

8 NEW URBANISM 1985 - PRESENT

8.1 BACKGROUND AND STANDARD PRACTICE

8.1.1 RETURN OF THE PUBLIC DOMAIN

The New Urbanists share a 'belief in the scale and spatial organisation of the traditional town as the basic building block for human settlement'.¹⁰⁴ This echoes the earlier trend amongst English planners of the 1940's who were fond of dense old villages and small towns. It was felt that these kinds of dense and enclosed spaces fostered community and more energetic urbanity. Tracing the development of New Urbanism is complex. It shares common roots with the rise of the preservation and community participation models that arose from the 1970's on. The architecture critic Vincent Scully traced its roots to a reaction against the destruction of traditional neighbourhoods by freeways in the United States in the 1970's and the rise of the Preservation Movement.¹⁰⁵ Andres Duany, a key proponent of New Urbanism, was a student of Scully and documented the existing neighbourhoods of Boston that were under threat by development. Vincent Scully described New Urbanism as the 'redesign of that vast area in which Americans now live, sprawled between the metropolitan centre (sic), which is emptying out, and the open countryside, which is rapidly being devoured'.¹⁰⁶

For the New Urbanists, the street is the prime element of the public domain. Scully also notes the importance that built form plays. In a sense Duany starts with the building, codifying it, relying on it to create space rather than landscape. Duany developed complex detailed codes for exemplary projects such as Seaside. The New Urbanists place great value on architecture. It is neo traditional above all else in its architecture. In the United States, Calthorpe has proposed increased densities to encourage public transit. He also introduced housing types not used since the 1920's and the advent of the post war suburb. Historicist values underlie New Urbanism in a similar manner to the Garden City model. While the Garden City proponents believed that a healthy environment and pre industrial village form would restore pre industrial values, the New Urbanists believe that the traditional American Small Town embodies the values of the traditional community, and that re establishing it will re establish *community*. In fact Duany's key text is sub titled '*An Architecture of Community*'.

Another fundamental value of New Urbanism is the importance of conventions. Unlike the Garden City Proponents who disliked most aspects of the city, the New Urbanists sought to regain the values that they saw existing in traditional small towns especially the street. For New Urbanists, 'communities of the past were better. Emulation not invention [is] a primary concern'.¹⁰⁷ As a result, the New Urbanist planning model is extremely hierarchical, codifying the elements of the traditional small town, from overall planning structures to architectural elements such as porches.

104 Robbins, Edward & El-Khoury, Rodolphe, Chapter 11, 'New Urbanism', in *Shaping the City: Studies in History, Theory and Urban Design*, 2002, Spon Press / Routledge, London

105 Vincent Scully, forward, Peter Katz (Ed), *New Urbanism, Towards an Architecture of Community*, 1994, McGraw-Hill
106 Ibid

107 Andres Duany 'Notes on the Lexicon of the New Urbanism', Ed. T.W. Bressi *The Seaside Debates – A Critique of the New Urbanism*, 2000, Rizzoli New York

PART III - ANALYSIS AND CONCLUSIONS


9. ANALYSIS OF THE MODELS

9.1 DESCRIPTION AND ANALYSIS OF ELEMENTS OF SUBURBAN FORM

Part II of this enquiry has developed an analytic framework that has examined 12 selected exemplars and Case Studies, analysing their elements and identifying changing forms of those elements, in the context of social values and significant issues of the day.

This analysis sets out the data from which the conclusion will then attempt to answer the questions posed at the beginning of this study; what from a physical form point of view, makes a good suburb, and can better understanding exemplars of the past provide a framework for designing suburbs that are better than those contemporary examples that seem lacking in comparison?

In section 9.2 the different forms of the elements of each of the exemplars and Case Studies are grouped into common form groups. This is set out in table 9.2 where the exemplars and Case Studies are clustered into three common form groups as described in section 2.3.2. The first group is the first form that is identified, the second and third being subsequent modifications or new approaches to that form.



Section 9.3 then charts the evolution of element forms by setting out the exemplars and Case Studies chronologically so that trends and patterns for each element of form over time can be identified. In other words what do they have in common and does a clear pattern or correlation emerge? An underlying assumption is that more durable forms will require less modification over time.

The final section in this chapter analyses the evolving social values that are reflected by the various models by charting them against the chronology of models to also identify patterns and trends. The assumption here is that such an analysis will help understand better how various social values and issues of the day have underpinned the evolving forms analysed

9.2 DESCRIPTION AND ANALYSIS OF FORM GROUPS

In Table 9.2 below, the exemplars and Case Studies have been divided into common form groups, element by element. A description and analysis of the groups follows.

ELEMENT	ORIGINAL FORM GROUP - A	MODIFIED FORM GROUP - B	MODIFIED FORM GROUP - C
MASTER PLAN	EDGE CORE - A	INTERNAL CORE CONNECTED - B	INTERNAL CORE LIMITED CONNECTIVITY - C
STRUCTURE	Forest Hills Gardens	Radburn	Macquarie Fields
	Garden Village	Tapiola	Swinger Hill
	Hampstead Garden Suburb	Irvine	
	Daceyville	Golden Grove	
		Seaside	
		Newington	
STREET PATTERN	GRID - A	DENDRITIC - B	SPINE AND LOOP - C
	Forest Hills Gardens	Garden Village	Macquarie Fields
	Daceyville	Hampstead Garden Suburb	Swinger Hill
	Seaside	Radburn	Irvine
		Tapiola	Golden Grove
		Newington	
BLOCK PATTERN	REGULAR - A	IRREGULAR - B	SUPER BLOCK - C
	Forest Hills Gardens	Garden Village	Tapiola
	Seaside	Hampstead Garden Suburb	Swinger Hill
	Newington	Daceyville	
		Radburn	
		Macquarie Fields	
		Irvine	
		Golden Grove	
SUBDIVISION/ LOT	REGULAR - A	IRREGULAR - B	DISCRETE OR SUPER LOT - C
PATTERN	Forest Hills Gardens	Garden Village	Tapiola
	Daceyville	Hampstead Garden Suburb	Swinger Hill
	Seaside	Radburn	
		Macquarie Fields	
		Irvine	
		Golden Grove	
		Newington	
OPEN SPACE PATTERN	DISCRETE - A	LINEAR - B	HYBRID - C

