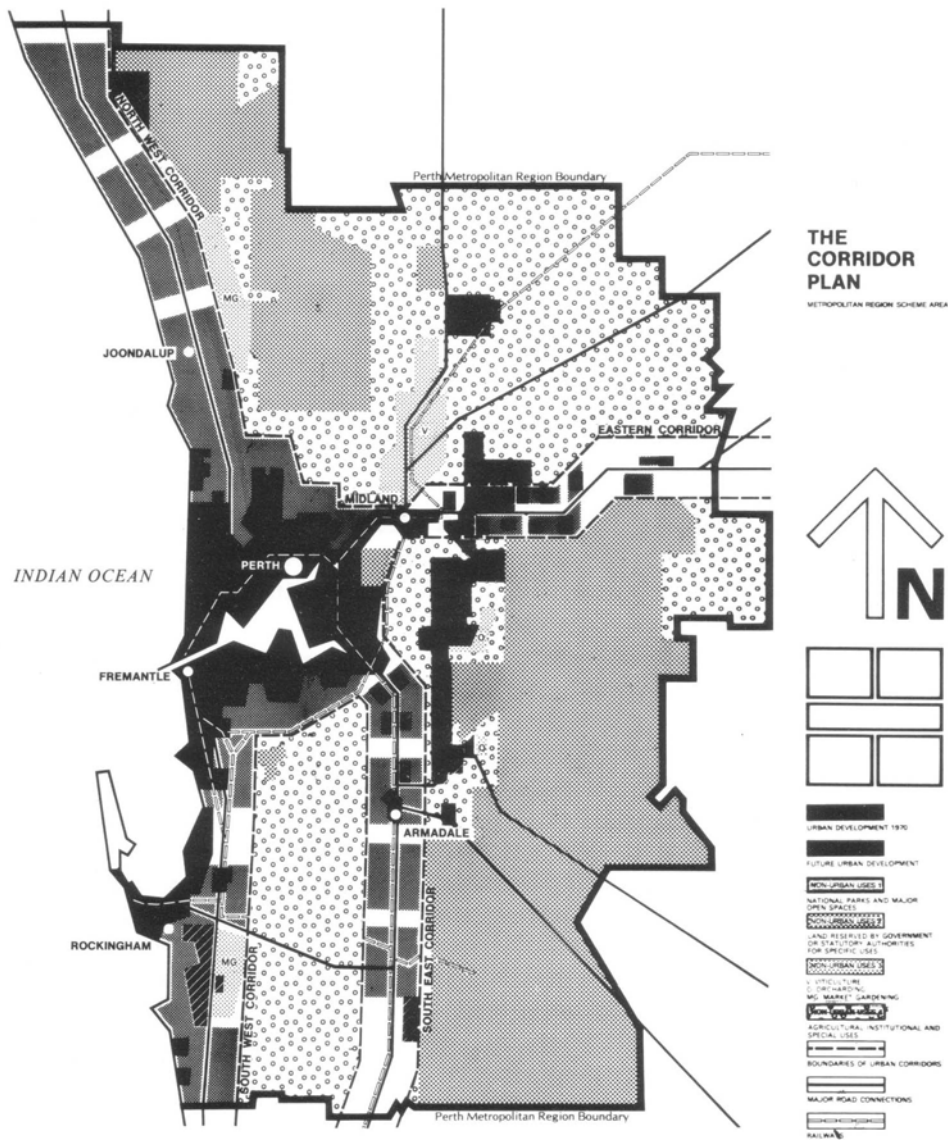
proposed by the 1955 plan, meant rising levels of congestion and urban sprawl occurred despite intentions to prevent both.¹⁷ Demand for the modern garden suburbs of post-war Perth placed particular pressure on the urban limits of the region. Future plans for the metropolitan region attempted to deal with this phenomenon and the regional centre of Joondalup emerged as part of an overall strategy to rectify congestion and sprawl.

The Corridor Plan for Perth, adopted by the Metropolitan Planning Authority in 1970, became the programme with which to manage this sprawling aspect of Perth's urban growth.¹⁸ It carried on the tradition of technocratic planning in Perth, conceiving the metropolitan area's growth in terms of a problem of form and structure. The agenda for the Corridor Plan was described in the introduction to the Authority's report on its workings:

The corridor plan then examines the physical and urban structure of the Metropolitan area and indicates the most desirable pattern for future urban and non-urban development. It deals with the distribution of population and workforce, the location of service and industrial centres, housing and recreation, and the expansion of utility services. It then relates all these to the proposed corridors of growth.¹⁹

The corridors of development that the Plan referred to were seen as being defined by the physical characteristics of the region and its previous patterns of growth. The establishment of the Kwinana industrial complex and the adjoining settlement of Medina-Calista in the mid-fifties, in effect, brought the south west corridor into being. The eastern and south eastern corridors were less developed at that time, consisting mainly of fruit growing and small holding areas. In the 1960s residential growth further urbanised these areas. In the north-west a corridor emerged with the extensive development of the suburban areas of Hamersley, Whitford and, eventually, Wanneroo. The north east, although served by road and rail routes, had not been used for urban purposes because of valuable Swan Valley vineyards, situated on either side of these routes immediately to the north and west of Midland.²⁰

The basis for the scheme was the concept that a corridor or linear city-region, containing satellite centres of activity, means shorter journeys to and from



57
The Corridor Plan, 1970.

employment, reducing strain on infrastructure, unlike the centripetal city which requires large amounts of the population to commute to its city centre daily. Plans for European cities like Copenhagen and Stockholm were drawn on to develop the corridor proposal. The 1948 plan for Copenhagen was a particularly important source; it suggested “fingers” of development radiating from the city, containing high speed suburban railways and separated by wedges of open space. The fingers connected the central city with satellite towns.²¹ It was a seductive diagramming of urban development that suggested an easily understood formal solution for the problems of sprawl.

Planning for the metropolitan regions growth continued to assume the continuation of a low density suburban environment.²² The Corridor Plan was conceived as a way of structuring and ordering its form; the linear corridors stretching out from Perth and containing satellite centres that rationalised transport infrastructure, employment location, and the residential environment. The notion of the satellite centres, referred to in Perth as “sub-regional centres,” was key to the functioning of this linear city. Their role was described in the report:

The Corridor Plan enables the regional centre to develop specialised functions to augment the facilities provided by the sub-regional and service centres.

In the Corridor Plan the intention is to create sub-regional centres and suburban centres to meet the many daily needs of the surrounding population. The Perth central area will no longer need to fulfil the role of providing all types of goods and services. It will be able to develop specialised retail, cultural and recreational activities for the region population.²³

As the sub-regional centre for the northern corridor, Joondalup’s role was also detailed:

In the north-west corridor, the Plan proposes that the major sub-regional centre should be located west of Lake Joondalup, where it is intended to locate the state’s third University and a regional hospital...The comprehensive plan for this area provides for a commercial, administrative and cultural complex.²⁴

Subsequently the means of government control over Joondalup’s development and, importantly, its form was established. A report in 1974 by Maunsell and Partners

Pty Ltd confirmed the feasibility of building the city in the vicinity of Crown owned State Forest Reserve 69 west of Lake Joondalup, in the Shire of Wanneroo.²⁵ Early in 1975 the state government, the Metropolitan Region Planning Authority and the Shire of Wanneroo appointed Professor Gordon Stephenson as planning consultant. Stephenson's experience designing the English New Towns contributed greatly to the recasting of and extension of Garden City ideas in Joondalup's planning. The government's complete control over the land on which Joondalup was to be developed allowed Stephenson and his team to sketch out a radical intervention in Perth's suburban landscape- Joondalup was to be a largely self-contained, planned city.

Legislation providing for the establishment of the Joondalup Development Corporation to further the design and development of the sub-regional centre in the future was passed in the spring parliamentary session of 1976 and received assent in April 1977. Thus the final report, containing the plan for Joondalup overseen by Stephenson, represented the culmination of more than two years research and design, testing and debate.²⁶ The Joondalup Development Corporation assumed planning responsibility for an area of 1425 hectares, of which nearly 1100 hectares was Crown land. About one-third of the planned area would be occupied by the sub-regional centre. Stephenson was optimistic that the Plan would fulfil the vision of the newly established Corporation:

I believe its proposals offer an exciting prospect and constitute the basis of design for the more detailed work which will be necessary when development begins and the centre grows to fulfil its function in the expanding Northwest corridor.²⁷

Leaving aside discussion of that first scheme for the moment, the growth of Perth's metropolitan region during the 1970s and 1980s is described in order to emphasise its serious implications for Joondalup's development. The continued spread of the suburbs, continued importance of Perth as an employment centre, and uncoordinated growth of various commercial centres during the 1980s and 1990s, undermined Joondalup as a focus for the urban form of the North West corridor. The design and development of Joondalup during the 1990s reflected that condition- Joondalup ultimately had to market itself in opposition to urban phenomena like

the large suburban shopping centres and business parks that had emerged in the preceding decades and weakened the importance of the satellite city.

In the years following the original plan for Joondalup the Northwest corridor experienced dramatic growth that wasn't fully anticipated by the Corridor Plan. The 1971 plan had a projected population for Perth in 1989 of 1.4 million people, this was expected to consist of 47% (670 000) of the population dwelling in the outer corridors and 53% (767 000) dwelling in the urban core. The projections in 1985, however, revised this to 68% (928 000) in the outer corridors and 32% (450 000) in the urban core. The Corridor Plan had not envisaged such a rapid flight of the population to the outlying areas.

Importantly, the urban core still provided the majority of workforce opportunities for the metropolitan region. Only 22% of the workforce actually worked in the corridors, which meant that between 1971 and 1981 the average journey-to-work distance had increased from 7.7km to 9.5km, rather than decreasing as predicted.²⁸ The city continued to develop as a mono-centric metropolis, the centre primarily a workplace for a population that retreated to dormitory suburbs each night.

Growth in the north-west corridor was dominated by those dormitory suburbs and it was particularly strong for a number of reasons. Firstly, agreements between the state government and developers at Whitford and Ocean Reef led to a commitment to provide roads and infrastructure by the government, helping bring thousands of residential lots onto the market. The incorporation of sources of groundwater into the comprehensive water supply allowed development to spread further, reducing reliance on traditional catchments. The progressive construction of the Mitchell freeway acted as a further catalyst for expansion. In terms of amenity, the attraction of the northern beaches also contributed to the desirability of the low-density residential lots. In effect, the government sponsored the continued extension outward of the low density suburban fabric.²⁹

The development of Regional Centres (as the Sub-Regional Centres of the Corridor Plan became referred to) was hampered by the continuing dominance of this type of

peripheral residential development rather than a poly-nuclear metropolitan region. Central Perth remained the commercial and cultural core for the metropolitan region while new commercial and retail development became spread throughout the suburbs in a piecemeal fashion.

Tensions between local and metropolitan planning authorities resulted in adverse consequences for the Regional Centres.³⁰ Local governments were a significant factor in that dissipated growth of the 1970s through to the 1990s. Whilst decentralisation did occur, firms and businesses were not only shifting into the regional centres, they were scattering instead across the metropolitan area, particularly in its inner and immediate suburbs. Shopping centres, business parks and other commercial developments were often approved by councils without regard to metropolitan planning objectives, thus undermining the intention for Regional Centres like Joondalup to be a social and economic focus in their corridors. The government itself also undermined the Regional Centres with state government agencies such as the Water Authority and the Education and Community Services departments relocating from the central area to adjacent inner suburbs rather than the regional centres themselves.

The *Planning for the Future of the Metropolitan Region* report (1987) and *Metroplan* (1990) were developed in recognition of such issues of uncoordinated metropolitan growth. In relation to the continued growth of the suburbs, the *Urban Expansion Policy Statement for Metropolitan Perth* (1990) concentrated almost exclusively on green-field suburban development as the means to accommodate future housing demand.³¹ It was a retreat from earlier considerations of urban consolidation as a means of controlling the physical growth of the city. *Metroplan* adopted this response to the continued expansion and suburban sprawl of Perth. The commitment of the plan to urban consolidation was limited- it also favoured continued, large-scale suburban expansion. *Metroplan* also demonstrated a reluctance to include an urban density policy as part of the metropolitan strategy. The new strategy returned to the indefinite urban expansion of the Corridor Plan and added a new north eastern corridor. An acknowledgement of the need to encourage denser development at Regional Centres was still evident in the plan but

in 1992 Yiftachel and Kenworthy noted that there had still been little effective action to support this policy.³²

The problems with the Corridor Plan and the later *Metroplan* strategy showed what could be considered a serious flaw in the structure of Perth's metropolitan planning system, from the point of view of developing Joondalup as an autonomous city. It appeared that Perth's metropolitan planners were unable to effectively control the form, structure and function of the metropolitan region. It could be seen that local authorities, without regard for metropolitan issues largely exercised control, and as such, Yiftachel and Kenworthy have argued, under the current system metropolitan planning effectively ceased to exist.³³ The strength of Joondalup as an instrument for influencing the form of the metropolitan region, and by extension its role as affective urban form, was being lost.

This dilution in strength of the planning for metropolitan Perth was primarily considered in relation to the effectiveness of planning forms and the regulatory instruments controlling them. However, it can also be seen as a result of the changing status of planning within the community. The task of metropolitan planning evolved from being seen as a predominantly technical activity to becoming a much more integral part of the political process. The Stephenson-Hepburn plan was prepared during a period where the idea of metropolitan planning assumed that planning represented a universal reform movement; the functioning of the city and the region could be analysed and changed through its form. The understanding at that time was that physical means were adequate to achieve a better city- the public interest could be identified, and there existed an adequate knowledge and expertise for the professional conduct of metropolitan planning. The subsequent plans adopted less ambitious approaches to intervention through form.

The Corridor Plan and *Metroplan* were created as strategic, rather than statutory, documents. A greater public interest and involvement in the process, and the subsequent political issues raised, meant that understandings of the management of urban development became far more complex. Issues such as the impact of city wide planning strategies on local amenity and their sometimes counteractive effects

on the development plans of local government areas became widely debated. Vocal resistance by local councils and in the general community to urban consolidation effectively forced the state planning bodies to reduce their advocacy for that strategy.³⁴ This transformed nature of urban planning is effectively demonstrated in the qualification of the 1987 Corridor Plan Review's objectives: "It is important to note that a set of objectives will to some extent contain internal contradictions".³⁵

The status of Joondalup within the Perth metropolitan region and its importance as a community node was inextricably linked with the objectives of successive metropolitan plans. The shift away from a cohesive master planning of the region's form and rigid statutory control of urban expansion led to the downgrading of active support of that kind for the Joondalup regional centre. The declining nature of government protection and sponsorship, for what could be seen as a social experiment, intensified the commercial nature of Joondalup as corporate entity. During the late twentieth century Joondalup City had to compete for its economic survival in Perth's contemporary urban landscape against other small-scale centres of activity: business parks, light industrial areas, shopping centres and strip malls. The impact of rival commercial and residential development, along with an increasingly corporatised government, escalated the need to differentiate Joondalup's physical and social environment in order to attract investment and residents.³⁶ It also changed the way in which the satellite city was conceived of as affective form. Joondalup's form in the 1990s was developed in the knowledge that its urban design had to be "sold" to local residents, and marketed against other developments in the metropolitan region. From Stephenson's plan for an antipodean New Town to the contemporary urban tableaux, the formal emphasis shifted from the efficient, rational coordination of the city form to constructing desirable place-images.

Suburban Reform

Responding to the need for reform of Perth's urban environment, as well as the need to create a marketable place-image for Joondalup, in the 1990s a design vision of Joondalup was projected that promised a city combining neo-traditional urban form (with an accompanying cosmopolitan atmosphere) and a suburban landscape

that represented the ideal environment for families. Affective form in contemporary Joondalup was defined in a combination of advertising narrative, image and built form.

The planning and design of Joondalup during the 1990s also played a part in moves towards restructuring the suburban model dominant in Perth. The issues of urban consolidation touched on in regard to *Metroplan* had become more urgent.

Joondalup, through City North, was part of attempts to introduce more environmentally sustainable and socially integrative suburban models to Perth. That aspect of Joondalup's planning is discussed later in this chapter, with a particular focus on the translation of New Urbanism to Perth. However, again it is useful to establish a broader context for that reformative urban design work and discuss briefly the issues of reform associated with the suburban landscape Joondalup sits within.

As outlined earlier, Joondalup is located in Perth's North-West Corridor- a swathe of essentially suburban development that stretches to the north-west of the city of Perth along the coastline. Joondalup city centre is approximately 20 kilometres north of Perth's CBD. It lies adjacent to suburban development structured by the design, planning and engineering parameters that have come to represent Perth's typical (and perhaps archetypal) residential environment.

These suburbs are overwhelmingly mono-functional, zoned areas of single family detached housing at low densities.³⁷ The structuring of the road system enforces a spatial hierarchy controlling privacy and street activity, as well as traffic flow. At a larger scale distributor roads provide access to residential areas but have no houses fronting on to them. At the other end of the scale, the cul-de-sac provides private, "defensible space," preventing any through-traffic and theoretically contributing to a safer, more neighbourly environment. The suburbs formed this way represent the "refining" of local subdivision design techniques since the 1950s. The residential environment created is focused on privacy and seclusion; the controls over building density, streetscape and traffic movement are designed to help in withdrawing from the urban environment of the city.

