INTRODUCTION

THE CONVENTIONS OF MAP MAKING; SOURCES AND PROBLEMS

> 'To some men it is an extraordinary delight to study, to looke upon a geographical map and to behold, as it were, all the remote Provinces, Towns, and Citties of the world... what greater pleasure can there be then...To peruse those books of Citties.'
>
> Robert Burton, The Anatomy of Melancholy, 1621.

> 'When he can Write well and quick, I think it may be convenient not only to continue the exercise in his Hand in Writing, but also to improve the use of it farther in Drawing, a thing very useful to a Gentleman in several occasions, but especially if he travel, as that which helps a Man often to express, in a few Lines well put together, what a whole sheet of Paper in Writing would not be able to represent and make intelligible.'
>
> John Locke, Thoughts concerning Education, 1693

This thesis is a study of the town plans that evolved from the time Australia was settled by Europeans in 1788 up to the 1840s, when the process of plan making in New South Wales had become codified and predictable and able to be applied to other states when they too were settled by Great Britain.

This process was not straight-forward. Local conditions had an influence on the way the plans were constructed. The interior of Australia was unknown when the first town was settled, the continent was a vast land mass without maps. The maps were constructed in such a way and at such particular times to allow for the controlled spread of settlement, and for the settlers to arrive at a sense of cohesion. Within the larger county units the town plans were measured and marked out on the ground; these plans became a most important factor in the great enterprise of migration, giving form to the settlement process itself. The towns and the roads that linked them together provided the backbone of the colony in spatial terms. They were part of a totally different system of measurement and thinking from that used before by the Aborigines, one that had roots deep in western antiquity.

Apart from the plan of Sydney, the town plans were usually made before the town started to assemble. In the way of plans they were then used as predictable guides to the future. They had a long history behind them. They stretched from ancient European and Asian civilizations, and along the way, had been modified, abandoned, lost, and re-worked.

The Conventions of Map-making

As the thesis is constructed around the maps and town-plans, using them as direct evidence, a general background of the tradition of making town plans is first examined here.

The earliest ground plans of towns known come from Mesopotamia, surviving as fragments of clay tablets on which the plans are incised, dated from the 4th century BC. Even before this, the Egyptians planned and built monolithic cities, indicating a complex alignment between their observation of the stars and their aspirations for the built environment to echo it on earth. In central Turkey, a wall painting shows in stylised form the houses and the main thoroughfare of the town, dated to 6200 BC (1). The deliberately right-angled and orderly form of Greek cities such as Megalopolis indicates that urban surveying was one of the skills related to the flowering of the arts of architecture and sculpture in the Greek culture.

Derived from Greek forms, Roman town planning was exported wherever the Roman army went, and Rome became the centre of a vast network of urban foundations throughout her Empire. The 'agrimensores' or land surveyors were trained especially for this task. (2) (Figs.0.1 (a-c)). At the Australian Museum, Sydney, in January 1995, a funerary marble relief from Pompeii was exhibited depicting the Roman surveyor's tools of trade: his 'groma' or principal surveying instrument, with its plumb lines, measuring sticks and poles of alignment. These tools were used for dividing arable land and especially for planning and marking out new urban centers. (Fig.0.1 (d))

Other practices related to the founding and delimiting of towns used by ancient surveyors are discussed in Chapter Three, and linked with the founding ceremony of Sydney. There were also echoes of these practices in varying degrees in other Australian city foundations.

The Re-emergence of Surveying

With the decline of the Roman Empire, the techniques of the 'agrimensores' were lost, and measured town plans did not re-emerge until the Middle Ages in Europe. However, copies of the treatises of the Roman surveyors were made, the Corpus Agrimensorum was one; and unscaled 'picture maps' were drawn in which town walls and buildings were depicted on simplified ground plans.(3) Views of European cities began to appear as backgrounds to paintings, and in manuscript miniatures, and then woodcut prospects were printed for book illustrations in the 15th century.

In Renaissance Italy, Brunelleschi advanced the science of perspective from 1425, and Leon Battista Alberti

followed with his Four Books of Architecture which among other things, influenced the development of the 'birds-eye' view as a means of depicting cities. Its application to military manoeuvres was evident, and the military surveyors produced the first scale maps of towns to be made since Roman times.

By the sixteenth century Italian scholars were writing about the 'new' practices of levelling and determining distances. One of them was the Venetian Silvio Belli, who published his Libra del misurar con la vista, in 1565. He wrote about the use of the compass, cross-staff, quandrant, and astrolobe by the surveyors, who were starting to form a new professional body with members formally qualified.(4)(Fig.0.1 (e)) Their work became known in England where the practical 'landmeaters' or surveyors studied the books of Edward Worsop, Robert Record, John Dee and Leonard and Thomas Digges.(5)

In late Renaissance Italy the mathematical science of geometry, based on the revival of Euclid's theories, led to the publication of a large number of mathematical and geometric texts in the sixteenth century. Geometry was fundamental to the practical activities of cartography, land surveying, civil engineering and architecture, and these pursuits began to flourish in the Italian city-states, and filtered through to England in translations. It was also at the heart of a widely accepted neo-platonic cosmology which found expression in the art of the period. Cartographers like Cristoforo Sorte of Venice were consulted for their skill at designing hydrological systems used for the draining of the Venetian hinterland, and also for their skill at the perspective arrangement of painted landscapes. The compass, the cross-staff, the quadrant, and the astrolabe were their tools of trade. Denis Cosgrove has pointed out that for Renaissance Italy, a key to the unity of material and cultural change lies in the blossoming of the practical art of surveying and map-making allied with the speculative, philosophical culture evident in the surveyors art.(6) In Australian studies, also, the maps and plans of towns may provide useful links in the understanding of how material and cultural change came so quickly, and changed the face of the country within a few generations.

In 1572, the great Civitas Orbis Terrarum, a collection of maps in uniform style was produced by the German cartographers George Braun and Frans Hogenberg. This started a fashion for 'town books' in the 17th and 18th century, but manuscript maps continued to be made for particular purposes.

In England, one of the first published maps of a city was a woodcut bird's-eye view of Norwich dated 1558, made by William Cunningham, a distinguished physician and astrologer, who included it in The Cosmographical Glasse, a treatise on practical map-making.(Fig.0.2) Topographers William Smith and John Norden were followed by John

Speed, well-known even today, who provided many English and Irish towns with their earliest printed plans.(7)

More accurate and detailed plans were produced by the end of the 17th century, like the one by James Millerd of Bristol, and that by Wenceslaus Hollar of the ruined city of London after the Great Fire. Hollar had made maps and plans for the Royalist cause and returned to England when Charles II was restored to the throne. Surveys for the army were drawn up in the Drawing Room of the Board of Ordnance at the Tower of London. Paul Standby was trained there as a draughtsman, and sent to Scotland for the Highlands Survey in the 1740s, where new techniques of survey and topographical description were developed. (Fig.0.7) These proved useful in the Napoleonic Wars, the Peninsula Wars, in the subjugation of the Irish, and finally in the British colonial expansion in the first half of the nineteenth century.

Standby became a key figure in the rise of the new interest in landscape painting, in the 'emotional appropiation of landscape in terms of the beautiful, the picturesque, and the sublime', but he exercised at the same time a compelling influence over the adoption of empirical naturalism in topographic art. He became a founding member of the Royal Academy. The pressure on the representational arts to move in the direction of naturalism was strong at the end of the eighteenth century, and 'topography came to exercise a commanding influence upon landscape as a fine art because of its continuing importance to the army and navy.'(8) Topography, of course was the stuff and substance of surveying.

In the 18th century, therefore, there was a great improvement in surveying methods and town plans were produced to a higher standard of accuracy. Many maps, however, still retained their decorative pictorial character, and were collected, not only for information but also for the delight they afforded to the viewer.

The continuing importance of skills in depicting topography was fostered in the drawing school attached to the Mathematical School at Christ's Hospital, which trained boys for the British Navy, and later at military academies at Woolwich, Marlow, Sandhurst and Addiscombe. The schools where drawing was taught for the purpose of recording information trained draughtsmen for the survey teams, and provided them with the traditions and background common to the practitioners in the art world.

The illustration by Paul Standby of a team of surveyors working in Scotland in 1749, with theodolite, staff, and chain,(Fig.0.7) can be compared with Robert Dixon's depiction of a survey team camping in New South Wales near the Liverpool Range in 1835. (Fig.0.8)

The American Counterpoint to Town Planning in Australia

In the American Colonies, the grid system of town planning appeared quite early in the plan of New Haven, which originated in 1641, and was pursued most notably in the plans of Philadelphia (1682), Williamsburg (1699), the fortified Charlestown (1704), and Savannah (1734). The grid was the archetypal colonial form, from Greek and Roman times, ideal for newly settled offshoots from the mother city. New Haven, the first example, was a purely Vitruvian figure, proclaiming its long ancestry in its perfect square shape, divided into nine smaller squares, with the central one reserved as common land. (Fig.0.3 (a) and (b)) The urban structure was widely spread, unlike the towns in England, but shaped by taut cubes, exact and self-contained.(9)

In the 18th century, the establishment of the National Trigonometrical Survey by the British Board of Ordnance after 1782 meant that many urban surveys were undertaken at the turn of the century, and map making became part of the military campaigns abroad, particularly in America. There, Thomas Jefferson presided over the formation of the Public Land Survey System. The Ordnance of 1785, reflecting the English Survey, but extending it over the the vast lands of North America, established the rectangular system that divided land into 'townships' of 6 miles square based on the true meridian, further divided into 36 one mile sections.(10)

This system can be compared with the system that was adopted in New South Wales for the measuring of the Nineteen Counties during the 1820s, which culminated in the Darling Regulations of 1829.

The improvement in surveying methods in the eighteenth century was parallelled by advances in navigation at sea, with the English astronomers taking a leading role, and Captain James Cook testing their calculations in the Pacific.

Cartography became allied to the rise of the powerful centralised governments of Europe. Cities like Berlin, Karlsruhe, and St Petersburg expanded, and in Asia and the Americas, new cities arose, transplanted by the colonial empires. Bombay, Calcutta, Penang, Hong Kong, Djakata, Singapore, and Manila, drew to themselves the trade of the East as it was transferred to the West. In America, the town of Savannah, 1734, is a colonial example of a very formal grid-iron or rectilinear street plan.(Fig.0.4) Though some commentators see this type of plan reflecting egalitarian principles, others see it as utilitarian, and some discern an autocratic military influence. It has been described by Vincent Scully in aesthetic terms which is nearer the mark for our purposes here. He says: 'The plan of Savannah...intensifies the contrast between the closed and open units of the grid; the squares of the park were separated by only a few

blocks of build-up rectangles, so that a beautiful rhythm of street and square expanded and contracted throughout the city.'(11)

The American examples provide an interesting counter-point to the Australian experience, but town formation here is probably linked more closely with the planning of the new squares of cities like London, Edinburgh and Dublin, which may be the originating impluse transmitted from England. Those cities started to grow in regularly surveyed blocks outside their old city walls in the nineteenth century, and provided models for antipodean cities like Adelaide and Perth. (Fig.0.5)

Maps and Town Plans in Colonial Australia

It is in this tradition of map making, which reached its high point of expression in the 18th century, that the urban plans of Australian towns and potential cities can be considered. In England, surveyors were trained both for the army and the navy, and it was the naval officers who drew most of the pictures depicting the first settlements in Australia, the coastal profiles and views of harbours, the paintings of the fledgling towns, and the early panoramas. The plans of towns in colonial Australia, however, were drawn with the pictorial element supressed; they were intended to impart information rather than look decorative. This applies to most early plans, but some map-makers here managed to combine information with a pictorial flair. John Hunter, William Bradley, and George Raper were naval officers who drew plans and maps in a distinctive style. Convict artists also contributed: the maps and topographical views of emancipists Francis Fowkes, James Meehan, and Joseph Lycett were valued highly. The visiting French ships had skilled map makers on board, and their published plans of Sydney add to our collection.

Alwyne Wheeler points out in his preface to The Art of the First Fleet, the collections of drawings and maps held at the British Museum (Natural History), London, are valuable records which encode information useful to scientists, art historians, environmental historians, and he might have added, historians of urban form. He writes that the drawings and maps are an important new resource for scholars.

> 'In the past, Australian historians writing about the first years of British settlement have tended to ignore the existence of visual material (held in their collections)...When the material has not been ignored completely, it has been used mainly to illustrate modern interpretive history. The visual documents have rarely been interrogated in terms of their status as evidence for the kinds of information they convey.'(12)

In this thesis, I have given pride of place to the maps and plans. These visual documents have been interrogated both for the information that they themselves convey, and for the evidence they present about the tenor of their times.

The conventions of 18th century map-making were still influencing the cartographic style in the early decades of the colony, and the maps and plans have an echo of the English urban plans in their composition. Later on, in the military tradition, Thomas Mitchell was a skilled map maker and draftsman, and his manuscript plans of towns, though simple by English standards, have a peculiar attraction of their own. Some engraved maps were published in England from measurements taken in the colony. After 1831, published maps of Sydney and then other capital towns were mainly drawn at the Surveyor-General's Office in Sydney, engraved on copper, and printed in the colony. The most widely known map of early Sydney, issued in 1831, was made this way. After this time, private surveyors and map makers published town maps of Sydney, surveyors like William Henry Wells, in 1843, and Woolcott and Clarke, in 1854.

But the great bulk of maps in Australia were not published before 1840. They were used as working documents in the Surveyor-General's Office, first in Sydney and then at the other State capitals. Some important ones have been published in this century and used by historians, particularly in local studies, heritage studies, and books about early artists. The panoramas and early town views, however, allied to map-making but more attractive pictorially, have been prized by collectors and libraries. A list of the most interesting of these made before 1850 is added in Appendix III.

Terminology

It is a convention that the terms 'plan' and 'map' are applied in specific ways by the Archives Office of New South Wales, the chief depository of maps and plans in this State. The term 'plan' is reserved for plans of buildings, and the term 'map' is applied to larger tracts of territory, including depictions of towns. The term 'town plan' being an amalgamation of both terms is used in the professions of Town Planning and Surveying in this century, and it has been used in this sense in this thesis. Both terms have become interchangeable in general use, and so both terms are used here.

Map and Plan Sources and other Documentary Sources

In this thesis the town plans themselves form a large part of the historical evidence, and their provenance, their authors, and their methods of production, contribute to their interest. Copies of many of the extant plans from the earliest decades of European

settlement have been included in volume two, and an attempt made to discover as much as possible about their provenance. The reading of these maps is an essential part of the construction of the argument. Most important is the collection of Maps and Plans from the Surveyor-General's Office held in the NSW State Archives. These are supplemented by maps held in the Mitchell Library, State Library of NSW, and other maps held by other State Libraries and Departments. For the period of initial white settlement, maps have also been sought from the Public Record Office, London, the British Library (Natural History), and Melbourne maps sought from the Royal Geographical Society.(13)

Apart from the maps themselves, other important primary sources for the description of town formation and town life, are the Governor's proclamations, orders, and notices. Town Regulations were issued and recorded in the Governor's despatches to London. Before 1803, and the setting up of the Sydney Gazette by George Howe under Governor King, orders were printed individually by George Hughes from 1795 to 1800. Many of these had to do with the settlement process as it took place in detail on the ground, with the regulations affecting the shape and character of the town. The conduct of the prisoners, and that of the population in general was shaped by the urban form around them, as it was assembled and defined in physical terms. After 1803, orders were regularly printed in the Gazette until 1824 and the establishment of the Legislative Council.

Each Governor had a distinctive style. Governor Phillip's orders were not printed at the time, and for this early period we have to go to his despatches or to the diarists. The most consistent of them was David Collins. Collins also commented on the tenures of Lieutenant Governor Grose and Governor Hunter. For a long time, the official despatches and the town plans sent over with them to the Colonial Office in London, were not available to historians and scholars here, and information about past endeavours in the Australian context had to be sought in London. It was not until the late 1890s that the despatches from the early years were published, by the New South Wales Government, and later by the Australian Government. They appeared in the volumes of the two series Historical Records of New South Wales, and then Historical Records of Australia. Scholars, at last, had access to many important documents, and slowly, there emerged the possibility of constructing an overview of the period.

Governor King despatched his orders to London, and also produced an Index and a printed abridgement. He published them in the colony in the Sydney Gazette. In fact, the first book produced in the colony was George Howe's publication of King's NSW General Standing Orders, 1792-1802, 1802-1806. Under King, town leases were given

to a selected number of settlers, and the town of Sydney took on a more permanent character.

The newspaper and other official printing work continued under Governor Bligh, but scarcity of paper caused Howe to suspend operations periodically, leaving many colonial events unreported in 1807 and 1808. Bligh's term was of course interrupted by the fracas of the Rebellion of 26 January 1808, and the Gazette was not published at that time.

Governor Macquarie, after he took over in 1809, made frequent use of the Gazette to disseminate his instructions for the ordering of the affairs of Sydney, and also laid down similar rules for the other towns in the County. At the end of Macquarie's term, Commissioner J.T. Bigge's Reports and Appendices are useful sources of some town plans.

In the 1820s the Colonial Secretary's letters to the Surveyor-General, and his in return, are the main sources. After 1824 and the appointment of the Executive Council in New South Wales to advise the Governor, the statutes passed by the Council were approved and then published. As well, Government Orders were continued for a time in the Sydney Gazette and in Proclamations, Orders and Notices (1825-1832). Subordinate legislation was published after 1832 in the official Government Gazette.

Under Governor Darling, a Board was set up to frame 'Regulations for securing the regularity and improvement of towns', and its report to the Executive Council was tabled in March 1829. The Order which followed set out the first comprehensive set of Town Planning Regulations in the colony, known as the 'Darling Regulations'. These are discussed in Chapter Seven.(14)

Apart from these regulations, the Police Act followed in 1833, and other re-inforcing Acts, like the Tolls Act of 1832 and the Streets Aligment Act of 1834 were also passed. The most important measure for the control of building in the towns, apart from the Darling Regulations of 1829, was the Sydney Building Act of 1837, and this re-inforced the town planning regulations and together they became the regulatory instruments for the ordering of towns and controlling the process of building and street alignment in New South Wales. By inference, they were also the major regulatory instruments applied to the control of building in Victoria and in the other eastern states. This Building Act was based on the London Building Act of 1774. It was modified in 1838 to take account of local conditions and climate, and then remained in force for another forty years.(15)

Sources consulted apart from those mentioned above are included in the Bibliography, which can be found in Volume II. Secondary Sources influential in the development of the arguments are found in the writings of

Joseph Rykwert, Jeremy Dawkins, Alan Atkinson, Pamela Statham and Raymond Wright. The manuscript letters of William Dawes written to Dr Maskelyne were transcribed by the author from those held at Herstmonceaux Castle, Sussex. These letters were not studied in detail until I started the work on the thesis in 1992.

Questions and Problems

The questions which have been part of the inquiry into town plans and the formation of towns in Australia, are grouped around seven problems:

1. What customs and traditions from the store of Western knowledge were translated into the rites of founding towns in Australia?

2. What plans were adapted from known patterns of towns drawn from the European and English tradition?

3. How did the towns we now know in Australia come to be located where they are?

4. What are the recognisable characteristics of official Australian town plans?

5. What proportion of public land was reserved within the town structure, in contrast with land granted or for sale?

Leading on from these questions, two others emerged as the thesis progressed:

6. What made the initial sites of the capital cities so powerful as centres of state economic activities? What reinforced their primacy?