	Forest Hills Gardens	Radburn	Irvine
	Garden Village	Macquarie Fields	Golden Grove
	Hampstead Garden Suburb	Tapiola	Newington
	Daceyville	Swinger Hill	
	Seaside		
BUILT FORM	HIGH DENSITY CORE - A	HIGH DENSITY LINEAR - B	DISPERSED - C
	Forest Hills Gardens	Radburn	Macquarie Fields
	Garden Village	Swinger Hill	Tapiola
	Hampstead Garden Suburb	Irvine	Golden Grove
	Daceyville	Newington	
	Seaside		
HOUSING DESIGN	SITE SPECIFIC - A	GENERIC- B	CODE - C
	Forest Hills Gardens	Macquarie Fields	Seaside
	Hampstead Garden Suburb	Irvine	Newington
	Daceyville	Golden Grove	
	Radburn		
	Tapiola		
	Swinger Hill		

Table 9.2 Form Groups

From the groupings the following key observations are made:

Observation 1 – The most common form is Form B, the first modified form. It occurs 37 times. It is predominant in the most recent Australian case study, Newington

Observation 2 – The next most common form is Form A, which occurs 28 times. It is predominant in the most recent Overseas Exemplar, Seaside

Observation 3 – The least common form is Form C, which occurs 18 times

The more detailed observations for each element are set out below.

9.2.1 MASTER PLAN STRUCTURE

Original Form (A) Edge Core

- The key aspect of this form is the importance of transit in close proximity to the core located at the edge of the suburb. It therefore includes the first four exemplars and Case Studies where there was no choice but public transport. It is this aspect which separates these earlier exemplars from most of the others
- While the most contemporary exemplar, Seaside and the Australian case study, Newington also have edge cores, and accommodate links to them, they are close to roads rather than transit routes as there is generally a lack of adequate public transit links in contemporary suburbs both overseas and in Australia. This will perpetuate car dependence and negate the possibility of transit commuting which underpinned the earlier models unless broader transit initiatives are introduced
- The Case Studies in this group are structured around a key focal space or plaza at the edge of the site creating a strong sense of address and identity well defined by built form, linked to adjoining places, especially transport routes.

Modified Form (B) Internal Core Connected

- The 'Neighbourhood Unit' is the most significant innovation in form that has modified most exemplars and Case Studies from Radburn through to Golden Grove. As a result they are more internally focussed, structured around the primary school located in the heart of the neighbourhood, rather than transit
- This creates a more internalised plan organised around the neighbourhood core and is less connected to adjoining places
- Because of the lasting dominance of the car, this form has proven remarkably robust, lasting some 50 years. If the car becomes less viable, this more inward form may be less accessible by public transport

Modified Form – C – Internal Core Limited Connectivity

- Two of the Case Studies, Macquarie Fields and Swinger Hill are similar in structure to their exemplars, except that the internal nodes or cores are not as well connected to the principal street system within the suburb.
- This creates more isolated places as the neighbourhood core may have less surveillance and passing traffic

9.2.2 STREET PATTERN

Original Form (A) Grid

- In the early Rail suburbs in the United States such as Riverside and Forest Hills Gardens, as well as at Daceyville in Australia, there was a generally continuous network of streets, structured around a grid with an overlay of axial geometry
- This network, which included an entry axis and vistas, was distinctive, as well as being efficient to move through
- All models since Hampstead Garden Suburb are structured by hierarchical street patterns to maintain residential amenity over the car, except New Urbanism which attempts to re-establish a pre-Garden Suburb street pattern
- Many of the hierarchical street patterns examined have not been successful, modifying other elements, or reducing connections within and to a place as a result
- The New Urbanist exemplar Seaside reinstates the connective grid pattern. Seaside cleverly combines the grid with an axial pattern as did the early exemplars. Newington has a more hierarchical street pattern than Seaside. This may not be an issue for Seaside given that it is a small resort town with relatively low levels of traffic.

Modified Form (B) Dendritic

- Hampstead Garden Suburb represents a significant modification to the street pattern, introducing the cul-de-sacs that creates a dendritic hierarchical street pattern. The cul-de-sacs, however, are short – the broader street grid is the dominant element. Garden Village, proposed in Sydney, used a similar street pattern
- Radburn completely separated the vehicle street from the pedestrian path, putting all dwellings on a cul-de-sacs with no houses accessed directly from a through street. Like Hampstead, there remains a larger connected grid of streets that links local schools and neighbourhood parks. Tapiola is similar with an overall grid with looping roads accessing individual super blocks
- Newington combines a central spine road with a grid pattern for each precinct. Within the grids are cul-de-sacs for traffic ‘calming’ as per all exemplars since Radburn. The Radburn idea has therefore been an enduring one

Modified Form (C) Spine and Loop

- Four of the exemplars and Case Studies subsequent to Radburn including Macquarie Fields, Swinger Hill, Irvine, and Golden Grove all include a hierarchical system (dendritically or tree like) that responds to vehicle based local streets and cul-de-sacs within a hierarchy of loop roads
- Macquarie Fields is different in street structure from its exemplar, the Radburn model, being structured around a loop collector with little connection to surrounding places. Swinger Hill is similar in street pattern to Macquarie Fields
- Irvine is structured around local loop roads and cul-de-sacs that sit within a larger grid of arterial roads
- Golden Grove is similarly structured around secondary loop roads and cul-de-sacs. The loop roads link to a continuous central spine. Like the arterial grid at Irvine, the spine is access denied

9.2.3 BLOCK PATTERN

Original Form (A) Regular

- The blocks at Forest Hills Gardens are generally regular as a result of the grid street pattern
- The only other exemplar with a similar block pattern is Seaside which has reinstated the simple grid street layout without the use of the cul-de-sacs except for the beach front. Newington also has a regular block pattern although it contains car courts and some cul-de-sacs
- The form of all other exemplars has been modified in some way

Modified Form (B) Irregular

- More than half of the exemplars and Case Studies fall in this category
- The modified form results from the extensive use of cul-de-sacs or car courts in the case of Garden Village, Hampstead Garden Suburb, Radburn, and Macquarie Fields
- At Irvine the practice of creating super blocks that are further subdivided by the purchaser to create lots and access streets in the most land effective manner results in an irregular network of cul-de-sacs, streets and blocks. Large super blocks discourage connections. At Irvine, while the overall structure plan appears connective, it is not at the local level. This allows efficient vehicle movement but not pedestrian movement
- Daceyville is an exception, having no cul-de-sacs. The irregular block configuration derives from the radiating street pattern combined with axial avenues. Much of Daceyville, especially the irregular blocks, were not built