The continued spread of such suburbs on the fringes of metropolitan Perth and other Australian cities since the 1970s, and the debate over their economic, environmental and social impact, provided the impetus for rethinking their form.³⁸ The rising costs to government of providing water, sewerage, drainage, roads, schools, hospitals, recreational and community facilities to new suburbs became a serious concern by the mid-1980s.³⁹ The under-use of community facilities in inner areas increased that concern.⁴⁰ Over the same period the ecological implications of suburban development were also questioned: the high use of water, adverse effects on groundwater supplies, high energy use due to the inefficiencies of detached housing and reliance on the private car in transport

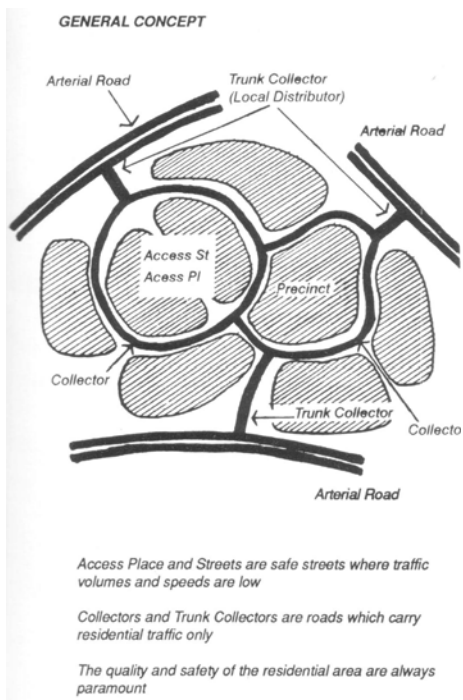
Negative public attitudes towards accommodation other than the detached house increased the need for an alternative vision for urban consolidation. It has been suggested that the relatively low levels of medium and high density development in Perth exacerbated their negative associations. The negligible amount of well regarded examples of higher density development in Perth, alongside ill-feeling generated by well publicised problems in SHC flats, predisposed suburban residents to oppose further construction.⁴¹ During the mid-1970s local councils began placing increasingly strict controls and restrictions on group housing developments and rejecting applications for higher-density developments. Increasing densities in the metropolitan region would need to be achieved through models quite different to those suggested by post-war modernist planning.

Whilst suburbanisation continued after the post-war boom (albeit at a slower rate), calls from planners and theorists for urban alternatives grew. By the end of the 1990s urban consolidation (generally understood as the increasing of urban residential densities) had become a central issue in Australian metropolitan planning. The accompanying debates on the need for consolidation, and its implications, revolved around a number of key issues. They can be broadly summarized along the lines of economic, environmental and social aspects. Economic concerns dealt mainly with claimed economic and energy efficiencies of compact cities; relating to issues such as infrastructure costs and travel times. The

environmental impacts also related to energy efficiency, as well pollution concerns. The most fraught discussion dealt with the potential social impacts of denser Australian cities. Argument centred on the values and social equity of established suburban densities versus those of a more consolidated city.⁴² That issue is particularly relevant for this chapters discussion of the alternative suburban model provided by Joondalup's New Urbanist derived form.

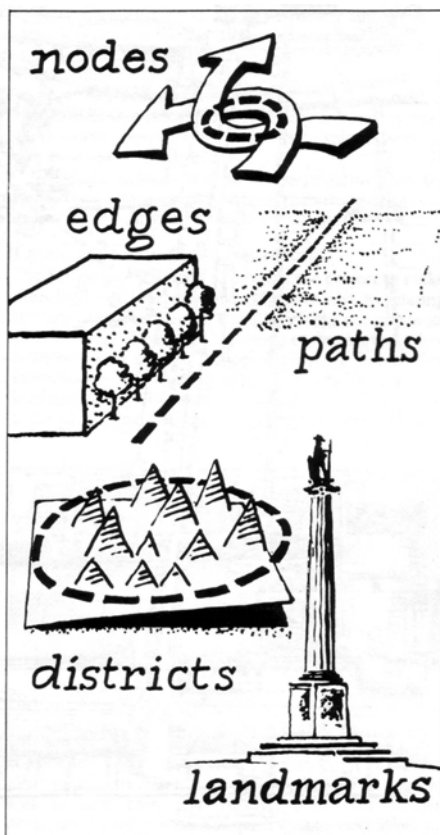
Mike Berry has outlined the diversity of influences generating policies of urban consolidation and densification during the 1990s.⁴³ Environmental and economic goals (such as reduced car dependence and greenhouse emissions) directed governmental planning policies towards densification, but the developing social issues related to an aging and diversifying population also influenced the search for alternative urban residential models. Essentially, a developing mismatch between housing needs and existing housing stock has been the expected consequence. That mismatch is expected to be driven by factors primarily associated with the declining size of the average household. Those factors include: an aging population, with a significant proportion of retirees, who will desire smaller, more easily managed accommodation, and a trend towards smaller, more urban dwellings as a lifestyle choice.⁴⁴

In response to those issues, urban debates in Australia have been polarised into those in favour of continued (but modified) suburban growth, such as Hugh Stretton and Patrick Troy, and advocates of more radical change (generally urban consolidation) such as Peter Newman and Jeffrey Kenworthy.⁴⁵ Alongside that academic debate, the form of Perth's suburbs since the 1980s has been the subject of a number of planning critiques and proposals for its reformation. They have included a national program to generate alternative suburban planning models (the Australian Model Code for Residential Development - AMCORD) as well as the importation of planning ideas from overseas in the form of the English "Responsive Environments" approach and the American "New Urbanism" concept. AMCORD was intended for adoption by local and state government and public and private developers.⁴⁶ The initiatives were taken up in Perth by Homeswest and eventually



58

Safe road network - Australian Model Code for residential Development, 1990.



59

Urban legibility analysis - Responsive Environments, 1985.

by private developers to provide an alternative housing type for the suburban market.⁴⁷

However, the alternative provided by the AMCORD project remained tied to established suburban development structures. The building block was still the single family, single storey, detached dwelling in a residential area, separated by zoning from other uses. Within the codes, notions of privacy, and the resident's desire for seclusion, dominated discussion of building form and its positioning. Little consideration was given to the relationship between the housing and the public realm of the street, other than to discuss measures of screening one from the other.⁴⁸

During the 1990s other critiques of the Perth's residential environment have proposed more dramatic reform. Planning theories from overseas have once again played a major role in the structuring of such re-evaluation. The Responsive Environments and New Urbanism concepts, which both look to the reassessment of traditional urban forms, have been used locally as models in the reformation of Perth's suburbs. Both overseas concepts value the creation of active public streets and squares over the privatised and secluded landscape of the modern suburbs.

The Responsive Environments concept was developed by a group of architects and urban designers associated with the Oxford Polytechnic (now Oxford Brookes University) in the UK. Their 1985 book *Responsive Environments: a manual for designers* made yet another critique of the residential environments produced by modernism:

The tragedy of modern design, it seems to us, is that designers never made a concerted effort to work out the *form* implications of their social and political ideals. Indeed, the very *strength* of their commitment to these ideals seems to have led designers to feel that a concentration on form itself was somehow superficial.⁴⁹

In response to that concern, the manual's authors advocated the reappropriation of forms and spatial qualities associated with the traditional city, analysed through the categories of: permeability, variety, legibility, robustness, visual appropriateness,

richness and personalisation. The key points of the book and the general approach it outlined have been adopted by Australian planning professionals including those in Perth.⁵⁰

In the Australian context the critique was applied more generally to the process of suburban design as planners found fault with the dominance of the car, the lack of human scale, and the social isolation of the resulting environment. In Perth the “Liveable Neighbourhoods” residential development codes have been trialled since 1998; they are based on the AMCORD but have a strong relation to the concepts of the Responsive Environments model.⁵¹ The aims of Liveable Neighbourhoods include walkable neighbourhoods, more mixed-use development, permeable street networks and an emphasis on the control of urban form as a way of fostering a sense of community and local identity in neighbourhoods and towns.⁵²

New Urbanism has been promoted locally in a similar way to the Responsive Environments theories - through lectures, design workshops and published literature. Its proponents have offered a similar critique of the modern suburban landscape and New Urbanism enjoys some similarities with Responsive Environments in its approach to the reformulation of urban design.⁵³ In Perth it has also managed to impact on planning approaches, providing both a source of inspiration for designers and techniques for a number of innovative urban design projects in the metropolitan area.⁵⁴ New Urbanism, like Responsive Environments, reinforces the importance of form in the rehabilitation of the urban environment. As discussed in the previous chapter, its critique of suburbia, and the solutions it offers to the social and environmental problems of the suburb, is grounded in an understanding of urban form as affective.

Criticism of the economic, social and environmental impacts of the suburb has been widespread in Australia since the 1970s. Debates about more sustainable and socially responsible forms have been dominated by the question of the size, density and form of the suburbs. Since the 1980s in Perth, attempts have been made to provide alternative suburban models, drawing significantly from overseas development models. The most important of these have been the Responsive

Environments concepts from the UK and New Urbanism from America. Joondalup provides an important project for discussing the importation of New Urbanism and its conception of affective form. Both the city centre of Joondalup and the City North project draw extensively upon the neo-traditional planning forms and concepts of New Urbanism in their design and promotion.

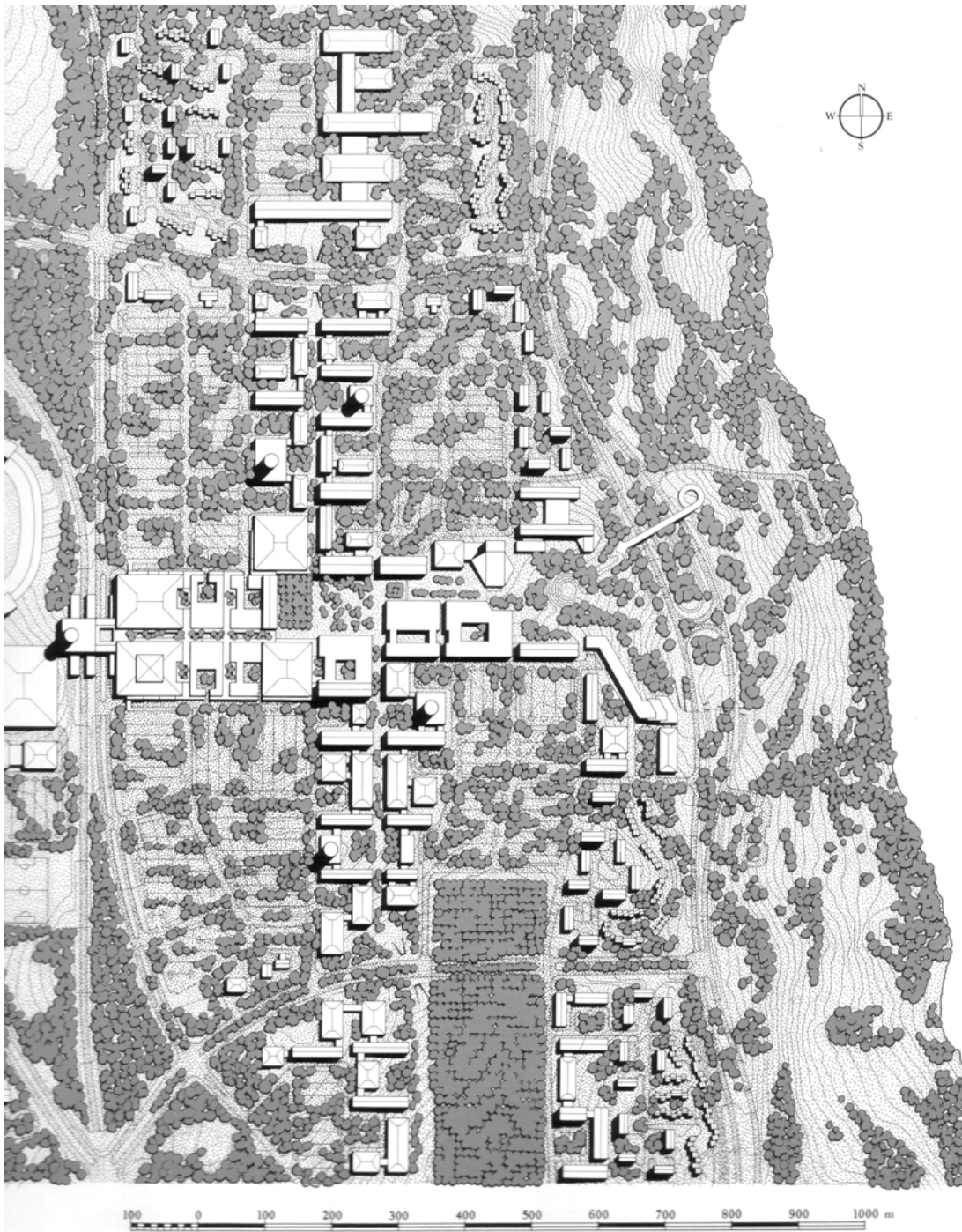
Selling the City in Landscape

Joondalup is significant as a recent attempt to address Perth's suburban sprawl using affective form. The city has been promoted as a more sustainable, compact regional centre that helps consolidate the metropolitan region's form whilst acknowledging the enduring preference for the Garden Suburb. The remainder of this chapter will outline the significance of Joondalup in this regard.

Firstly, the vision of Joondalup as a New Town inspired city, outlined in the Stephenson plan, will be examined. That study will provide a background the recasting of its form during the 1990s as a synthesis of garden city and neo-traditional planning. Both the notion of Joondalup as a satellite city, and the way that its urban form is projected as socially affective, will be addressed.

As Tom Stannage has noted, Gordon Stephenson was a "child of the British Garden City movement and parent of the international New Towns movement."⁵⁵ His commission to prepare a plan for Joondalup was consistent with the critical influence that the garden city reforms and English town planning had on the planning history of Western Australia. The reinterpretation of the garden city ideal that emerged in the original proposal for Joondalup represented its ongoing evolution and application as a social and physical model.

The 1977 plan consolidated Stephenson's planning influences and drew especially on his experience in England, planning the New Town of Stevenage. His work on Joondalup continued a pursuit of social reform through the built environment, and reconciled that with the local inclination toward the garden suburb as an ideal residential environment. The 1976 plan for Joondalup was significantly more than a pragmatic, technical response to the needs of an expanding metropolitan Perth. It



60

Central Joondalup, The Stephenson Plan, 1977.

also contained a vision of a proposed community that symbolised societal advances to be gained through the judicious planning of the built environment.

The centre is designed for people who delight in moving freely in quiet or crowded promenades and gardens. They will not be harassed by obtruding cars, trucks and buses. Joondalup may be the first centre in the world with an unbroken pedestrian system uniting the extraordinary mix of people and buildings to be found only in the heart of a city. Because of the generally level site, the core can everywhere be designed for people of all ages and kinds, including mothers with young children and the disabled. Every day and evening it could be a meeting place for a growing population interested in an ever increasing range of activities.⁵⁶

The concept of the Joondalup Regional Centre was structured in opposition to the developing middle landscape of suburban Perth; the plan posited a form of urbanism that drew considerably on planning models evolved from the garden city idea. The English town planning movement that arose as Ebenezer Howard's legacy, and the American variants on this tradition, provided strong stimulus for Stephenson's scheme. Hence, Joondalup was not devised as a garden city but continued the transfiguration of Howard's model seen in subsequent planning projects (from the works of the Regional Planning Association of America (RPAA) to the New Towns Committee in Britain). Those projects continued aspects of the Garden City model - mainly in the mode of planning rather than formally deriving from garden cities like Letchworth. The legacy can be identified through various aspects of Joondalup's planning: its role as a self-sufficient urban centre, peripheral to the primary centre of Perth; the protection of the natural landscape and its importance for the community; and the idea of urban containment.

Most conspicuous in the Stephenson plan for Joondalup was the explicit utilisation of techniques derived from the Radburn development in New York. In 1926 the RPAA, an informal group of architects, planners, proponents of conservation, sociologists, and economists embarked on this project- a residential development intended as an updating of the garden city, particularly intended to address the impact of the car on urban life. It did not have Howard's model of community land ownership, nor did it contain all the elements needed for a self-contained community, but in its internal design it pioneered new principles of suburban development. These reappeared in the English New Towns, were also incorporated

into Joondalup's initial design, and would influence subsequent suburban development models in Perth (some of the principles can be seen translated in subdivision design techniques discussed previously within this chapter). The elements of the Radburn plan, as defined by its primary designer Clarence Stein, were:

THE SUPERBLOCK in place of the narrow, rectangular block.

SPECIALISED ROADS PLANNED AND BUILT FOR ONE USE INSTEAD OF FOR ALL USES: service lanes for direct access to buildings; secondary collector roads around superblocks; main through roads, linking the traffic of various sections, neighbourhoods and districts; express highways or parkways, for connection with outside communities. (Thus differentiating between movement, collection service, parking and visiting).

COMPLETE SEPARATION OF PEDESTRIAN AND AUTOMOBILE, or as complete separation as possible. Walks and paths routed at different places from roads and at different levels when they cross. For this purpose overpasses and underpasses were used.

HOUSES TURNED AROUND. Living and sleeping rooms facing towards garden and parks; service rooms towards access roads.

PARK AS BACKBONE of the neighbourhood. Large open areas in the centre of superblocks, joined together as continuous park.⁵⁷

These elements, and variations upon them, reappeared in the Joondalup Regional Centre in response to Perth's own developing problems of urban congestion.

Stephenson applied a number of the ideas directly to Joondalup, feeling that "the Joondalup centre could uncompromisingly follow Radburn principles, with people in large numbers moving through inner malls and spaces without seeing vehicles."⁵⁸

The configuration of buildings and open spaces within the city centre derived from the "superblock" concept of Radburn; service access and parking was relegated to the exterior edges of the built envelope, leaving the interior as a landscaped pedestrian space. This privileging of the pedestrian also led to the continuous system of cycleways and footpaths present in the 1977 scheme. Stephenson envisaged the system as a radical gesture: "Joondalup may be the first centre in the world with an unbroken pedestrian system uniting the extraordinary mix of people and buildings to be found only in the heart of a city."⁵⁹

The proposed system of land tenure within the development also recalled the Radburn experiment (and its grounding in the tradition of the Garden City). The

corporation retained control over land in commercial centres and public facilities whilst subdividing and selling the residential areas. The principle reflected a belief that residential market demand would remain continuous whilst office, shopping and other developments would take place gradually. It also suggested a faith in the state as the co-ordinator and provider of public services.

However, the scheme for Joondalup was more than simply an application of the Radburn principles. It incorporated Stephenson's experience with the English New Towns and his schooling in architectural modernism, along with an accommodation of the local context and input of the other design team members. It certainly bore the influence of the garden city but evolved from its precedents, much as Radburn did:

Radburn did not become a Garden City. It lacked in complete greenbelt [sic]. It did not succeed in securing industry. Its underlying land, excepting the inner block parks, was not retained in single ownership for or by the community. All this is true- but the fact remains that in spite of the avowed intention of the Corporation to create a Garden City, eventually the pressing need of demonstrating the Radburn idea overshadowed the Garden City idea. In large part it superseded it.⁶⁰

The community envisaged by the Joondalup plan of 1976 was different from that existing in Perth at the time, especially in its relation to the built environment. Underlying Stephenson's description of the new city was a sense that the form of the development would improve the social environment of its residents. The architectural and urban forms portrayed in the report suggested a definite modernist lineage and imposed a stylistic homogeneity across the site. The vision was of a clean, urban focused, centripetal society with a highly developed and consonant aesthetic sense. Like many Modernist planning and architectural visions it projected rational and regular form as symbolic of an efficiently ordered and functioning society. Locally, it was a model that, like the modernist housing of the games village, was set in opposition to the perception of Perth's central city congestion and disorderly suburban growth.