7. Why were the links between the cities so poorly developed in Australia?

Though these two last questions are of vital interest to us now, in 1995, only partial answers, or indications, have been deduced from the argument of the thesis. There is a need for further work to done by others on these questions.

* * *

These questions have guided the inquiry as it developed to span the years from 1788 to the 1840s. They are re-introduced in the last chapter, and answers attempted and comments made, deduced from the study undertaken.

In 1978, J.W. McCarthy and C.B. Schedvin wrote in the introduction of their book Australian Capital Cities, that 'there is as yet no generally accepted synthesis, or framework, that might help to define and classify the growing variety of studies that fall under the heading of

'Australian urban history'. They thought historians could usefully turn to American urban historiography for examples. The 'urban biography' has been recently considered as an important type of urban history in American studies, but Eric Lampard has argued that they do not begin to provide the necessary framework for understanding the urbanisation of a society.(16)

Urban History is essentially syncretic; it embodies strands from several disciplines: from the History of Law and Institutions, from Social History, from Geography, from Economic History, and from the history of Architecture and Town Planning. Social History is now having a vogue; other strands have been eclipsed by other more 'politically' pressing historical concerns. The structure of The Sydney-Melbourne Book, 1987, written about inter-city rivalry (17) can act as a pointer to pre-occupations from the 1980s to the nineties: the chapters devoted to 'urban ecology' cover business, political culture, the law, crime, immigration, education, with prospects predicted for the future being greater differentation, greater inequality, and emphasis on real estate values. The special spirit of each city, though underlying the arguments in the book, is not easily encompassed or expressed.

Pamela Statham's book on the Origins of Australia's Capital Cities, published in 1989, is a most interesting attempt to pursue comparisons between cities, something that has not been attempted in any depth before in Australia. This in fact leads us into another sort of urban history; the consideration of the relationships between the cities themselves.(17)

So an overview of the emerging towns and cities up to the 1840s, though it sounds straight-forward enough, is not without its problems. It does not observe the usual sorts of subject demarcation. It is not social history, though it describes the assembling of migrant people. The subjects of current compelling interest, associated with Aboriginal/European relationships, and gender positioning have been deliberately excluded from the arguments in the thesis in order to reduce its scope and allow a focus on urban form and structure. It is not intentionally historical geography, though it may be close. Historical geography is considered hard to define even by geographers, apart from its stronger emphasis on spatial relationships than historians normally exhibit.

Moreover, it is not post-modern history, as I have tried to address nineteenth century ideas about the transplanting of a society rather than trying to interpret that society in terms of current values. It is not economic history, though the forces underlying the spread of people from Europe and the dispossession of other people who were already here, can be considered under this heading.

What it is concerned with is the way the continent was settled by Europeans, how they ordered their urban settlements in spatial terms, and the implications of this; how they helped to establish a sense of cohesion with their urban arrangements. It is concerned with underlying structure of change; in a formal sense, an attempt at 'structural history'. A satisfactory integration of urban history into national history has yet to be made.

As well, the primary evidence used in the thesis, the plans and maps, is not the usual sort used by historians. Some geographers have forsaken plans in favour of concern with process. In fact, the maps are regarded and described here as if they are works in a minor art form; their author is acknowledged where possible, their printer, their context, where they were published, where they are now stored. All this technical information adds to the provenance and interest of the map. I have used these maps as formal signifiers of the far-reaching social and topographical changes which occurred in the process of European settlement in the first sixty years after 1788, in the hope that this approach will make a contribution to the understanding of that process.

If the subject matter of urban history cannot be fitted easily into any of the compartments of traditional historiography, McCarthy suggested in 1978 that a lack of suitable technique is not sufficient explanation. He suggested that urban history lacks an ideological interest, and as the thematic study of grand themes dominates research, local historians are left to pursue the anecdotal history of towns or localities.(18) Heritage Studies funded by the Australian Government chanelled into local government bodies have encouraged local histories, but at the expense of ignoring the city as a whole, both in terms of the changing relationships of its component parts, and in terms of comparing and tracing its relationships with other cities.

Eleven years after McCarthy and Schedvin, in 1989, Pamela Statham's volume tackled different sorts of questions. They reflect my own queries. She and her contributors lean fairly heavily on the economic factors propelling foundation and growth; and there are some valuable insights explored. The impinging political factors, the climate of opinion, both in the colony and especially in Britain, must be acknowledged. The importance of government expenditure and centralised decision-making is emerging as a pervasive factor, one that was with us from the very beginning. The prominence of government expenditure in defence and administration, subsidised by Britain, produced a standard of wealth in the colony unachievable by any other means. (19)

The surveying of the land was one of these expenses, subsidised by the British government and central to the expansion and growth of the colonies. As well, the most

important urban reforms, leading to further change in administration, commonly had their genesis in Britain, with the Australian states following along behind.

This is the first study to demonstrate the role of the town plans themselves as determinants of social cohesion in a newly settled continent. Previously, these plans as signifiers have largely been ignored, and only rarely have the town plans as a body of work been considered in the Australian context.

Urban maps in Europe were usually made to depict the established growth of a town or city, but here in Australia there had been no permanent assemblages of native people which could be termed 'urban'. That was one reason why the indigeous people were popularly regarded as a people with no 'title' to the land that the Europeans understood. The land, to be useful to the incoming settlers, had to be marked out and defined for the settlement to remain orderly and controlled. In the urban context the geometric grid provided a uniform method of dividing the spaces. The effectiveness of the plan itself shaped development. The orderly marking out of town allotments, and after 1831, their sale, ensured that occupation and development could be independent of government but still have the protection of law supported by the power of the state.

It is in the co-operation between state and private citizens rather than in the dominance of the state itself, that we can see the most fruitful participation in the rise and growth of antipodean towns and cities. The balance struck was not always appropriate, but the system had its virtues. Ideas engendered by democratic ideals, by utilitarian goals, and by the belief in the transforming role of the planned and built environments, were paradoxically contained within the form of the plan.

INTRODUCTION
ENDNOTES

1. James Elliot, The City in Maps: urban mapping to 1900, The British Library, London, 1987, p.9.

2. Ibid, pp.10-11; Joseph Rykwert, The Idea of a Town, M.I.T. Press, Cambridge, Mass, 1988, p.62; Catalogue of the exhibition 'Rediscovering Pompeii', held at the Australian Museum, January 1995, item 62.

3. Elliot, p.11.

4. Denis Cosgrove, 'The geometry of landscape: practical and speculative arts in sixteenth-century Venetian land territories', The Iconography of Landscape, Cambridge University Press, Cambridge, 1988, pp.260-1.

5. M.A.R. Cooper, 'Edward Worsop: from the Black Art and 'Sundry Errours to 'True Geometricall Demonstration',' paper given at The Great World of Surveying, Seminar held 14 March 1994, Institute of Surveyors, Sydney.

6. Cosgrove, op. cit, p.271.

7. Elliot, p.11. An interesting book of small-scaled picture maps appeared in Sydney in 1848, Joseph Fowles' Sydney in 1848, D.Wall, Sydney, engraved by the author. He claimed 'This plan has been adopted in several cities in England, and has been found successful.' The buildings along the street fronts in Sydney were depicted and described also by the letterpress. The technique stems from the maps made by William Cunningham in 1559, See Fig.0.2.

8. Bernard Smith, Imagining the Pacific, Melbourne University Press, Melbourne, 1992, pp.28-29; N.Alfrey and S. Daniels, eds., Mapping the Landscape, University Art Gallery, Castle Museum, Nottingham, 1990, 'Landscape and the Ordnance Survey', N. Alfrey, pp.23-7, and J. Christian, 'Paul Stanby and the Military Survey of Scotland', pp.18-22.

9. Vincent Scully, American Architecture and Urbanism, Thames & Hudson, London, 1969, pp.30-34.

10. Elliot, p.59; Institution of Surveyors NSW, The Great World of Surveying, Seminar Papers, 14 March 1994, Robert Foster, 'The Three Surveyors of Rushmore' (Washington, Jefferson and Lincoln).

11. Scully, op cit, p.34; Mary L. Morrison (ed), Historic Savannah, Historic Savannah Foundation, Georgia, 1979, pp.ix-x. Savannah had its foundation in 1732, when a band of 114 settlers, including a group of debtors who were confined to the London gaols, followed the reformer James Oglethorpe to settle in Georgia. He chose the site on the Savannah River, a healthy situation 10 miles from the

sea. The banks, about 40 foot high, led on to a flat bluff which extended into the country five or six miles. The probable source of his plan, though debatable, is thought to follow the traditions of a Roman military plan (see Chapter Two), or else the English town planning experience in Northern Ireland. Defense was a major consideration, and the plan was compact, and allowed for four satellite villages from which the villagers could move their cattle and families into places set aside in the town, if under attack. Each freeholder was granted 50 acres of land, which included a town lot of 60 x 90 feet, a garden lot of 5 acres, and a farm of 45 acres. The town revolved around its squares, town lots and wards. The plan of Savannah was used in other early Georgian settlements in North America: Ebenezer, Darien or New Inverness, and three others had similiar plans, Sunbury, Hardwick and Brunswick. Parallels can be found in the less systematic planning in NSW, at the Hawkesbury, where the settlers had town lots as well as their 30 or 40 acre grants. (See Chapter Five)

12. Alwyne Weeler, in Bernard Smith and Alwyne Weeler, The Art of the First Fleet, Oxford University Press, Melbourne, 1988, p.17.

13. Copies of most maps from the very early colonial period were sent back to England. Other unexplored sources are the Royal Geographical Society, London, and the London Geographical Institute.

14. A detailed account of these Acts and regulations is provided by Jeremy Dawkins in his Master's thesis, 'Town Planning before Planning Schemes', Sydney University, 1986.

15. Ibid.

16. Pamela Statham, Origins of Australia's Capital Cities, Cambridge University Press, Melbourne, 1989, Introduction.

17. Some valuable work has been done by local historians, working within the ambit of Historical Societies, which have attracted a growing following during the last twenty years. People such as Nancy Gray, Peter Reyolds, Joy Hughes, Carol Liston, Terry Kass, have invested their local histories with a lively intelligence and careful and skillful use of the primary sources. Local history has also attracted academic historians, like W.K. Hancock, Alan Atkinson, and Graeme Davison.

18. Local History for a long time was the disregarded poor relation of National History which pursued certain well defined themes. See Chapter Three. Numerous Heritage Studies have also focussed very closely on particular areas.

19. Pamela Statham, op cit, p.27.

INTRODUCTION

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Fig.0.1 (a) Fragment of a large plan of the city of Rome executed on stone. British Library, London.
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Fig.0.3 New Haven, Connecticut, USA.
(a) Wadworth Map of 1748, showing the original plan of 1641, in D. Lyman, Atlas of Old New Haven, New Haven, Conn. 1924; reproduced in Vincent Scully, American Architecture and Urbanism, Thames and Hudson, London. 1969, p.30.
(b) New Haven, Dolittle Map of 1824, ibid.

Fig.0.4 Peter Gordon, 'A view of the town of Savannah as it stood the 29th March 1734', engraving, London? 1734, Bitish Library, reproduced in Elliot, op.cit, p.57.

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CHAPTER ONE

THE STARS AND THE TOWN : LIEUTENANT WILLIAM DAWES AND GOVERNOR ARTHUR PHILLIP

> 'Mr Dawes we do not see so frequently. He is so much engaged with the stars that to mortal eyes he is not always visible.'
>
> - Elizabeth Macarthur.

> Governor Phillip: 'who has seen much of the Service. and so much of the World; and has studied it. He is posses'd of great good Sence, (and is) well inform'd'; in him was blended that 'which is not common with Captains the Gentleman the scholar and the seaman',
>
> - Southwell, quoted by Allan Frost.

In the colonisation of Australia, the founding of towns was an integral part of the settling of the people sent out from England. The initial location and planning of the towns has influenced both the character and development of the cities which have grown out of them and the very nature and complexion of the nation.

One of the first things to be done when the First Fleet arrived at Sydney Cove, was to fix its position as exactly as possible. This task was undertaken by Lieutenant William Dawes of the Marines, who accompanied Governor Phillip on the First Fleet to Botany Bay, arriving in January 1788. Eighteen years before, Captain James Cook had taken readings in Botany Bay, of course, but now a carefully-planned observatory was to be built, and the stars of the Southern Hemisphere studied in more detail.

William Dawes had studied astronomy, and was recommended by the Astronomer Royal, Rev Dr Nevil Maskelyne, for service in the colony. He was furnished with instruments and books for an Observatory by the Board of Longitude at Greenwich, and particularly instructed to watch for a comet expected to appear in 1788. When he arrived, he found that he was also allotted the task of marking out the plans of the first towns on the continent, with the laying out of Sydney at Sydney Cove, and Parramatta, twelve miles (18 km) inland.

Governor Arthur Phillip himself was furnished with written instructions about the principles of establishing towns in the colony, but without definite indications of what form they should take. In the Additional Instructions issued to Phillip on 20 August 1789, he was instructed:

> 'And whereas it has been found by experience that the settling of plantees in townships hath very much

> redounded to their advantage, not only in respect to the assistance they have been able to afford each other in their civil concerns, but likewise with regard to their security, You are therefore to lay out townships of a convenient size and extent, in such places as You, in Your discretion shall judge most proper; having, as far as may be, natural boundaries extending up into the country and comprehending a necessary part of the sea-coast, where it can be most conveniently had.'

This Instruction has resonances derived from Elizabethan times and the Royal Letters Patent issued to such men as Sir Humphrey Gilbert and Sir Walter Ralegh when they endeavoured to colonise American lands. Gilbert was charged 'to discover and occupy lands not possessed by any Christian prince'; he and his heirs were granted lands they should settle in perpetuity, with the power to expel any intruders within 200 leagues. He was to exercise all jurisdiction and make laws 'agreeable to the form of the laws and policies of England'. Ralegh's charter was also confirmed by parliament and was informed by the writings of Richard Hakluyt the younger, expressed in his Discourse of Western Planting, which advocated the view that colonisation was a matter for the enterprise and resources of the state, rather than of private persons.(1)

The choice of the word 'plantees', in Phillip's Instructions is an interesting echo of the Elizabethan theories on colonisation propounded by Hakluyt and Francis Bacon.(2) The literature of exploration and colonisation from Elizabethan times and the seventeenth century casts some light on the principles of colonisation two centuries later in Australia. The experiences of those who went west to America bears curious parallels to our own, not least in the way the towns were founded and planned. Pamela Statham, in her introduction to The Origins of Australia's Capital Cities, notes that our main cities grew on the same locations where they were fortuitously founded, but it appears that the same was true also of some American cities like Jamestown in Virginia.(3)

In New South Wales it was accepted that the colonising process was a state enterprise, and Phillip was in fact invested with the power to found a 'new' England beyond the seas. The fact that the motive for colonisation was to dispose of the people who had forfeited their rights as citizens by being convicted of crimes according to the laws of England at that time, did not preclude them from being considered inheritors of the same British laws and policies which were enjoyed in England, when they had landed in New South Wales.(4)

With William Dawes we have a figure who links the great voyages of discovery in the last decades of the eighteenth century with the scientific bases underlying

their achievements; with Cook, Maskelyne, and Greenwich Observatory. It is not without a sense of propriety, moreover, that the Southern Cross, symbol of the sky over Australia, is the distinctive motif on our national flag. Dawes too, largely by default, became the most skilled land surveyor in the colony, and was responsible for drawing up the town plans of both Sydney and Parramatta. As he has hitherto been a rather shadowy figure, it is worthwhile to look at the background of his appointment.

Dawes was twenty-six when he reached Sydney, the eldest son of Benjamin Dawes, clerk of works in the Ordinance Office at Portsmouth; his father, therefore, was in the business of supervising the construction of buildings in his everyday work, and judging from his letters written on his son's behalf when he was in New South Wales, was a well-educated man. His son, William Dawes, was born in 1762, joined the navy, and was gazetted second lieutenant in the marines on 2 September 1779. He was wounded while in service against the French off Chesapeake Bay in 1781. Sometime after that he was trained as an astronomer, serving some time under Nevil Maskelyne at Greenwich.(5)

The Astronomer Royal himself had been a key figure in the co-operation between the Royal Society, the Admiralty, and the Royal Greenwich Observatory in the arrangement to have the lunar mathematical tables, calculated by the French mathematician and cartographer Tobias Mayer in 1753, compared with observations of the moon made by James Bradley in England, and given a practical test at sea. In a voyage to Barbados in 1763, Maskelyne showed that it was possible to find longitude at sea using Mayer's lunar tables and Hadley's quadrant at a greatly enhanced exactitude. It was a lengthy process, however, and Maskelyne himself, when he became Astronomer Royal, organised the computation of tables of lunar distances and persuaded the Admiralty to publish them in the Nautical Almanac in 1766. The tables gave the angular distances of the moon from 9 bright stars and the sun for every 3 hours of Greenwich time and for every day of the year.(6)

Four years later, in 1770, it was this arrangement of measurements which enabled Captain James Cook on his epic voyage to the South Pacific in the Endeavour to navigate with such accuracy in unknown oceans; and heralded the British ascendancy at sea from that time for the next hundred years. It also enabled Cook to discover and map the east coast of the hitherto unexplored Australian continent. He carried Maskelyne's Nautical Almanac, and was accompanied by Charles Green, who also, like Dawes later on, was an assistant to Maskelyne.(7)

So Dawes had impeccable connections in naval circles; he was answerable to Maskelyne for his main work in astronomy, and it was this conflict of loyalties between the work he was commissioned to perform for Greenwich and the duties Governor Phillip expected of him, which, in

the end forced the deterioration of his relationship with the Governor and led to his withdrawal from the colony in December 1791. But as the initial astronomer and first town planner in Australia he warrants close attention.

In an article written in 1924, Professor Arnold Wood of Sydney University, wrote about the tantalising lack of information about Dawes during his four years in Sydney:

> 'There is no man among the founders who ought to have given us so much information about himself as Lieutenant Dawes, and there is no man among them who has given us so little. He was the scholar of the expedition, man of letters and man of science, explorer, mapmaker, student of language, of anthropology, of astronomy, of botany, of surveying, and of engineering, teacher and philanthropist.'(8)

Professor Wood, at that stage, pointed to the writings of Watkin Tench, Elizabeth Macarthur, and Phillip himself, for information. Seventy years on, in 1995, we can fortunately add quite a bit more to this scanty record. The Meteorogical Journal Dawes compiled while at Port Jackson, has now been located at the library of the Royal Society in London. As well, Dawes did write some letters while he was in Sydney in those first seminal four years, and these, fortunately, have survived. He wrote them to Dr Nevil Maskelyne, the Astronomer Royal at Greenwich, and they have been kept at Herstmonceux Castle, Sussex, part of Greenwich Observatory.(9) The author was able to study these letters in manuscript in England, and they can now fill in some details in Dawes's own authentic voice.