Modified Form (C) Super Block

- Tapiola alone consists of large super blocks of apartments set in parkland
- Swinger Hill is organised into clusters of courtyard houses and townhouses with no real block structure defined by streets. Rather, the integration of buildings with the existing landscape orders the plan and the resulting blocks

9.2.4 SUBDIVISION/ LOT PATTERN

Original Form (A) Regular

- Lots at Forest Hills Gardens, Daceyville and Seaside are generally rectangular with all frontages addressing the street
- At Daceyville and the earlier exemplars the lots are narrower and deeper, minimising the amount of street frontage and road construction, while still accommodating a rear garden large enough to grow vegetables etc

Modified Form (B) Irregular

- The super lot subdivision type includes those types where a hierarchical street pattern results in most houses having a cul-de-sacs address, with approximately one third of the lots being arranged at the head of a cul-de-sacs (Radburn and Macquarie Fields) or along a loop road (Irvine, Golden Grove and Macquarie Fields)
- Newington includes a range of subdivision types including traditional lot, car lots and apartment super blocks. The apartment super blocks address a linear open space defined by a path not a street. While this is similar to Radburn in some ways, the apartments do not 'back' onto the open space. The surveillance problems of Radburn are therefore addressed in a different way from say, Seaside. This relationship is similar to that of the lots facing Hampstead Common at Hampstead Garden Suburb

Modified Form (C) Discrete or Super Lot

- The lots at Tapiola and Swinger Hill are not conventional
- At Tapiola buildings are placed in large open spaces that could be loosely termed super blocks
- At Swinger Hill, buildings are placed in dense clusters following the topography. The subdivision boundaries follow the built form rather than any street pattern

9.2.5 OPEN SPACE PATTERN

Original Form (A) Discrete

- The earlier exemplars, Rail and Garden Suburbs, were ordered around discrete open spaces; parks in the order of one to five hectares in the case of the Rail Suburbs and Daceyville, and a larger 20 hectares common at Hampstead Garden Suburb (refer also to Letchworth Garden City)

Modified Form (B) Linear

- The parks were generally surrounded by a street or path. The Radburn Plan introduced the linear park as both a recreation space and linking element. This open space type extends through all models from Swinger Hill up to the suburbs of the 1970's. A major difference between the discrete park and linear open space is that house lots back onto most linear spaces
- In the case of Radburn, the combination of cul-de-sacs streets and linear open spaces actually saved on the quantum of streets required and additional open space could be 'paid for' by the quantum of road saved. The cul-de-sacs also saved street frontage

Modified Form (C) Hybrid

- All models examined from Irvine to the present, combine discrete and linear spaces, creating a hybrid form. It is not clear why this hybrid has emerged except that perhaps the later models include land releases in more constrained areas and, in the case of Irvine, Golden Grove and

Newington, often included steep areas and watercourses. The open space patterns at Seaside and Newington, while different, are both well defined, with surveillance from surrounding houses. Newington has some open space reserves defined by paths rather than streets

- New Urbanism has consciously reinstated the more traditional park, though this form was reinstated earlier at Irvine and Golden Grove

9.2.6 BUILT FORM

Original Form (A) High Density Core

- The Rail and Garden Suburbs of Forest Hills Gardens, Hampstead Garden Suburb and Daceyville, structure built form generally into a higher density core of apartments or attached dwellings and a periphery of lower density detached houses. The higher density cores were located to the entry of the site adjoining a rail station, transit stop or main street. Seaside also has a higher density core

Modified Form (B) High Density Linear

- Later models such as Radburn, Macquarie Fields, and Newington separate the higher density housing into a more linear arrangement
- Contemporary models such as Newington, distribute apartments along the open space creek line providing a higher amenity outlook rather than proximity to transport as in the case of the earlier models
- It may well be that the apartments in the earlier models were possibly a more affordable rental tenure for those without a car, while in the case of the contemporary Australian suburb the waterfront apartment is occupied by a more affluent owner not dependent on public transport

Modified Form (C) Dispersed

- Yet other models appear to distribute a range of built form types within the suburb. At Tapiola, higher and lower densities are deliberately 'salt and peppered' with taller apartment buildings located immediately adjoining low-rise apartments. This was to create diversity within precincts

9.2.7 HOUSING DESIGN

Original Form (A) Site Specific

- Houses and apartments at Forest Hills Gardens, Hampstead Garden Suburb, Daceyville, Radburn, Tapiola, and Swinger Hill were designed by architects specifically for their site
- Most of these dwellings would be considered to be of exceptional design with regard to function and aesthetic standards

Modified Form (B) Generic

- Houses at Macquarie Fields are a mix of specific architectural designs for the higher density townhouses, and standard Department of Housing low density cottages
- At Irvine, a range of house forms and styles were developed by development companies. Both the lot and house style could be selected by the purchaser

Modified Form (C) Code

- Houses at Golden Grove, Newington, and Seaside have been designed to a code
- At Golden Grove a national performance based code was applied
- At Seaside and Newington, site specific codes were applied. The Seaside code is more prescriptive, mandating traditional architectural elements

9.3 ANALYSIS OF EVOLVING FORMS AND TRENDS

Table 9.3 below compares the elements chronologically to identify trends and patterns in form types. From the table, a number of observations are then made:

Element	Rail Suburb		Garden Suburb		Radburn	
	Forest Hills	Garden Village	Hampstead	Daceyville	Radburn	Macq Fields
M/Plan Structure	A	A	A	A	B	C
Street Pattern	A	B	B	A	B	C
Block Pattern	A	B	B	B	B	B
Subdivis Pattern	A	B	B	A	B	B
Open Space Pattern	A	A	A	A	B	B
Built Form Pattern	A	A	A	A	B	C
Housing Design	A	N/A	A	A	A	B

Legend

- A – Original Form
- B – First Modified Form
- C – Subsequent Modified Form

Table 9.3 Evolving Forms and Trends

Design with Nature		Planned Communities		New Urbanism	
Tapiola	Swinger Hill	Irvine	Gold Grove	Seaside	Newington
B	C	B	B	B	B
B	C	C	C	A	B
C	C	B	B	A	A
C	C	B	B	A	B
B	B	C	C	A	C
C	B	B	C	A	B
A	A	B	B	C	C