However, the singular, consistent vision of that plan dissipated; lost in the move away from Modernism's project "of a last rebuilding of the whole space occupied by

humanity.”⁶¹ Instead, post-modern Joondalup (the city described in plans and marketing images of the 1990s) was envisioned as the setting for a neo-traditional urbanity fused with local expectations of a verdant suburban landscape. The Development Plan prepared in 1990 conspicuously outlined the shift in approach:

The Joondalup Development Corporation’s vision for Joondalup is for a city centre that offers more than highly planned new towns, which often lack the quality and vitality of cities which have evolved over many decades. To achieve this, the design of the Joondalup City Centre draws upon the essential characteristics of historically developed cities ... An emphasis on city centre retailing and entertainment will ensure a significant level of pedestrian activity and commercialism which, combined with a diverse activity mix, will help to create an urbane, 24-hour character often lacking in new urban areas.⁶²

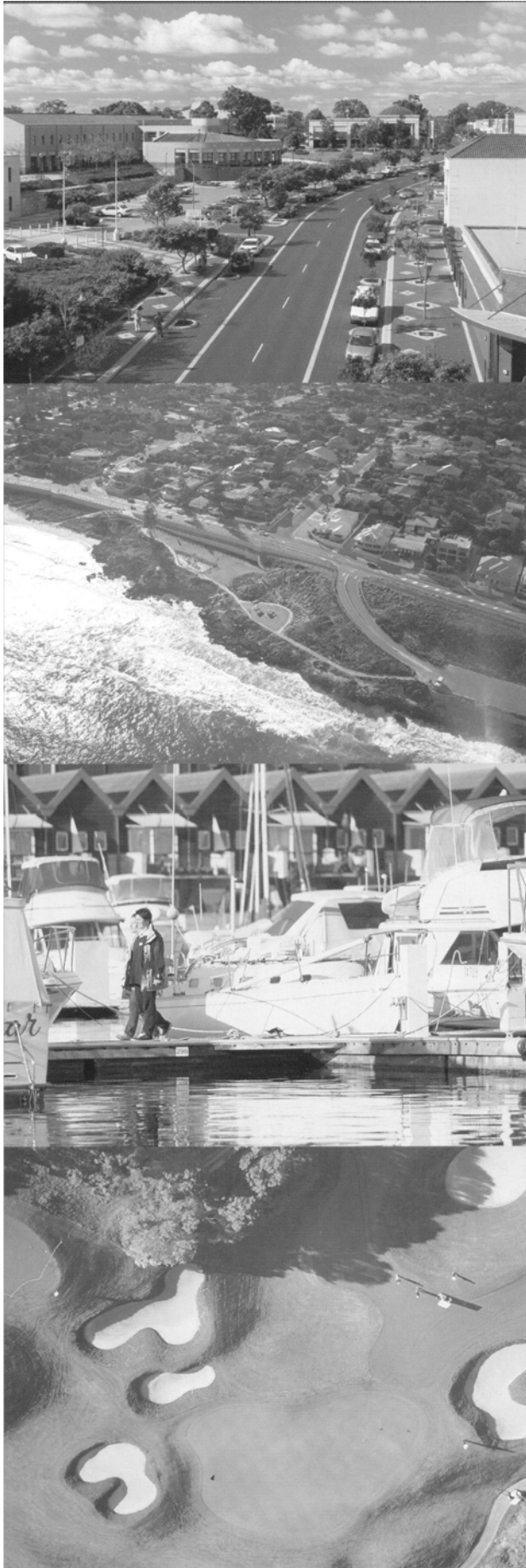
The original planning of Joondalup, as a city, embodied a different understanding of its regional role than the “mini-Paris” described in the 1990s. Its initial form, described by the plan of 1977, was as a synthesis of the dominant local suburban model and the New Town planning model, represented by Stephenson.⁶³

Selling the City in Landscape

Being able to design the city from the ground up has presented a unique opportunity. The theme at Joondalup is ‘A City In Harmony’ - a city in harmony with its environment and its people.⁶⁴

The preceding quote, from a pamphlet published in the early 1990s to promote living in Joondalup, points to the way that an underlying conception of the city as affective form was an important part of Joondalup’s more recent planning and design. It also demonstrates the manner in which promotional material, theming, and place-imagery became a key part of developing the understanding of affective form. Within that process Joondalup was envisioned as a setting for neo-traditional urban streetscapes combined with a verdant suburban landscape.

The following discussion explores the intersection of a “green” landscape ideal with urban forms introduced to reestablish traditional street life and public activity in the City of Joondalup. The dissolution of the Garden City model’s assumptions about city form during the late twentieth century is outlined as well as the manner in which a strong concern with “natural” landscape, nevertheless, continued to



61
Joondalup marketing images, c1998.

underlie aspirations for the ideal urban environment. The notion of an “urban pastoral ideal” is outlined within the recent place selling of Joondalup to describe the conception of the city’s affective form that arose. More specifically the use of nature and lifestyle as commodity in LandCorp advertising material is examined: the creation of the construct that is “Joondalup: A City in Harmony.”

It is suggested that the combination of the elements of city and suburb contributed to the proposition within Joondalup of a new residential model for Perth. This model, like the Endowment Lands development and the Empire Games village, recast the elements of the garden suburb and projected them as affective form - critical to the development of better social relations and community character. The new urban form developed within Joondalup attempted to reverse the dispersed, disaggregated trajectory of Perth’s suburban development, proposing instead a model that valorised the physical and social relations of “traditional” towns and neighbourhoods. In promoting this new model, and attempting to influence the understanding of its design as socially ameliorative, Joondalup’s role as affective form was critically tied to its promotion through text and image. That promotional process privileged the narrative image in communicating the idea of Joondalup’s form as a catalyst for a better community. It replaced the technocratic plans and drawings of the 1950s and 1960s with advertising storyboards that made persuasive associations between the design and planning of the city and its socio-economic success.⁶⁵

Recasting Joondalup

Rapid post-war urban expansion in the UK and Australia compromised the Garden City ideal of a self-contained community. Continued growth eventually undermined the ability of the New Towns to rationalise the urban form of that expansion. However, the New Town concept was only one of the ways in which the garden city tradition was recast in the late twentieth century. That tradition shifted in form during the 1990s in order to respond to a new era of decentralization in planning and diffusion of the city. The Garden City is an ideal that continues to be modified and re-imagined and continues to underlie the formal ideals of numerous urban design projects.

What made the continual re-assessment of this model possible is that Ebenezer Howard's concepts still relate strongly to some aspects of the contemporary metropolitan landscape.⁶⁶ His key idea of "a marriage of town and country" gave powerful form to desires for a reformed urban environment at the time of its conception and still underlies the aspirations of many urban dwellers. However, the definition of 'town and 'country' has become problematic when the dominant environment of contemporary cities is often a complex, low density collage of urban, rural and suburban elements.

Rather than develop a distinct town-form, as originally projected, Joondalup became enmeshed in the suburban fabric of Perth; it was no longer the conspicuous Modernist intervention first envisaged. Its symbolic and functional role in the metropolitan region was undermined by dispersed development through the metropolitan region and the subsequent creation of multiple commercial, industrial and recreational nodes. Given the mobility that the car brings, Perth's inhabitants increasingly lived at a regional scale.⁶⁷ That mobility was not simply an automatic response to the independent transportation of the car, and increasingly flexible communication and production technologies, but reflected a deeper shift in social and economic ideals. As Robert Fishman has observed, Ebenezer Howard's original hopes, for a self-contained community, implied an economic ideal where a stable, static job and employer were integral. In what Fishman has termed the "post-suburban age," that stability and certainty was gone.⁶⁸

In the early twentieth century the model of the garden city presupposed a localised workforce whose skills would be desirable and sought over the long term by a small group of employers located in close proximity to that workforce. That ideal was never realised, it subsequently transpired that highly educated workers came to require a more broadly-based or regional job market to find appropriate employment. The possibilities for all members of a family finding suitable, and highly localised, work were increasingly low. The job market in the late twentieth century, most noticeably in the high-tech areas of the new city, took on much of the mobility and instability of its nineteenth-century urban counterpart.⁶⁹ Workers had

to be prepared to treat their place of residence as only a base from which to seek economic opportunity throughout the decentralised region.

Another consequence of that disassociation of home from employment was the greater priority placed on the amenity of the residential environment - a continuing theme for the suburb. In the residential marketplace consumers sought homes that combined accessibility to work and leisure possibilities. Spatial dependencies for those opportunities were increasingly eliminated during the late twentieth century.

Like employment, consumption and leisure were rarely contained within the borders of Garden City inspired developments; although they were also conceived as central elements in the formal layout. Howard promised to accommodate that “class of shopping which requires the job of deliberation and selection” within the “Crystal Palace” at the centre of the Garden City.⁷⁰ New Town planners in England devoted much effort to creating convenient and attractive shopping areas, but post-war affluence created demand for a wider choice of products and services than any single locality could provide. In the United States, at least, the local mall was largely displaced by vast, enclosed “edge cities”, or “mega-malls”.⁷¹ This situation could be seen to some extent in Perth with the development, in the latter half of the twentieth century, of large, enclosed shopping malls drawing customers from throughout the city. Leisure, too, became regionalised; in addition to journeys-to-work and journeys-to-shop there were now routine journeys to diverse recreational destinations such as the beach, organised sporting events, amusement parks and the countryside.

The characteristics of that new decentralised urban environment were beginning to be seen in the late 1960s, when Melvin Webber published “The Post-City Age,” projecting the effects of advanced industrialisation and burgeoning communication technologies on cities. Later observations of “Edge Cities” and “technoburbs” noted the continuing trend towards decentralised metropolitan regions that interwove economic, recreational and residential segments of the landscape. The resultant urban field had a more uniform morphology.⁷²

The changing structure of the urban and suburban environment led to the demise of concepts such as the New Town as convincing planning forms. Consistently enshrining the ideal of a self-contained community, such projects were built on a dialectical relationship between the concepts of town and country, centre and periphery, and upon distinctions between those pairs of terms which became much harder to discern within the urban regions that developed in the 1980s and 1990s. In Joondalup the echoes of such precedents – the ideas of an autonomous, satellite city - as part of the Stephenson plan consequently dissipated. However, the deeper tradition of using nature as a background to urban development continued, its role and very definition changing as the construct of Joondalup was transformed:

Joondalup was originally the vision of former premier Sir Charles Court, one of WA's foremost economic development architects. Back then it was just bush. Thirty years later, Joondalup has been transformed from a concept into a beautiful garden city which is a global showcase for urban development.⁷³

The vital role of green space, and the concept of nature as an ameliorative element, forming a part of the urban landscape, remained critical in the envisioning of Joondalup during the 1990s. Nature, or the countryside, appeared more frequently as an element woven into the metropolitan region than a landscape in opposition to the city. In that regard, the characteristics of the garden suburb landscape in Perth strongly influenced the manner in which Joondalup's environment was formed. The imported model of the garden suburb, continually shifting to accommodate local conditions and social change, became a preference for planners. It was a prejudice that came to be presupposed as the model for particular environmental characteristics. As such, the role of public parks, private gardens, and the extensive vegetation of interstitial spaces, alongside low-rise, low-density, detached housing, was consistently defined as critical to the development of a healthy and harmonious community. Green space and leafy vistas continued to exemplify measures to civilise the urban environment.

City as Landscape

'Nature', rural scenery, vernacular architecture, village settlement form and a nostalgic idea of 'countryside' have been the source of much of the inspiration for

the treatment of the ills of the industrial city, in the search for more liveable urban environments and for the ideal metropolitan form. In short, a persistent Arcadian thread runs through the landscape history of the modern western metropolis.⁷⁴ In the 1960s Leo Marx described that persistent reference as existing in a number of forms; the idea that he termed “cultural pastoralism” was the most persuasive in terms of planned visions for society. He argued that it operated in the ideas of planners, architects and social visionaries including Ebenezer Howard, William Morris and Frank Lloyd-Wright.⁷⁵

“Cultural pastoralism ” as described by Marx, constituted a reaction to the world characterised by the desire to withdraw from the complexities of a structured civilisation toward a natural environment promising individual freedom and instinctual spontaneity. The reaction reflects that phenomenon of ‘metropolitan shock’ described in the early twentieth century by figures such as Simmel and Musil. Their writings evoked an emerging sense of alienation from the burgeoning metropolis; the rapid and intense stimulation of the city was apparently numbing the urban dweller.

The deepest problems of modern life flow from the attempt of the individual to maintain the independence and individuality of his existence against the sovereign powers of society...He becomes a single cog as over against the vast overwhelming organisation of things and forces which gradually take out of his hands everything connected with progress, spirituality and value.⁷⁶

The development of the modern suburb resulted from the transformation of this reaction into the idea of the “Urban Pastoral.” Not advocating a complete retreat to a primitive life-style, the Urban Pastoral impulse envisioned a mild, cultivated terrain, a “middle landscape” in which the conflicting values of art and nature, civilisation and primitivism merged into a characteristically rural environment located between a dichotomy formed between concepts of untamed nature and the city.⁷⁷ More recently, Alex Krieger has suggested that, despite the inherent rejection of the normative urban/rural dichotomy, the green landscape between city and country is precisely the form of settlement that the western world has desired since the Enlightenment. Karl Marx’s villain, the “idiocy of rural life”, and Rousseau’s

“artificialities of over-civilisation” were both to be overcome by the picturesque; constructing this radical new landscape between the geographies associated with each domain.⁷⁸

J.B. Jackson, in discussing the idealised political, or city landscape and the natural, also touched upon this powerful desire for a middle realm:

None of us is ever entirely political animal or entirely inhabitant; we are unpredictable mixtures of the two. We enjoy the dense vitality of the city only to complain that there are not enough green spaces where we can be alone with nature. To live close to nature in the open country is a wholesome experience- if only there were more political coming together!⁷⁹

However, James L. Machor has posited yet another “middle” realm- differing again from the definitions of Leo Marx, and possessing a distinct moral geography. It is a model that relates closely to the “post-suburban” landscape described earlier. In his own urban-pastoral vision Machor conceived of a landscape where the city blends harmoniously with the countryside; or contains within its own boundaries, urbanity, complexity and sophistication combined with the physical or social attributes of simple rusticity.

He has suggested that such a synthesis might take a number of forms, from the preservation of open green spaces in the urban topography to an “organic” relationship among the inhabitants. The essential element of this impulse is the provision, for the urban population, of some means to renew the elemental connection to the spontaneous, natural self whilst remaining a member of society, of the city and of civilisation.⁸⁰ In comparison to the purely pastoral vision, the ideography of urban pastoralism does retain a dialectic structure; however, it substitutes the rural-urban dichotomy with an opposition between the over-civilised city, cut off from nature, and the organic city that maintains contact with pastoral values.

Urban pastoralism suggests more than an attempt to infuse cities with a touch of greenery and rural virtue in order to combat the evils of the metropolis, although at times it has ostensibly taken that form. Rather, the ideal constitutes a vision of

society where city and country are components that operate in harmony, and are equally valuable in the evolving landscape. The urban pastoral vision, in its most ambitious form, is one of a completely harmonious society, at one with its landscape.

Urban pastoral visions such as Howard's Garden City, in addition to their desire to provide a physically superior environment, can be viewed as a means of balancing the conflicting desires for individual self-gratification and a need for social identification; rural freedom and civic *communitas*. The vision delineates a balance between the political and natural landscape modes described by J.B. Jackson. Machor used the thoughts of Freud and Herbert Marcuse in an attempt to understand the simultaneous longing for each. Freud pointed out in *Civilisation and Its Discontents* that the impulse to return to nature, to the pristine conditions of isolated independence that emerge from the desire for "the happiness of quietness", is only one of the drives influencing the individual. He believed that behaviour is also impelled by the power of Eros and what he called the "reality principle", or an awareness of external necessity. Thus the individual is pulled simultaneously away from society and toward it.⁸¹ Marcuse also noted, drawing on Freud, that the struggle between individual desires and group orientation frequently "generates the wish that paradise be re-created on the basis of the achievements of civilisation".⁸² Thus, the middle landscapes of the Garden City, and its subsequent incarnations, functioned as an alternative to the congested, socially degraded city, providing civilising greenery. The disaggregated, low density environment of the post-suburban region might even be viewed as an ideal middle landscape in that regard.

Urban pastoralism, to a large extent, functions as an ideal of affective form, reconciling antithetical cultural ideas. The ideal operates on a subconscious level by fusing divergent values of rustic nostalgia and the striving for a more advanced urban civilisation - certainly the greening of cities and the concern for the preservation of nature within the city is not seen by most urbanites in terms of a moral geography. Essentially, by conceiving of cities that unite the best of urban activities with pastoral values, the appeal of the urban pastoralist vision lies in its reconciliation of the personal conflict of self-fulfilment and group identification, and

the cultural tension of change and continued stability. Freud explicated the dilemma of urban pastoralism in a manner that can be related to this discussion: “one of the problems that touches the fate of humanity is whether such an accommodation can be reached by means of some particular form of civilisation or whether the conflict is irreconcilable.”⁸³

The understanding that “nature” and green space have a moral dimension has a long history. The Garden City was an explicit example of that sense of affective form through its conception of a verdant landscape as means to balance the ills of the industrial city. Since the nineteenth century, speculation on the development of an ideal residential environment has been continually occupied with the problem of making an accommodation of the urban and the rural – a middle landscape. The construction of Joondalup in the 1990s, through text and visual media, was a model of just such an accommodation. The city’s promotional and informational material described a community that resembled that middle landscape in its social structuring as well as its built environment. The “City in Harmony” provided a vision of an urban centre that provided the sociability and vitality of idealised traditional towns with lush green-spaces. It was a vision that also suggested an ideal community that emerged from the landscape - combining urban sophistication with suburban privacy and exclusivity. The following section of this chapter addresses the way that the vision, and its conception of affective form, is constructed and transmitted.