Another clue was found in the Mitchell Library, Sydney: a letter written to Dawes by a French astronomer who was sailing with La Perouse in the Astrolabe, which arrived in Botany Bay most unexpectedly six days after Phillip's first landfall in Australia. This was written by Monsieur L. Dagelet who must have met Dawes briefly before the ships of the First Fleet moved north from Botany Bay to Sydney Harbour. A few days later, on the 1 February, Dawes accompanied Lieutenant King when he went to visit the French Expedition on Governor Phillip's instructions, and he met the French Astronomer again and inspected his observatory tent with its quadrant and other instruments. King wrote in his Journal about the meeting and remarked that the French were very well equipped, and described their establishment on the shore of Botany Bay, where they had made a compound within a stockade, and mounted two guns.(10)

Dagelet subsequently wrote to Dawes on 3 March 1788, discussing the observatory Dawes was in the process of building on the western shore of Sydney Cove, and regretting that he was not well enough to make the short journey up from Botany Bay to see it in person before they left. He suggested several pressing lines of

enquiry that Dawes might have liked to pursue, seemingly to encourage Dawes to continue his own work if he himself did not get back to France, a poignant reminder of the dangers of long sea-voyages then. He also made some practical suggestions about the plan and arrangement of building. (11)

Two other sources of information about Dawes in the colony were Captain Tench and Elizabeth Macarthur, contemporaries in Sydney, and they were both lively commentators. Mrs Macarthur, in particular, wrote that memorable sentence about Dawes which has passed into popular legend. Mentioning him as being among her friends in the colony, she said:

> 'Mr Dawes we do not see so frequently. He is so much engaged with the stars that to mortal eyes he is not always visible.' She wrote that she 'had the presumption to become his pupil and meant to learn a little of astronomy.' She had many pleasant walks to his house at the tip of the western shore of Sydney Cove, and had 'given him much trouble in making orreries' (i.e. clock-work models of the planetary system) and 'explaining to me the general principles of the heavenly bodies, but I soon found I had mistaken my abilities and blush at my error.'(12)

Captain Tench writes of Dawes's facility at surveying and exploring in his account of the settlement; he became a close friend, and they both went on exploring expeditions together in the County of Cumberland. In fact, some of Tench's observations about the conditions of the settlement and the native people seem to bear the stamp of a more scientific turn of mind, which suggests that Dawes, indeed, might have been their original author, and that Tench adopted them after discussing them with his friend. On these expeditions, as they calculated distances by pacing (2,200 paces were deemed to be one mile), each night they measured their route by transverse table, so they always knew exactly where they were. Tench wrote that 'This arduous task was always allotted to Mr. Dawes, who, from habit and superior skill, performed it almost without a stop, or an interruption of conversation.' (13)

Lieutenant William Bradley is known to have collaborated with Dawes in his work. Bradley is thought to have been the great-nephew of James Bradley, one-time Astronomer Royal, and he checked Dawes' measurement of the longitude of the new observatory by a mean of 176 lunar distance observations as 151'20" E, with a latitude of 33"52'30". (14)

Yet another friend of Dawes when he was in Sydney was Daniel Southwell. Southwell had been a midshipman on the <u>Sirius</u>, and was promoted to Lieutenant during the voyage

out. He gives a portrait of Dawes in a letter to his mother on 14 April, 1790.

> 'To give you his character in a few words, he is a most amiable man, and though young, truly religious, without any appearance of formal sanctity. He is kind to everyone; but I am speaking of his many affabilities to myself, which are such that more could not be looked for from a relation. He has a great share of general knowledge, studious, yet ever cheerful, and the goodness of his disposition renders him esteemed by all who know him.'

Southwell comments in his letters about the surveys of the harbour undertaken by Captain Hunter and James Bradley in July 1788, and also notices that 'a plan of a town is laying out, in which I believe the ingenious Mr. Dawes is particularly engaged.' He comments that there was some discussion about the formal naming of the town, with the name of 'Albion' suggested:'Whether the name is yet determined on I cannot tell, but have heard the name Albion mentioned upon this occasion.'(15)

The Governor, on the other hand, wrote of Dawes in his despatches to London with approval at first, but then culminating in his displeasure at Dawes's refusal to apologise for a perceived flouting of his authority. It is not easy, however, to penetrate Phillip's motives or opinions about his fellow officers; any private letters by Phillip from Sydney have not been discovered, leaving a great gap in our understanding of both Dawes and Phillip himself.

So these few letters written by Dawes which have survived at Greenwich Observatory are doubly interesting. He wrote the first one in April, a month before Phillip's own first despatch about the settlement; he wrote again in July 1788, two letters; in October and November; in April 1790 and July 1790. Only a handful of letters, but so clear and precise that they form a most valuable source of information about the first settlement period and the genesis of the first town plan on the newly discovered continent.

The first letter written by Dawes is one dated 30 April 1788, penned in his neat, tiny handwriting; and in it he describes the circumstances of the settlement and the difficulties he had been having with the progress of the observatory building:

> 'The extreme aeconomy of Government, not allowing them to give salaries to proper persons to perform the necessary business of settlement has obliged the Govr to appoint me to do the Duty of Engineer and Officer of Artillery, and the inability of the Surveyor to perform his business has also thrown a great part of that on my hands; I have notwithstanding with the assistance of 4 Marines of

> my own Party and 3 or 4 Convicts which the Govr has allowed me, cleared a point of land of trees, and am now getting on as fast as possible, with an Observatory, which I hope will be completed and the Instruments in it July sometime. This has not however been done without a good deal of my own & my servants' bodily labour, which shall when necessary, be chiefly employed in the same cause. The situation struck me at first sight to be so eligible & all the necessary materials so conveniently at hand, that I did not hestitate a moment to determine on setting about a permanent one at once - a sketch will say more than many words.'

Here Dawes makes a diagram of the proposed building, with a plan, side elevation, section, and an exact plan of the circular roof under which the instruments were to be placed. (See Figs.1.1(a) and (b))

By this letter Dawes establishes some pertinent facts about conditions in Port Jackson, and his role in 'performing the necessary business of settlement'. Governor Phillip had appointed him to do the duty of engineer, and, due to the inability of the appointed surveyor, Augustus Alt, to do his job, Dawes also found himself also obliged to do much of the survey work needed by the settlement. This was as well as preparing for the building of the observatory, and taking astronomical observations. There seems no need to doubt this frank, matter-of-fact letter. Dawes also mentions Alt in another letter in July 1790 in less than favourable terms. He writes:

> 'The greatest hindrance to Astronomy has been the unfortunate want of abilities in the Surveyor of Lands, who being totally ignorant of his business, it has of course been necessary to employ some other person on it, it has followed that every thing in that way, of any consequence, has passed through my hands.'

One must therefore conclude that it was Dawes, and not Augustus Alt, who was reponsible for the first Sydney town plan.(16)

In his letter of 10 July 1788, Dawes writes to Maskelyne about the difficulties of setting up the observatory. He had been very busy since the landing ...

> 'my time has been so much taken up with the business the Governor has desired me to do and with attending to the building of an observatory that I have had no opportunity whatever to write ... besides, our situation being in a thick wood, which after rain becomes an entire swamp, will partly account for the impossibility of sitting down much to writing.'

In the first week of July, Dawes took up his residence at the Point, which he had named Point Maskelyne after the Astronomer Royal, (it is now called Dawes Point), and set about assembling the instruments on shore.(See Figs.1(c) and (d)) Robert McAfee gives a detailed account of this building in his discussion about Dawes' meteorological journal.(17)

Dawes did not mention in his letter of 10 July 1788 that he had been drafting out a 'Sketch Plan for Sydney Cove', but his name appears on the published plan along with John Hunter's, and he claims his involvement in his later memorial submitted in 1826 when he petitioned the Colonial Office for extra remuneration for work as engineer and surveyor in New South Wales.(18) Daniel Southwell, as mentioned before, also names 'the ingenious Mr. Dawes' as being 'much engaged' in the plan. (Fig.1.2)

Dawes had still not heard anything from Greenwich; the Second Fleet did not arrive until early in June that year. Along with the rest of the company, he was suffering from an oppressive sense of exile, but he continued on with his work, repeating the news he had sent by the previous letters in case the others had not reached Maskelyne. He wrote on 16 April 1790 that he was living in 'a pretty comfortable house' and the clock and quadrant were 'admirably well fixt', the quandrant secured to the frame which was wedged into a niche in the solid rock 'which has never been moved since the foundation of the world'.

In a long letter dated 26 July 1790, Dawes again complains about the Governor so overloading him with work that he had been

> 'obliged very plainly and respectfully to tell him my sentiments thereon, in consequence of which he was very highly offended, and several letters passed between us; this is however almost entirely worn off and I now find myself rather less hurried than before;'

All the same, Dawes was still worried that he had not been able to devote enough time to his observations, By then, too, his attitude both to the Governor and to the future of the colony had suffered some disillusionment. He writes that the Governor 'is so exceedingly close and mysterious that it is impossible to understand clearly, what he means even on the most trifling subjects'.

The disagreements between Governor Phillip and Dawes, which appear to have surfaced in 1790, are better known than the details of his surveying activities.(19) It is not my intention to go into these here, except to point out that their growing antipathy was a major factor in Dawes's disillusionment. The relationship between Dawes and Phillip also indicates that those who argue that 'planning' was 'authoritarian' in the colonial years

start from a very simplistic notion, Dawes, as the instigator of the first plans, was torn between two loyalties: the first was to the Astronomer Royal in Greenwich and his work as the only astronomer in the fourth quandrant of the globe; and the second was to Phillip as Governor and leader of the little group of colonists. In the end, he was forced to withdraw, and take his instruments back with him to England.

Dawes also writes in a letter of his exploratory journey westward toward the Hawkesbury River made in April 1791. He went with a party of eight, which included the Governor, acting as their surveyor. They set off from Parramatta in a north-easterly direction, and turned westwards. Soon they were clambering among steep barren rocks and then, camping the night, they reached the wide Hawkesbury River next morning where the banks were about 20 feet high. The country bordering the river was high and universally rocky. His comments about the country he traversed are not favourable.

> '... a more deary, dismal, barren, inanimated country I believe does not exist any where in the whole world; it is indeed exceedingly rugged, stony & full of frightful precipices...'

This remark by Dawes has to be taken in context, and linked with the particular nature of the very difficult, broken uplands around the Hawkesbury, in the vicinity of Cattai Creek.(20) John Hunter includes an interesting map by Dawes in his Historical Journal of the Transactions at Port Jackson and Norfolk Island, published by Stockdale, London, in 1793, but this map omits the route of this particular journey. However, it shows the County criss-crossed by traverses as Dawes and his companions sought to understand the country in the vicinity of Sydney; they penetrated the Blue Mountains west of the Nepean to reach a peak they called Mount Twiss, and south-west to beyond present-day Camden to 'Pyramid Hill' near the Razorback'.

The Town Plan of Sydney Cove

One of the tasks which would have interrupted Dawes and his observations was the drafting of the first 'Sketch' plan for the town at Sydney Cove. Two years later, he also laid out Parramatta, the second town in the colony. He claims in his memorial of 1 December 1826 from Antigua 'he had been employed in laying out the towns of Sydney and Parramatta, and in surveying the Government Farm at Sydney.'(21)

The Parramatta plan (Fig.1.5) expresses in more formal detail the ideas tenatively embodied in the July 1788 plan of Sydney. It lasted a little longer on the ground than the Sydney plan, which only appeared on paper and was not in evidence in practice even when Phillip left the colony in 1792. (See Fig.1.2, Fig.1.3 and Fig 1.4)

The Sydney plan is known from the engraving published by John Stockdale in his substantial volume, The Voyage of Governor Phillip to Botany Bay, with an Account of the Establishment of the Colonies of Port Jackson and Norfolk Island, in London in 1789. (Fig.1.2) The plan is dated, however, July 1788, and has the acknowledgement 'The Coast Line by W. Dawes, the Soundings by Capt. Hunter' along with the engraver's name, T. Medland. The original is held in the Public Record Office, London.(22)

This plan is really two plans in one; the base-map which shows the coast-line, the major topographical features, the estuary of the Tank Stream, and the buildings existing or being built at that time; and the superimposed, regular plan of a wide parade or street leading up from the mouth of the Tank Stream south-westerly to ground intended for the major official buildings, (intended but not indicated in any detail), and two major streets marked out south-west of this parade. The Military Barracks, in their temporary form, were marked out near the Tank Stream, and the Hospital further north near the shore line. Various tents and temporary buildings are indicated; on the eastern side of the stream, there was a scattering of huts, with the intended 'House building for the Governor'.

The plan was distinguished by its parade ground, a brief but wide approach up the gentle slope of ground leading up from the head of Sydney Cove, At the head of this slope, Government House, the Military Headquarters, and the Criminal Courthouse were to be located. The approach was to be 200 feet (or 63 metres) wide and 800 feet (or 240 metres) long up to the Government House. The immediate extension of the town was to be at the crest of the rise in another wide street leading down to Cockle Bay (later called Darling Harbour), with a cross street at right angles, designated 'Ground intended for buildings hereafter'.

Phillip wrote in some detail about the plan in his despatch of 9 July 1788, when he enclosed it with his other papers:

> 'As stores and other buildings will be begun in the next few months, some regular plan for the town was necessary, and in the laying out of which I have endeavoured to place all public buildings in situations that will be eligible hereafter, and give a sufficient of ground for the stores, hospitals, &c., to be enlarged, as may be necessary in the future. The principal streets are placed so as to admit a free circulation of air, and are 200 hundred feet wide.'(23)

Phillip goes on to repeat that the streets of the town 'will be laid out in such a manner to afford a free air, and when the houses are to be built...the land will be granted with a clause that prevents more than one house

being built on the allotment, which will be sixty feet (18.28 m) in front and 150 feet (45.72 m) in depth. This will preserve uniformity in the buildings, prevent narrow streets and the many inconveniences which the increase of inhabitants would otherwise occasion hereafter.'

If we return to Phillip's Additional Instructions of 20 August 1789, we find some general principles about relationships between the buildings, the surrounding pastures, the port, the erection of defences, the reservation of lands for the growth of naval timber,'and more particularly for the building of a town-hall and other such public edifices you may deem necessary'. A particular site was also to be reserved for a church, with 400 acres for the maintenance of a minister, and 200 acres for a schoolmaster. So there was provision for civic life and administration, and public buildings to house them; for a church and religious practices, for a school and education. But there were no details provided, and no model plan to follow. Vitruvian precepts about the choice of particular qualities in a town site were not mentioned. In the next chapter, these underlying considerations are discussed.

Phillip, in his initial planning, was scarcely in a position to make mention at this time of such fundamental things as security of tenure, principles of allotting parcels of land between public and private uses, and how the convicts, when their sentences expired, were to be regarded as landholders. But these were questions which had to be addressed before the hastily arranged camp at the Cove could become a permanent settlement.

As it transpired, the lack of acknowledgement of such matters was to become a problem even before Phillip left the colony. Thus we have to conclude that the settlement was not even formalised according to this plan of July 1788. The locational exigencies of the hastily-established camp, as the people were transferred from the ships, meant that the settlement began to assume some sort of 'ad hoc' form almost immediately; and once established, sites for buildings were difficult to move; especially once they were translated into stone and brick. Theory was to lag behind practice at Sydney Cove.

Captain Watkin Tench, however, was to remark about this plan of Sydney:

> 'To proceed on a narrow, confining scale, in a country of the extensive limits we possess, would be unpardonable: extent of empire demands grandeur of design.'

But thoughts of imperial destiny were fairly short-lived in the hearts of the First Fleeters. Even Tench qualified his sentiment immediately;

> 'How far this will be accompanied with adequate dispatch, is another question, and the incredulous amongst us are sometimes hardy enough to declare, that ten times our strength would not be able to finish it in as many years.'(24)

On 2 December 1792, Phillip signed the 'Survey of the Settlement in New South Wales, New Holland'. (See Fig.1.3 and Fig.1.4) By then the shape of the town had reverted to what can only be described as a loose grouping of zones of occupation assembled around the shores of the Cove, with the determining factors being the rounded shape of the Cove itself, the course of the little Tank Stream, the Military grouping on the western side of the stream, and the Governor's permanent house on the eastern side. The ships were accommodated in the calm waters of the Cove, near the shore, but not moored alongside, and two wharves had made their appearance, but neither was linked to any 'landing place' or 'town square'. The form of the town, though it had been predicated on the parade space envisaged in front of the principal public buildings in the plan of July 1788, had become more tightly knit. It was grouped at the mouth of the Tank Stream at the head of the Cove.(Fig.1.4)

The main planning concept that Phillip had been able to impose, despite his words about wide streets and plenty of space for future settlement, was embodied in a hastily drawn Boundary Line from the head of Woolloomooloo Bay to the head of Cockle Bay. This line, he asserted on the plan in his own handwriting, was to mark out the extent of the 'Land reserved for Government'. He emphasised that 'It is the Orders of Government that no ground within the Boundary line is ever granted or let on Lease and all houses built within the Boundary line are and are to remain the property of the Crown.' (Fig.1.3 and Fig.1.4)

The Need to Strike a Balance between Public and Private Land

Here we have the start of the tug-of-war that was to continue for some decades in the settlement. Until it was resolved, the colony lacked an essential ingredient in its spatial definition; and itself could not flourish before the map-making began in earnest. The concept of 'public virtue' implicit in the construction of public buildings, roads, and services, that is, in the infrastructre of public works which underpinned the form and function of the town will be discussed in Chapter Five. At the beginning of settlement, the Crown was deemed to be the 'owner' of the land, holding it in trust for the body of people settled there from England. The question of prior 'ownership' by the native peoples was not seen to be an impediment to this emigration, and the territory was deemed to be 'terra nullius', without a structure of settled peoples.(25)

Apart from this, however, another structure needed to be put in place to counter-balance the totality of public ownership. This was begun in the system of grants of land to encourage people to emigrate from England and become settlers. The emancipated convicts, those free from survitude, and the officers and marines who wished to remain were also to be given land grants.(26) The land then 'alienated' from the Crown started to form a sort of counter-balance to public ownership, whereby citizens had the right to 'improve' and 'use' their land for their own benefit. In the urban context, this right of ownership became the driving force behind the improvement of the town. This process was worked out gradually during the years up to 1822, but town lands continued, up to that time, to be granted or leased in a piecemeal fashion.

It is this dichotomy, the need to strike a balance between public land and private land, that lay at the root of the lack of 'urbanity' of our first laid plan of a city in Australia. The balance needed to be struck in the plan; but the plan itself was not formulated deliberately enough to resolve these fundamental concepts. Sydney lacked form because its framework was not tied to any clear concept, either of being made a deliberate 'colony' attached to its parent source, or a gaol, defended behind strong walls, or a providential colony capable of attracting an emigrant population. It became subject to contradictary pressures which were surfacing as the nineteenth century rolled on, and its site itself, being so picturesque and informal in shape, mitigated against the formation of a clear, coherent design.

The planning of Melbourne, by contrast, fifty years later, can be compared with that of Sydney. By then, town planning practice had been codified and formulated in spatial terms in the colony, and public land was complemented by land surveyed and sold to private individuals or interests and defined by its economic price.

Colonisation had commenced with the raising of the British Flag on the shore, on the very spot where the intended first town was to be built; it was marked by the reading of the Proclamation by the Governor before the assembled company, convict and free. This proclamation declared that the British Government had annexed the territory of New South Wales, and that all land was hereafter deemed 'Crown Land' or the property of the British Crown. This was the legal pre-condition of settlement.(27) William Dawes, as a reluctant town-planner, might have thought about these principles behind his plan, but was not in any position to give them expression. In the next chapter I shall discuss the foundation rites of the first Australian town in more detail.