From the chronology the following key observations are made:

1. All Forms have Evolved –There is a general evolution of forms through groups A, B and C with a subsequent return to the earlier forms A and B. This includes master plan structure, street, block and subdivision pattern, but not open space and built form. Open space pattern has continued to change and evolve. The evolution of built form is not as clear, evolving from a consistent higher density core to more fragmented forms from Radburn to the present. One exception may be Seaside, which is similar in form to the earlier models. Forms of housing design have continued to evolve over time, from specially designed, generically designed, to a hybrid where a range of designs meet design guidelines
2. Rail and Garden Suburbs are the Most Similar in Form –The Rail and Garden Suburb share the most common elements, with four of the seven being of the same form. The advent of the cul-de-sacs at Hampstead modified the other three elements of street, block and subdivision pattern. While Garden Suburb was planned as a Railway Suburb it clearly is derived also from the Rail Suburb exemplar
3. Subsequent Exemplars and Case Studies are Significantly More Fragmented In Form with Radburn, Design with Nature, and New Urbanism all sharing all three forms mixed across all the elements. Planned Communities are slightly more consistent with only form groups B and C being used but across all the elements
4. Many of the Elements are Closely Related. Extensive cul-de-sacs and loop roads changed the simple form of the block. Car courts or rear lanes within small blocks do not impact block pattern and the efficient subdivision of lots. Grid street patterns create more regular blocks than loop road
5. Daceyville is the Most Similar Australian Case Study in Form to its Exemplar sharing five similar element forms
6. There is Limited Correlation between Other Overseas Exemplars and Corresponding Australian Case Studies
7. Seaside Returns Most Consistently to Original Forms in six of seven element
8. Over Two Thirds of the Exemplars and Case Studies have Included Specially Designed Dwellings

9.4 EVOLVING ISSUES AND SOCIAL VALUES

This section sets out the issues of the day and emerging social values identified in the background section of each of the overseas exemplars and Australian Case Studies analysed here. Section 1.2 of this study noted that the Garden City paradigm arose from a program of social reform, which in turn arose in response to significant social upheaval caused in turn by issues such as the technology of the industrial revolution. Technology such as the railway also provided the means by which the Garden City paradigm could be implemented. From a review of the exemplars studied here it can be seen that the significant issues of the day are the catalyst from which social values respond. It is apparent that there have been a number of paradigm shifts over the period studied. In addition to the already well-documented advent of the Garden Suburb in response to the 'uninhabitable' nineteenth century industrial city, the Radburn idea must be understood against the rise of the private car.

This study has also identified that subsequent to the Radburn model, there has been an equally strong reaction to the increasing degradation of both the natural environment and existing urban fabric of towns. The evolving issues and social values are set out on the next page:

EXEMPLAR	ISSUES	EMERGING VALUES	NEW FORMS
RAIL SUBURB 1850 – 1900	<ul style="list-style-type: none"> • Industrial Revolution and changes in work • Mass concentration of workers into congested city centres • Advent of Public transport 	<ul style="list-style-type: none"> • Commute – live away from work • Healthier lifestyle • More space 	<ul style="list-style-type: none"> • Low density community within walking distance of transit • Compact urban core near transit node
GARDEN SUBURB 1900 – 1930	<ul style="list-style-type: none"> • Emerging middle class • Car becomes affordable to some • Spread of public transit 	<ul style="list-style-type: none"> • Stronger community • Private domain - own home and garden • Live in the best of town and country 	<ul style="list-style-type: none"> • Detached houses with private garden • Urban core and common green space
RADBURN 1930 - 1940	<ul style="list-style-type: none"> • Mass availability of motor cars • Dramatic increase in cars and car fatalities 	<ul style="list-style-type: none"> • Safer lifestyle • Neighbourhood • Reclaim community from the car • Stronger community • Recreational lifestyle • Economy 	<ul style="list-style-type: none"> • Separation of streets and pedestrians • Neighbourhood structure based on the school more dominant than the urban core • Less roads more open space
DESIGN WITH NATURE 1950 – 1965	<ul style="list-style-type: none"> • Loss of natural areas • Conservation movement • Environmental impact assessment 	<ul style="list-style-type: none"> • Environmental impact • Community consultation 	<ul style="list-style-type: none"> • Master plan structure responds to environmental constraints • Open space responds to natural systems
PLANNED COMMUNITIES 1965 - 1985	<ul style="list-style-type: none"> • Increasing affluence • Market choice • Mass production of subdivisions 	<ul style="list-style-type: none"> • Consumer choice/ • Individuality • Recreational lifestyle 	<ul style="list-style-type: none"> • Urban core near arterial road • Neighbourhood core accessible by car and pedestrian
NEW URBANISM 1985 – PRESENT	<ul style="list-style-type: none"> • Loss of historic neighbourhoods • Lack of design in subdivisions 	<ul style="list-style-type: none"> • Public domain • Identity • Return to tradition 	<ul style="list-style-type: none"> • Return to a strong urban core • Return to traditional grid street pattern • Return to regular block and subdivision patterns

Table 9.4a Issues, Emerging Values and Forms

From the analysis two themes emerge:

Firstly, the issues of the day and evolving social values have influenced the forms of the elements of the suburb as set out in table 9.4 above. In summary:

- The Rail Garden Suburbs rejected the degraded industrial living environment of the nineteenth century, creating a far better urban environment
- Radburn created a new hierarchical street system in response to the alarming fatality rate on US roads
- Design with Nature models responded to the increasing concern with environmental impacts of development
- Planned Communities addressed the need for development required on a mass regional scale while addressing market and increasing environmental and community consultation demands
- New Urbanism rejects the Planned Community model and its acceptance of a car based community

Secondly it may be argued that, rather than changing values, there has been a general accumulation of values over time rather than new values superseding previous ones. Over time some values are emphasised over others. Table 9.4 below sets out the exemplars, grouped into models, correlating accumulated values. In the next section more explicit reference is made to values currently emerging.