Joondalup: City in Harmony

During the 1990s, the construction of the Joondalup city centre, and associated commercial and residential development, saw a greater recognition of the role of market forces in the progress of the city - and the impact of consumer aspirations on demand for Joondalup the product. The marketed vision for Joondalup of that time suggested that its design was integral to the creation of a vibrant, sustainable community - the form of the city was critical to selling Joondalup as a location for the home, for business and for cultural activities. An understanding of affective form was put forward that placed emphasis on an association between the streetscapes of New Urbanism and the creation of an urbane city.

Some theorists have argued that this type of construction of image reflects a typical condition of the post-modern, western city; that of culture subsumed by the new logic of capitalism.⁸⁴ Late Capitalism, we are told, has produced a uniquely semiotic society, which is regulated by a combination of the material and the representational. Indeed, Frederic Jameson has proposed that there is hardly an area of life, whether it Nature, the Unconscious, or Culture, untouched by this prodigious expansion:⁸⁵

...a formerly autonomous cultural sphere is appropriated into the service of capital's accumulative logic and, once entrapped, [is] delivered as an inauthentic culture of pastiche, simulacrum and commodification.⁸⁶

Taking Jameson's perspective it could be argued the Joondalup that emerged from the advertising literature and marketing was an assemblage of projected needs and desires embodied in the prospective inhabitants. In that sense it was a construct formed by the government body LandCorp in association with marketing and developing consultants (LandCorp's corporate slogan was "Developing Land and Community"). The harmonious, urban pastoral city ideal became a cultural commodity, the lifestyle by which Joondalup was promoted to the consumer. However, where Jameson saw the cultural sphere as being deactivated, and difference being subsumed with the undifferentiated homogeneity and globalisation of capital accumulation, other accounts of postmodernity point to the reconstitution and revalidation of place, locality and difference.⁸⁷ In that view, place-selling strategies are used by different localities to elaborate distinctive self-images – an attempt to create individual identity and "marketability" in opposition to the homogeneity that Jameson identified.

Place-selling for Joondalup linked form with all the components of a desired urban lifestyle - city living with easy access to open, green space, as well as the rest of the metropolitan region. It was exemplified by the images of people drinking coffee in inner city cafés, high-tech train stations, houses in leafy surrounds, and kids riding bikes through urban parks. Through marketing the city form came to represent, even produce, a lifestyle that could be bought into. In his discussion of consumer

society Baudrillard identified the condition we have reached through that sort of process as one where consumption has grasped the whole of life. A condition where:

...All activities are sequenced in the same combinatorial mode; where the schedule of gratification is outlined in advance, one hour at a time; and where the 'environment' is complete, completely climatised, furnished, and culturalised. In the phenomenology of consumption, the general climatisation of goods, objects, services, behaviours, and social relations represents the perfected, 'consummated', stage of evolution which, through articulated networks of objects, ascends from pure and simple abundance to a complete conditioning of action and time, and finally to the systematic organisation of ambience, which is characteristic of the drugstores, the shopping malls, or the modern airports in our futuristic cities.⁸⁸

We can identify that characteristic of the post-modern city as a commodification of ambience. Homogenisation occurs, not of place, but of the experience of place: all aspects of the city become consumptive. The associated process of city marketing has been defined as a process whereby:

... urban activities are as closely as possible related to the demands of targeted customers so as to maximise the efficient social and economic functioning of the area concerned in accordance with whatever goals have been established.⁸⁹

Cities have always existed within markets of some sort, and competed for resources, activities and residents. However, shifts in late twentieth century western society altered the nature of those urban processes and the way cities were used. The major changes included: the deindustrialisation of cities and the rise of a service economy; the blurring of the distinction between the function of cities as centres of production and of collective consumption; perhaps most importantly, the increased freedom of activities to locate without constraints imposed by physical distance. Those changes can be related to concomitant changes in the individuals' relationship to modern living. For a variety of reasons urban societies became "more variegated, individualistic, internationally aware, and oriented to life styles based upon a fashion conscious and rapidly shifting consumerism."⁹⁰

Two characteristics became particularly important for the social and economic success of cities at the end of the twentieth century. Rather than traditional geographical, environmental and infrastructural attributes that would be conducive

to industrial growth and increased trade, the concepts of amenity, and the perception by potential residents of an attractive lifestyle, became much more important. Amenity could be simply defined as the quality of the natural or built environment of cities; more broadly it could include access to a wide range of urban residential, social, recreational and cultural services. Hence, the way cities became evaluated as places in which to live, work, invest or relax during the 1980s and 1990s made the way that they were viewed of critical significance. The perception of a city, the mental image projected and held, became active in its economic success or failure.

That market-oriented approach was similar to the substantive urban plans of the 1950s and 1960s in its focus on the comprehensive, graphic detailing of physical interventions.⁹¹ However, the broadly ambitious social aims of modernist, professional planning, and the parallel vision of an apolitical development process, gave way to an intense focus on “target groups” and “potential consumers.”⁹² Associated with this shift was an increased concern with the shaping and projection of suitable urban images through the built environment, and the careful representation of that environment to appeal to consumer aspirations. As Ashworth and Voogd noted:

In this way conventional urban spatial management by its control, for example, of street furniture, landscaping, building design, and many other contributors to what can be termed style, is operating within a new and broader management context of marketing.⁹³

The concern with the visualisation of cities responded to the consumer society that emerged in the late twentieth century, particularly the increased reflection by people on the social conditions of their existence. As Nigel Thrift and Paul Glennie explained, an important shift was made: “this reflectivity was predominantly cognitive and normative, but increasingly it is also aesthetic.”⁹⁴ That observation was reiterated in the accounts of figures such as Jean Baudrillard, Umberto Eco and Dick Hebdige, which traced the emergence of style as identity and consumption as a form of self-definition.⁹⁵ The selling of an urban lifestyle became an integral part of the increasingly sophisticated commodification of everyday life, where images,

aspirations and myths were endlessly packaged and made “hyper-real.” The regeneration of the London Docklands during the 1980s saw an example of that commodification in the context of the built environment and demonstrated the new role of designers: “we have no land use plan or grand design; our plans are essentially marketing images.”⁹⁶

At the end of the twentieth century marketing – the development of place-image – usurped the role of the technocratic masterplan. The city’s form was consistently tied, through promotional imagery, to the creation of settings for an ideal lifestyle. Urban environments were required to accommodate multiple, desirable conditions – urbane socialising in inner-city cafés with the privatised retreat of the leafy suburb. Affective form was intimately linked to its associated imagery, its power to generate the ideal city derived from its ability to be visually “consumed.”

In addition to the planning of the city, the imagining of Joondalup was dominated by promotional imagery and advertising.⁹⁷ It was a comprehensive example of city marketing that worked to shape responses to the built environment, hoping to form positive associations between its form and different lifestyle aspirations. Thus, the dynamics of the social identity of Joondalup, the post-modern city, were inferred through the aestheticised, commercial representation.

Joondalup and its Place Image

The post-modern Joondalup of the 1990s was connected to the garden suburb ideal through an appropriation of the verdant as civilising, and its projection of that ideal through promotional imagery. In a similar manner the neo-traditional tropes of New Urbanism were also incorporated into Joondalup’s place-image, and affective form.

“Reading” the publicised construct of the marketed city shows the presence of an urban pastoral vision that underpinned the place-selling strategy of Joondalup. The numerous references to landscape, nature and the natural environment within Joondalup structured an image of an urban community that resided within a natural landscape, that was in harmony with it and that identified itself with the culturally

established benefits of a proximity to nature. The following are excerpts from various advertising brochures for Joondalup:

Joondalup's parklands and landscaping are very much its trademark. 'Central Park' will act as the lungs of the centre of the city linking it to the lake's edge. These parklands preserve the natural bush whilst also providing a unique setting for recreational and cultural events.

The emphasis within the city is on pedestrian and bicycle traffic, to reduce the noise and pollution from motor vehicles. The natural environment too is very much a part of the city. Existing vegetation and extensive landscaping provide a soft balance to the buildings.

The ultimate goal is to have a city which offers all the benefits of a much larger city, within a pleasant and stimulating environment.

The Joondalup neighbourhood features a unique linear park system providing safe and convenient access between major parks and the Joondalup Primary School, neighbourhood shopping centre and housing sites.

Joondalup City is situated in a stunning location, nestled alongside the beautiful Lake Joondalup and Yellagonga Regional Park. Great care has been taken to preserve the natural environment and to incorporate this into the city design. Where possible, native vegetation is being maintained or re-planted instead of simply cleared. A comprehensive landscaping programme for roadside reserves and public spaces has also been undertaken.

An environment policy for the Joondalup City ensures that high environmental standards are maintained by all those involved in the development of this new centre.⁹⁸

The themes and framing language of the promotional material conveyed an urban pastoral ideal; they essentially operated on an aesthetic level, treating the commodified landscape as a sales feature. Their use indicated the recognition of a modern nostalgia for 'countryside' which, as has been discussed, can be traced back to more fundamental desires for harmony and simplicity of lifestyle.

As Michael Bunce has noted, the modern version of an Arcadian idea of nature and green space as the cure for urban ills, has held distinct significance for modern communities in relation to a traditional ideal. The translation of the urban pastoral developed multiple implications for "nature" within the city. In Joondalup the role of the landscape was one of aesthetic value, but it was also an aspect in the

regeneration of urban community. That aspect of “nature” as a redemptive, civilizing influence in the urban realm stretches back to Enlightenment times; its instrumentalisation in the nineteenth century was covered in the first two chapters of this thesis. A similar image of a benevolent “nature” pervaded Joondalup: the notion of landscape in the promotional material was repeatedly linked to the concept of a friendlier, safer, more harmonious, more compact, urbane community. The term consistently used was “neighbourhood” with its connotations of locality and familiarity. Thus, nature was seen as critical to the formation of a balanced society.

In positing the greening of the city as a method of humanising the urban environment the promotional literature echoed the Victorian notion that “nature” and open space would make for a more healthy and moral people and a more civilised city. Joondalup’s Central Park not only bore the same name as Frederick Law Olmsted’s seminal urban park but was also described in terms that aligned it with Olmsted’s vision of the ameliorating effects of rural scenery within the urban context. He gained much of the inspiration for that type of park from his visits to England where the concept of the urban park as a relief from the congestion of the industrial city was developed. Indeed, the description of Joondalup’s Central Park as “the ‘lungs’ of the centre of the city” was effectively derived from the work of nineteenth century urbanists who drew upon their predecessors in the Enlightenment and their conception of the city as arteries and veins of movement.⁹⁹

The analogy of park to lung in the nineteenth century was, as Bruno Fortier has observed, simple and direct: the people flowing through the city’s street-arteries were meant to circulate around these parks, breathing their fresh air just as the blood is refreshed by the lungs. Those planners drew upon the contemporary medical premise that in Fortier’s words, “nothing can actually become corrupted that is mobile and forms a mass.”¹⁰⁰ In England, the nineteenth century parks spurred by the work of the Commons Select Committee on Public Walks (1833) were explicit in their aim of moral and physical improvement of the poor.¹⁰¹ Recreational use of the parks by the working classes was understood to aid physical fitness (through fresh air and exercise) and to morally improve by offering an

alternative to the pub and its dubious entertainments. James Pennethorne, in planning London's Victoria Park, was certain of "the good effect which rational amusements produce on the lower orders."¹⁰²

By the 1990s urban green ideology favoured not only the formally landscaped park, but also a more liberal concept of public parks, as well as the integration of "nature" and green space into the everyday urban fabric.¹⁰³ Within Joondalup, in addition to formal parks, there were National Parks, landscaped road reserves, pedestrian paths and cycleways, bush trails and sporting grounds. Additionally, a proposed environment centre was "designed to educate residents how to truly live in harmony with the fragile surrounding bushlands."¹⁰⁴

Reflecting a wider cultural shift, the concept of landscape and nature within the city has altered in the transition from nineteenth century *laissez faire* society to that of the late capitalist twentieth century. The discourses on morality and health that informed projects such as Victoria Park (begun in 1845) shifted in meaning and importance in the commodification of post-modern landscape. In Joondalup "nature" was sold in a variety of forms as an element of 'lifestyle.' Green space in the city provided and symbolised opportunities for exercise, relaxation, social engagement, environmental improvement and escape from the urban.

The planned, harmonious community of Joondalup, where "lifestyle and progress coexist comfortably," and its descriptive literature inferred a sense of an "other" - a landscape lacking the qualities observed in that urban pastoral idyll.¹⁰⁵

Traditionally, as has been discussed, the urban pastoral character mediated between the uncultured, yet natural, rural and the civilised, yet artificial, city. Joondalup's form was inferred as being a reaction to the ugly, dangerous, congested and artificial urban core, suggesting specifically the city of Perth. The creation of the Joondalup City tableaux - its historicised streetscapes - allowed it to be marked, measured, marketed and transacted; the stylised and representational form of that commodity allowed it to compete against the "other" for capital investment.¹⁰⁶

Additionally, in forming that image, Joondalup was also differentiated from the surrounding suburban milieu - a distinct identity and urban form was described to

prevent it being subsumed by the homogeneous residential landscape it sat within. The undeclared consequence of a suburban landscape lacking Joondalup's urban centre was the post-modern horror of sprawling tracts of undifferentiated speculative housing and a subsequent loss of identity.¹⁰⁷

The consistent emphasis implicit in the visual and textual construction of Joondalup was that of a harmony produced between differing orders of urban form; the vivifying qualities of the natural landscape were synthesised with the dynamism of the city and the cordiality of the suburb. The representation of Joondalup's role as a regional centre was symptomatic of this fusion of ideas. Within the visual construct of Joondalup "City in Harmony" there were references to its physical separation from Perth as an urban centre, suggesting a discrete and alternative retail, commercial and recreational focus. However, those references also emphasised the ease of travel between the two domains. Thus, whilst projecting the idea of Joondalup as a separate, internally focused community it was simultaneously described as part of the larger city's hinterland. Again, the promotional material described that connectivity:

Joondalup is situated 26 kilometres north of the Perth City centre - a convenient freeway drive or rail journey of just 20 to 30 minutes' duration.

In designing the city, special attention has been paid to its transportation networks to ensure easy access to, from and within the city as it grows.

You know, there's so little reason to travel kilometres any more - when everything you need is right here. In your street. In Joondalup City North.¹⁰⁸

The image of Joondalup functioned in that way to suggest something akin to a utopian development, providing everything the imagined community could wish for in a living environment: the natural surrounds of the rural, the urbanity of the traditional city, and the accessibility of the suburban landscape.

As part of that vision, more was offered than merely physical separation and the obvious notion of a retreat to a gentler landscape. Consumers were also asked to "come out to inner city living." In accordance with Joondalup's intended role

within the metropolitan region the city was described in terms that suggested a “bustling city centre, with a core ‘urban’ character.”¹⁰⁹ However, “character” operated in a theatrical, rather than qualitative, sense as the urban qualities of Joondalup often contrived features for the construction of a scene - a stage set created to market the city.

Development in Joondalup was controlled by codes that aimed to produce that urban character. The *Joondalup City Centre Development Plan and Manual* outlined acceptable building form, scale and style. It also delineated various precincts within the city and their required character, land uses and building elements. The visions outlined by the marketing of the city were intended to be constructed through the use of these controls. In that way the understanding of the urban fabric as affective form became folded in on itself, as the idea that form might produce a better community was then reinforced by images that supposedly demonstrated it. Idealised conceptions of nineteenth century communities and their associated urban forms were drawn upon as source material for Joondalup’s form and imagery. As Christine Boyer has noted, in describing similarly planned developments:

What characterises these new urban zones are the reiteration and recycling of already-known symbolic codes and historic forms to the point of cliché. Codes control signs, materials, colours, ornamentation, street furniture, and street walls; and codes also dictate the design of public spaces, the types of buildings, and the range of activities. Most important, codes contain a schema that generates a narrative pattern, a kind of memory device that draws associations and establishes relations between images and places, resemblances and meanings.¹¹⁰

The planning of Joondalup was intended to provide “a kind of mini ‘Paris’,” a “‘twenty four hour’ city,” one that “won’t go to sleep at night.”¹¹¹ Joondalup’s wide “boulevards,” artist designed street bollards (in the shape of mini-Art Deco skyscrapers), landmark clock towers and “Central Park” were part of a planning strategy that defined the form and aesthetics of its streetscapes as critical to the production of an urbane community. The development manual itself proclaimed:

The views of prominent features and vistas from significant locations are important contributors to the understanding of the city ... Key views and vistas will play an important role in the creation of the experience of the city and the construction of a memorable “image.”¹¹²

During the 1990s Joondalup was planned and promoted as a city that provided an ideal residential, commercial and recreational environment. Its successful balancing of varying economic, social and cultural needs was projected through a vision of an ideal middle landscape – civilising the urban realm with greenery. Joondalup remained connected to the garden suburb ideal through an appropriation of the verdant as civilising. Traditional city form was used as a symbolic means of expressing an urbane character and embodying a stable public realm. The combination of those two elements in the promotional construction of Joondalup – the natural landscape and neo-traditional urbanism – created a place-image that functioned as affective form.

City North: the Vision of Community

That urbane vision for Joondalup was most effectively articulated in the lifestyle narratives for the Joondalup City North development. The examination of City North will address the use of imagery and codes in its construction as affective form; as a mixed-use development that offers an alternative to the sprawling, alienated suburb and instead generates a diverse but harmonious community.

City North occupies approximately one third of the City Centre. In the 1976 plan for the city it was anticipated that the area would contain “hospital and central residential” activities. Subsequently educational and commercial activities were added to the mix of uses and the design of the precinct changed considerably. In 1991 the Joondalup Development Corporation (JDC), later to become LandCorp, announced that the land would be devoted to “a bold experiment in creating inner city living with a strong sense of community.”¹¹³ A team of architects, town planners and landscape architects produced the *Joondalup City Centre North Structure Plan* (1991) in response to the broad concepts outlined by the corporation. Their ideas were presented in planning meetings conducted with the consultants and included the desire for a strong community structure providing good pedestrian amenity, and a “strong, tight” urban structure that would allow flexible development and achieve “a sense of community through density.”¹¹⁴



62

City North – lifestyle images, c1996.