The Plan of Parramatta

The site at Parramatta, the second town in Australia, allowed Lieut Dawes the space to set out a more ordered, logical design for a town. Parramatta was 18 km inland from Sydney Cove, where the deeply-indented harbour was joined by a small stream from the west, and the soil looked more promising for the cultivation of cereal crops.

The urban centre there was to be symmetrically arranged around a long wide street which proceeded from the landing place at the river due west and parallel to the stream for a mile. The street, called High Street, was terminated by the Government House which was placed on a gentle rise overlooking the straight line of the wide street; which was planned to be 205 feet (62.48 m) in width. At the landing place the composition was anchored by the Military Barracks and Store within its compound. There were two tentative cross-streets running north-south designated Church Street and Bridge Street; Church was the second street in the hierarchy, being an intended 143 feet (43.58 m) wide, and Bridge Street was to be 118 feet (35.96 m) wide; and a second street, called South Street was to run parallel to High Street and be 118 feet (35.96 m) wide also. The site for a intended Town Hall was to terminate Church Street near the river. A narrower street, called Back Lane led off from High Street to, presumably, some permanent buildings planned for officials; and a 'Lane' of 76 feet (23.16 m) ran between High Street and South Street. (See Fig.1.5, Fig.1.6 and Fig.1.7)

Captain Tench, ever an admiring commentator, wrote about the plan in November 1790.(28) 'The main street of the new town is already begun.' he observed. 'It is to be a mile long, and of such breadth as will make Pall-Mall and Portland-Place "hide their diminished heads".' Here he uses a line from Milton's Paradise Lost, to make a point about imagined splendours to come, and compares it with two fashionable promenades in London. The street as surveyed at that time was to be 200 feet (60.96 m) wide. Tench describes the buildings being erected there, small houses 24 x 12 feet (7.3 x 3.65 m), placed regularly along the street, separated from each other by wide allotments. They were made of wattles plastered with clay, with thatched roofs, and a brick fire-place and chimney.

Public buildings were also flimsy at first; the old wooden barrack and store had be replaced by a new brick store house 100 feet (30.48 m) long, and a barrack built for the soldiers the same size within 150 yards (137 m) of the wharf. There was 'an excellent barn, a granary, a commodious blacksmith's shop, and a most wretched hospital'.

This plan has been called an example of Baroque planning, by Bernard Smith, with its vista along the long, straight, wide street from the wharf to the Government House. (29) Its lineage can be traced much farther back than this, however, and it is worth considering its salient features and comparing them with ancient paradigms. Compared to the 'Sketch' at Sydney Cove, this plan is a serious beginning for Town Planning in Australia.

A recent study by Joseph Rykwert, The Idea of a Town, (1983), discusses the anthropology of urban form in the ancient world, comparing it with the confusion evident in many examples in the modern world, and the Sydney and the Parramatta Plans are discussed in the next chapter in the light of his arguments.

The last letter from Dawes in the Maskelyne bundle was written from Spithead, from the Gorgon, as he was returning to England on 8 June 1792. In it, Dawes reiterated his frustation about his surveying duties, which he had found so onerous. He wrote, 'Altho' this first attempt has been so little successful ... and the Governor's principal & perhaps only real view was to load me with the much greater and more obstructing business of surveying, engineering & &,' and he regretted that his astronomical work had suffered accordingly. However he still ended his letter saying that he 'did not yet despair of making some valuable observations in that (at present) dismal & distracted country', as if he was still hoping to return to New South Wales.(30) Our regret is also that Dawes went back to England so soon, and the town plans he formulated were forerunners rather than fully considered patterns for an emigrant society.

But Dawes did not return, and the instruments stayed at Greenwich. With Dawes's departure went more than a lively, intelligent, talented man; the promising start to the planned foundation of towns in the colony was dissipated in the confusion of the next eighteen years. The ailing Augustus Alt stayed behind, and was helped by Charles Grimes, who in turn employed James Meehan, an emancipist from Ireland. Although, in a sense, town planning in the new continent had to wait upon events set in train by another Governor, Lachlan Macquarie, after 1810, some interesting developments were put in train by Governor Philip Gidley King before then.

The matter of private ownership of land in the colony was starting to be of pressing concern. The formal founding of ancient towns and cities and how their resonances continued in founding ceremonies in Australia are discussed in Chapter Two. The account of the settlement of Norfolk Island and its significance for the planning of towns in New South Wales then follows in Chapter Three. In Chapter Four, we will return to this question of the private ownership of land, and consider its influence on the colony's fortunes.

'Cities inspire affection, pride, identification: they stimulate comparisons and provide arguments.' So wrote Asa Briggs, a respected scholar of the cities' history and evolving urban form.(31) In studying the formation of towns in Australia, a continent where there were no urban settlements before 1788 and white settlement, we have the opportunity to discern how the initial towns gathered strength to become capitals; how they sprang up seemingly from nowhere and began to transform their countrysides; and we have also the opportunity to consider the administrative organisation that underlay the physical form of the towns and the ideas current in the early nineteenth century which influenced their scale, their shape, and their disposition of parts.

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2. Rowse, Ibid.; Hakluyt's Discourse was a secret document given to the Queen, but its ideas became influential once the English became seriously interested in colonising America. Francis Bacon in his famous essay Of Plantations, pursued this theme further.

3. Pamela Statham, Origins of Australia's Capital Cities, Cambridge University Press, Melbourne, 1992, Chap.1, 'Patterns and Perspectives', p.13-15.

4. David Neal, The Rule of Law in a Penal Colony, Cambridge University Press, Melbourne, 1992. Introduction.

5. See entry on Dawes by Phillis Mander-Jones in the Australian Dictionary of Biography, Vol.I, Melbourne, 1966; Philip S. Laurie, 'William Dawes, and Australia's first observatory', Quarterly Journal of the Royal Astronomical Society, 29, 469-482, 1988.

6. Hanbury Brown, Man and the Stars, Oxford University Press, Oxford, 1978, pp.68-71.

7. Ibid; Shirley Saunder's PhD Thesis, Sydney University, 'Astronomy in Colonial New South Wales: 1788-1858', is noted, but was not consulted.

8. Professor G. Arnold Wood, "Lieutenant William Dawes and Captain Watkin Tench', Journal of the Royal Australian Historical Society, Vol.X, 1924, pp.1-24.

9. The author was able to visit Herstmonceux Castle in Sussex in 1985 and read the manuscript letters written by William Dawes which are held there; and later the Librarian most courteously made copies available, and sent them out to me. However, I did not have time to study them in careful detail before I started work on my thesis in 1992.
Some of these letters by Dawes were also used by Robert J. McAfee in conjunction with the original manuscript of Dawes' Meteorological Journal, which he located at the Royal Society, London, and subsequently published in part in a monograph for the Bureau of Meteorology, as Dawes's Meteorological Journal, Australian Government Publishing Service, Canberra, 1981. Both the letters and the Journal are important sources for information on the colony's weather and physical conditions at that early stage of its foundation. McAfee hails the work by Dawes 'as a

monumental foundation' on which to start a history of climate for this continent. Dawes's town planning activities can also be regarded as an important beginning for town planning in Australia.

10. The Journal of Philip Gidley King, Lieutenant, R.N. 1787-1790, Edited by Paul G. Fidlon and R.J. Ryan, Australian Documents Library, Sydney, 1980, pp.37-40, entry for 1 February 1788.

11. Dawes Papers, ML Ad49/1-7, Letter from L, Dagelet, to Dawes, written 'a la Baye Botanique' on 3 March, 1788. Mitchell Library, State Library of NSW. Kindly translated for me from the French by Stephanie Hall. Relations between the French and the English Officers were cordial, and Dagelet asked Dawes to forward a packet of his notes to addresses in France.

12. Sibella Macarthur Onslow, Some Early Records of the Macarthurs of Camden, Angus & Robertson, Sydney, 1914, p.28; letter to Miss Kingdon, 7 March, 1791.

13. Watkin Tench, A Complete Account of the Settlement at Port Jackson, London, 1793: edited and republished by L.F. Fitzhardinge, as Sydney's First Four Years, Angus and Robertson, 1961, pp.224, note.

14. Lieut William Bradley, A Voyage to New South Wales, facsimile of manuscript held by the Mitchell Library, State Library of NSW, Ure Smith, Sydney, 1969, pp.xiv-xv.

15. The Southwell letters are held in the British Museum, and were transcribed by James Bonwick, with substantial extracts published in the Historical Records of New South Wales, Vol.II, 1893. See pp.710 and 692. For the meaning and use of the word 'Albion' see Chapter Two, notes 34 and 35. 'Albion' was a name used in legendary tales for England itself. It was derived from the Greek Hero, son of Neptune and Amphitrite, who came to Britain and introduced the science of studying the stars and the art of ship-building there.

16. John-Paul Johnston, in a series of papers, has mounted a case for Augustus Alt, rather than William Dawes, to be considered the author of both the Sydney and Parramatta plans. The main papers are 'The Original Sydney: a Geometrical and Numerical Analysis of of Phillip's Plan', Graduate School of the Built Environment, Sydney, 1982; 'Albion: Phillip's Town at Sydney Cove', Australian Planner, vol.26, no.3, Sept 1988; 'Numina, Numbers and Nonsense: the early planning of New South Wales', NSW Institute of Surveyors Centenary Conference, 1991. I do not subscribe to his theory.

17. Robert J. McAfee, Dawes's Meteorological Journal, School of Earth Sciences, Macquarie University, Sydney, 1981. McAfee gives a detailed account of the observatory building and includes a discussion on the instruments

Dawes installed. He also includes a reconstruction drawing of the building, based on the sketch provided by Dawes in this letter. Dawes does not detail the materials used in the building, except to say that 'light fir rafters' were used to nail the circular canvas roof onto. McAfee concludes that the building was of wood, abutted to a rocky outcrop. I have some difficulty with this notion, because the Sydney sandstone is notoriously prone to seepage, and I think that cut stone would have been a more stable base for the housing of the instruments. Inspection of a range of early drawings does not indicate the material; the building appears mostly at a distance in the views, and the conical roof Dawes indicated is not apparent. See also P.M. Chisholm and Thomas Tooth, 'The Dawes Observatory 1788-1791', an Old Sydney Town Publication, Sydney, 1975.

18. Memorial to Lord Bathurst, 1 December 1826, Public Record Office, London, cited in Journal of the Royal Australian Historical Society, 12, 1926.

19. See Phillis Mander-Jones and G. Arnold Wood, op.cit.

20. Watkin Tench, op.cit, pp, 227-29; notes 7 and 9.

21. Historical Records of New South Wales, Vol.I, pt.2. pp.147-8.

22. This book issued by Stockdale is based on despatches sent back by Phillip to the Colonial Office, with Stockdale himself acting as compiler and editor. It forms a most important start to Australian historiographical writing, and gives an interesting philosophical cast to the process of settlement. See Helen Proudfoot, 'Fixing the Settlement upon a Savage Shore: The Puzzle of Governor Phillip's Two Plans', article submitted to the magazine Kunapipi (Aarhus, Denmark, 1992) following a conference on Populous Places there in 1988. The original of the plan published by Stockdale is held in the Public Record Office, London. MPG300.

23. Governor Phillip's Commission, 3 April 1787; Phillip's despatch 15 May, 1788, note, Historical Records of New South Wales, Vol.I, pt.2, p.61-67, 121-122. Various accounts by Collins, White, and Tench.

24. Watkin Tench, op.cit, pp.57-8.

25. Following the High Court pronouncement on the Mabo Case, questions of Aboriginal Land Rights have sparked off a vigorous debate in the community; a debate about white culpability and black recriminations. A large body of literature has since been published following on Henry Reynolds's book of the 1980s The Other Side of the Frontier, which was cited by the judges as their main source of information. The question of land ownership is also central to this investigation into the formation and

spatial arrangement of urban settlements, a fact little mentioned in the debate.

26. Phillip's despatch, 17 June, 1790, Historical Records of New South Wales, vol.I, pt.2, pp.348-9; observations by Tench, op.cit, p.193-9.

27. This was expressed in the Letters Patent, read by David Collins at the formal foundation ceremony on 7 February 1788.

28. Tench, op.cit, pp.57-58.

29. Bernard Smith, 'Architecture in Australia', review article on J.M. Freeland's book of that name, Historical Studies, Melbourne, Vol.14, No.53, 1969, p.88.

30. Dawes had contemplated staying in the colony before he had disagreed with Governor Phillip over his policies of recrimination towards the natives, and before his duties had become too onerous.

31. Asa Briggs, Historians and the Study of Cities, University of Sydney, Sydney, 1960, p.4.

CHAPTER ONE

FIGURES: Titles only; for full captions see Vol.II.

Fig.1.1 (a) Letter sent by William Dawes to Rev Dr Nevil Maskelyne, 30 April 1788. Dawes' Papers, Greenwich Observatory, Herstmonceux Castle, Sussex.
Fig.1.1 (b) Page 2 of Dawes' letter.

Fig.1.1 (c) Quadrant used by William Dawes, by Rod Bashford, Macquarie University. Now held at Powerhouse Museum.
Fig.1.1.(d) Observatory built by William Dawes on Point Maskelyne, Robert Bashford for Robert J. McAfee, Dawes's Meteorological Journal, Australias Government Publishing Service, Canberra,

Fig.1.2 Sketch of Sydney Cove, Port Jackson, in the County of Cumberland, New South Wales, July 1788. Coastline by W. Dawes, soundings by Capt Hunter. Published by J. Stockdale, T. Medland sculp, in A Voyage of Governor Phillip to Botany Bay, London, 1789, fp.123.

Fig.1.3 The Settlement in New South Wales, New Holland. Detail. Archives Office of NSW, Map No.SZ430. Dated 2 November 1792, signed by Governor Phillip. Pasted onto a another similar contemporary map.

Fig.1.4 A Survey of the Settlement in New South Wales. New Holland, a composite map of the two maps above, published in A. Garran (ed), Picturesque Atlas of Australasia, vol.1, Sydney, 1886. Engraved by A. Dulon and L. Poates.

Fig.1.5 Town of Parramatta, black and red pen and ink and grey wash. Public Record Office, London, CO700/NSW.4.

Fig.1.6 Town of Parramatta. Copy of above plan by the author, from the Bigge Appendix, Bonwick Transcripts, Box 36, Mitchell Library, State Library of NSW.

Fig.1.7 A View of the Governor's House at Rose Hill in the Township of Parramatta. J. Hearth, sculp. From David Collins, An Account of the English Colony in New South Wales, Cadell and Davies, London, 1804.

CHAPTER TWO

ANCIENT ORIGINS OF FOUNDING RITES AND THEIR REFLECTION IN COLONIAL AUSTRALIA

> 'The township is the only association so well rooted in nature that wherever men assemble it forms itself...Communal society therefore exists among all peoples, whatever be their customs and their laws; man creates kingdoms and republics, but townships seem to spring from the hand of God. But though townships are coeval with humanity, local freedom is a rare and fragile thing.'
>
> - Alexis de Tocqueville (1835)

> A town is 'an ordering of blocks and quarters disposed with symmetry and decorum, of streets and public squares opening in straight lines with a fine and healthy orienation and adequate slopes for the draining of water..'
>
> - Charles Daviler (1691)

> 'The land on which a city is to be sited should be sloping, that we must just hope to find, but we should keep four considerations in mind. First and most essential, the situation must be a healthy one. A slope facing east, with winds blowing from the direction of sunrise, gives a healthy site, rather better than the lee side of north, though this gives good weather. Next it should be well situated for carrying out all its civil and military activities..'
>
> - Aristotle, Politics.

> 'You are also to cause a proper place...for the building a town sufficient to contain such a number of families as You shall judge proper to settle there, with town and pasture lots convenient to each tenement,..near as conveniently may be to some navigable river or the sea coast; and You are also to reserve to Us proper quantities of land in each township, for the following purposes, viz., for erecting fortifications and barracks, or for other military or naval services, and more particularly for the building of a town-hall, and such other public edifices as you may deem necessary...
> And it is Our further Will and Pleasure that a particular spot in or near each town as possible be set apart for the building of a church, and 400 acres adjacent thereto allotted for the maintenance of a minister, and 200 for a school-master.
> - Governor Phillip's Additional Instructions (1789)

Here, we have a series of four major pronouncements pertaining to the laying of towns and cities; one from antiquity, one from the 17th century, one sent in a

despatch to Phillip, and one written by a percipient commentator on the emerging American urban scene.

Their separate biases are interesting and revealing, because they point to the different points of view from which the foundation and planning of urban centres can be considered. These separate points of view, in turn, point to the difficulties inherent in the study of urban form. Is it allied to the characteristics of the site itself? Is it allied to assemblages of particular people and their needs? Is it really only a physical construct, determined by geometry? Or is it intimately bound up with political organisation and the freedoms won by its citizens?

All these questions have significance in the process of town founding and formation, not least on those formed in Australia, the last continent of the globe to be settled and organised into urban groupings.

In view of the importance of towns and cities in Australia, and their dominance of our national life, there is a strange lack of depth in our understanding of the very process of urban formation. There have been many studies centering on the struggle for rural land during the nineteenth century. These studies trace the expansion of settlement over the map of Australia, and tend to link it with the forming of political power blocks, - exclusives versus emancipists, liberals versus conservatives, labour supporters versus liberals. They start with the work of Stephen Roberts and the British Empire historians and culminate in the work of Henry Reynolds and others who focus more upon the dispossessed Aborigines than the new-comers.(1)

This exclusive attention upon rural, pastoral or farming land, however, diverts us from considering the total pattern of the alienation of 'crown' land and its division into both 'public' and 'private' parcels of land. The process of the distribution of urban land, and the patterns of town formation seem to be largely taken for granted and left unexamined. What is surprising, in the Australian context, is both the scale of urbanisation and the strength of its imprint in particular places.

Joseph Rykwert has remarked on the conceptual poverty of the urban discourse elsewhere, even in the nineteenth century when the large cities we have now inherited began to grow. He was writing about European cities, rather than about those in the New Worlds of America or Australia, but he is right when he says: 'It appears that civic authorities, or even planners themselves, are not able to think of the new town as a totality, as a pattern which might carry other meanings than the commonplaces of zoning or circulation. To consider the town or city a symbolic pattern, as the ancients did, seems utterly alien and pointless.'(2)

But Rykwert then goes on to explore the ancient practices of town formation; and what he finds gives us a useful parallel to the processes which took place in Australia during the period from 1788 to the 1840s, when most of our cities and many of our country towns were founded and established.

Aristotle, Plato, and the Ancients

The foundation and laying-out of towns was conducted in the ancient world according to a conceptual model which was hedged about with elaborate ceremonial words and actions. The foundation was then commemorated in regularly recurring festivals, and physically enshrined in monuments.(3)

Basically, there were two main concepts: firstly, the city form was symbolically placed at the centre of the cosmos, and this spot was determined by the 'auspices' of the site, and first marked by a stake driven into the earth. (i.e. the Flagpole). It was the task of a special 'augur' or surveyor to determine the most suitable place for the foundation of a city. He made a ritual delineation of the macrocosmic or world templum, taking the visible horizon as the circular boundary of the earth and indicating the four corners of the earth corresponding to the four cardinal directions. The north-south axis or cardo became the principal street of the town, and the decumanus or cross-axis became the main east-west street, reflecting as well the path of the sun across the heavens. The intersection of these main axes was called the 'axis mundi', the sacred place at the centre of the town.