VALUE	TYPE					
	RAIL SUBURB 1850 -1900	GARDEN SUBURB 1900 -1930	RADBURN 1930 -1940	DESIGN WITH NATURE 1950 -1965	PLANNED COMMUNITY 1965 -1985	NEW URBANISM 1985 – PRESENT
COMMUTE – LIVE AWAY FROM WORK						
HEALTHY LIFESTYLE						
SPACIOUS/ NOT CROWDED						
STRONG COMMUNITY						
PRIVATE DOMAIN – OWN HOME AND GARDEN						
BEST OF TOWN AND COUNTRY						
ECONOMY						
SECURE/SAFE						
FREEDOM FROM CAR						
NEIGHBOURHOOD						
ENVIRONMENTAL IMPACT						
COMMUNITY DRIVEN						
PERSONAL CHOICE/ INDIVIDUALITY						
RETURN TO TRADITION						

9.4 b Accumulated Values

The following conclusions can be drawn from table 9.4b.

- I. There is a general accumulation of values over time rather than emerging values replacing earlier ones
- II. After the Rail and Garden Suburb, more new values are reflected and consequently new forms introduced by the Radburn Idea than in any other model or exemplar
- III. The value of the private domain has been challenged by the New Urbanists. While it is beyond the scope of this study to ascertain why this has occurred, there appears to be a combination of the New Urbanists desire for more traditional compact housing forms, as well as a government policy of urban containment. There is also evidence that this is not supported by the desires or values of the private market who continue to prefer a large detached dwelling
- IV. The value of both town and country has been evident in the earlier and later paradigms, but not in the Radburn, Design with Nature or Planned Community exemplars, which generally lack an urban core. This coincides initially with the lessening in importance of public transit, and advent of the neighbourhood unit based on a school and open space rather than the more urban railway plaza defined by apartments. More recently environmental concern has brought the issue of public transit back, and there is renewed interest in the creation of an urban core. As noted above there is however a tension between the planners and government's desire for more compact housing forms with the private market's preference for lower density housing forms. The importance of economy emerged after the depression where housing costs were keenly scrutinised.
- V. The Radburn idea proposed that the space and cost saved by having less roads could pay for increased open space as well as still being less costly overall. The dual (but competing) objectives of saving costs while developing lower and lower density suburbs that required an increasing amount of infrastructure has really continued from Radburn through to the present. Again New Urbanism has questioned these values by re-emphasising the importance of the public domain, especially re-establishing more generous streets, a fundamental shift from attitudes in place since Radburn. By the 1980's in the United States, United Kingdom and Australia were again exploring ways to reduce the infrastructure costs on rapidly expanding low-density suburbs
- VI. Radburn introduced economy, the notion of a safer physical environment, a car free environment for the family, as well as the neighbourhood unit in one exemplar. From table 9.4b it can be seen that the values that underpinned these forms have endured to the present in some form. While the Radburn forms themselves may not have been durable, they have influenced subsequent suburbs including the New Urbanism more than any model apart from the original Rail and garden suburbs
- VII. Each of the subsequent exemplars has reflected at least one new value while generally accumulating the previous ones
- VIII. The values not accumulated in subsequent models include Safety in the Design with Nature model and to some extent with Planned Communities. More significantly New Urbanism appears to question three values as follows:
 - Freedom from the car
 - Environmental balance
 - Personal choice

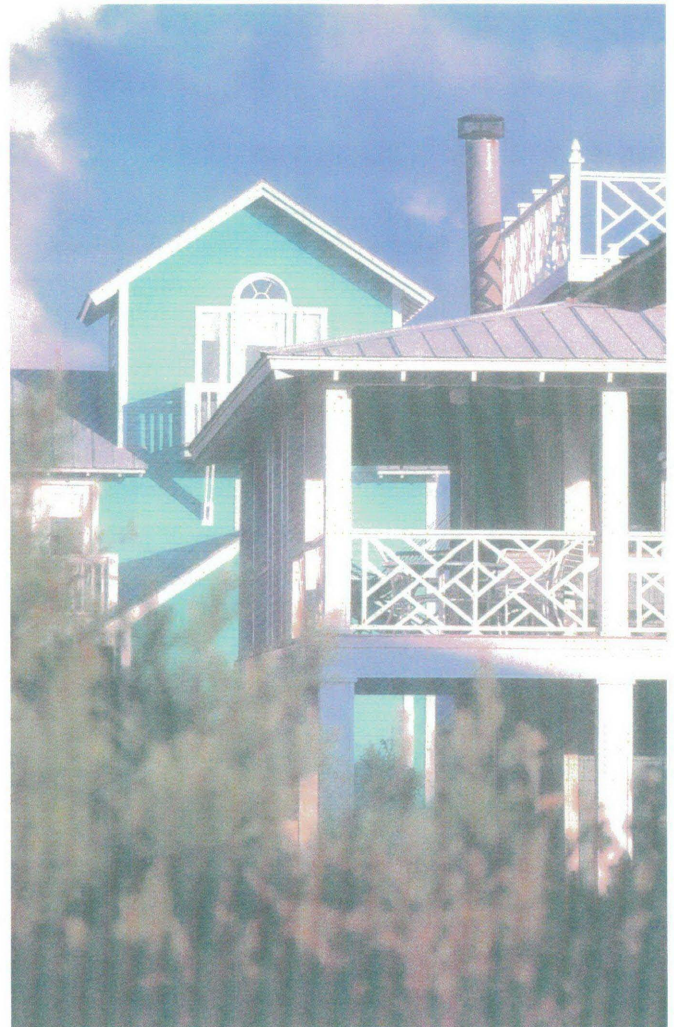
The values of neighbourhood and community derive from both Garden City and Radburn models. New Urbanism places particular value on the street as the key element of the public domain, and proposes higher densities in some places. Key values for the Garden City were low density (nothing gained by overcrowding), for Radburn it was neighbourhood and open space re established away from the car.

Andres Duany and the Congress for New Urbanism (CNU) drafted Charter Values¹⁰⁸ that attempted to codify the above principles. A number of premises¹⁰⁹ underpin these values:

- Communities of the past were better
- Importance of the use of conventions
- The design of communities directly affects well being and the preservation of nature
- Emulation not invention a primary concern
- Conventions should be measured by successful built examples

In an apparent contradiction, New Urbanism combines generally geometric formalised plans with a significant community participation process. It utilises a 'charette'¹¹⁰ process where issues and ideas are put forward in a community forum, culminating in a plan being developed by the facilitators of the workshop in a short time frame. While the process is informed by the community the plan results are remarkably similar.

In Sydney and other capital cities in Australia, New Urbanism is becoming increasingly common as a model.