Drawing on studies of Australian inner-city suburbs, experiences of traditional European cities, and the work of American New Urbanists, the project team developed the structure plan for City Centre North.¹¹⁵ The plan was envisaged as a comprehensive document, “a fully coded development plan” that would delineate the urban form at a range of scales. The structuring of the built environment was carefully calculated, from the street layout to fencing materials.¹¹⁶ Accompanying the design work was similarly thorough marketing research and promotional programmes. Through that process a concept developed that was intended to “emphasise Joondalup as a city with all the associated diversity of activity, enterprises and institutions. [A] Sense of place and environmental quality should be emphasised.”¹¹⁷

That vision emerged in the promotional literature for City Centre North. The brochure *Joondalup City North: Come Out to Inner City Living* was particularly representative, detailing the lifestyle that could be expected within that precinct. Two contrasting stories were told, under the headings “Your Street, Your Lifestyle” and “Your Street, Your Livelihood”, both implying certain community qualities and characteristics emerging from the influence of the built environment.¹¹⁸

The first detailed a day in the life of a female resident at Joondalup. This can be assumed because the accompanying photographs all feature a female protagonist enacting the events described. The narrative portrayed an essentially passive, recreational existence commencing, in the morning, with coffee and socialising at a café. After that there was a bike ride, swimming, some gardening, shopping and a haircut. After preparing her children’s dinner, the day ended with socialising amongst friends.¹¹⁹

The second account detailed the day of a small business proprietor. In this case the accompanying photograph identified the subject as male. Joondalup’s mixed-use planning was demonstrated as enabling him to walk to his premises. Before opening his shop he greeted a neighbouring businessman who, even more

conveniently, lived above his own shop. After a typical working day the protagonist closed his shop and returned home, stopping along the way for a coffee, where his thoughts turned to the Joondalup street life: bars restaurants and cafes; meeting friends, dining out, people watching and unwinding.¹²⁰

Both of the narratives depicted an urbane community that enjoyed the benefits of the vibrant city, whilst also comprising a strong notion of a localised, neighbourly setting. The natural environment was similarly crucial to the structuring of the Joondalup City North “lifestyle”; a temperate climate, clean surrounds and easy access to recreational facilities (such as beaches and parks) were expressed as integral parts of the *mise en scène*. As a representation of Joondalup, the characters portrayed in the promotional material embodied an idealised populace; they were members of a society where what could be described as ‘traditional values’ held. The archetypal feminine role within that community was that of mother and homemaker, a passive consumer, whilst the masculine role was within the workforce and freed of domestic duties. The narratives suggested that Joondalup’s planning and design allowed families to engage in the possibilities of an urbane, inner-city lifestyle without giving up the qualities they might associate with a suburban location, particularly the connection to a more “natural” landscape. That envisaged merging of lifestyles in City North was exemplified by one advertising brochure’s proclamation: “A house by the Lake. A house in the city. Here’s how you can have both.”¹²¹

The implication of the material was that the success of the city, its community, its environment and economy, would derive from its planned character. It was assertively claimed that “Joondalup will benefit greatly from the fact that it was thoroughly designed before one brick was laid.”¹²² Thus, Joondalup’s affective form was understood as creating the conditions for the realisation of the advertising narrative.

That underlying confidence in the control of the city’s recent development superceded the conception of affective form that drove the prescriptive, modernist planning of the 1977 plan. The image of the overly determinate and bureaucratic

new town was dismissed in Joondalup's later development plans, in favour of a planning framework to allow "flexibility and creativity throughout its dynamic life." In striving for vitality, the later development of Joondalup resorted to the imitation and recreation of model cities admired for their accreted character. The strong desire for their "activity and commercialism" and "urbane, 24-hour character" saw a design and marketing process emerge in Joondalup that attempted to accelerate and stimulate similar urban character and activity. The visual and spatial elements of an organic town setting were constructed like a stage set; the city developed a character akin to that of the forcing house. The power of Joondalup as affective form was its synthesis of suburban and city landscapes - its combination of residential seclusion, connectivity with the wider metropolitan area, vibrant city street life, and the constant presence of nature.

The establishment of Joondalup City North illustrated clearly that the vision of affective form for Joondalup was most clearly articulated in its promotion as well as its physical structuring. The advertising narratives discussed earlier demonstrated the importance of image in the construction and understanding of community at Joondalup. Like much of the promotion associated with Joondalup's development by Landcorp, they generated associations between the "innovative" urban forms of Joondalup and the desired community. They attempted to develop specific understandings of affective form amongst potential purchasers as a way of "selling" the city.

City North and the Building of Community

The conception and documentation of City North's innovative urban design reinforced the notions of affective form that underlay Joondalup's promotional material. In the importation and translation of neo-traditional urban forms to City North (especially through techniques drawn from New Urbanism,) the Structure Plan, and later Development Manual, imposed a carefully constituted set of guidelines and controls. Reconfiguring the role of the street, the relation of buildings to the street and the form of the street network were considered

particularly important - addressing the perceived social alienation and environmental damage wrought by car-dominated suburbs.

The assumption was that controls on City North's urban form would create an ideal community through their consequent structuring of social relations. The implementation of those measures reflected the difficulties of importing an urban design theory modelled on social and environmental types with little precedence in Perth.¹²³ The eventual vision for City North set out in its plans and guidelines recast the imported New Urbanist ideas to conform to local preferences and development procedures geared toward the garden suburb.

Tom Stannage in *Lakeside City*, his history of the Joondalup Development Corporation, described the rapid development of Joondalup's city centre during the early 1990s:

The City Centre itself, which as recently as early 1992 had only the Council Office, Joondalup House and Wanneroo Hospital, and some business premises across in the Business Park had, by late 1994, a railway station, a 40,000-square metre shopping centre, commercial buildings such as Sanori House, government buildings such as the courthouse, police station and offices for the Department of Social Security. Some 2,500 people worked in the City Centre in mid-1994, a figure projected to rise to 40,000 over the next decade. Some 4,600 students attended Edith Cowan University, TAFE, the WA International College (with a connection with Curtin University of Technology), and the Baptist College. This was projected to rise to at least 20,000 by 2001. Even in 1994 Joondalup already had the feel of a university and college city, with more than half the rail and bus passengers being students.¹²⁴

That growth provided an impetus for increasing the amount of residential development nearby. Part of that rapid development, City North was conceived as an urban (and urbane) residential community that might contribute to the life of Joondalup as a city. The City Centre North Structure Plan (1991) represented an explicit attempt to remodel local expectations of residential amenity and the possibilities of the suburban environment.

The JDC, through the work of their design consultants, intended that City North provide innovative solutions for a number of adverse social and infrastructural issues associated with Perth's low density, car-dominated suburban growth-

including increased greenhouse gas emissions and social isolation. It was proposed that City North, as a more compact, mixed-use development, would demonstrate an attractive alternative residential environment to those suburbs. It was argued that its location near the services of the city centre, and Joondalup train station, would reduce the need for car travel. City North's more compact and efficient planning was planned to reduce sprawl. Diverse employment and residential opportunities were envisaged, and the project was to be structured by a "democratic" street and pedestrian network. The development was deemed capable of "sustaining social and economic demands", as well as generating a neighbourhood based on "human scale."¹²⁵

The wider social, political and economic issues provoking reassessment of Australia's suburban form have been outlined previously within this chapter; those debates impacted directly upon the design of City North. However, the manner in which the Structure Plan outlined their influence demonstrated a very particular set of objectives for the guidelines, and the urban form they delineated. Within the document, the widely accepted problems of Perth's low-density suburban development model were summarised with particular emphasis on the role of the car. The environmental and economic effects of car-dominated, low-density suburbs were described in the plan, but the most striking aspect was the concentration on the social impact of widespread car ownership, and the urban planning that supported it. The social patterning of car usage, and the built environment produced, was readily associated with negative consequences for social relations within families and the wider community. An impassioned critique of that situation formed the background to the project and the structuring of the proposed development model:

The insulated cocoon of the car and the distances between things it permits and requires has generated a malaise of isolation and alienation. The opportunities to meet and involve ourselves with our neighbours, to develop the bonds of a community have been lost.

The liberating car has in fact become a tyranny. Every activity beyond the home, be it work, school, shopping or leisure demands the use of the car ... The thought and the possibility of walking as a mode of "transport" has been lost. The hierarchy of the new-style suburb, with cul de sacs and crescents creates impossible distances between

activities, frustrating the simplest of journeys ... Housewives can become prisoners in their own homes, teenagers become bored and frustrated, sometimes causing social problems and crime, and elderly [sic] watch their world constrict around them as they lose their mobility.

With this wastage and alienation comes an often ugly and illegible environment. Confusion is created out of endlessly curving roads with no focus and no apparent beginning or end. Major arteries reveal nothing but the high fenced backs of housing estates. Even residential streets can be unpleasantly fronted by little more than garages and concealed front doors. The monotony of sameness grips suburb after suburb.¹²⁶

The style and substance of the critique was very similar to New Urbanist criticism of American suburbs and their tract housing. Amongst the consultants for the City North Structure Plan, staff within the planning office of Taylor Burrell and architecture office of Phillip Cox Etherington Coulter and Jones had extensive knowledge of the writings and projects of New Urbanist firms.¹²⁷ Aspects of the planning techniques and architectural forms proposed by New Urbanism had infiltrated previous work carried out by the Perth consultants, but at that time Joondalup was the most comprehensive application of the ideas and skills they had assimilated. The emphasis on the negative impact of car-dominated suburbs led to a concentration on the design of the street network and the control of the streetscape. The affective form of the development was largely expressed through that creation of “democratic” and “human-scale” streetscapes.

The design principles were drawn from the methods established by New Urbanism’s most well-known advocates, the architects Andres Duany and Elizabeth Plater-Zyberk. At Seaside, a resort community in Florida, it was contended that an integrated, harmonious community would be formed by Duany and Plater-Zyberk’s plans and design codes. The most publicised New Urbanist work, Seaside was a clear demonstration of the type of urban environment they envisaged as an antidote to conventional land use patterns and sprawling suburban development. As Elizabeth Smith has described the project:

It stands as the most renowned contemporary example realised to date of attitudes about scale, structure, and hierarchy of building types drawn from turn-of-the-century concepts of Civic Art and Beaux-Arts principles of classical composition, as well as from the anti-modern theories of the architect and polemicist Leon Krier, first articulated by him in the 1970s.¹²⁸

In Joondalup a similar urban design model to the New Urbanists', based on a "traditional street neighbourhood" and "modified grid layout," was proposed as a framework to induce "street life" and a "pedestrian environment."¹²⁹ In describing that vision for City North, the local consultants outlined images of exemplary places that could easily have emerged from the New Urbanism's studies of admired small American towns:

They support all the facets of city life in close proximity. They are easy and enjoyable to walk around and get through and are legible in their structure. Invariably they support a strong social and cultural mix of people at a much higher density than we experience in the new suburbs. They are serviced by a good public transportation system that overcomes automobile dependency.

Architecture and streets are in a balance that creates a total humane environment with a strong sense of place. These neighbourhoods are supported by a network of social facilities and public spaces that provide diverse opportunities for structured and spontaneous social interaction.

The result is a community that generates a sense of pride, identity and cohesiveness, that supports the individual and family and enriches life by the diversity of choices it offers. The environment is secure, clean and a pleasure to experience.

Although noting that older local suburbs (those laid out at the beginning of the twentieth century) displayed some of the desired qualities, it was the attempted reconstruction of the "values and forms of traditional small towns" in recent American urban design that most impressed the Perth design team.¹³⁰

Consequently, they proposed that the new type of urban community being planned for Joondalup, in City North, could achieve comparable attributes.

A number of design principles were adopted and synthesised within the design proposal and were used to not only address infrastructural, economic and environmental issues but also the shaping of a community. At a pragmatic level, measures such as a modified grid street layout, mixed use planning and increased densities were deemed to provide more planning flexibility. In combination they were expected to facilitate a diversity of uses and building types, support an integrated public transport system and accommodate growth and change in response to market conditions. Additionally, the structuring of Joondalup City North was focused on developing a successful residential neighbourhood with a

strong sense of community and an identifiable character. The design measures proposed to achieve that demonstrated most clearly the underlying role of affective form within the City North model and, much like the New Urbanist projects, the configuration of the residential street as vital. The Structure Plan explained:

The street in conventional suburban planning has lost much of its ability to promote social identity and interaction ... In contrast residential streets, squares and parks when properly designed can be the single most important factor in creating a strong community spirit.¹³¹

It was further argued that the formal definition of the street as a public space is achieved through controlling the built fabric framing it, along with the configuration of street hierarchy and patterning. Streetscapes with defined edges, tree plantings, and vistas terminated by key buildings or structures were understood to increase social integration and neighbourliness through pedestrian propinquity and rehabilitated public environment. The careful design at a range of scales was deemed to generate legible, democratic public spaces with strong connections to their local community.

The overarching framework of the street grid was held responsible in the Structure Plan for allowing easier pedestrian movement, more accessible neighbourhoods, and reducing the impact of the car through reducing road speeds and capacity. It was also implemented as a means for setting out an easily understandable and recognisable structure for the neighbourhood, linking places of social and visual significance. In combination with a themed treatment of the local landscape the approach was intended to promote a sense of identity:

It is essential that all these elements be orchestrated to the end of increasing peoples [sic] sense of orientation, place and understanding and appreciation of their environment.

The benefits include an individuals [sic] stronger identity with the community at all levels (street, neighbourhood, city) and their place within it. People become encouraged to explore and discover their city if it is comprehensible and yields interesting experiences and places.¹³²

During the formulation of the Structure Plan by the design team, a themed visual character was proposed for the precinct to help generate a local identity. Once

again New Urbanism provided a precedent: the *Charter of the New Urbanism* (1998) had demanded that in order to create “real neighbourhoods” then “architecture and landscape design should grow from local climate, topography, history, and building practice.”¹³³ A palette of materials and forms was proposed to help unify the physical character of the City North. Stylistic control of the architecture was also envisaged: building codes would ensure that “traditional” forms were used. Ultimately, the proposal did not appear in the final document, but the suggested image was that of a “Village Centre architectural theme in keeping with the south west vernacular.” Reinforcing the sense of an applied character, the description suggested that “the materials [should] be light earthy colours reflecting limestone and sand, [with] landscaping to make use of local materials and in particular local peppermints.”¹³⁴

City North’s Structure Plan was developed as a means to guide the production of affective form. Drawing on the ideas and techniques of New Urbanism it applied them locally to reinforced the image of community and neighbourhood portrayed in Joondalup’s marketing. The introduction of neo-traditional urban design ideas drew upon the street patterns and urban morphology of exemplary “traditional” urban environments to generate those qualities. A vision was produced of a new, progressive form of community generated by its built environment.

The Architecture of Community

The published structure plan did not include the detailed “Village Centre architectural theme.” Instead of a prescribed vernacular aesthetic Landcorp drew on the market knowledge of Perth building firms involved in local suburban development for advice on a “saleable” style for the housing. The programmatic requirements were determined through further market research and discussion with the builders. A number of architectural firms worked with the builders to provide model houses for City North and they were built in a demonstration street (Plaistow Street) for the first land release.¹³⁵ A discussion of the architecture found within the demonstration street will identify more clearly the ways in which the New Urbanist model was altered when applied in Joondalup and the influence of the local garden suburb ideal on the eventual urban form.



63

City North – demonstration street, 1997.

Guidelines for the housing in City North focused on the controlling the formal relationship with the street. Servicing and carparking were relegated to rear alleyways in order that they not intervene with the intended character of the street as a pedestrian-oriented, public space. The articulation of the house and garden was to be designed to reinforce that character, a section of the guidelines explained:

Houses need to relate directly to the street ... Front gardens should be narrow to bring houses near the street. Coupled with verandahs and balconies, a semi private zone is created where people may sit and be in comfort to watch and be part of street activity. It is here that the community is formed, as people greet passers by and come to know their neighbours.

The intrusion of moving and parked cars must be minimised to promote the street as a space for people.

No, or low front boundary walls ensure a positive interactive street environment.¹³⁶

Thus the deliberate assembly of those elements, the house, the building lot, and the street, was envisioned as the means to create a new community within Joondalup City North. The vision corresponded with the “accessible (socially and physically) and truly shared place[s]” of New Urbanism.¹³⁷

The houses that emerged from the development of the demonstration street, and later construction within City North, resembled a visual and spatial compression of the housing found in nearby suburbs. That model housing for City North was quite different to the dense town houses of New Urbanist developments in its form and creation of an image of community. The American examples were generally more stylistically homogenous town house models that clearly emphasised a consonant, urban architectural form and relation to a public street life. Those houses were usually a consistent height of two to three storeys and the semi-public space of the porch or “stoop” was thrust forward to engage the street space. The City North housing designs were clearly a suburban model recast to conform to the area’s guidelines - the single-storey bungalows were pushed, pulled and squeezed to make them “inner-city housing.” The houses maintained that single storey form except where necessary to accommodate their suburban programme - generally the “four-bed, two-bath” model of the idealised suburban family. Their porches and

verandahs were generally minimised, often vestigial, elements that rarely suggested actual inhabitation. The construction materials, stylistic architectural elements, and particularly the hipped and gabled roof forms of the houses were articulated in a way that broke down the sense of an urban townscape. Instead, combined with the grassed and treed verge on each side, the streetscape was readily associated with the garden suburb forms of Perth, albeit more compact.

The landscape of City North was formed by the combination of New Urbanist principles and an aesthetic ideal guided by the local model of the garden suburb. The widespread, international promotion of New Urbanism had established its message, and forms, as a powerful antidote to the problems of the sprawling suburban cities of countries like Australia. The importation of New Urbanist ideas in Joondalup, applied directly in City North, involved an accommodation of local housing preferences – the local garden suburb ideal modified the design of City North, its building guidelines and its promotion as affective form through advertising.

Conclusion

The development of Joondalup was a key part of Perth's metropolitan expansion after the Second World War. From the 1970s onward the satellite city's form was planned within a lineage of Garden City influenced models. The early conception of Joondalup along the lines of the English New Towns established its position as a site of alternative urban form within Perth's spreading suburban landscape. The adjustment of the New Town model to accommodate the local ideal of the garden suburb resulted in an emphasis on the civilising effects of green space.