The second main concept follows from the first: within the circular templum, the four-square plan of the town was then laid out, with its principal quarters divided by the cardo and decumanus. To Plato, this modelling of the ideal city allowed for the perfect balance between order and freedom. His 'Magnesia' approaches the ideal (but the true ideal is always in unmanifested form). Plato derived his concept of the ideal city, the ancient cosmic canon, from traditions carried down from the Egyptians.

New Communities were founded for various reasons; strategic, economic, to relieve pressures of population, to reward or punish. But ever present was the relationship between these motives and the myths and rituals they engendered. The stories of Dido and Æneas, Romulus and Remus, Hercules and Theseus have come down to us and form part of the Western intellectual inheritance.

The city had a need to be founded by a hero; and historic personages who had founded towns were, even during their life-time, given semi-heroic status. As well, the hero-founder had to be buried, if possible, in the heart of the city he had founded, as a guarantee that he could

continue to act as its guardian. Monuments were tokens of this continuing connection.

We find, even now, echoes of these most ancient beliefs in the foundation literature attached to Australia. Some are slightly transposed; but the same sorts of myths persist. Phillip, even in his enigmatic lack of a colourful presence, and the paucity of personal memorabilia, is now starting to exert an aura of some veneration.(4) He is, however, largely overshadowed by Cook, who attained true heroic status soon after his death. He was idealised almost immediately; there was a popular masque staged in London about his career, and the back-drop to the performance had an heroic tableau depicting Cook's Apotheosis where he is taken up to heaven by legendary figures representing Britannia and Fame, appearing as two angels. He was venerated by the scientific community and the naval establishment. There are several contemporary paintings about his death; mementoes of Cook were collected; he was later remembered in poetry as well as in scholarly works.(5)

Phillip, of course, died in faraway Bath, and so robbed the city he founded of his continuing guardianship; but Cook was murdered by natives in the Pacific, and his presence is claimed by Australia and New Zealand, both nations he was instrumental in founding through his discoveries.

We catch an echo of this belief in the words of the Colonial poet Judge Barron Field, where he claims that the true act of possession of a place is the burial of a sailor from Cook's ship, when the great navigator anchored in Botany Bay.

> ...'and thence a little space
> Lies Sutherland, their shipmate; for the sound
> Of Christian burial better did proclaim
> Possession, than did the flag, in England's name.'

Elsewhere, Field reflected on:

> 'A land without antiquities, with one,
> And only one, poor spot of classic ground,
> (That on which Cook first landed) - where, instead
> Of heart-communings with ancestral relics,
> Which purge the pride while they exalt the mind,
> We've nothing but anticipation.'(6)

All the same, Field himself, as a member of the Philosophical Society of New South Wales, was party to the erection of a first commemorative tablet to Captain Cook and Joseph Banks, on the cliff face of Botany Bay in 1821. In a commemorative sonnet, he described himself as one of the colonists 'of a discordant state', but qualifies this opinion at once by saying: ' Yet big with virtues...if our great Be wise and good.' 'So,' he says,'fairest Rome became!' In comparing it to Rome, he anticipates an illustrious future. (7)

Founders and Guardians

Australians generally date the foundation of modern Australia from 1770, the year Cook discovered the eastern part of the continent, though it was 18 years later when the First Fleet dropped anchor in Sydney Harbour. As the ancients took careful note of any 'signs' or omens propitious to their founding of colonies and cities, so Sir Joseph Banks, in his journal of the voyage, recorded some natural events which could be interpreted as harbingers of arrival. On 16 April 1770, a small butterfly was observed on the ship, and at night, while thunder was rolling, a small land bird about the size of a sparrow came on board. The weather was squally, with the wind shifting around, and the seamen started to prophesy the near advent of land. A Gannet was seen which flew NW 'with a steady uninterrupted flight as if he knew the road that he was going led to the shore'. More birds were seen, and a shoal of porpoises leapt about the ship. The following day, 19 April, land was sighted by an officer, Lieutenant Hicks; sloping hills, partly covered with trees and bushes, interspersed with tracts of sand. As the ship moved up the coast, they observed three water-spouts. They were near enough to the shore to see sloping hills clad with large trees, and some smokes ascending from fires lit inland. On 22 April, they could see five people on shore.(8)

On 25 April, the fires appeared to be larger and more numerous, but it was not until 28 April that Cook decided to prepare to enter an opening between the cliffs where a harbour might be hidden. This entrance, of course, was to lead to Botany Bay. Soon after noon they dropped anchor abreast of 'a small village consisting of about 6 or 8 houses'.(9) This observation made by Banks is particularly interesting, because the conventional wisdom has been that the Aborigines were nomadic people without fixed places of abode, and that townships and villages, that is, 'urban places' opposed to rural dwellings, represent a way of living introduced by Europeans to Australia. In his Log Book, however, Cook says of the same collection of huts: 'We found here a few poor hutts, made of the bark of trees, in one of which were hid four or five children.'(10)

A few days later, Banks and Solander made an excursion with Cook into the country. Banks noted that the soil was swampy or sandy, with few trees but much grass. 'We saw many Indian houses and places where they had slept upon the grass without the least shelter,' he wrote.(11) During the week's stay in Botany Bay, Cook ordered the British flag to be displayed ashore every day, and caused an inscription to be cut upon one of the trees at the watering place where they were filling the ship's casks with water. The name of the Endeavour was marked, with the date of their arrival. On the 1 May, the body of Forby Sutherland, seaman, was buried on shore; he had

died from consumption the night before. On Sunday, 6 May, they weighed anchor and put to sea again.(12)

Thus there were ceremonial observances at that first landing: the hoisting of the flag, the inscription cut, the burial of a seaman according to Christian rites. Three months later, when Cook had satisfied himself that he had at last traced the whole east coast of Terra Australis from Point Hicks to Possession Island, and after a long and difficult voyage between the islands and treacherous waters of the Great Barrier Reef, he raised the flag again and 'took possession' of the whole eastern coast of the continent, designating it by the name New South Wales. He writes in his Log on 22 August 1770: 'At 6 possession was taken of the Country in His Majesty's name and under his coulours; fired several volleys of small arms on the occasion, and cheer'd 3 times, which was answered from the ship.'(13)

I have paid particular attention to the ceremonies with which Cook marked his progress in 1770, because they bear comparison with those conducted by Governor Phillip when he came to plant the permanent settlement in Sydney Cove in 1788. There were also echoes when Governor Macquarie founded the town of Bathurst across the Dividing Range in 1815.

Governor Phillip, of course, rejected Botany Bay as a suitable site for the town he founded in New South Wales. He may not have consciously recogised the fact, but his motives might have been similar to those espoused by the Roman writer, Vitruvius, when he warned against marshy ground as a site for a town. Phillip's motives, however, are not recorded in his dispatches, and we have to reconstruct the circumstances in our thoughts to try and discern his reasons for the removal of the Fleet. At Botany Bay there was a stream of fresh water, but the soil did not look promising; but these conditions were not appreciably bettered at Sydney Cove.(14)

When he sailed around to Port Jackson, a few kilometres to the north, and assembled the Fleet of eleven ships once again, his motives were coloured by various factors he found when he landed at Botany Bay. There was his concern for the safety of his ships to start with; the Bay was too exposed to the weather to afford a safe anchorage. The other factors were also important, his removal was given urgency by strategic considerations. Not the least of the factors, and also the most unexpected, was the surprising arrival of two French vessels under La Perouse, which appeared off the entrance of the Bay in the morning of the 24 January, six days after the Supply, had rounded Point Solander and anchored on the north side of the Bay.

Governor Phillip immediately caused the English colours to be hoisted on the southern side of the Bay. The strong winds prevented the French from entering until the

26 January, and by that time the orders had been given to move northwards to Port Jackson, and the Fleet was getting under way. La Perouse recorded that they were going only sixteen miles north of Point Banks, 'where Commodore Phillip had himself reconnoitred a very good harbour, which ran 10 miles into the land to the southward, and in which the ships might anchor within pistol shot of the shore, in water as smooth as as that of a basin.'(15)

Before nightfall, when all the ships reached Port Jackson, Phillip called all the principal officers together, and many of the private soldiers, to the point where they had first landed at Sydney Cove. There a flag-staff had been purposely erected and a Union Jack displayed. The marines fired several volleys; Phillip and his officers drank to the health of His Majesty the King and the Royal Family, and to the success of the new Colony. This ceremony was no casual occasion. It was a deliberate, formal gesture of possession, ratified by British custom, and was to be confirmed by the larger, more solemn ceremony held before all the assembled company on 7 February, when the Judge-Advocate read the Governor's Commission from the King.(16)

The wording of this Commission is particularly relevant to the founding of Colonies, but also to the founding of towns, which went hand in hand together in Australia. It was couched in formal, legal language:

> '...George the Third by the Grace of God of Great Britain France and Ireland King Defender of the Faith &c.
> To our trusty and well-beloved ARTHUR PHILLIP Esquire.
>
> Wee reposing especial trust and confidence in the prudence courage and loyalty of you the said Arthur Phillip ... do constitute and appoint you the said Phillip to be our Captain-General in and over our territory called New South Wales extending from he Northern Cape or extremity of the coast called Cape York in the latitude of ten degrees thirty-seven minutes south to the southern extremity of the said territory of New South Wales or South Cape in the latitude of forty-three degrees thirty-nine minutes south and of all the country westward as far as the one hundred and thirty-fifth degree of east longitude reckoning from the meridian of Greenwich ... and all towns garrisons castles forts and all other fortifications or other military works which may be erected upon the said territory or any of the said islands.'(17)

Thus the territory claimed was very precisely delineated by latitude and longitude determined from Greenwich, and Phillip, with his 'prudence, courage, and loyalty', was charged with the protection of all towns which might be

erected. Then Phillip was commanded to take the oaths appointed by the Acts of Parliament concerning the safety of the King (as the symbol of the Kingdom of Great Britain) and the oath 'for the due execution of the office and trust of our Captain-General and Governor-in-Chief in and over our said territory and its dependencies for the due and impartial administration of justice.' He was empowered to keep and use the Public Seal of office; to administer oaths, appoint justices, to pardon and reprieve wrong-doers. He was also granted

> 'full power and authority to erect raise and build ... forts and platforms, castles cities boroughs towns and fortifications ... necessary for the security of the same.'

He could appoint fairs and markets as well as ports for trade; and grant land according to instructions.

The ceremony was described by Lieutenant Bowes in detail. 'This morning at 11 o'clock all who could leave the ships were summoned on shore, to hear the Governor's Commission read and also the Commission constituting the Court of Judicature. The marines were all under arms, and received the Governor with flying colours and a band of music.' The Governor accompanied with his few senior civil officers, took off his hat and complimented the marine officers, who had lowered their colours in respect, and the military then marched with pipes and drums playing and formed a circle around the whole body of convicts, men and women, who were assembled together. The convicts then sat down, and the civil officers proceeded to a small table set with two red leather cases, which were opened and unsealed in the sight of all present. The documents were read aloud by the Judge Advocate William Collins.(18)

The physical form of this ceremony was, therefore, consistent with those ancient ceremonies which were connected with the consecration of 'sacred places'. The point is, that the actual space marked out as the town site was considered sacred, according to ancient European ritual and tradition.

Governor Phillip then addressed the people, saying, according to Collins, that 'He should ever be ready to show approbation and encouragement to those who proved themselves of worthy of them by good conduct; while, on the other hand, such as were determined to act in opposition to propriety, would inevitably meet with the punishment they deserved.' He exhorted the convicts to be honest among themselves, obedient to their overseers, and attentive to the several works in which they were about to be employed. (19)

What we find here therefore, is a formal marking of the spot which was to become the centre of the town by the flag-pole; an assembling of the whole company, convicted

and free, including the sailors and officers from the ships, and the military; the taking of oaths acknowledging the Royal Commission and Instructions; and the playing of official music. There does not seem to be any public drinking of toasts on this occasion; but the marines fired off three vollies as a salute at the conclusion of the ceremony. Afterwards, Phillip invited some of the officers to have a 'cold collation' with him by way of a celebration.

The Placing of the Flag-pole

The central focus of this ceremony was the flag-pole and flag. Now the flag-pole itself is a very ancient symbol, betoking a sacred place. It is a descendant from the vertically placed stick or pole called the 'gnomon' or shadow-stick used from pre-historic times as a means of measuring the daylight from sunrise to sunset, and also for measuring the phases of the moon. Another symbolic attribute of the upright staff planted deliberately in the ground in a special place, was to be a mediating object between earth and sky, between the terrestrial and heavenly sphere; as previously explained, it forms an 'axis mundi' in the centre on the town or city.(20) In the early drawings of Sydney Cove, particularly those drawn by Hunter, Raper, and Bradley, there is emphasis on the flag-pole and the flag flying above the little settlement. (Fig.2.1)

It should also be noted that the flagpole (or gnomon, or axis mundi) is consistent with the concept of 'omphalos', that is a place which is regarded as the centre or navel of the world. At Delphi, at Mount Parnassus, even now, we can see the carved rock which the ancient Greeks regarded as the religious centre of their world.

Far away on Norfolk Island, we see a graphic representation of this symbol of the flag-pole. This island, though many hundreds of kilometres away from Sydney, had been sighted by Cook, and the tall pine trees noted. More in anxiety about French designs on New Holland, rather than in hope that the tall pines might prove useful as ships' masts, Phillip took immediate action to claim it for the Crown. His Instructions, indeed, anticipating the move, had included an order to send a ship to claim and settle the island. Within days of landing in Sydney, Lieutenant King was despatched to the island with a small party of convicts. Later, when food became scarce in Sydney, before the second fleet arrived in 1790, a greater number were sent, and a substantial settlement formed there. It was Sydney's first satellite town. Lieutenant George Raper has left a drawing which illustrates the dominant position of the two flag-poles; one on the shore-line, flying colours as a signal about the landing conditions, the other placed in front of Lieutenant King's two storied house. (Fig.2.2)

In ancient times, a very formal manifestation of the upright staff, was seen in the 'stele' of the Founders of the ancient city of Kyrene, a colony of Thera in the Mediterranean. This was a stone monument carved with the Founder's Oath, an oath sworn to the god Apollo. The text of this oath still survives, and defines the relationship of the people of the colony to the society that sent them out, much in the same way, that Phillip's Commission defined his people's relationship to the mother country of Britain.(21)

Egyptian obelisks, either placed at nodal points of Egyptian cities, or plundered by the Romans and laboriously transported overseas, were commonly used pointers or 'steles'; the Romans also used columns, often elaborately carved like Hadrian's Column in Rome, to signify special or sacred places. It is interesting to find Governor Macquarie, over twenty years after the first landing, ordering an Obelisk to be constructed on the bay side of Bridge Street in Macquarie Place, very close to the spot where the Sydney flag-pole was placed, and causing all roads in the colony to be measured from this spot. (Fig.2.3)

In the ancient ritual of foundation, the placing of the gnomon was the first step in the delineation of the boundaries of the town, which were measured from this central point. The decumanus was found by the shadow cast from the gnomon, and the cardo was found by bisecting the decumanus at right angles, thus forming the principal directions of the town's main streets. The first starting point, at the gnomon, had been determined by augury; the term 'an auspicious site' is derived from the practice of the science (or art) of augury. To an augur, natural signs were divine manifestations which should be observed and acted upon; the flight of birds, the patterns discerned in the entrails of ritually sacrificed animals; the fortuitious presence of a spring. The augur belonged to a priestly caste and was schooled in such mysteries. Writers such as Plato and Vitruvius describe their function in ancient societies.

Nowadays the practice of augury or 'divining' is linked usually to the ability of some people to predict where springs of water can be found underground. It is still used extensively by farmers and country folk for 'divining' the point where a bore or well should be sunk. Every country town has its well-known diviner who advises on the position of a bore; and to sink an expensive bore, even with modern hydrographic diagrams prepared, without the services of a diviner, is to court failure. (22)

In principle, what the diviner is doing is trying to discern the flow of subterranean streams so the bore can tap into them. The ancient augur was supposed to read the signs from the earth itself, from the heavens above, and also from underground. Underground flowing water was

believed to release the 'earth' energy. That is what the augurs or geomancers sought.

Once the point was fixed by the upright staff (or flagpole), it was essential to mark the boundaries of the site. These boundaries were determined according to a 'templum', or plan set out. The word 'templum' contains a concept foreign to modern calculations. According to the Roman writer Varro, 'templum' is 'used in three ways: with reference to nature, to divination, and to resemblance, with reference to nature, in the sky; to divination, on the ground; and to resemblance underground.' He also says a 'templum' could be any space set apart for definite functions of state or religion. Our word 'temple' is derived from this Latin root. The space was 'consecrated', that is, freed of evil influence. It should also have a continuous fence and only one entrance.(23)

It is interesting to note that even in 1788, there were more than echoes of the ancient beliefs amongst the arrivals in the First Fleet. The Flagstaff erected at Sydney Cove was placed in a four-square enclosure, clearly visible in both the Raper and Bradley drawings, a sort of mini-templum, representing the town to be marked out. On Norfolk Island, the Flagstaff is placed directly on the axis to the Government House, the chief building of the settlement.

Sydney Harbour has, from the first, been regarded as a haven. The relief evident at the safe arrival after the longest voyage ever taken by so many people at one time up to that date, must not be lightly dismissed, or muddied by mischievous accounts by later historians seeking to belittle the achievement. (24) The site of Sydney, was and is, allegorically benevolent. What is more, there was an implied promise of something like redemption in the fact that the convicts had the chance to start a new life after their sentences expired.

The very air the First Settlers breathed seemed to be favourable. The climate was mainly benign, temperate, but sometimes enlivened by quirky winds and capricious temperatures. Generations of Sydneysiders have remarked about the sparkling, elastic, even joyous air which sometimes enlivens their days in winter; about the balmy, scented, velvety nights after a hot summer's day. The promise was like a god-given gift to people from the dank winters of its antipodes London, surrounding their days, and cushioning their transition into the Great Southern Continent. Newcomers to Sydney, even now, feel this strange quality of enlivened perception. It is more a feeling than a measurable attribute; but Hippocrates, Aristotle, and Vitruvius would have recognised it.

The point of arrival itself was auspicious; a gap between forbidding cliffs on the rim of the wide Pacific Ocean; an allegorical gateway to a new life. This gateway also

fulfilled the idea of a single entrance into the projected city; a break which allows passage from one region to another, as if from unconsecrated to consecrated space.

The parallels with the ancient practices can be extended. After the augur had determined the choice of the exact site, the most important task was to determine the shape of the templum, or enclosed space. The most ancient and symbolic form of this was that of a circle, representing the dome of the sky, marked by a figure with four equal parts; these traditionally represented the four quarters, and were delineated by a cross with arms at right-angles to each other. (Fig.2.4) When this was decided, then the matter of defining the boundary and marking the main gate was of crucial importance to the future well-being of the city and its inhabitants.(25)

The ancients also had other ceremonial practices, like mixing the earth of the mother city with that of the new country, bringing fire from the home land to light the fire at their own duly consecrated hearth, and (previously mentioned) burying the founder, when he died, in a specially consecrated place in the city, to ensure his spirit would guard over them.