Seaside Built Form

108 Elizabeth Moule, 'Charter of the New Urbanism', Ed. T.W.Bressi, *The Seaside Debates – A Critique of the New Urbanism*, 2000, Rizzoli New York

109 Andres Duany 'Notes on the Lexicon of the New Urbanism'. Ed. T.W.Bressi *The Seaside Debates – A Critique of the New Urbanism*, 2000, Rizzoli New York

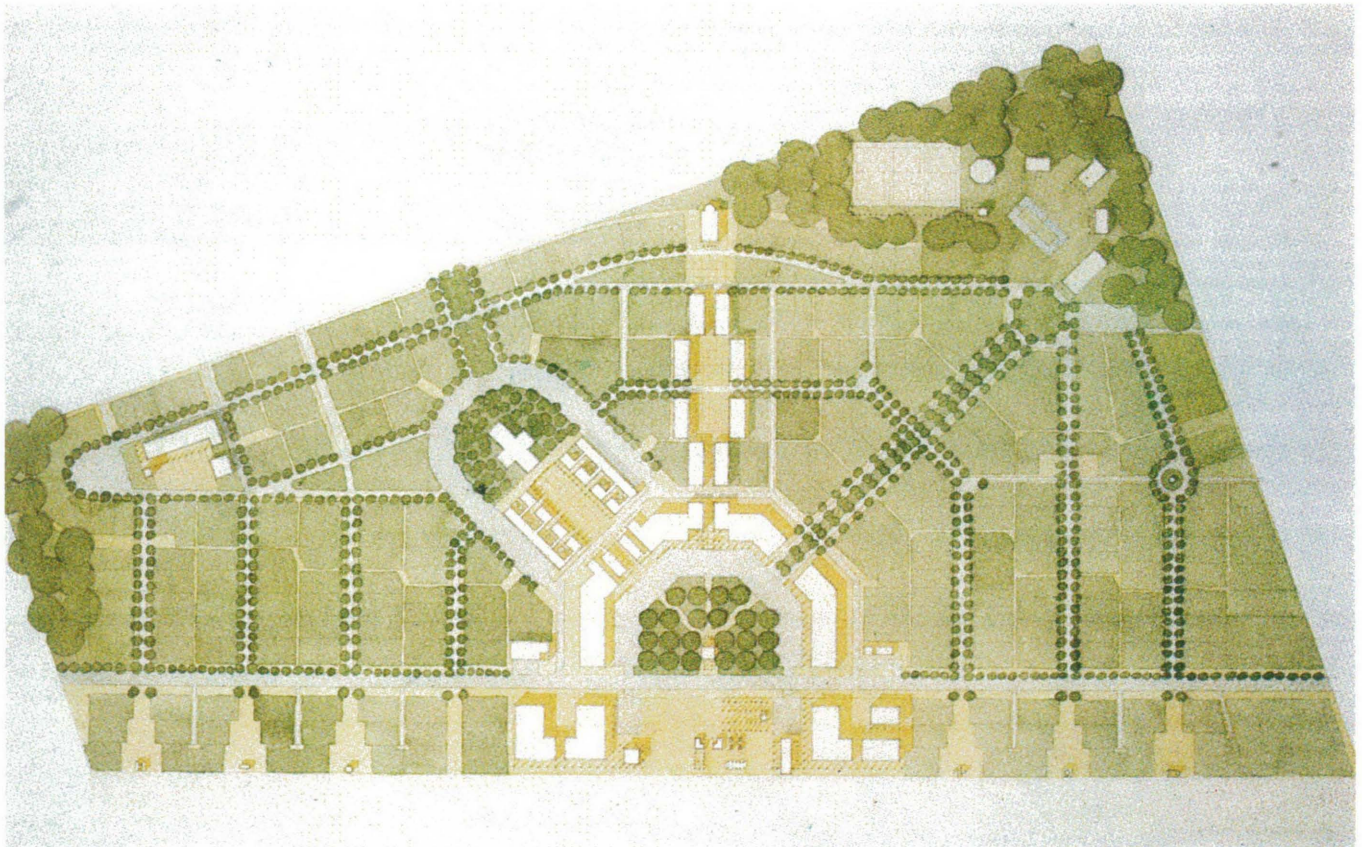
110 The term Charette derives from the Ecole des Beaux Arts system of examinations where the design had to be deposited in a 'charette' trolley promptly at the end of the session. It now refers to a design produced in a workshop in a limited time frame

8.2 INTERNATIONAL EXEMPLAR - SEASIDE 1987

8.2.1 BACKGROUND AND VALUES

Seaside is considered the paradigm/ exemplar of New Urbanism as well as the most accomplished as a plan and as a piece of architecture. It encompasses the values noted above including place making relying heavily on it being articulated by built form, the importance of the past, and the street as the basic element of the public domain. While it is in reality a small holiday resort for a relatively affluent demographic, it was the first built New Urbanist project which demonstrated the return to a 'traditional neighbourhood model' of development.

It also demonstrated the use of a 'code' governing the public domain and those parts of the house and garden seen from the public domain. The land use is predominantly residential with community uses in both the central plaza and the termination of axes. A mixture of uses is located at the central plaza. A church is located at the end of the plaza and another public building is located at the vista termination of the avenue.



Historic Plan

8.2.2 ELEMENTS

Element 1- Master Plan Structure (Edge Cores – A)

Seaside is well known as the exemplar of New Urbanism – where a clear ‘public domain of streets and open spaces’ order the plan. In some ways this is a return to the more traditional Garden Suburb plan although the New Urbanists would claim the traditional Town as the precursor. This approach contrasts with the more ‘market driven’ plans of the previous types, the so called ‘subdivision suburbs’ where the private realm, private community, or development efficiencies ordered the plan. However, like most iconic projects Seaside is complex at a number of levels and does not dogmatically follow its own ‘rules’. Where for example the New Urbanists

espouse the connective rectangular grid, at Seaside a rectilinear street grid is cleverly overlaid with a radial axis and smaller streets to avoid a continuous street pattern and the attendant traffic issues. ‘Geometric perfection at the center (sic) which disintegrates towards the edges as a result of circumstance, a formal organization common to most towns studied’¹¹¹. This really is in the tradition of Forest Hills Gardens, Riverside, and Hampstead Garden Suburb. Key elements include:

- The street pattern is the primary ordering element of the plan
- The placement of public buildings is a key element of the plan
- The street is the basic element of the public domain
- This contrasts with typical suburbs of the period