However, the New Town model became increasingly outmoded as Perth's inhabitants lived, worked and resided at a metropolitan scale – travelling back and forth across the city to conduct their lives. The sprawling but highly connected fabric of the suburban landscape undermined Joondalup's role as a satellite city. Responding to that dissipation, in the 1990s Joondalup was marketed and developed as a "city in harmony." Its projection as affective form envisaged the melding of a familiar suburban landscape with the images and forms of idealised

traditional cities. That “harmony” between the urban and the suburban was largely conceived through the unifying properties of nature – in order to create a place-image that would appeal to Perth’s suburban population. Thus, an urban pastoral ideal underlay the selling of Joondalup - linking the salutary effects of “green space” with idealised neo-traditional city forms. The structuring and perception of the urban environment within Joondalup was centred on the construction of various urban tableaux. The ideas and techniques of New Urbanism were imported to Joondalup as a means of constructing a neo-traditional urbanity. The visual and spatial characteristics of an organic town setting were assembled like a stage set. The power of Joondalup as affective form was its synthesis of suburban and city landscapes - its combination of residential seclusion, connectivity with the wider metropolitan area, vibrant city street life, and the constant presence of nature.

The contemporary affective power of Joondalup’s urban form lay in its scenic qualities - the way in which the streetscape allowed the viewer to immerse themselves in a sanitised concept of civic life. Joondalup, “City in Harmony,” provided its citizens with an urban environment designed to safely and attractively stage their experience of its “people, arts and night-life.”¹³⁸ Its codes and guidelines contributed to an artificial, collaged image of what a “traditional” city looks like; the ubiquitous tilt-up concrete construction of its city centre provided instant historical facades while the tidy rear lanes and garages of City North hid the car from its “neighbourly” streets. That control was formed and exercised through urban design that carefully configured a predominantly visual experience of the city. As Christine Boyer has described it, the visual narratives developed to sell such places:

...mix theatre play with actuality, publicise private space as public terrain, and push every neglected space of the city through the sieve of an imaginary matrix whose nodes are none other than well-designed city tableaux. The contemporary spectator envisions isolated city worlds as if they were framed within in a frame- they appear as scenographic stage sets of different lifestyles to try and different voyages to take.¹³⁹

In a similar manner, the Joondalup of the 1990s allowed its inhabitants control of the post-suburban landscape described by Robert Fishman; connected by freeways to the wider metropolis, the journey from workplace to home to recreation and entertainment combined the excitement and vitality of the city with the seclusion

and “natural” connection of the garden suburb in a series of discrete experiences. A model of affective form emerged that interwove control of the city’s physical form with the structuring of its experience through imagery.

Notes

¹ Robin Boyd, *Australia's Home: Its Origins, Builders and Occupiers* (1952), Melbourne University Press, Melbourne, 1991, p. 229.

² Department of the Environment and Heritage. *Human Settlements, Australia State of the Environment Report 2001*, Prepared by CSIRO (Newton, P.W. et al) on behalf of the Department. Canberra, 2001, p. 34.

³ Hugh Stretton, *Ideas For Australian Cities*, Hugh Stretton, Adelaide, 1970, p. 7.

⁴ Of course, ever since the phenomena of the suburb can be traced there have been attempts to control its progress; and ironically the Garden City, such a powerful presence in its history, was itself devised to deal with the growth of the industrial city.

⁵ Responding to the urgent social need for new housing and infrastructure after World War II.

⁶ O. Yiftachel and D. Hedgecock, "The Planning of Perth's Changing Form- Invention or Convention," *Australian Planner*, Vol. 27, No. 1, March 1989, p. 10.

⁷ Robin Boyd, *The Australian Ugliness*, Penguin Books, Sydney, Australia, 1960, p.12.

⁸ Separate houses, as a proportion of all dwellings, peaked at 93% in 1961. Although that proportion has decreased slightly, to 78% in 2001, it is still the overwhelming preference. Western Australian Planning Commission (WAPC), *Greater Perth, Population and Housing Discussion Paper No. 2*, WAPC, Perth, Western Australia, 2003, p. 7.

⁹ E. McKenzie, *Privatopia: Homeowner Associations and the Rise of Residential Private Government*, Yale University Press, New Haven, 1994; J.C. Teaford, *Post-Suburbia: Government and Politics in the Edge Cities*, John Hopkins University Press, Baltimore, 1997.

¹⁰ R. Harris and P. J. Larkham, "Suburban Foundation, Form and Function," in R. Harris and P. J. Larkham (eds), *Changing Suburbs: Foundation, Form and Function*, E & FN Spon, London, England, 1999, p. 12.

¹¹ P.L. Knox, "The Packaged Landscapes of Post-Suburban America," in J.W.R. Whitehand and P.J. Larkham (Eds), *Urban Landscapes: international Perspectives*, Routledge, London, 1992, pp. 207-208.

¹² Harris and Larkham, "Suburban Foundation, Form and Function," p. 13.

¹³ A recent example of such processes can be seen in the attempt by American writer Joel Garreau to describe North Sydney using the 'edge city' model he had identified in the fringe developments of North American cities. The relevance of the imported model to the local context was subsequently questioned by a number of Australian commentators. See: Joel Garreau *Edge City: Life on the New Frontier*, Doubleday, New York, USA, 1991; R. Freestone, and P. Murphy, "Review of a Debate: Edge City", *Urban Policy and Research*, vol.11, no.3, pp.184-190.

¹⁴ Landcorp, *Joondalup City: Joondalup, Up and Away* [Advertising Material], c1992.

¹⁵ The Stephenson Hepburn Plan and its consequences are discussed more fully in Chapter 4.

¹⁶ Gordon Stephenson, *On a Human Scale: a life in city design*, Fremantle Arts Centre Press, South Fremantle, W.A, 1992, p. 144.

¹⁷ It was concluded that continued focus of employment within the central area would soon result in severe congestion (See Ray Stokes and Roger Hill, "The Evolution of Metropolitan Planning in Western Australia," in Hedgecock and Yiftachel (eds), p. 117.

¹⁸ The notion of a corridor plan for Perth was first mentioned by Perth's Chief Planner David Carr, at a 1968 Royal Australian Institute of Urban Planners congress, in a paper dealing with a review of the Metropolitan Regional Scheme. R. Stanton & K. Adams, "The Context and Role of Joondalup," in Australian Institute of Urban Studies (AIUS), *Joondalup: System City, A Symposium*. (Canberra, Australia, AIUS: 1979)

¹⁹ Metropolitan Regional Planning Authority (MRPA), *Report on the Corridor Plan for Perth*, Perth, Australia, 1972, p. 6.

²⁰ MRPA, *Report on the Corridor Plan for Perth*, p. 15.

²¹ Stanton and Adams, "The Context and Role of Joondalup," p. 10.

²² Stanton and Adams, "The Context and Role of Joondalup," pp. 10-11.

²³ MRPA, *Report on the Corridor Plan for Perth*, p. 19.

²⁴ MRPA, *Report on the Corridor Plan for Perth*, p. 41.

²⁵ Maunsell and Partners *Joondalup Area Development Study* (1974).

²⁶ Gordon Stephenson, *Joondalup Regional Centre: A Plan for a Metropolitan Regional Centre in Western Australia*, UWA Press, Nedlands, 1977, p.vii

²⁷ Stephenson, *Joondalup Regional Centre*, p.vii.

²⁸ MRPA, *Report on the Corridor Plan for Perth*, p. 41.

²⁹ MRPA, *Report on the Corridor Plan for Perth*, p. 14.

³⁰ Oren Yiftachel and Jeff Kenworthy. "Theories of Metropolitan Planning" in David Hedgcock and Oren Yiftachel, *Urban and Regional Planning in Western Australia: Historical and Cultural Perspectives*, Paradigm Press, Perth, 1992, p. 137.

³¹ Department of Planning and Urban Development (DPUD), *Urban Expansion Policy for Metropolitan Perth*, DPUD, Perth, 1990.

³² DPUD, *Urban Expansion Policy for Metropolitan Perth*, p.144. In addition to the conflict of interest between the City of Perth's objectives (of maintaining the commercial focus of the central area) and Metroplan's objectives that Yiftachel and Kenworthy describe was the more specific undermining of Joondalup's role as regional centre within its own catchment area. The extensive additions to Whitford City shopping centre and the rise of other local shopping centres, supported by Wanneroo City Council, had the effect of providing competing commercial and retail floor space that hampered similar development in Joondalup.

³³ Yiftachel and Kenworthy in Hedgcock and Yiftachel, *Urban and Regional Planning in Western Australia*, p. 155.

³⁴ O. Yiftachel & M. Benthams, "Urban Consolidation in Perth: Locations and Attitudes," in Max Hipkins (ed), *Urban Consolidation: Myths and Realities*, Proceedings of Division Annual Conference Seminar held at Belmont, W.A., on 6th and 7th June, 1991, Australian Institute of Urban Studies, Perth, 1991.

³⁵ Yiftachel and Kenworthy in Hedgcock and Yiftachel, *Urban and Regional Planning in Western Australia*, p. 150.

³⁶ The evolution of Joondalup's political and financial status is comprehensively detailed in Tom Stannage, *Lakeside City: the dreaming of Joondalup*, University of Western Australia Press, Nedlands, WA, 1996.

³⁷ The suburbs surrounding the Joondalup city centre are predominantly zoned R20, which specifies a minimum average lot size of 500m²,

along with other requirements such as a minimum setback of 6 metres from the street. However, the actual densities achieved in these suburbs are generally much lower; typical lot sizes are between 700 – 800m².

³⁸ The Whitlam government's concern, in the early 1970s, with the problems of post-war suburbs (particularly the lack of infrastructure and community facilities) most prominently marks the beginning of nationwide debate about the consequences of suburban development for Australian society. See: L. Orchard, *A Blinkered Vision? The Emerging National Agenda for Housing or Where's the Social Democratic Middle?* The Planning Education Foundation of South Australia and the University of South Australia, Working Paper No. 1, Adelaide, 1992, p. 3.

³⁹ The government generally bears around \$50 000 in servicing costs for a new block on the fringe. T. Collins, *Living for the City: Urban Australia Crisis of Challenge*, ABC Books, Sydney, 1993, p. 30.

⁴⁰ P. Newman, J. Kenworthy and S. Robinson, *Winning Back the Cities*, Australian Consumers Association and Pluto Press, NSW, 1992; B. Judd, *Designed for Urban Living: Recent Medium-Density Group Housing in Australia*, RAlA with the Commonwealth Department of Health, Housing and Community Services, ACT, 1993.

⁴¹ Amelia Thorpe, *More Than A Roof Over Their Heads: State Housing and Urban Form in Perth*, Thesis (Honours), Institute for Sustainability and Technology Policy, Murdoch University, Perth, 2000, pp. 40-42.

⁴² Oren Yiftachel and Michael Betham, "Urban Consolidation in Perth: Locations and Attitudes" in Max Hipkins (ed), *Urban Consolidation: Myths and Realities*, Proceedings of Division Annual Conference Seminar held at Belmont, W.A., on 6th and 7th June, 1991, Australian Institute of Urban Studies, Perth, 1991.

⁴³ Mike Berry, "Unravelling the Housing Solution: The Post War Years," in Robert Freestone (ed), *The Twentieth Century Urban Planning Experience, Proceedings of the 8th International Planning Conference and 4th Australian Planning/Urban History Conference*, Faculty of the Built Environment, The University of New South Wales, NSW, 1998.

⁴⁴ Berry, "Unravelling the Housing Solution," pp. 43-44.

⁴⁵ L. Sandercock and M. Berry, *Urban Political Economy: the Australian case*, Georgian House, Melbourne, 1983, pp. 51-52; H. Stretton, *Housing and Government*, Australian Broadcasting Commission, Sydney, 1974; P. Newman and J. Kenworthy, *Sustainability and*

Cities: Overcoming Automobile Dependence, Island Press, Washington DC, 1999.

⁴⁶ Joint Venture for More Affordable Housing Australian Model Code for Residential Development AGPS, Canberra, 1989. The project was renamed Green Street in 1989 and produced a second edition of the codes: Model Code Task Force of the Green Street Joint Venture, *Australian Model Code for Residential Development*, (Edition 2), November 1990, Australian Government Publishing Service, Canberra, Australia, 1990.

⁴⁷ For discussion of the Mitchell Estate in Perth, see: Davis Hedgcock and Tom Hibbs, "Perth's Suburban Traditions: From Orthodoxy to Innovation," in David Hedgcock and Oren Yiftachel (eds), *Urban and Regional Planning in Western Australia: Historical and Critical Perspectives*, Paradigm Press, Perth, Western Australia, 1992, pp.73-74.

⁴⁸ JVMAH, *Australian Model Code for Residential Development*, pp. 20-24. Building form and detailing is encouraged to be visually recessive and landscaping, such as trees, is preferred as a method of improving privacy rather than environmental amenity.

⁴⁹ Ian Bentley et. al. *Responsive Environments: a manual for designers*, The Architectural Press, London, England, 1985, p. 9.

⁵⁰ Department of Planning and Urban Development, *Shaping Urban Futures: Proceedings of the Wanneroo Residential Design Workshop*, Perth, Australia, 1990.

⁵¹ Western Australian Planning Commission (WAPC), *Liveable Neighbourhoods* (Edition 2), WAPC, Perth, 2000.

⁵² WAPC, *Liveable Neighbourhoods*.

⁵³ During the 1990s there was considerable interaction between design professionals in Perth and key figures in the Responsive Environments and New Urbanism movements. Paul Murrain visited Perth in 1990 for the Wanneroo Residential Design Workshop. His academic and professional relationship with Australian figures such as Evan Jones (a key state government planner at that time) was important in the development of initiatives such as Liveable Neighbourhoods, and the general status of urban design in Perth. Local planning firm Taylor Burrell, and architecture firm Jones Coulter Young, made contact with the offices of Andres Duany and Peter Calthorpe during the 1990s. Subsequently the various offices collaborated on a number of projects with Calthorpe making at least two trips to Perth.

⁵⁴ During the 1990s, redevelopment authorities were set up for East Perth and Subiaco. A series of urban design projects in those areas

introduced mixed-use development, medium density housing, live-work housing, permeable street networks, and planning based on the idea of encouraging public transport nodes. The Ellenbrook, development, on Perth's north-eastern suburban fringe, was marketed as a Liveable Neighbourhoods development. It featured a number of "villages" based on developing a more diverse range of housing types in each (compared to Perth's existing suburbs), and centred on community parks and neighbourhood shops.

⁵⁵ Stannage, *Lakeside Dreaming*.

⁵⁶ Gordon Stephenson, *Joondalup Regional Centre: A Plan for a Metropolitan Regional Centre in Western Australia*, University of Western Australia Press, Perth, Australia, 1977, p. 3.

⁵⁷ Clarence Stein, *Towards New Towns for America*, Reinhold Publishing Corporation, Liverpool, England, 1951, p. 41-44.

⁵⁸ Stephenson, *Joondalup Regional Centre*, p. 2.

⁵⁹ Stephenson, *Joondalup Regional Centre*, p. 3.

⁶⁰ Stein, *Towards New Towns for America*, p. 67.

⁶¹ Jean-Francois Lyotard quoted in Dick Hebdige, "A Report on the Western Front: Post-modernism and the 'politics' of Style" in Jon Bird et al, *The Block Reader in Visual Culture*, Routledge, London, England, 1996, p. 283.

⁶² Joondalup Development Corporation, *Joondalup City Centre Development Plan*, (prepared by Hames Sharley Australia), Joondalup Development Corporation, Perth, Australia, 1990, p. 4.

⁶³ Stephenson was directly involved with the development of the New Town concept, working especially on the first constructed-Stevenage. For his own account see; Gordon Stephenson, *On a Human Scale*.

⁶⁴ LandCorp. *Joondalup: Residential Neighbourhoods*. [Advertising pamphlet] LandCorp, c1992.

⁶⁵ The promotion of Joondalup in 1990s included numerous advertising brochures, television advertisements, teaching packs, newsletters and technical reports.

⁶⁶ Ebenezer Howard, *Garden Cities of Tomorrow*, MIT Press, Massachusetts, USA, 1965.

⁶⁷ See the discussion of Joondalup's development in: Tom Stannage, *Lakeside City*:

The Dreaming of Joondalup, University of Western Australia Press Perth, Australia, 1996.

⁶⁸ Robert Fishman, "The Garden City Tradition in the Post-Suburban Age", *Built Environment*, Vol. 17, No. 3-4, p. 236.

⁶⁹ Fishman, "The Garden City Tradition in the Post-Suburban Age," p. 237.

⁷⁰ Howard. *Garden Cities of To-Morrow*, p. 54.

⁷¹ Fishman, "The Garden City Tradition in the Post-Suburban Age," p. 238.

⁷² Melvin Webber, "The Post-City Age" *Daedalus* 97, 1968, pp. 1091-1110; Garreau, *Edge Cities*; Fishman, "The Garden City Tradition in the Post-Suburban Age"; Manuel Castells, *The Rise of the Network Society* Cambridge, Blackwell Publishers, MA, 1996.

⁷³ City of Joondalup, *City of Joondalup: creating the future*, City of Joondalup, Perth, Australia, 1999, n.p..

⁷⁴ Michael Bunce, *The Countryside Ideal: Anglo-American Images of Landscape*, Routledge, London, England, 1994, p. 141.

⁷⁵ Leo Marx. *The Machine in the Garden: Technology and the Pastoral Idea in America*, Oxford University Press, New York, USA, 1964.

⁷⁶ Georg Simmel, "The Metropolis and Mental Life", D.N. Levine (ed), *On Individuality and Social Forms*, University of Chicago Press, Chicago, USA. 1971, p. 324. See also: David S. Luft. *Robert Musil and the Crisis of European Culture, 1880-1942*, University of California Press Berkeley, USA, 1980.

⁷⁷ Marx, *The Machine in the Garden*.

⁷⁸ Alex Krieger in Andres Duany and Elizabeth Plater-Zyberk, *Towns and Town-making Principles*, Rizzoli New York, USA, 1992, p. 11.

⁷⁹ John Brinckerhoff Jackson, *Discovering the Vernacular Landscape*, Yale University Press, New Haven, c1984, p. 12.

⁸⁰ James L. Machor, *Pastoral Cities: Urban Ideals and the Symbolic Landscape of America*, University of Wisconsin Press, London, 1987, p. 14.