The Marking of Boundaries

In the matter of the marking out of boundaries, we find direct evidence from the map Phillip signed before he left Sydney in 1792, and this practice re-appeared in a formal way in 1829 in the marking of the limits of the 'township' within which the town was sited.

In New South Wales the first settlers had found a haven in Sydney Harbour after their long and perilous voyage, but the purpose of the settlement was still punishment for crimes committed in England. Their punishment was exile, also an ancient form of banishment, and their return to their homeland was always unlikely. The place itself, by its isolation from Europe, constituted a form of prison without walls, and the little settlement was also hemmed in with the unknown 'bush' without known paths or roads. Even beyond the bush, on the horizon, were the Blue Mountains, another formidable barrier preventing escape. Thus there was no need for defensive city walls or formal gateways. The only defences were a small redoubt established by Phillip at Dawes Point, and the presence of the 'Sirius' and its guns.

Governor Phillip, defined the extent of the 'township' of Sydney, on December 2 1792, before he departed.(See Fig.1.4 where it is clearly marked, Fig.2.7 in this chapter, and also Fig.4.7, James Meehan's plan of Sydney). He caused a line to be drawn from the head of Woolloomooloo Bay to the head of Cockle Bay (later re-named Darling Harbour), and marked it with his own hand:

> 'It is the Orders of Government that no ground within the Boundary Line is ever granted or let on lease and all houses built within the Boundary Line are and are to remain the property of the Crown.' signed A. Phillip, Dec.2, 1792. (26)

This line was never marked in a formal way on the ground; it persisted in part in maps and plans drawn from 1792 to 1822; in Lesueur's plan of 1802, in Meehan's plan of the town in 1807, in de Freycinet's plan of 1819; and can still be partly discerned in the Post Office plans of the 1830s and even in the municipal plan of William Henry Wells in 1843. By then its purpose was long forgotten, and a new way of marking out boundaries had been instituted. Nevertheless, it was an initial geometric figure which preceded the later squared 'township' lands instituted in the 1829 Regulations for the laying out of towns in New South Wales. There the planned town constructed with streets at right-angles was contained in a larger defined space. Examples can be readily seen in the plans of Bathurst, Dubbo, and Melbourne.

Thus even when there was no compelling reason for defensive walls, or a major gateway, the marking out of the boundary of the city was made by Phillip. Other Governors during the early colonial decades defined Sydney's boundaries from time to time, and these boundaries were formally made, not only on a map, but also by Boundary Stones, or Toll Houses, as we shall see.

The ancients, of course held the boundary of the city sacred. This was the line within which the inhabitants could expect to be defended, which marked the place where they were recognised as citizens, where they had certain rights and responsibilities. Historians like Heroditus, Varro, and Vitruvius, write about the symbolic practice of making a furrow around the place where a city was being founded; this was then thought of as a ditch, and finally a wall. Romulus is supposed to have killed Remus because he desecrated the ditch Romulus had marked out as the boundary of Rome by jumping over it. City walls themselves were considered sacred, people found defacing or damaging them incurred grevious penalties; the space the walls then enclosed was considered a sort of refuge where acts of violence were not permitted, where the laws of the city were observed.(27)

Particular boundaries between parts of the city, or between different plots of land, were marked by boundary stones; as the custom became more entrenched these stones were made in a decorative form in the shape of a figure called a 'Herm', dedicated to Terminus, the god of boundaries.(Fig.2.5). Penalties for moving or re-moving boundary stones were severe.

It has been noted, that Governor Phillip marked out the boundary line of Sydney before he left the colony. By this act, Phillip acknowledged the need to distinguish

'town' lands from their surroundings; to mark out, however crudely, the space where the people were enclosed within the protective shield of the rule of their own laws, where the term 'public lands' had a special meaning of belonging to the whole community, and being under the central control. In the case of Sydney, this line was not distinguished by a wall, or any physical barrier. Problems of re-subdividing this composite town space had to be worked through as the town started to grow; of distinguishing 'private' from 'public' land, but the genesis of the principles underlying the formation of the city is there, marked out by Governor Phillip.

In later decades, some echoes of this fundamental division can be discerned. Under Governor Macquarie, boundaries were related to the road-system and the toll-houses. I have not discovered, so far, whether he caused boundary stones to be placed around the town of Sydney. The maps between 1807 and 1822 do not indicate them, and Macquarie may not have considered the area of the town sufficiently 'fixed' to require permanent markers, despite the fact he had all houses numbered and tried to have the streets re-organised.(28)

Boundary Stones were however erected in Parramatta in 1839, by David Lennox under Governor Gipps. Nine stones were erected encircling the town, inscribed with the name 'Parramatta' followed by 'Sir George Gipps, Governor', and the date, 1839. Five of these boundary stones still survive in their original places. (See Fig.2.6)

In the City of Sydney, following its incorporation as a City in 1842, the Mayor was instructed by the Act of Parliament to 'beat the bounds' once every year. This is a custom, not from the Classical world, but from the pagan Celtic world of England. It was subsequently adopted as a symbol by the Christian Church as a way to mark out the boundaries of the parish, a physical unit of area within the province of a diocese. The day called 'Rogation Sunday' is fixed in the Church Calendar of Events to be the day for the processing of the boundaries of the parish. The Minister is supposed to walk the whole way, accompanied by some parishioners and children, in order to show the children where the boundaries are marked. (29)

In Sydney in 1842, imposing cast-iron markers were commissioned from the firm P.N. Russell, and positioned at strategic points around the boundary of the city, and were also employed to mark the ward divisions within the city. There were six wards, named after Phillip, Cook, Macquarie, Brisbane, Bourke, and Gipps. No less than five boundary posts were positioned along Cleveland Street at the southern boundary of the city; they were useful in a practical way in an area where the roads were not clearly marked out on the ground and kept getting invaded by shifting sands from the Lachlan Swamps. (30)

Some of these handsome iron markers still survive; there is an example outside the Town Hall itself, (not known if it has been moved from its original position), and another on Cleveland Street at the corner of Dowling Street. (Fig.2.7)

The Significagnce of the Name of the Town

It is intriguing to speculate, briefly, about the importance of the giving of an appropriate name to a town or city when it was founded. Recent writing by Paul Carter links the act of naming with explorers' predilections and memories, with their aspirations as well as with their observations about the qualities of the place discovered.(31) Paul-Alan Johnson, on the other hand, suggests links with symbolic numbers which lead back to correspondence between ancient Greek letters and legends.(32) Joseph Rykwert also discusses ancient practices which have echoes in the naming of Sydney in particular.(33)

Rykwert suggests that some ancient cities had a secret. or magic name, as well as a public name, and cites the case of Rome. It is therefore intriguing to find that the name 'Albion' was, according to two contempories, Surgeon John White and Lieutenant Southwell, considered for the name of the town at Sydney Cove, but not adopted officially.(34)

Now Albion was a name also used in legendary tales for England itself. It was derived from the hero Albion, son of Neptune and Amphitrite, who, according to legend, came to Britain and established a kingdom there, introducing the ancient science of studying the stars and the art of building ships. 'Albion' was a symbol for the'Ancient Man' who contained in himself all things, and became transposed as a spiritual form of England. It seems the name had a revival about this time, at the end of the eighteenth century; it was used by some writers then, notably the mystic William Blake.(35) It would have been a very appropriate name for a city founded as a colony by a powerful sea-faring nation like Britain.

But the name 'Sydney', derived from the name of the little Cove when they finally landed, gradually replaced 'Sydney Cove', on the official despatches, and the town, though not named at the formal ceremony described above, commemorated, not an ancient hero, but a contemporary government minister, the Secretary of the Home Office in England, Lord Sydney, formerly known as Thomas Townsend before his elevation to the peerage in 1783 for his part in concluding the treaty with America. This practice of naming major towns after distinguished officials in England, then became the pattern for names of the Australian state capitals. Native names were used for subsidiary towns, like Parramatta and Toongabbie almost at once, but the capitals were all distinguished by names of earthly rather than heavenly patrons.

Convict Outstations and Roman Military Encampments

Some writers have argued that there is a close influence from military planning evident in Australian Colonial town plans(36),so it is appropriate to look closely at the shape and form of the early convict outstations, and dispose of this modern myth straight away. Apart from the outstation Parramatta, Toongabbie was formed two years later in the County of Cumberland, and Norfolk Island, of course, was settled almost simultaneously with Sydney, and these two were manned by convicts and controlled by the military.

It has become an accepted but unexamined myth in town planning literature that Roman towns were more formal counterparts of Roman Miltary Camps - the 'Castrum'. English town names are cited as evidence of a camp becoming a town, for example, Chester, Cirencester, Winchester etc. But this is an inversion of the truth. Rykwert points out that the camps were diagrammatic invocations of Rome itself, rather than the other way around. 'The Romans did not treat the setting up of the camp as a makeshift for a night's sleep: it was part of the nightly military ritual that no army was permitted to settle down for the night without setting up camp ceremonially.'(37)

> 'The first act was to plant the general's vexillum at a chosen place. It was from the vexillum that the praetorium was paced out. On the border of the praetorium and the principal road a groma (staff) was stood to ensure that the streets were laid out at right angles. The line between the vexillum and the groma gave the surveyor the main axis of the camp; the groma in the camp, as on the site of a new town, was auspiciouly placed. It gave the direction of the cardo maximus of the camp, and led to the Porta Praetoria, the principal of the four camp gates.'

Given that Roman camps were derived from Rome the city, not vice versa, the argument that the colonial town was derived from the military camp cannot be sustained. There is no evidence to suggest this, despite the fact that each town in the beginning functioned as a loose sort of gaol. The early towns assumed civic-type functions almost straight away. Only Toongabbie, a temporary agricultural station, did not develop this way, and this was because the town-like facilities were being established at Parramatta, within walking distance.

One of the first plans of Sydney was drawn by Lieutenant William Bradley, (Fig.2.8). This plan was drawn only four weeks after the first landing, but even then there is some semblance of regularity. The military tents are positioned with exactness, distinguished by a small parade ground in front. The convict tents are in rows. There is a major separation between the three main

groups: marines, convicts and administrators. The hospital is positioned further along the shore of the Cove, and the observatory is even further north.

The centre of the pattern could be considered to be in the parade ground. This was the feature which has been taken to be the starting point of Sydney's street system, echoed in the Dawes' plan of Sydney, and formalised in the etching in Stockdale's edition of Phillip's Voyage, a feature that became 'the principal street marked out' in that plan. In reality this 'street' was mistakenly transposed to the west side of the cove from the east.(Compare Figs.1.2, 1.3, and 1.4 with Fig.2.8) It disappeared mysteriously on subsequent plans because it was not there on the ground, it had appeared only in the Stockdale plan.

Though the settlement as a whole lacks a overall plan, it began to shape up more as a town than a camp. There is no determined effort to impose a grid, but there is a division imposed by the Tank Stream running through the middle of the settlement. The Governor and the main officials were positioned on its eastern side, and the military, and the main body of the convicts were on the west. It is interesting that there was some rudimentary gender distinction between the placing of the womens' tents on the eastern side, presumably to allow them some protection. The ships, with the 'Sirius' as their flag-ship on the look-out at the entrance of the Cove, were their potential means of defense, filling the temporary role of a ready-made defensive wall around the settlement on its seaward side.

To pursue the matter further, Parramatta was also planned as a town rather than a camp from the first weeks of designation, though a small redoubt was established as a first step. The parade ground, the central feature of the pattern, was subsumed into the long axial street leading from the wharf to the Governor's residence on Rose Hill. The settlement on Norfolk Island was also started off as a town rather than a camp, even though there was an echo of the army parade ground leading up to the Superintendent's house.

As a contrast, it is interesting to consider the plan of encampment Surveyor-General Thomas Mitchell published four decades later in his account of his journey of exploration to the Darling River. (Fig.2.9) This plan is the nearest we can get to a true 'military' arrangement in the settlement process in Australia. He adopted this plan every night without fail. As he said: 'One great convenience in having such a fixed plan of encampment was, that I could choose a place free from trees, and establish the whole party on the ground by merely pointing out the position for my own tent, and how it was to face.'(38)

As already mentioned, Parramatta itself assumed township characteristics almost at once when it was established. It had sites planned and marked out in a formal way, measured, mapped, and designated for particular uses. But the arable land around the head of the harbour was very limited in extent, so another location was soon established on the banks of a creek which arose beyond the watershed of the gentle hills north-west of Parramatta, It was named Toon-gab-be by Phillip, after the native name for the spot, and the settlement reported in his despatch 8 October, 1792.

Toongabbie

The farming out-station of Toongabbie, as it is now spelt. was about 4 miles (6.4 km) west from Parramatta, and the alluvial soil was fine and fertile near the creek. Phillip reported 416 acres cultivated there and 97 more cleared. (i.e. 166 plus 38 ha); that is, nearly half the extent of the land cultivated at Parramatta. (39)

The convict station established there was initially similar in plan to Parramatta's, but simpler. It was centred on the crossing of a wide east-west street, again like the principal planned streets at Sydney and Parramatta, scaled at 60.9 metres wide, and another at right-angles to it of 24.9 metres heading north across the creek to a formally-laid out barrack-yard. Thus the cardo and decumanus of ancient surveying practice re-surfaced yet again in the antipodes.

Ranged along the principal street were convict wattle-and-daub thatched huts each commanding an allotment 30.48 metres wide and 100 metres deep, and spaced regularly. (See Fig.2.10 and Fig.2.11) Separated from the convict huts and located to the north across the creek, were the barracks for the soldiers, huts for the superintendent and his men, and storehouses. There were no other communal buildings like a church or hospital; presumably those at Parramatta were considered close enough to serve.

The similarity between the dimensions of the main axes at Toongabbie and Parramatta, and the wide parade ground planned, but not carried out at Sydney, suggests that Dawes was also involved in the layout of the plan at Toongabbie. The simplicity of the plan is evident, and its form, with the conjunction of vertical and horizontal elements has confirmed its ancient origins.

At the time, during those first five years of settlement, the agricultural centres of Parramatta and Toongabbie, loomed large in the relationship between Sydney and its urban satellites. Phillip divided his people between Sydney, Norfolk Island, Parramatta, and Toongabbie in the effort to make a viable start in the business of growing enough grain for the immigrants arriving. By December

1792, when he left to return to England, the numbers of Europeans in the colony had grown to 4203; with 1161 based at Sydney, nearly twice that, 1906, at Parramatta and Toongabbie, and 1123 at Norfolk Island.(40) Thus the main settlement, Sydney, had already engendered two satellite towns and a village.

Vitruvius

Returning to the ancient philosophers. it is a comparative late-comer who is the most frequently mentioned theorist on matters of architecture and town planning. Vitruvius Pollio (c.50-26 BC) was a Roman who served under Julius Caesar. The principles he espoused informed the later writings of Alberti and Palladio, but he had drawn upon Aristotle and Plato, on Heroditas the historian, on Hippodamus of Miletus and Dinocrates of Alexandria.(41)

He wrote about the concepts of order (taxis), of arrangement (diathesis), and proportion (oeconomia), an idea which also embraced symmetry, decoration, and distribution. He is often mentioned but not widely quoted, as his concepts are quite complex and depend on a modern understanding of the ancient Roman words in their technical sense, and a realisation of the place the ancient gods were afforded in his society.

In Book I, he discusses in particular the salubrity of sites, and the factors to take into consideration to ensure a healthy site is chosen. 'Now, this will be high and free from clouds and hoar frost, with an aspect neither hot nor cold but temperate. Besides, in this way a marshy neighbourhood shall be avoided.' He considers defence as a matter of course:

> 'When, therefore, by these methods, there shall be ensured healthiness in the laying out of the walls; and districts shall be chosen abounding in fruit to feed the citizens; and roads duly laid out, or convenient rivers, or supplies by sea through the harbour, shall have ready transport to the ramparts: then the foundations of the towers and walls are to be laid.'(42)

Then, he considers the prevailing winds and the aspect of the streets of the town.

> 'When the walls are set round the city, there follow the divisions of the sites within the walls, and the laying out of the broad streets and the alleys with a view to aspect. These will be rightly laid out if the winds are carefully shut out from the alleys. For if the winds are cold they are unpleasant; if hot, they infect; if moist they are injurious.'(43)

Then, after apportioning the alleys and settling the main streets, the choice of sites for the convenience and

common use of citizens must be chosen, for the sacred buildings, for the forum, and other public places.

Thus Vitruvius stresses five main considerations: a healthy site above marshland, a fruitful district, strong walls for defence, streets formed to mitigate the effects of winds, and the careful siting of important public buildings. At Sydney the site was considered more healthy than that at Botany Bay; the district however, was less than fruitful, strong walls for defence were not built, and the aspect of the streets was not geared to the winds. The main public buildings were not sited according to a well-ordered plan. Even the basic idea of a central parade ground, was quickly overlaid by exigencies of the moment.

Thus, though there were echoes of ancient ceremonies and foundation rites at Sydney, the technical details implicit in the laying out of a town according to Vitruvius were not consciously followed at once. As the decades passed, however, the town began to resemble more closely an ancient model.

Destruction Rites

This may be a good place to mention another intriguing ancient rite. When a city was formally destroyed by war, like Troy, or Carthage, its legal existence also ceased, and this was formalised by accepted rites, just as its foundation was. In literature, the ground was again ploughed over, with the plough drawn anti-clockwise around the city site.(44)

We are so accustomed, in these modern times, to think of cities as ever-growing, constantly expanding entities, that we forget that cities can decline as well as grow. Many ancient cities are only known to us as ruins; the great cities of the trade-routes of the Middle East, Baalbeck, Palmyra amongst them; Troy itself, archetypal ancient legendary city; the cities of old North Africa. Rome dwindled down to almost a village when the Popes moved to Avignon. Some cities persist even after they decline, and rise once again, like Rome.

Even in Australia, towns were founded but then abandoned. In the first ten years After 1800, Port Phillip was briefly settled by David Collins, under orders from Governor King (1803), but then deserted in favour of the Derwent River in Tasmania. Coal Harbour at the mouth of the Hunter River was occupied, abandoned, and re-settled as King's Town, and later called Newcastle.(45) The first settlement of Norfolk Island, as a satellite out of Sydney, provides an example of colonial town founding, quick development in isolation, and then abandonment; and there the pattern of settlement can be contrasted with that of Sydney. In the next chapter, therefore, the first phase at Norfolk Island is considered.

CHAPTER TWO : REFERENCES

1. See S.H. Roberts, History of Australian Land Settlement 1788-1920. Melbourne, 1924; Eris O'Brien, The Foundation of Australia, Sheed & Ward, London, 1937; Henry Reynolds, The Other Side of the Frontier, Penguin, Melbourne, 1982.

2. Joseph Rykwert, The Idea of a Town: The Anthropology of Urban Form in Rome, Italy and the Ancient World, M.I.T. Press, 1976, 1988. Preface, pp.23-26. Rykwert cited the extracts from Daviler and Aristotle quoted above.

3. Ibid, p.24.

4. It was some time before Phillip was awarded the dignity of a commemmoratory statue, but in 1888, a large symbolic fountain was erected where the Exhibition Building had stood in the Botanic Gardens, with Phillip at its apex.