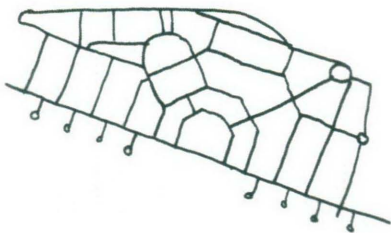
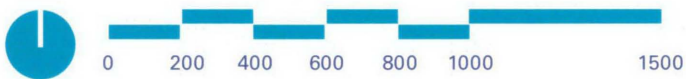
Element 1 - Master Plan Structure

111 Janet Abrams, ‘The form of the (American) city, the town of Seaside’, Lotus International, quarterly journal, 1986, Edizioni Electa S.p.A, Milano, p.16

Element 2- Street Pattern (Grid – A)

The street pattern at Seaside combines the radial geometry of the City Beautiful model with a regular grid pattern. In this respect it has some similarities with Dacey Garden Suburb where avenues and vistas radiate from a significant place. The connective grid is actually achieved by a combination of streets and pedestrian only lanes (similar to Radburn in some ways). Without the lanes, the street pattern would not be connective. Key elements include:

- Hybrid pattern of axial, radial and rectilinear grid
- Generally rectilinear
- Axial street signifies entry and village centre
- Generally connective street grid throughout
- Cul-de-sacs only used on the beach front
- Streets generally surround open space except on reserves
- Extensive use of rear lanes

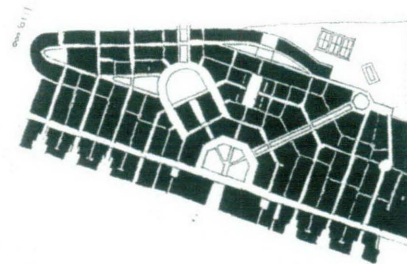


Element 2 - Street Pattern

Element 3- Block Pattern (Regular – A)

The combination of regular and axial street grids creates a combination of regular and irregular blocks. The use of laneways also creates a greater range of block types. Key elements include:

- Generally regular shapes divided by rear lanes
- Irregular lots occur where the axial streets meet the grid
- The relatively low density permits the irregular block pattern

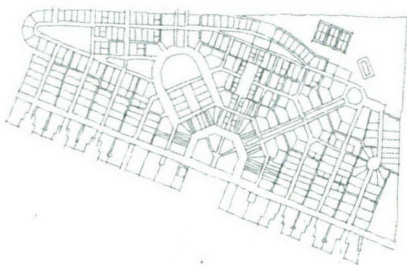


Element 3 - Block Pattern

Element 4- Subdivision and Lot Pattern (Regular – A)

The subdivision pattern is predominantly traditional and similar to the Rail Suburbs with higher density clearly concentrated at the entry. The fundamental difference however is that while at Riverside and Forest Hills Gardens the density is at the rail station, at Seaside it is more geometric place making than related to transit. Sir Peter Hall has also identified this fundamental difference in his comparison of the Rail Suburb and New Urbanism.¹¹² Key elements include:

- Generally traditional detached dwelling lots
- Lots generally regular within the block. Irregular at block ends to axial streets
- Special apartment lots located adjoining the principal plaza

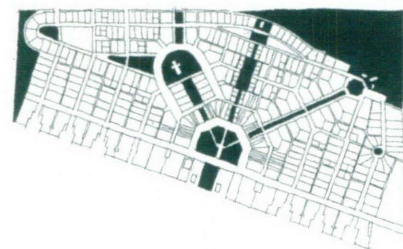


Element 4 - Subdivision & Lot Pattern

Element 5 - Open Space Pattern (Discrete - A)

Seaside includes a variety of open spaces including a formal plaza and a larger more informal park. The plazas are each defined by streets while the park is partly defined by a street, a lane, and a property boundary. The open spaces, broad radial avenue, and network of tree lined streets together create a connected public domain. Key elements include:

- Central formal plaza
- Generally discrete local parks
- Large reserve at edge of site



Element 5 - Open Space Pattern

112 Peter Hall, Chapter 11, 'Retro Urbanism; On the Once and FutureTOD' in Harvard Design Magazine No 12 – Sprawl and Suburbia , Fall 2000

Element 6 – Built Form (High Density Core – A)

Non-residential buildings are concentrated around the central plaza to define the urban core in the manner of the earlier models. The fundamental difference is that while the core is located at the edge of the site, it is on the local highway, not a transit node.

Housing is configured so that higher densities are concentrated around the urban core. Housing types include primarily two storey detached houses and a smaller number of apartment buildings. Key elements include:

- A well defined urban core
- Predominantly low density detached two storey dwellings
- Apartments concentrated near the central plaza



Element 6 - Built Form

Element 7 – Housing Design (Code – C)

Seaside requires that all dwellings be built to a 'design code'. The matrix codifies requirements for traditional elements such as entry, porch, front fence, as well as street width and other urban design requirements. All dwellings are architect designed and have achieved a high level of architectural and built quality. While the code does not require buildings in a particular style, the matrix of required elements is derived from Duany's earlier experience of analysing the traditional American house. The built result is a traditional small town image. The imagery of Seaside has not been bettered or even equalled in any subsequent New Urbanist project. Key elements include:

- Codified guidelines for all buildings
- Houses architecturally designed



Seaside Built Form

8.3 AUSTRALIAN CASE STUDY - NEWINGTON 1997

8.3.1 BACKGROUND AND VALUES

Newington was developed as the Sydney 2000 Olympic Village. It shares many of the elements of New Urbanism including discrete neighbourhoods with defined centres and edges, a gridded street pattern. As part of the 'green games', Newington showcased Ecologically Sustainable Design (ESD) in the context of a conventional suburb. In this sense a model community was proposed which could be replicated by the commercial development industry. The value of ecological sustainability was a value that may be traced back to the Design with Nature exemplars.

Newington was developed by a commercial consortium, the successful tenderer for a government bid. Newington consists of some 90 hectares and was initially planned in 1995 when a draft structure plan was developed for government. Tenders were called in 1996 and the successful tender awarded in 1997. During the process a design code was negotiated between tenderers and government.

The land use is primarily residential with a concentration of local shopping and business park at the village centre. There is a local primary school located in the open space corridor between precincts.