⁸¹ Freud quoted and discussed in Machor, *Pastoral Cities*, p. 17.

⁸² Machor, *Pastoral Cities*, p. 17.

⁸³ Machor, *Pastoral Cities*, p. 18

⁸⁴ Jane M. Jacobs, *Edge of Empire: Postcolonialism and the City*, Routledge London, 1996, p. 2.

⁸⁵ Frederic Jameson. *Postmodernism, or, the Cultural Logic of Late Capitalism*, Verso, London, 1991, p. 48-49.

⁸⁶ Jacobs, *Edge of Empire*, p. 3.

⁸⁷ Watts, Massey, Sorkin discussed in Jacobs. *Edge of Empire*, p. 3.

⁸⁸ Mark Poster (ed), *Jean Baudrillard: Selected Writings*, Stanford University Press, Stanford, 1988, p. 33-34.

⁸⁹ G.J. Ashworth and H. Voogd, *Selling the City: Marketing Approaches in Public Sector Urban Planning*, Belhaven Press, London, 1990, p. 11.

⁹⁰ Ashworth and Voogd, *Selling the City*, p. 3.

⁹¹ Indeed the 1955 plan for Perth and Fremantle, with its colour-coded zoning map of the region, fits into this lineage.

⁹² Ashworth and Voogd, *Selling the City*, p. 13.

⁹³ Ashworth and Voogd, *Selling the City*, p. 26.

⁹⁴ Nigel Thrift and Paul Glennie, "Historical Geographies of Urban Life and Modern Consumption," in Gerry Kearns and Chris Philo (eds), *Selling Places: The City as Cultural Capital, Past and Present*, Pergamon Press, Oxford, 1993, p. 43.

⁹⁵ Dick Hebdige, *Subculture: The Meaning of Style*, Methuen, London, 1979; Jean Baudrillard, "Consumer Culture," in Mark Poster (ed), *Jean Baudrillard: Selected Writings*, Polity Press, Cambridge, 1988; Umberto Eco, *Travels in Hyperreality*, Picador, London, 1986.

⁹⁶ *The Times*, 18.11.1986, quoted in Mark Goodwin, "The City as Commodity: The Contested Spaces of Urban Development," in Gerry Kearns and Chris Philo, *Selling Places*, p. 159.

⁹⁷ This has included promotional brochures, newsletters, television and newspaper advertising, community art projects, festivals and educational packages within schools.

⁹⁸ These passages are extracted from LandCorp advertising leaflets produced in order to sell the development, specifically land or tenancies, to consumers including homebuyers and businesses.

⁹⁹ LandCorp, *The Vision Unfolds* [advertising pamphlet], LandCorp, c1992.

- ¹⁰⁰ Bruno Fortier, "La Politique de L'Espace parisien" in Bruno Fortier (ed), *La politique de l'espace parisien à la fin de l'ancien regime*, Editions Fortier, Paris, 1975, quoted in Richard Sennett, *Flesh and Stone: The Body and the City in Western Civilisation*, W W Norton & Co., New York, 1994, p. 324-325.
- ¹⁰¹ See Hazel Conway, *People's Parks: the design and development of Victorian parks in Britain* Cambridge [England], Cambridge University Press, New York, 1991.
- ¹⁰² James Pennethorne quoted in Geoffrey Tyack, *Sir James Pennethorne and the Making of Victorian London*, Cambridge University Press, New York, 1992.
- ¹⁰³ For a discussion of modern tactics of urban greening see Bunce, *The Countryside Ideal*, chapter 5: "The Country in the City".
- ¹⁰⁴ LandCorp, *Joondalup: Environment and Recreation*. [advertising pamphlet], LandCorp, c1992.
- ¹⁰⁵ LandCorp, *Joondalup City: Joondalup, up and away*.
- ¹⁰⁶ See particularly the discussion of city space as product in Christine Boyer, *The City of Collective Memory: Its Historical Imagery and Architectural Entertainments*, MIT Press, Cambridge, 1996, pp. 408-409.
- ¹⁰⁷ The suburban context that surrounds the Joondalup city centre is described below.
- ¹⁰⁸ Quotes extracted from LandCorp advertising pamphlets
- ¹⁰⁹ LandCorp, *The Vision Unfolds*.
- ¹¹⁰ Christine Boyer, "Cities for Sale: Merchandising history at South Street Seaport," in Michael Sorkin (Ed), *Variations on a Theme Park*, Harper Collins, Toronto, 1992, p. 188.
- ¹¹¹ Boyer, "Cities for Sale," p. 188.
- ¹¹² Landcorp, *Development Manual*, 1995, p. 3.
- ¹¹³ "New City Seeks the Right Mix", *The West Australian*, 12.09.1992.
- ¹¹⁴ Minutes of Joondalup Planning Meeting, 27.11.1990 in Taylor Burrell Town Planners, Project File: "City Centre/Med. Density Residential Development." (Vol. 1)
- ¹¹⁵ Personal communication with Bill Burrell of Taylor Burrell Town Planners (21.03.2002) and Paul Jones of Jones Coulter Young Pty Ltd Architects and Planners (26.03.2002).
- ¹¹⁶ Taylor Burrell Town Planners, Minutes of Joondalup Planning Meeting, 27.11.1990.
- ¹¹⁷ Notes on Marketing Study, 31.01.1991, in Taylor Burrell Town Planners, Minutes of Joondalup Planning Meeting, 27.11.1990.
- ¹¹⁸ LandCorp, *Joondalup City North: Come Out To Inner City Living*.
- ¹¹⁹ LandCorp, *Joondalup City North: Come Out To Inner City Living*.
- ¹²⁰ LandCorp, *Joondalup City North: Come Out To Inner City Living*.
- ¹²¹ Landcorp, Joondalup City North, land release Stage 1, (advertising brochure).
- ¹²² Richard Sennett. *The Uses of Disorder: Personal Identity and City Life*, Faber and Faber, London, 1996, see pp. 85-107 especially.
- ¹²³ New Urbanism draws explicitly on the built, and social, structures of small-town America (both real and mythologised). Continual reference has been made by leading figures of the movement, such as Andres Duany, to the desire of the majority of Americans to live in an environment reminiscent of these idealised communities. In comparison, it has already been noted that Perth emerged as an essentially suburban community from its earliest growth and that the suburban milieu still remains an aspiration for most families.
- ¹²⁴ Stannage, *Lakeside City*, p. 224.
- ¹²⁵ Joondalup Development Corporation, *Joondalup City Centre North Structure Plan*, Joondalup Development Corporation, Perth, 1991, p. 2.
- ¹²⁶ Joondalup Development Corporation, *Joondalup City Centre North Structure Plan*, Joondalup Development Corporation, Perth, 1991, p. 16.
- ¹²⁷ Personal communication with Bill Burrell (Taylor Burrell) and Paul Jones (Jones Coulter Young). Tract Consultants were also engaged as planners and landscape architects.
- ¹²⁸ Elizabeth A.T. Smith, "Urban Revisions: Current Projects for the Public Realm," in Russell Ferguson (ed), *Urban Revisions: Current Projects for the Public Realm*, Exhibition organised by Elizabeth A.T. Smith, Museum of Contemporary Art, Los Angeles, 1994, p. 9.
- ¹²⁹ Taylor Burrell Town Planners, Minutes of Joondalup Planning Meeting, 27.11.1990.

¹³⁰ Particularly important was the work done by Duany and Plater-Zyberk in Seaside and Kentlands, and Calthorpe Associates design for Laguna West.

¹³¹ Joondalup Development Corporation, *Joondalup City Centre North Structure Plan*, p.22.

¹³² Joondalup Development Corporation, *Joondalup City Centre North Structure Plan*, p. 21.

¹³³ Congress for the New Urbanism, *Charter of the New Urbanism*, 1998, http://www.cnu.org/cnu_reports/Charter.pdf.

¹³⁴ Taylor Burrell Town Planners, Minutes of Joondalup Planning Meeting, 27.11.1990. It is perhaps the vague nature of this description, and the fraught task of defining a “vernacular” for the varied south-west region of WA, that saw the idea lost in the final report.

¹³⁵ Personal communication with Paul Jones (26.03.2002) and William Burrell (26.03.2002).

¹³⁶ Joondalup Development Corporation, *Joondalup City Centre North Structure Plan*, p. 22.

¹³⁷ Peter Katz, *The New Urbanism: Toward an architecture of community*, McGraw-Hill, New York c1994, p. xxii.

¹³⁸ City of Joondalup, *The New City* [Advertising Material], c1992.

¹³⁹ Boyer, *The City of Collective Memory*, p. 449.

Conclusion

*Architecture is not about the conditions of design but about the design of conditions that will dislocate the most traditional and regressive aspects of our society and simultaneously reorganize these elements in the most liberating way, so that our experience becomes the experience of events organized and strategized through architecture.*¹

Those techniques of “organisation and “strategisation” were critical to Bernard Tschumi’s elucidation, in 1991, of a “new urbanity.” In his lecture “Six Concepts,” Tschumi envisaged a mode of architectural form-making concentrated on “intensifying the rich collision of events and spaces” in order that contemporary architecture could provide a “turning point in culture and society.”²

Tschumi was responding in his lecture, not only to the nostalgic, neo-traditional visions of a movement like New Urbanism, but also the socially pragmatic contemporary architecture of a figure such as Dominic Perrault. Perrault had recently completed the *Hôtel Industriel* project in Paris - a minimalist, glazed box

housing around forty small industrial businesses. He described the building's urban role as:

Nothing, less than nothing, no anchorage, no hold, no hook, no soothing theories about the city-with-parks-and-gardens but a confrontation with 'our world,' that one, the true, the so called 'hard' world, the world people claim not to want.³

The projects of both Tschumi and Perrault have been readily linked by Hans Ibelings in his discussion of what he has described as "supermodernism." Ibelings groups Tschumi and Perrault with a number of contemporary architects that he considers explore, amongst other things, "the super-cool transparency and smoothness of glazed buildings." He sees supermodernism as an architectural approach that has freed the designer from "the onerous duty to keep on producing 'meaningful' architecture."⁴

The danger of linking the work of these architects in that sense is that it ignores very real differences in their conception of an ethical implication for urban form. Admittedly neither architect pursues a figurative or symbolic formal language within their work but, discussed in relation to affective form, a critical divide opens up between the rethinking of architecture that Tschumi engages in and the realism of Perrault. Whereas Tschumi is intimately concerned with architecture's structuring of "event" – and the possibility for urban form to stimulate new social relations – Perrault's work is aptly described by Ibelings as "totally self-sufficient," suggesting an antagonistic relation to its context.⁵

My assertion is that discussing these projects through the lens of affective form opens up a context for more comprehensive enquiry into their implications for urban form. In Ibelings' terms of "lightness and transparency [and] smooth facades" their architecture might be correlated. However, there are surely critical differences in their formal conception that produce the schism between Perrault's stance of urban "confrontation" and Tschumi's contention that:

By understanding the nature of our contemporary circumstances and the media processes that accompany them, architects possess the possibility of constructing conditions that will create a new city and new relationships between spaces and events.⁶

The comparison of Tschumi's and Perrault's approaches is outlined here to reinforce my proposition of the idea of affective form as a flexible conceptual tool. Avoiding the mechanistic implications of environmental determinism whereby the built environment is envisaged as directly influencing the actions of an individual, affective form can be used to discuss form conceived in a broader sense than simply programming human behaviours. Affective form is more accurately described in terms of a built environment where people are encouraged to define themselves according to particular socio-political ideas. Thus, concepts of affective form are not simply blunt deterministic theories that set out hierarchical and authoritarian structures to reform societies. They more often develop a culturally specific language that structures the scrutiny and rationalisation of the way in which urban design is formed. Although it can address proposals of urban form that imply a sense of deterministic influence, affective form also accommodates notions of symbolic landscapes or spaces of autonomy; including concepts such as the "event space" of Tschumi.

This thesis began by establishing an historical context for the concept of affective form, grounded in the intellectual activity of the eighteenth century. The initial formulations of affective form shadowed the development of a widespread faith in the possibility of indefinite progress for humankind. The related belief in the mental pliability and perfectibility of humankind was critical to the development of theories of affective form. During the nineteenth century the structuring and design of the built environment was increasingly proposed as a means to influence behaviour, encourage reflective thought and improve morality. Expressed most explicitly in reform institutions such as the prison, the new public spaces such as parks, museums, and galleries, were also understood as instruments of reform that targeted and modified external behaviour and internal sentiments.

Through housing improvement, the goals of moral and physical reform were envisaged as taking place at the centre of daily life. Housing design and construction was restructured to not only improve sanitary conditions but also structure family relations and promote qualities such as domestic pride. Reformers

like Octavia Hill were involved both in renovations and the construction of new housing, but also attempted to demonstrate by example to tenants the benefits of gardening and the beautification and maintenance of their dwellings.

As Chapter Two demonstrated, the architectural partnership of Parker and Unwin applied a similar conception of affective form to their work on the first Garden City at Letchworth (c1904). The planning, architectural and landscape models generated in that project also had a profound effect on subsequent understandings of the garden suburb's social influence. As a model of affective form, the garden suburb has had a profound influence on the urban landscape of Australian, American and British cities, particularly in projecting ideal residential environments.

During the early twentieth century the broad notion of the Garden City was imported to Perth, ostensibly as a means of providing for a civilised suburban society and replacing the character of a dusty colonial town. The development of the first garden suburbs within the Endowment Lands development also functioned as a means for establishing town planning as a tool of governance, and an accepted profession. Indeed, in Perth, the development of a local garden suburb model was critical to the establishment of a local planning discipline and its statutory mechanisms. The urban forms borne of concerns for housing the working classes - for reforming and "perfecting" communities - were appropriated in Perth for the task of "rational" planning.

During the late 1920s the Endowment lands provided a testing ground from which an archetypal suburban model for Perth was drawn. The garden suburb as it was formulated during that period provided an ideal arrangement of public and private space, the harmonious and orderly grouping of homes and, through separation and setback, a comforting middle landscape. The harmony of community and built environment became associated with an increasingly abstracted representation of the garden suburb's form. Throughout the rest of the twentieth century that conception accommodated and absorbed modern developments in conceptualising the home, and an increasing atomisation of society. It formed a ductile notion of

affective form that was variously projected as a means of governance - political contrivance, marketing tool or social mediator.

Whilst nineteenth century reform of the built environment was focused on the governance of good moral and physical health, in the inter-war period the moral regulation of the community became more closely related to notions of national efficiency and productivity. In Australia the suburban home as a generator of healthy, productive, moral families was an important part of that process, particularly in the period immediately following the Second World War. The image and projected role of the garden suburb as a tool of moral governance shifted emphasis after World War II. The modern home in the suburb was increasingly promoted as a means of privatised financial investment and source of individual and family stability. Its governmental capacity was particularly focused on personal economic security, especially the regulating habits of financial propriety.

A modern way of suburban life was also implicit in the promotion of model homes and cities for the post-war period. Walter Bunning's *Homes in the Sun* (1945), alongside publications such as Harold Smith's *Planning the Community* (1944) and F. Oswald Barnett's *Housing the Australian Nation* (1942), encouraged a vision of post-war planning as a means to produce modern, efficient, scientifically planned cities. Bunning, particularly, developed model houses that assumed the privatised, suburban, nuclear family as the Australian norm and ideal. His careful articulation of plans that would efficiently fulfil the expected desires of young homebuyers intertwined a concern for exploiting the Australian climate, the prospects of financial independence, sobriety and rational Modernist design. They accommodated and reinforced the expected lifestyle of the "average" Australian family; as affective form they were a means of governing understandings of the ideal "Australian lifestyle" and its social composition. Modernist British architecture and town planning principles, along with extremely influential traffic engineering models from America, formed the basis for the proposals, which were developed by Australian planning bodies during the 1950s and 1960s; including in Perth.

As a recasting of the garden suburb to accommodate those modernist influences on post-war form, the Empire Games Village stands as a unique experiment in model housing within Perth. The desires of the local architectural profession to provide a blueprint for modern housing production through this project were largely unfulfilled. However, whilst the formal and constructional aesthetic of the houses was not immediately assimilated, the overarching organic form represented an ideal translation of the properties of the garden suburb within the exigencies of post-war planning. Street patterns were “rationalised” to accommodate new traffic engineering standards and public life disappeared from them, the suburbs became increasingly disconnected from commercial and public facilities, while individual houses were becoming ever more internalised.

The Games Village embodied the newly developing conceptions of the home and suburb as affective form during the 1950s and ‘60s, as a vehicle for conspicuous consumption and as a means of constructing privatised family and personal identities. That increasing privatism emptied out the communal space of the suburb but the understanding in Perth of the garden suburb as affective form remained significant. The modernisation of the house and suburb in the Games Village Perth altered the arrangement of the single-family detached dwelling in a verdant, low-density landscape, but did nothing to dislodge that model as the measure of residential amenity in Perth.

Since the 1960s widespread criticism of modern architecture and urbanism has developed. Internationally, calls for the recognition of a crisis in the way the urban environment is constructed - environmentally, economically and socially- have been mounted. In countries such as Australia, the United Kingdom and America, the negative impacts of mono-functional zoning, the car and its associated infrastructure, the increasing privatisation of public space, as well as the growth of the suburb have been extensively documented. The continued application of modernist urban form (particularly in the pursuit of technical, rational planning) during the large-scale peripheral expansion of cities during the late twentieth century has produced what is often termed “placeless” sprawl. Those critiques have undermined the projection of the modern garden suburb as an ideal place;

they have also served to heighten the sense that the possibilities for meaningful urban form have been severely circumscribed. Confidence in the ability to successfully plan the “good” city as defined by modernism – the potential for urban form that might produce an awareness of wider community - has been substantially weakened; a crisis of affective form has developed. The relevance of my central discussion, the tracing of certain forms of aspiration for affective architecture, is found in this contemporary crisis of form.

Flow Urbanism and New Urbanism, discussed extensively in Chapter Five, lie at the extremes of reactions to this crisis of form. Both address the perceived post-modern shift from a centred and hierarchical city to a contemporary poly-nuclear, dispersed urban field. In response, Flow Urbanism has suggested a decline of figurative architectural form, in favour of urban design that concentrates on the spatialisation of diagrams, the accommodation of indeterminacy, and the production of innovative, sophisticated infrastructure. Alternatively, New Urbanism consistently proposes a search for redemptive, symbolic form and building practices- largely based on the revival of “traditional” planning and architectural tropes. Both reactions demand a change in the conception of urban design in order to transform the contemporary city; however, they offer radically different conceptions of affective form and its ethical role.