5. Bernard Smith has pointed to the difference in veneration given to the two founders in his article, 'Cook's Posthumous Reputation', in Robin Fisher and Hugh Johnstone (eds) Captain James Cook and His Times, Vancouver, 1979, and in 'Depicting Pacific Peoples' in The Turnbull Library Record, Wellington, New Zealand, vol.21, no.1, May 1988; also in the book he edited with William Eisler for the grand bi-centennial exhibition at the Art Gallery of New South Wales in 1988. The back-drop from the masque in London inspired an engraving titled 'The Apotheosis of Captain Cook' with Cook ascending into heaven attended by Britannia and Fame, while the accompanying verse acclaims his achievements.

> 'He came, and he saw, not to conquer, but to save,
> The Caesar of Britain was he;
> Who scorn'd the ambition of making a slave
> While Britons themselves are so free
> Now the Genius of Britain forbids us to grieve,
> Since Cook, ever honour'd, immortal shall live.'

In the exhibition at Hyde Park Barracks, entitled 'Icons of Australia', June-July 1992, Cook's 'Ditty Box' is exhibited. A miniature coffin, it has mementoes of his martydom; a picture of his death, a lock of his hair, a spear allegedly made by a native from Cook's thigh-bone; it is in fact a modern 'relic', which parallels the older, more venerable Christian relics of the Saints. Again, Kenneth Slessor's great poem, 'The Five Visions of Captain Cook', draws on these resonances of a hero's death for modern audiences; and the scholarly works by Beaglehole and recent scholars have continued the revival of interest in Cook as a heroic figure.

6. Barron Field, 'Anticipation is to a young country what antiquity is to an old'. and also 'On visiting the spot where Captain Cook and Sir Joseph Banks first landed

in Botany Bay', in First Fruits of Australian Poetry, second edition, published in Sydney in 1823.

7. Barron Field, 'On affixing a Tablet to the Memory of Captain Cook and Sir Joseph Banks, against the rock of their first landing in Botany Bay'.

8. J.C. Beaglehole, The Endeavour Journal of Joseph Banks, Angus & Robertson, Sydney, 1962, Vol.II, pp.47-50.

9, Ibid, p.54.

10. Historical Records of New South Wales, vol.I, part 1, p.19; Cook's Private Log.

11. Beaglehole, op. cit., p.57.

12. See Cook's Log and Banks' Journal.

13. Historical Records of New South Wales, op.cit,p.157.

14. See H.Proudfoot et al, Australia's First Government House, Allen & Unwin, Sydney, 1988.

15. Historical Records of New South Wales, vol.I,part 2, p.178; Jean Francois La Perouse, Voyage de Laperouse, notes by De Lesseps, Arthur Bertrand Library, Paris, 1831.

16. There are various descriptions of this occasion, but I have followed David Collins in his account here.

17. Historical Records of New South Wales, vol.I, part 2, p.61-62.

18. See John Cobley, Sydney Cove 1788, Angus & Robertson, Sydney, 1980. p.60.

19. Ibid., p.62.

20. Rykwert, op.cit. Chaps 1 and 2; Nigel Pennick. The Ancient Science of Geomancy, Thames and Hudson, London, 1979. pp.28-30.

21. Rykwert, pp.37-38.

22. Rykwert, p.46. Keeva Vozoff in Earth Sciences, Macquarie University has explored the water diviners' skills.

23. See Varro's Treatis, quoted by Rykwert.

24. It has been almost a literary convention amongst historians and other writers to give emphasis to scenes of debauchery when the convict women were landed. It is interesting, however, that they all draw their picture from only one source, Lieutenant Bowes, amongst many.

That tells us more about the historians' desire to be 'shocking' than their desire for accuracy.

25. A feature of cities in Europe, if not markedly in England, up to the rise of strong national administration under an accepted sovereign, was the building of masonry walls around the enclosed space of the defined city; these were often embellished with decorative gateways, or in the case of a dominant power like Rome, triumphal arches.

26. See Fig.1.4 and Fig.2.7.

27. Rykwert, op.cit., p.59.

28. See Macquarie's proclamations in the Sydney Gazette, 11 August and 6 October, 1810.

29. Nigel Pennick, The Ancient Science of Geomancy, London, 1978.

30. Information from Shirley Fitzgerald; also see her Sydney 1842-1992, Hale & Iremonger, Sydney.

31. Paul Carter, The Road to Botany Bay, Faber and Faber, London, 1987. He discusses boundaries in the colonies from different perspectives in chapter 5.

32. Paul-Alan Johnston, 'Numina, Numbers and Non-sense, the early planning of New South Wales', paper delivered to the Centenary Conference of the NSW Institute of Surveyors, 1991.

33. Rykwert, op.cit., chapter 2.

34. John White, Journal of a Voyage to New South Wales, Debret, London, 1790; Daniel Southwell, Letters, Historical Records of New South Wales, vol.II, 12 July, 1788, p.692.

35. William Blake, (1757-1827). Blake published his Songs of Innocence in 1789, and was waorking on his Jerusalem: the Emanation of the Giant Albion, between 1804-1820. He was in touch with the events in New South Wales, for he did the finished lithograph of the well-known 'Family of New South Wales', which was published by John Stockdale on 15 November 1792, and included in John Hunter's Historical Journal the following year. It was a sympathic portrait in the 'noble savage' style.

36. See J. Sait, 'Public Building and Town Planning: the first 100 years,' in Leonore Coltheart (ed), Sigificant Sites, Hale & Iremonger, Sydney, 1988, pp.15-25.

37. Rykwert, op.cit., p.68.

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30. Rykwert, ibid., chapter 2.

31. Carter, op.cit.

32. Johnston, op.cit.

33. Rykwert, p.59.

34. John White, Journal of a Voyage to New South Wales, Debrett, London, 1790; Daniel Southwell, Papers, Historical Records of New South Wales, vol.II, 12 July 1788, p.692.

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36. See J. Sait, 'Public Building and Town Planning: the first 100 years', in Leonore Coltheart (ed), Significant Sites, Hale & Iremonger, 1988, pp.15-25.

34. Rykwert, p.68.

35. Major T.L. Mitchell, Three Expeditions into the interior of Eastern Australia, vol.I, 1838, p.339. See Fig.16.

38. Major T.L. Mitchell, Three Expeditions into the Interior of Eastern Australia, vol.I, 1838, p.339. See Fig. 2.9

39. Toongabbee is noticed in J.S. Kerr's Design for Convicts, Library of Australian History, Sydney, 1984, pp.9-10; also in Paul-Alan Johnston, op.cit.. The plan is held in the Colonial Office Papers, Public Record Office, London (PROM at CO 700.5). See also Historical Records of New South Wales, vol.I, pt.2, Phillip to Dundas, 2 Oct 1792.

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42. Ibid, p.47.

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36. Toongabbie is noticed in J.S. Kerr's Design for Convicts, Library of Australian History, Sydney, 1984, pp.9-10, and Paul-Allan Johnson, op cit. The plan is held in the Colonial Office papers, Public Record Office, London (PROMR at CO 700.5); Historical Records of NSW, vol.1, pt.2, p.645, Phillip to Dundas, 2 Oct 1792.

37. See Bernard Smith and Alwyne Wheeler, The Art of the First Fleet. Oxford University Press, London, 1988. pp.125-7, in chapter 3, by Alan Frost, 'The Growth of Settlement'; also J.S. Kerr, op cit. pp.11-15, and Figs.17, 18 and 19. Plans held in PROMR, CO 700 NSW 6; and MPG 299.

38. Rykwert, p.70.

39. In North America, some centuries before, settlements were more often abandoned than not when they were first attempted. See A.L.Rowse, The Expansion of Elizabethan England, Macmillan 1955, Cardinal edition 1973.

40. Historical Records of New South Wales, vol.1, pt 2, pp.676-77.

41. Vitruvius, edited and translated by Frank Granger, Heinemann, London, 1932; John Onians, Bearers of Meaning: The Classical Orders, Cambridge University Press, Cambridge, 1988, pp.33-40.

42. Ibid, p.47.

43. Ibid, p.53.

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45. J.T. Bigge, Report of the Commissioner of Inquiry on the State of the Colony of New South Wales, House of Commons, London, 1822. pp. 34, 100, 114-118.

CHAPTER TWO

Figures: Titles only; for full captions see Vol.II.

Fig.2.1 George Raper, View of the East Side of Sydney Cove, Port Jackson, c.1789. British Museum, (Natural History).

Fig.2.2 George Raper, Principal Settlement on Norfolk Island, c.1790. National Library, Canberra.

Fig.2.3 (a) Map of Part of Sydney Cove, 12 July 1833. AONSW Map No.5633, from H. Proudfoot, Cadman's Cottage, Sydney, 1988. (b) Morton Herman, pen drawing of the Obelisk, from M.H. Ellis, Francis Greenway, Angus and Robertson, 1849.

Fig.2.4 The Templum of the Sky. Miniature, copy from Joseph Rykwert, The Idea of a Town, 1988, p.48.

Fig.2.5 An ancient 'Herm', or boundary stone, from the Villa Medici, Rome. Photograph by the author, 1989.

Fig.2.6 Boundary Stones still standing in their original positions at Parramatta. Constructed by order from Governor Gipps, 1839. Photographs by the author.

Fig.2.7 The City of Sydney, map by Surveyor William Henry Wells, 1843. Sydney City Council.

Fig.2.8 Sydney Cove, Port Jackson, drawn by William Bradley, 1 March, 1788. Mitchell Library, State Library of NSW.

Fig.2.9 Surveyor-General Thomas Mitchell's Plan of Encampment, from his Three Expeditions into the Interior of Eastern Australia, T.& W. Boone, London, 1839.

Fig.2.10 The Town of Tongabby (Toongabbie) c.1792. Public Record Office, London, at CO 700.5. From J.S. Kerr, Design for Convicts, 1984.

Fig.2.11 'A western view of Toongabbe', from David Collins, An Account of the English Colony in New South Wales, D. Cadell and W. Davies, W. Lowry sculp, London, 1804, p.442.

CHAPTER THREE

NORFOLK ISLAND : INSULAR MODEL OF COLONIAL PLANNING

'A place fit for angels and eagles' - Surgeon John White reporting the opinions of Frenchmen La Perouse and Clonard. (1)

'A perfect image of Paradise.'(2)

The mighty Pacific Ocean has thrown up paradoxes to entice and perplex the Western European mind ever since Balboa gazed upon it from the peaks of America. At the end of the eighteenth century, Cook's voyages caught the imagination of Europe, and changed its perception of the world. Bernard Smith, in his two major publications, European Vision and the South Pacific, (1960) and Imagining the Pacific,(1992) has pursued this theme and greatly enriched our Australian insights about our place in the world. Pacific voyages were more important and much more resonant than writers like Alan Moorehead and Robert Hughes have depicted with their emphasis on 'fatal' events.(3) They were also voyages of discovery concerned with the constantly changing balance between the 'natural' world and the 'spiritual' world. The Pacific peoples, by their very presence in the fourth quarter of the globe, cast into question some of the fundamental assumptions underlying Western culture. Jean Jacques Rousseau with his cult of the noble savage, the natural man, and the revived idea of possible Utopias, laid the intellectual groundwork, and the discoveries were hailed as precursors to a new age; the philosophers of the French Enlightenment pursued this theme, and made it fashionable. The movement bore a curious parallel to the one stemming from the discoveries of America after Colombus three centuries before.(4)

The British philosophers and writers, however, led by Edmund Burke, were not so keen to embrace these concepts when they saw the excesses that the Revolution in France gave rise to. Their caution, and that of the members of the parliamentary cabinet, was expressed in a strengthening rather than a weakening of administration. The Navy, the British line of strategic defence and attack against the French, was based on a hierarchical system of command, which they translated in the colony of New South Wales to a system of close accountability to Whitehall. The early governors recognised this only too well, Phillip was careful to send full accounts of the settlement and its problems to London and carried out his official instructions as well as he could. Hunter, succeeding Phillip as governor. had already had to defend himself as a navigator for the wreck of the 'Sirius' in a Naval Court of inquiry; Bligh, before he came to Sydney, had had to defend himself when the 'Bounty' was seized by

mutineers, and also had to justify his position when he was arrested by the Officers of the New South Wales Corps.

The system of accountability was backed by the courts. This served to limit abuses to short-term corruption, and gave a long-term credibility to policies initiated from London. It was Macquarie's tragedy that his years in India had inured him to this central tenet of the British system of accountabilty, and he was unprepared for the inevitable arrival of Commissioner Bigge near the end of his term of office.

So at Norfolk Island there was an interesting reflection of two powerful ideas: the idea of settlement on a pristine, remote, fertile, deserted island where man might be able to lead a life 'close to nature', a sort of Utopian existence, mirroring that of an idealised native people of the Pacific; and the idea that a hierarchical, disciplined system of control and accountability could be set up to take advantage of the bounty of a naturally fertile, if remote, place.

The role of Captain Cook, and Governor Phillip's instructions

If Norfolk Island is considered in its wider context, its settlement can be seen to reflect some aspects of European imaginings of the wide Pacific which were sweeping across Europe in the late eighteenth and early nineteenth centuries.

Norfolk Island holds a special place in the accounts of the Pacific Islands. If Australian nature was paradoxical to western observers, Norfolk presented something yet again; almost another dimension. It was sighted by Captain Cook in his second voyage on 10 October 1774, and he made a landing there in two small boats the following day.(4) The island was an isolated volcanic cone, rising out of the ocean in solitary splendour, and he found it to be uninhabitated. The volcanic soil was rich, and supported an impressive mantle of majestic pine trees, later named *Araucaria heterophylla*, interspersed with cabbage tree palms and a flax plant resembling that found on New Zealand.

On Cook's recommendation, The Admiralty became interested in the prospect of securing supplies of the 'Spruce Pines' for masts for its ships. Cook reported that 'they grow here in vast abundance and to a vast size, from two to three feet in diameter and upwards', and compared them with Quebec Pines in quality. He named the island Norfolk in honour of a noble English family, not because it reminded him of the County of the same name in England. The Admiralty, of course, was also interested in its potential for the cultivation of flax, used for making ropes and sails. There was also a good supply of fresh water, even if the island was only small, about 26

square kilometers in size, with two mountain peaks rising to 300 metres in height.

Six years later, in 1788, Governor Arthur Phillip was instructed to send a small establishment there to secure the island for Britain and prevent it being occupied by any other voyaging European power.(5) The arrival of the French at Botany Bay six days after the First Fleet and their reported visit to Norfolk on the way across the Pacific, would have forcibly reminded Phillip of the urgency of carrying out this instruction, and he had no sooner formally established the settlement at Sydney Cove, when he ordered Phillip Gidley King, Second Lieutenant on the 'Sirius', to sail with a small party to re-inforce Cook's act of possession, and form a settlement on the island.

King took a party of only twenty-two people, counting himself, with six months provisions. They included James Cunningham, master's mate, Thomas Jamieson, surgeon's mate, Roger Morley, classed as an 'adventurer', formerly a master weaver, two marines and one seaman from the 'Sirius', and nine male and six female convicts. They sailed in the armed Tender 'Supply' on 15 February 1788, only three weeks after landfall at Sydney Cove. Heading north-east, they discovered on the way Ball's Pyramid and Lord Howe Island which were about half-way, and reached Norfolk Island on the 4 March. It was over a thousand miles (1600 km) from Port Jackson.(6)

Norfolk Island provides a contemporary example of a colonial settlement which can be compared to Sydney in New South Wales; it suggests a ready comparison, but its further isolation and self-containment give it a curious fairy-tale quality for the brief period of its first wave of settlement between 1788 and 1814. This unique, almost paradisical quality is re-inforced for us by the conventional techniques of the naval draftmanship exhibited in the fine drawings and plans made by the naval officers during the earliest years of its foundation, principally by George Raper, John Hunter, William Bradley, and William Neate Chapman. The tiny child-like huts and buildings set among the giant trees on the wild shore was the epitome of European imaginings of deserted islands.(See Figs.3.5, 3.6, 3.8 and 3.9)

Norfolk Island, moreover, had rich soil and none of the more apparent disadvantages of the Sydney Cove site. Its climate was salubrious: 'the air is more soft and the soil inexpressibly productive. It is a perfect image of Paradise,' wrote an enchanted observer. (7) But even Paradise had its serpents, and the settlers there found troubles enough.

The first idyllic phrase begun by King in March 1788, when the small party of people were establishing themselves on the shore, was interrupted two years later, in March 1790, when Governor Phillip, despairing at the

failure of the crops at Port Jackson and the lack of any sign of further ships from England, decided to split the settlement at the main base of Sydney into three portions: one third were sent to Parramatta and Toongabbie, one third stayed in Sydney, and one third were sent to Norfolk Island. The numbers on the island rose by 280 people, making the total 418. Added to this number for some months were the officers and crew of the wrecked 'Sirius'. (8)

Settlement then grew apace, and the organisation of the town proceeded with some dispatch. By 1798, there were 1,200 people there, a large town with a range of civic facilities, two smaller villages, and a carefully surveyed pattern of small farms supporting the population.

It is interesting to trace the evolution of this small, 'insular garden', isolated, but yet linked to New South Wales by the ships which called only infrequently. If there is a need to re-inforce the theory that Australia was settled for stragetic as well as punitive purposes, Norfolk, swinging free from Sydney in the vast Pacific, provides it.

An Insular Model of Settlement

There is an elementary plan surviving for the initial settlement at Norfolk Island; it was also, confusingly. called 'Sydney' by Lieutenant King. It is not known why King used the same name as the parent settlement; perhaps he thought Sydney Cove was a name which might have been superceded by 'Albion'. This simple plan was recorded by William Bradley in 1788, and published in Phillip's Voyage in 1789 with the chart of the island. (Fig.3.1)

It shows a short, straight street abutted to the shore line, terminated by the Commandant's house to the north, with three huts on either side of the street. It was more like a short open parade than a street, as in the 1788 conjectural plan of Sydney, Port Jackson, printed in J. Stockdale's book. A structure like a wharf is at the shore, and the Flag Staff mounted beside it. King was fortunate to have a builder, Nathaniel Lucas, amongst the handful of convicts at the start, and in 1790, a surveyor, Charles Grimes, was sent with the larger body of settlers from the mainland.(9)

We know considerably more about the building and planning during the first few years at Norfolk than we do about Sydney itself. King was meticulous about keeping day-to-day records, and also reported details about the settlement's progress at regular intervals to Phillip. When he left the island in 1796, after almost eight years there, he made an admirably clear and detailed report on its condition.(10)

The wreck of the 'Sirius' in March 1790, so unfortunate for the colony as a whole, meant that her complement of officers and seamen were stranded there for some months, George Raper, John Hunter, and William Bradley amongst them. Their meticulous drawings and water-colours, often freely copied from each other, have survived to delight us still. (See Fig.3.11) William Neate Chapman was also active after King's return from England from 1796, (Figs 3.5, 3.8. and 3.9) so a composite picture starts to emerge of a little colonial outpost, untroubled by such larger questions as the dispossession of native people, but reflecting most of the other difficulties of isolated new settlements.

The isolation of the island makes it an insular model of a Colonial town and settlement, and its shape can be fruitfully studied as a archetype of a British maritime town at the end of the eighteenth century. The one thing it conspicuously lacked, however, was a safe anchorage, so when the mother colony felt more securely anchored, and the pines proved disappointing as strong mast timber, even if useful as first as building material both at Norfolk and Sydney, its days were numbered, and its people were gradually withdrawn back to the mainland or Tasmania.