8.3.2 ELEMENTS

Element 1- Master Plan Structure (Edge Core – A)

Like the earlier models, the core of the community is concentrated at the edge of the site and includes a mix of uses. Unusual perhaps, is the inclusion of business park uses. Unlike the earlier models such as Forest Hills Gardens or Hampstead, the core is not associated with a public transit node, but a major street. The majority of precincts are not within walking distance of this core because of the linear nature of the site, but are linked by a bus route that is within 400 metres of dwellings. The master plan also includes three residential precincts each with a central open space and defined at the edges by open space corridors. A central boulevard on the site's ridge links

the precincts. The scheme incorporates New Urbanism principles of neighbourhood, centre and edge, but does not prescribe a traditional style of architecture. The plan form is generally a gridiron with each precinct grid aligned to the site's topography. Key elements include:

- Three gridded precincts linked by a spine boulevard
- Plan structured around neighbourhoods and open space
- Plan responds to topography

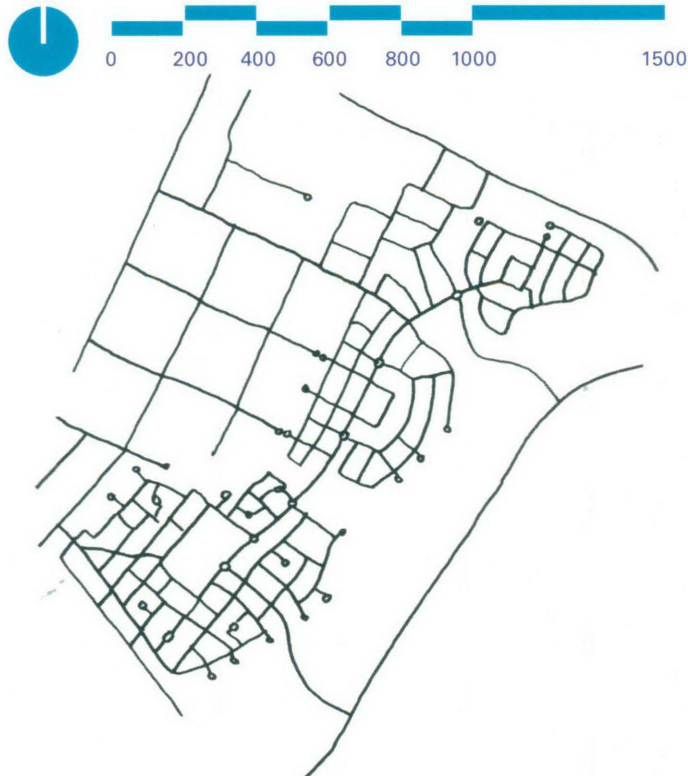


Element 1 - Master Plan Structure

Element 2- Street Pattern (Dendritic – B)

Overall the street pattern is connective, with each precinct containing a grid of smaller local streets linked to the spine boulevard on the site's ridge. The grids within the precincts are discontinuous in places to discourage local through traffic. One issue that has arisen is that the narrowness of the street reserve does not allow sufficient on street parking. Key elements include:

- Grid pattern – each precinct aligns with topography
- Central ridge boulevard links precincts
- Curvilinear boulevards signify entry and village centre
- Generally connective street grid throughout
- Some cul-de-sacs to apartment blocks
- Streets generally surround open space except on creek reserve
- Extensive use of rear car courts
- Streets too narrow to accommodate sufficient on street parking



Element 2 - Street Pattern

Element 3- Block Pattern (Regular – A)

The blocks are generally regular as the street pattern is gridded in most places. The blocks are generally short. The use of car courts creates atypical block types, as do the apartment blocks. Key elements include:

- Generally regular shapes incorporating car courts
- Super blocks contain apartment buildings



Element 3 - Block Pattern

Element 4 - Subdivision and Lot Pattern (Regular - A)

As a result residential blocks are generally traditional, subdivided principally into detached lots. The lots are generally 'small lots' around 300 square metres. The lots are relatively shallow being 25 -27 metres in depth. There are also 'zipper lots' where the boundary steps in plan to 'zero lot' the house on one boundary. There are also larger super blocks containing apartments. Key elements include:

- Generally small detached dwelling lots
- Lots generally regular within the block
- Special apartment lots located adjoining the village centre and creek edge



Element 4 - Subdivision & Lot Pattern

Element 5 - Open Space Pattern (Hybrid - C)

The open space network combines a linear reserve similar to that of Castlecrag or Riverside with more traditional neighbourhood parks. The parks are surrounded by streets and linked by the central avenue, which is greened by a planted median. Generally all parks are defined by public streets except for the long linear reserve on Haslam's Creek where apartments are placed at the eastern edge of the site. Key elements include:

- Local park in the centre of each precinct
- Generally discrete local parks
- Large reserve at edge of site on creek edge on flood way



Element 5 - Open Space Pattern

Element 6 – Built Form (High Density Linear – B)

The urban core is located near a major road connection and includes local shops, apartments, and a small business park. This mixed use core also acts as a buffer between the housing and adjoining light industrial uses and a detention centre. The core is defined by single storey buildings, with the two storey business park and three storey buildings grouped nearby. The built form is low rise with no buildings over three storeys. Non residential buildings are concentrated around the village centre located within the site. Key elements include:

- Predominantly low density housing types including:
 - Detached houses on relatively small lots
 - Semi detached and zero lot houses that may be either attached or have one wall on a boundary
 - Townhouses attached in groups
 - Low rise apartments that are either traditional three storey buildings or stepped down towards the creek. These buildings are a new housing form in the area.
 - Apartments concentrated near the village centre and creek edge
- Design guidelines for all buildings and precincts
- Houses architecturally designed



Element 6 - Built Form

Element 7 – Housing Design (Code – C)

Both the houses and apartments were architecturally designed specifically for the site. The apartments in particular are of interest, stepping down the site in terraces overlooking the creek. There is also a concentration of apartments in the 'village centre', which is placed on axis with the central Olympic Boulevard as well as along the creek edge. The apartment plan form interprets an earlier apartment model.

The houses were adapted and modified from the developer's range of types to meet the built form guidelines. Unlike Golden Grove where AMCORD was applied, the Newington guidelines included more prescriptive urban design controls for the public domain, or streetscape, as well as largely performance guidelines for largely amenity issues in the private domain such as solar access and privacy for the relatively small house lots. Key features include:

- Urban design and housing design guidelines
- Standard house types modified to comply with guidelines
- Site specific apartments designed



Typical Housing



Streetscape



Streetscape



Apartments