Within the ostensibly disparate approaches of Flow Urbanism there is a common tendency to portray the conventional pursuit of significant, mnemonic form in the architectural process as outmoded and associated with overly rigid social structures. Instead, Flow Urbanism links the interpretation and processing of data – the contextual parameters of a project – with the production of artless, pragmatic forms, ideologically-emancipated spaces of mobility, and ambiguous notions of liberty and personal autonomy. However, that aestheticised pragmatism and deferral of form-making to an abstract, diagrammatic process, submerges the question of affective form- deferring an ethical function for urban design.

In contrast, New Urbanism represents a continued application of an overt conception of affective form. In New Urbanist work, urban form is regarded as

communicative and representative: embodying stable social relations and ideal community values. A particular emphasis is placed on developing that “community” through the use of “traditional” planning and architectural forms. Thus, New Urbanists have maintained that urban design contains an ethical function - forming built environments that are socially and environmentally sustainable.

Flow Urbanism and New Urbanism offer virtually antithetical understandings of the contemporary potential for affective form. The work of Flow Urbanism is generally positioned as a means of forming dynamic spaces to accommodate nebulous ideas of individual freedom and flexible social interaction. Its conception of affective form and an ethical role for urban design remain ambiguous. In contrast, New Urbanism asserts a very clear notion that urban design, as affective form, must be applied to help reassemble a civil society and urban spaces that embody stable social relations.

The development of Perth’s satellite city of Joondalup during the 1990s saw the appropriation of those New Urbanist notions of affective form. Particularly within the City North precinct, the planning and design of the built environment was deployed as a tool to govern residents’ social relations and their moral lives. The landscape of City North was formed by the combination of New Urbanist principles and the local model of the garden suburb. It provided a new suburban model for Perth: more compact, more urbane, but still underpinned by the requirements of the garden suburb ideal. The design process and promotion of City North revealed those intersecting influences and was underpinned by a conception of its urban design as affective form. Descriptions of the project featured an emphasis on aspects such as: swift access by car to the wider metropolitan region, connection with the “natural” landscape, pedestrian-oriented local streets, an open, low-rise streetscape and the privacy of the bounded suburb. These elements were conceived as contributing to an urban form that would foster a neighbourly community, an active public realm, whilst retaining the privacy and picturesque landscape of the garden suburb.

The structuring and perception of the urban environment in the development of Joondalup has been centred on the construction of various urban tableaux. The importation of New Urbanism to City North was undertaken through a process that used its forms and imagery as a means of constructing promotional scenery as much as affective urban form. The promotion during the 1990s of Joondalup as an ideal city, a “city in harmony” was a means of extending the impact and understanding of affective form. The city’s ideal “lifestyle” characteristics were conveyed and reinforced by advertising and informational literature that linked those characteristics to the city’s affective form.

Examining the conception of affective form in Joondalup again highlights the importance of the garden suburb ideal in Perth as a form through which imported concepts such as New Urbanism are filtered. The model of a low density, verdant landscape of single family, detached dwellings provides a measure by which the residential environment is assessed in Perth. It is a model that structures debates regarding higher density and mixed-use development, the role and location of public open space as well as the provision of public transport and other infrastructure. Additionally, that analysis points out the critical interplay in contemporary urban design between formal ideals and conceptual imagery. Marketing and development of place-image have become as important as the construction of affective form in today’s city-forming processes.

The concept of affective form has been established here as a means of examining urban design in relation to techniques of governance. In a series of examples the implicit relation of planning, architectural and landscape form to social effect has been discussed. The language and design models used to delineate affective form have been described, alongside discussion of the level of intentionality involved in the conception of urban form’s social effect. Critique through affective form has allowed an analysis that brings together the underlying utopian elements of projects - the traces of ideology and sociological theories – with an evaluation of the formal concepts projected.

The tracing of Perth's garden suburb ideal throughout the twentieth century has been used within this thesis as an example of this potential for affective form as an analytical instrument. The lens of affective form has aided in the recognition of that ideal's moulding of discussions regarding the social effects of new urban models in Perth. Those assumptions regarding social governance that have been revealed (for example, presumptions of a link between higher urban densities and negative social impacts) should be questioned: the dominance of the garden suburb landscape, aided by its power as affective form, must be measured against its physical, social, economic and ecological implications.

The establishment of the term affective form, and exploration of its application as a theoretical tool, has been undertaken in the hope of generating a means of discussing the ethical function of urban design. Where new forms, and modes of form-making, are offered up in architectural, landscape and planning projects it is vital to attempt an understanding of their relationship to ideas of governance. Urban design consistently mingles the social and the aesthetic; affective form provides a means of questioning embedded attitudes to the urban landscape's social consequences. This questioning is a necessary task.

Notes

¹ Bernard Tschumi, "Six Concepts," (1991) in *Architecture and Disjunction*, Cambridge, MIT Press: 1996, p.259.

² Tschumi, "Six Concepts," p. 259.

³ Dominique Perrault quoted in Hans Ibelings, *Supermodernism: Architecture in the Age of Globalization*, (Rotterdam, NAI Publishers: 1998), p. 133.

⁴ Ibelings, *Supermodernism*, p. 133

⁵ Ibelings, *Supermodernism*, p. 133

⁶ Tschumi, "Six Concepts," , pp. 258-259.

List of Figures
Bibliography

List of Figures

Figure 1.

"Dwelling with trellis, Dwelling with castellated jacket, Dwelling with monastic jacket, Dwelling of two rooms for a man and his wife, Dwelling with Indian Jacket."

Source: Hersey, George L. *High Victorian Gothic: A study in associationism*. John Hopkins University Press, Baltimore, 1972. pp. 20-21.

Figure 2.

"Newgate prison c1735."

Source: Mary Evans Picture Library, Image No. 10072700 <www.maryevans.com>

Figure 3.

"Pentonville c1860."

Source: Mary Evans Picture Library, Image No. 10034505 <www.maryevans.com>

Figure 4.

"View from the Brewery Bridge, from Gustav Doré, London: A Pilgrimage, 1872".

Source: Evans, Robin. *Translations from Drawing to Building and Other Essays*. The MIT Press, Cambridge, 1997. p. 103.

Figure 5.

"Avenue and boating lake, Victoria Park"

Source: Tyack, Geoffrey Sir James Pennethorne and the Making of Victorian London Cambridge University Press, Cambridge, 1992. p. 97.

Figure 6.

"Derby Arboretum. Pavillion designed by E.B. Lamb 'in the style of James 1'."

Source: Simo, Melanie Louise, Loudon and the Landscape: From Country Seat to Metropolis 1783-1843 Yale University Press, New Haven, 1988. p. 196.

Figure 7.

"Hints for Breathing Places for the Metropolis"

Source: Simo, Melanie Louise, Loudon and the Landscape: From Country Seat to Metropolis 1783-1843 Yale University Press, New Haven, 1988. p. 228.

Figure 8.

"Model houses for four families, erected at the Cavalry Barracks, Hyde Park, in connection with the Exposition of the Works of Industry of All Nations, 1851, by His Royal Highness Prince Albert, KG."

Source: Gaskell, S. Martin Model Housing: From the Great Exhibition to the Festival of Britain Mansell Publishing Limited, London, 1987. p. 20.

Figure 9.

"William Street, c1880, looking north."

Source: Pitt Morison, Margaret and White, John Western Towns and Buildings UWA Press, Nedlands, 1979. p. 85.

Figure 10.

"Nancy. Héré de Corny's plan for inter-related squares."

Source: Youngson, A.J. *The Making of Classical Edinburgh 1750-1840*. Edinburgh University Press, Edinburgh, 1966. p. 75.

Figure 11.

"James Craig 'Plan of the new streets and squares intended for the City of Edinburgh, 1767'."
Source: Youngson, A.J. *The Making of Classical Edinburgh 1750-1840*. Edinburgh University Press, Edinburgh, 1966. pp. 72-73.

Figure 12.

"Robert Owen View of a Harmonious Community, 1832."

Source: Anderson, Stanford. *On Streets* The MIT Press, Cambridge, 1978. p. 61.

Figure 13.

"Contrasted residences for the poor from Contrasts"

Source: Lubbock, J. *The Tyranny of Taste: The Politics of Architecture and Design in Britain 1550-1960* Yale University Press, New Haven, 1995. p. 240.

Figure 14.

"Garden City diagram from Tomorrow, represented the 'social city' with a population of 250,000."

Source: Miller, Mervyn Letchworth: *The First Garden City* Philimore & Co Ltd, Chichester, 2002. p. 15.

Figure 15.

"Letchworth – Parker and Unwin's winning plan, as first published."

Source: Miller, Mervyn Letchworth: *The First Garden City* Philimore & Co Ltd, Chichester, 2002. p. 44.

Figure 16.

"Design for a living room with sanctum, kitchens, offices and bedroom around, from *The Art of Building a Home* (1902)"

Source: Creese, Walter L. (ed) *The Legacy of Raymond Unwin: A Human Pattern for Planning* The MIT Press, Cambridge, 1967. p. 50.

Figure 17.

"Working drawings of a typical Perth house at the turn of the century, J.B. Hine, Architect."

Source: Pitt Morison, Margaret and White, John *Western Towns and Buildings* UWA Press, Nedlands, 1979. p. 178.

Figure 18.

"St Georges Terrace, early view c1900."

Source: Pitt Morison, Margaret and White, John *Western Towns and Buildings* UWA Press, Nedlands, 1979. p. 301.

Figure 19.

"'Perth As It Should Be' George Temple-Poole's 1911 concept."

Source: Pitt Morison, Margaret and White, John *Western Towns and Buildings* UWA Press, Nedlands, 1979. p. 273.

Figure 20.

"Perth: Proposed City Improvement Scheme."

Source: Hardwick, William E. "Greater Perth From a City Planning Point of View" *The West Australian* 1911.

Figure 21.

"Acreville"

Source: Plan of land for sale by Peet & Co, Battye Library c1907

Figure 22.

"Perry Lakes. 18 January, 1918 Limekilns Estate and Endowment Lands."

Source: <http://www.perth.wa.gov.au/html/onthisday/perrylakes.html>

Figure 23.

"City of Perth Endowment Lands, showing great value of large areas of open space, with two townsites designed on modern town planning lines."

Source: Report of the Metropolitan Town Planning Commission. Perth, 1930. p. 102.

Figure 24.

"Formica advertisement from *Australian Home Beautiful*."

Source: O'Callaghan, Judith. *The Australian Dream: Design of the Fifties* Powerhouse Publishing, Sydney, 1993. pp. 82-83.

Figure 25.

"War Service Homes"

Source: State Housing Commission *Annual Report 1956/57*

Figure 26.

"Bird's eye view of a system of crossings was devised which uses only 3-4 acres as compared with nearly 10 acres used by the clover leaf crossing."

Source: Gold, John R. *The Experience of Modernism: Modern Architects and the Future City*, 1928-53. E & FN Spon, London, 1997. p. 184.

Figure 27.

"Golden Lane. Photomontage of proposed decks on actual site, viewed through yard gardens. PS, 1952."

Source: Smithson, Alison and Smithson, Peter. *The Charged Void: Architecture*. The Monacelli Press, New York, 2001. p. 87.

Figure 28.

"A Satellite Town for 10,000 people."

Source: Bunning, Walter. *Homes in the Sun: the past present and future of Australian housing*. W.J. Nesbit, Sydney, 1945. p. 91.

Figure 29.

"Neighbourhood for 10,000 people."

Source: Bunning, Walter. *Homes in the Sun: the past present and future of Australian housing*. W.J. Nesbit, Sydney, 1945. p. 86.

Figure 30.

"Suntrap house. View of courtyard."

Source: Bunning, Walter. *Homes in the Sun: the past present and future of Australian housing*. W.J. Nesbit, Sydney, 1945. p. 48.

Figure 31.

"Council House, Perth."

Source: Battye Library (WA): Government Photographer Collection; 816B/TB/3941.

Figure 32.

"St Georges Terrace, 1956."

Source: Seddon, George and Ravine, David. *A City and its Setting: Images of Perth, Western Australia*. Fremantle Arts Centre Press, Fremantle, 1986. p. 248.

Figure 33.

"Plan for the Metropolitan Region Perth and Fremantle. Simplification of the overall plan of development proposals based on Plate 9 of the atlas of the Stephenson-Hepburn Plan."

Source: Pitt Morison, Margaret and White, John *Western Towns and Buildings* UWA Press, Nedlands, 1979. p. 252.

Figure 34.

"Recent housing: Scarborough. The monotony of excessively long straight streets is apparent."

Source: Stephenson, Gordon and Hepburn, J.A. *Plan for the Metropolitan Region, Perth and Fremantle Western Australia* Government Printing Office, Perth, 1955. p. 143.

Figure 35.

"Part of an informal layout: Dalkeith. A more interesting street scene."

Source: Stephenson, Gordon and Hepburn, J.A. *Plan for the Metropolitan Region, Perth and Fremantle Western Australia* Government Printing Office, Perth, 1955. p. 143.

Figure 36.

"Maylands. An example of monotonous "gridiron" development typical of many parts of the Region."

Source: Stephenson, Gordon and Hepburn, J.A. *Plan for the Metropolitan Region, Perth and Fremantle Western Australia* Government Printing Office, Perth, 1955. p. 217.

Figure 37.

"Floreat Park. The retention of natural features and successful landscaping make this a very attractive estate."

Stephenson, Gordon and Hepburn, J.A. *Plan for the Metropolitan Region, Perth and Fremantle Western Australia* Government Printing Office, Perth, 1955. p. 144.

Figure 38.

"Housing: workmen engaged on the SHC project at Medina, the first neighbourhood of the Kwinana New Town."

Source: Stephenson, Gordon and Hepburn, J.A. *Plan for the Metropolitan Region, Perth and Fremantle Western Australia* Government Printing Office, Perth, 1955. p. 56.

Figure 39.

"The winning plan for the Empire Games Village."

Source: Gregory, Jenny. *City of Light: A History of Perth Since the 1950s*. City of Perth, Perth, 2003. p. 87.

Figure 40.

"Perspective view, House Type B3, 1961."

By permission, Cameron Chisholm & Nicol Architects.

Figure 41.

"Type A Cameron Chisholm and Nicol"

Source: Lewi, H. and Neille, S. (eds) *Fading Events and Places: the architecture of the VIIth British Empire and Commonwealth Games Village and Perry Lakes Stadium* Department of Architecture, Curtin University, Bentley, 1993. p. 63.

Figure 42.

"Bloomington, Illinois."

Photo by Alex Maclean

<<http://www.csmonitor.com/slideshows/durableSlideshows/suburbanSprawl/slide3.htm>>

Figure 43.

"Seeing Double. An overwhelming number of lanes converge into a Medford, Mass., interchange."

Photo by Alex Maclean

<<http://www.csmonitor.com/slideshows/durableSlideshows/suburbanSprawl/slide6.html>>

Figure 44.

Tokyo. 2004.

Photo by Amelia Thorpe.

Figure 45.

"construction" 2002/3

Photo by Chris Waigl.

<http://mapage.noos.fr/imageries/NBchantier/chantier2_2002_1.html>

Figure 46.

Tokyo 2004.

Photo by Kota Arai

Figure 47.

"Constant Terrain vague 1973."

Source: Heynen, Hilde. *Architecture and Modernity: A Critique*. The MIT Press, Cambridge, 1999. p. 171.

Figure 48.

"House on Long Island, New York, 1995."

Source: Allen, Stan, *Sites & Stations: Provisional Utopias*. Lusitania Press, New York, c1995. p. 130.

Figure 49.

Yokohama International Port Terminal. 2004.

Photo by Lee Stickells.

Figure 50.

Yokohama International Port Terminal. 2004.

Photo by Lee Stickells.

Figure 51.

"Housing 65 db(A) and less."

Source: MVRDV *FarMax: Excursions on Density*. 010 Publishers, Rotterdam, 1998. pp. 500-501.

Figure 52.

"Economical negotiations."

Source: MVRDV *FarMax: Excursions on Density*. 010 Publishers, Rotterdam, 1998. pp. 540-541.

Figure 53.

"Acoustic diagrams for the Carillon project, 1993."

Source: Lynn, Greg. "Conversation by modem with Ben van Berkel" *El Croquis* 72.1 May 1995. p. 9.

Figure 54.

Bell Tower. Perth.

Photo by Nicole Sully.

Figure 55.

“Josephsplein.”

Source: Krier, Rob. *Town Spaces: Contemporary Interpretations in Traditional Urbanism*. Birkhauser, Basel, 2003. p. 134.

Figure 56.

“Project for a Town Centre.”

Source: Duany, A. and Plater-Zyberk, E. *Towns and Town-Making Principles*. Rizzoli, New York, 1991. p. 92.

Figure 57.

“The Corridor Plan for Perth, 1970.”

Source: Pitt Morison, Margaret and White, John. *Western Towns and Buildings*. UWA Press, Nedlands, 1979. p. 262.

Figure 58.

“AMCORD General concept (road planning)”

Source: Joint Venture for More Affordable Housing Australian Model Code for Residential Development. AGPS, Canberra, 1989. p. 39.

Figure 59.

“Key physical elements.”

Source: Bentley, Ian et al. *Responsive Environments: a manual for designers*. The Architectural Press, London, England, 1985, p. 43.

Figure 60.

“Plan of Joondalup ‘intended to indicate that the landscape should be strong and appropriate’.”

Source: Stephenson, Gordon with R.J. Ferguson and Associates et al. *Joondalup Regional Centre: A plan prepared for the Government of Western Australia, the Wanneroo Shire Council and the Metropolitan Region Planning Authority*. UWA Press, Nedlands, 1977. p. 25.

Figure 61.

Joondalup. City images.

Source: City of Joondalup. *The New City*. (Advertising Material) c1998.

Figure 62.

Joondalup advertising images.

Source: Landcorp, *Joondalup City North: Come Out To Inner City Living*. (advertising material) c1996.

Figure 63.

Housing in Joondalup.

Source: Landcorp. *Annual Report*. 1997.

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Weekend News

The West Australian

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