Rites of Foundation

At Norfolk Island, we can again follow echoes of the ancient rites of Foundation and Destruction. When King landed his little party safely, on the 6 March 1788, he immediately had the Flag-Staff erected and the Colours hoisted. He wrote in his Journal:

> 'March 6 at Day break I left the Supply with 2 Boats, having in them all the people belonging to the settlement (except the Women), the Tents, a quantity of each kind of provisions and the most useful tools, which we landed with great ease and the people were instantly set to work clearing away ground enough to erect the Tents on and the Colours were hoisted, before sunsett (sic)every thing and person belonging to the settlement were onshore and their Tents pitched, before the Colours were handed down, I assembled all the settlement and Lieut Ball present I took possession of the Isle drinking 'His Majesty' 'the Queen' 'Prince of Wales' 'Governor Phillip and success to the Colony' after which three Cheers were given.'(11)

The next day they set about clearing ground for the sowing of seed on the west side of the bank on which they were camped. They had found a very fine spring of fresh water about three minutes walk away. The island was covered with a very thick wood and underwood, and the clearing of the ground was a symbolic act, as well as a practical start to the settlement process.

Thus Sydney at Norfolk was hard by the ocean, on a strip of flat land hemmed in by the hills rising around it, clad in their impressive mantel of very tall pine trees. It grew from a short, straight approach, a parade from the shore to the Commandant's House.

As at Sydney, New South Wales, the main building which received the most attention initially was the Commandant's House, which housed Lieutenant King, his concubine, and the stores and ammunition. The Commandant's House was supported by a range of other stone buildings, carefully constructed by the convict labour force under Nathaniel Lucas. There is a useful list of these made up by King on 8 October, 1796, which details the types, sizes, and comparative values of the 12 stone buildings, and also lists the eleven other framed and weather-boarded buildings at the main town on Norfolk.

Taken in conjunction with the fine contemporary drawings made by William Neate Chapman, and the maps drawn by Charles Grimes and George Raper, a clear picture of the little town in the first decade of its settlement emerges.

Town Plans on the Island

The town plan of the principal town at Norfolk Island was prepared by surveyor Charles Grimes and dated 10 May, 1793, and it shows the little township starting to grow. The first and main street was called Saint George's Street, and the four other streets were named in turn Church Street, Cascade Street, Sirius Street and Cook's Street. The 'Government House' has been constructed and contained within a compound; the convicts' huts along the main street have been replaced by a Store House, Granary, and Court House on one side, and officers' quarters and soldiers' barracks on the other. The Flag Staff is still at the landing place, but another Flag is more conspiciously positioned on the top of Mount George nearby.(Fig.3.2)

Six of the buildings are built of stone, and there were plans for a stone granary, officers' and soldiers' quarters, guard house, and other stone buildings. It is a tidy looking settlement on the plan, with Church Street crossing between the main street and Cascade Street which led north out of the town to Phillipburgh and Cascade Wharf where a safer anchorage had been planned.

A year later, there is a further concentration of official buildings around Saint George's Street and Church Street. (Fig.3.3) Apparent on this plan, too, is a row of huts close to the shore-line, not a double row, as at Parramatta and Toongabbie, but strung out singly along to the hospital on the eastern side of the town. The hospital, as well as the Government House and the Church, is contained in a defined compound. A second

road now leads out to the west towards Charlotte's Field, (or Queenboro').

The plan as it emerged was centred on the official buildings of Government House, storehouses, barracks, and later church; a cross-axis was then formed, named Church Street, linking this street, called Saint George Street, with three other short streets, Cascade Street, Sirius Street, and Cook Street. At the end of the town a hospital compound was located. Between the official buildings and the hospital were the little thatched huts occupied by the convicts. The Flag-pole with its flag flying was mounted on Mount George west of the town. (Fig.3.3)

The site was constricted, and contained, which was suitable for the survival of its people in a strange environment. The little town, nestling under the huge trees, is depicted by the artist William Neate Chapman, and was engraved and published in David Collins' Account of the Colony in 1798. (See Fig.3.5 and Fig.3.6). An attractive plan drawn by Chapman of the settlement within the surveyed fields surrounding it is found in the Public Record Office, London, here re-drawn by J.S. Kerr. (Fig.3.4)

Close by the town, was Arthur's Vale, a strip of arable land between the hills, which was cultivated by the convicts to provide food for everyone. The work was urgent, but the results were uneven, and discipline was severe at first. This provision of good land for the public benefit, was then counter-balanced by the allocation of lots to both the military and the convicts, larger acreages for the officers and soldiers, smaller ones for the convicts and ex-convicts. The Map of the island prepared by Charles Grimes gives a graphic picture of this situation, and was faithfully copied by W.N. Chapman. (See Fig.3.7)

This Common Land reserved for the public need, linked closely to the town, was the forerunner to King's policy of making Commons close to the agricultural towns around Sydney later on when he became Governor of New South Wales. By May 1792 the record of land holders on the island, gives a comparison between land apportioned to the free ex-service settlers, 3,480 acres; that allotted to the ex-convict population, 616 acres; and the acreage of land in cultivation for the public. This amounted to 346 acres in all; 169 acres at Arthur's Vale; 167 acres at Queenborough, and 23 acres at Phillipburgh. Not a lot of land in the public domain, but significant in its location and initial fertility. (10)

The two villages on the island, Queensbrough and Phillipsburg, in place by 1796, are presented in the John Eyre drawings as villages strung along a single street.(See Figs.3.8 and 3.9) W.G.Hoskins points out in his book on the making of the English landscape, that

there are three main village types, the village grouped around a central green or square; the village strung out along a single street; and the village consisting of a conglomerate of houses with no evident nucleus or consistent relationship between the houses.(11) It appears that the Norfolk Island villages had a focus of a barn and granary at Queensborough, and a wharf, store and barn at Phillipsburg.

The Norfolk Island experience of land management undertaken by Philip Gidley King as Lieutenant-Governor there, had a subsequent bearing on his decisions when he was appointed Governor of New South Wales in 1800. The conservation measures considered for the island are interesting, both to preserve the 'Birds of Providence' (not effective however), and the rules to prevent the wasteful cutting down and ring-barking of the Norfolk pine trees.(12) King was not in favour of abandoning the settlement on the island, but his successor there, Major Foveaux, took a more pragmatic view, and the interest of the Government in London waned as the experiment in flax-making failed.

After 1800 and King's departure, a new gaol was built, and a new barracks building constructed, as well as repairs made to the existing buildings. Government House itself had deteriorated, and Foveaux decided to have a new building built further east 'in Dove's plot at the back of Chimney Hill', which was atop a gentle rise near the hospital. He described it as being 94 feet long and 42 feet wide, of 6 rooms and a cellar, and an additional kitchen wing. This building was then the main modifier of the plan, changing its focus from the old axis up from the shore line, to an east-west direction past the main buildings. Although it was gutted when the island was abandoned, its foundations were used again as the basis of the Government House in the second settlement period.(13)

Foveaux questioned the advantages of continuing with agriculture on the island, as this industry grew stronger on the mainland. He thought the extra expense and danger of shipping food back was hardly warranted. In 1803 Lord Hobart advised Governor King that the British Government had decided to remove the settlement to Van Diemens Land. A number of settlers were very reluctant to leave, and petitioned Foveaux to allow them to stay.

In the end, Macquarie also favoured removal; he was always one to keep a close watch on his charges, and plans were put in train for evacuation. The settlers were withdrawn slowly, with provision made for their re-settlement at New Norfolk in Van Diemens Land and New South Wales. The last boat-load left in February 1814.(14)

Destruction Rites

It is interesting also to contrast the measures taken when the settlement on the island was abandoned in 1814, 26 years after it was first settled. The Ancients, when they decided to abandon a city, carried out specific Destruction Rites like ploughing up the city boundaries, and burning.(15) At Norfolk Island, the final withdrawal in February 1814 was accompanied by the slaughtering of the domestic animals, and the setting fire to all the buildings. Those animals that could not be slaughtered were shot or destroyed. Only the wild pigs and goats which could not be caught were left, together with some dogs in the hope that they could exterminate them.(16)

The departure was like a sacking of a city after a battle. Everything which could be used was taken, and the rest destroyed. Even before the final withdrawal, it was reported in the Sydney Gazette on 8 May 1813 that 'The Island already begins to assume its original wild appearance. The roads being unfrequented are covered in a thick bush, and the Cascade road is utterly impassable.'(17)

The symbolism of setting fire to the buildings and taking everything useful was undertaken partly as a warning to discourage attempts by the convicts to escape from New South Wales, and partly to leave no pickings for other European powers, especially the French, who might be interested in acquiring a strategic island base near the larger continent.

Nevertheless, the island was not abandoned for long. In 1824, the British Government decided to reopen settlement there, and make it a place to send secondary offenders from Sydney and Hobart. This second phrase of specialised punishment was different in intention and character to the first attempt at settlement, and need not concern us here.

The first period of European occupation at Norfolk Island has been used in order to compare the establishment of settlement at Sydney, Port Jackson, with a closely related start on an isolated island. Norfolk Island was, despite its romantic situation, still primarily a convict station in its early years, but its second generation threw up some interesting progeny. One of these was none other than William Charles Wentworth, whose father was the Surgeon at Norfolk. Wentworth became the eagle forecast by the French visitors, a man who developed one of the most powerful voices in the shaping of colonial freedoms.

Sydney, unlike Norfolk Island, being the main focus of settlement in New South Wales, quickly became leavened with other purposes and aspirations, and its city characteristics began to emerge and grow in strength once the first early years were past. To these we now return.

CHAPTER THREE

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CHAPTER THREE

FIGURES: Titles only; for Figures and full captions see Vol.II.

Fig.3.1 (a) W. Bradley, Chart, S.end of Norfolk Island, (detail), published by J. Stockdale and included in Phillip's Voyage, 1789.
(b) Map of Norfolk Island, redrawn by J.S. Kerr from Public Record Office, MPG 1115, 1796, in his book, Design for Convicts, 1984.
(c) Phillipsburg village, based on above map.
(d) Queenboro' village, based on above.

Fig.3.2 Charles Grimes, Plan of Sydney, Norfolk Island, May 10, 1793. From PROMG at CO700 NSW6. Redrawn by J.S. Kerr.

Fig.3.3 Plan of Sydney on Norfolk Island, 1794, MPG 299. From J.S. Kerr.

Fig.3.4 William Neate Chapman, Plan of the Town of Sydney, October 1796. PRO MPG 1115. From J.S. Kerr.

Fig.3.5 William Neate Chapman, View of Sydney on the South side of Norfolk Island, 1798. Mitchell Library, C688-2, State Library of NSW.

Fig.3.6 View of Sydney on the south side of Norfolk Island, engraved by W. Lowry, taken from the Chapman drawing above. From David Collins, Account of the English Colony in New South Wales, London, 1789, 2nd ed. 1804.

Fig.3.7 William Neate Chapman, Plan of the Settlerss Lots, Norfolk Island, 1795. Dixson Library Ca79/3, State Library of NSW.

Fig.3.8 John Eyre, View of Queenborough on Norfolk Island, 1801-4, Mitchell Library, State Library of NSW. From J. Hackforth-Jones, The Convict Artists, Sydney, 1977.

Fig.3.9 John Eyre, Phillipburg, Norfolk Island, c.1804. Mitchell Library, State Library of NSW. From the National Bank Calendar, 1965.

Fig.3.10 Estimation of the Expence of Publick Buildings on Norfolk Island, 1796. Historic Records of NSW, vol.3, p.159.

Fig.3.11 George Raper, Plan of Arthur's Vale on Norfolk Island, September 1790. British Museum (Natural History). From B. Smith and A. Wheeler, The Art of the First Fleet, Oxford University Press, Melbourne, 1988.

CHAPTER FOUR

'ORDER AND USEFUL ARRANGEMENT'

'Ye rising Realms! record
Time's opening scenes, and Truth's unerring word. -
There shall broad streets their stately walls extend,
... There, ray'd from cities o'er the cultur'd land,
Shall bright canals, and solid roads expand. -
There the proud arch, Colossus-like, bestride
Yon glittering streams, and bound the chafing tide;
...There shall tall spires, and dome-capt towers ascend,
And piers and quays their massy structures blend;'
- Erasmus Darwin, 1789.

'the Inhabitants have shown a Spirit to Second my Wishes.' - Governor Phillip Gidley King, 1804, when he was inviting the cooperation of the Sydney people to share in the improvement of the town.

When Charles Darwin's grandfather had his vision of the future Australia, he dreamt not of primordial creatures, as his grandson later dreamt about in his theory of natural selection, but of a city.

When Phillip's publisher, John Stockdale, published the Voyage to Botany Bay in London one year after the first landing, it had as one of its preliminaries to the text the poem quoted above. He also added a discussion about the process of settlement which includes the more pragmatic and sensible sentiment of 'Order and useful arrangement'.(1) It is Stockdale as editor, not Phillip as despatch-writer, who distills for his readers the atmosphere of the settlement process at Sydney Cove. He writes:

'There are few things more pleasing than the contemplation of order and useful arrangement, arising gradually out of tumult and confusion; and perhaps this satisfaction cannot any where be more fully enjoyed than when a settlement of civilized people is fixing itself upon a newly discovered or savage coast.'

Stockdale then goes on to describe the wild appearance of the land untouched by cultivation, the 'close and perplexed' growing of the trees on the shore, the intermingled vegetation and rocky spaces which formed the site of the landing place. He talks about 'the irregular placing of the first tents', of the first huts erected 'where chance presents a spot tolerably free from obstacles, or more easily cleared than the rest', of 'the bustle of various hands busily employed in a number of the most incongruous works'. All this 'seems to threaten an endless continuance of perplexity'. In the end however, he notes with satisfaction: 'But by degrees large spaces are opened, lines marked, and a prospect at

least of future regularity is clearly discerned, and is made the more striking by the recollection of former confusion.'

This 'prospect of future regularity' which could be clearly discerned is the climax of the whole account of the epic voyage to the antipodes. It is this that really marks out the 'town' from the 'wilderness'.

In an article on the founding of New South Wales, Ged Martin discusses the significance of the fact that the first city founded in Australia has an eighteenth century origin. Martin notes that 'The size of the First Fleet is also of more significance than the cheerfully innumerate historical profession has recognised.' (2) He contrasts it with the landing of the Pilgrim Fathers in America, where only 102 settlers emigrated, and with other initial settlements in Australia and New Zealand. This fact had direct consequences for the founding of the first town. It was a unusually large number of people to send half way around the world; what is more, the preparations for the venture were unusually complex.

In the eleven ships of the First Fleet there were 1350 arrivals; of these, the population which stayed numbered 1024 in the first year; after the arrival of the second and third Fleets in June 1790 and July 1791, there were many more, many of them sick or dying, suffering from the privations of long sea voyages less well organised than the voyage of the First Fleet. The hastily set out camp of 1788, is depicted in the maps drawn by Bradley, Fowkes, Dawes and by an unknown naval hand. (See Figs.1.2, and 2.8, and Figs.4.1 and 4.2(a) and (b) in this chapter). Two of these maps pre-date the Dawes Plan. The engraver of the Fowkes Sketch is careful to point out the exact location of Sydney Cove and its relationship to Botany Bay; it was drawn on 16 April 1788, a month after Bradley's map, three months before Dawes's plan, and six months before the Naval Chart of Port Jackson which includes a clear Detail of the camp at Sydney Cove.

It is interesting that the Detail on this last Naval Chart (Fig.4.2 (b)) does not indicate any straight path, let alone any sign of a surveyed street, at this stage. There is only a meandering pathway around the shore line, up to the Lieutenant-Governor's house and then around to the hospital buildings.

The arrival of the second and third Fleets, however, turned the already over-large camp into an instant town, where matters related to survival had to be strictly regulated. The drinking water supply, already posing difficulties because of the limited size and catchment area of the Tank Stream, had to be jealously guarded; the problem of latrines and the disposal of effluent, not often remarked upon, must have been horrendous. The survival of the settlers depended very directly upon the

ability to impose 'order and useful arrangement' on the little town, quite apart from the need to secure supplies and produce food themselves. Town planning became a necessity, even if it was not designated by that name.

The Early Surveyors and Map Makers:

Charles Grimes (1772-1858)

Apart from William Dawes and Augustus Alt, other figures start to influence the shape of the town. The three main figures between 1792 and 1810 were Charles Grimes, James Meehan, and George William Evans. The extent of their individual impacts is intertwined during the years between 1792 and 1810 when Governor Macquarie took office. As well, the Frenchmen C.A.Lesueur and C.P.Boullanger, who arrived in 1802 with Nicholas Baudin's expedition, have left behind a map which repays scrutiny.

Charles Grimes arrived in the second Fleet. He was born at Aylesbury, Buckinghamshire, England, and was an inexperienced eighteen year old in 1790 when he was appointed deputy-surveyor of roads, to be employed at Norfolk Island. There are no details of his training and background, but it is presumed he worked with the army in England. He reached Norfolk in November 1791, and also doubled as head constable on the island. He surveyed the parcels of land marked out for occupation by the convicts sent over by Governor Phillip when supplies in the main settlement at Sydney Cove became dangerously low. It seems probable that Lieutenant-Governor King was directing him closely.(3)

Even though Dawes returned to England in December 1791, Grimes was still retained on Norfolk until 1794, but returned in April of that year to assist Augustus Alt. B.T. Dowd considers he 'virtually performed the work of Alt', until 13 April 1801 when King finally appointed him in Alt's place. He was stationed first at the Hawkesbury and then at Toongabbie where he received a grant of 100 acres he called Hartwell Farm.(4)

His first major work on paper was the 'Plan of the Settlements in New South Wales' prepared in 1796. Here he details the extent of the modest number of land grants at that time and lists the recipients in the districts of Parramatta, Petersham (Bulanaming), Field of Concord, Eastern Boundary, Field of Mars, Toongabbie, Prospect Hill, and Mulgrave Place (Windsor). The emphasis is on the land parcels themselves, with almost no attempt to place them into coherent groupings. (See Fig.4.3 and Fig.4.4 for details of this map). Even at the Hawkesbury, strangely enough, there is no indication of any planning of a central place where the military and officials could be grouped.

Grimes also prepared a 'Plan of Sydney' in May 1800. It is notable for the fact that the streets, those fundamental direction finders and the backbone of any town, are actually omitted. Whether they were formed in practice and not marked in for some reason unknown to us now, it is hard to tell. It may be that this plan was meant to complement another plan, now lost.(See Fig.4.5).

If we go to the artists and topographers, we can get a slightly more coherent picture of the town at that time, but still no clear indication of a precisely thought-out and continuing plan. Thomas Watling is our major informant for the 1790s, and his sketches were used by David Collins in his book on the Colony (1798-1802), translated into etchings, and were also copied by at least one well known English artist, Edward Dayes.(5)

Charles-Alexander Lesueur (1778-1846)

Another plan was made in the early years of the century by a French Cartographer Charles-Alexander Lesueur (1778-1846), who came to Sydney with the expedition under Nicholas Baudin in the ships 'Le Geographe' and 'Le Naturaliste', staying from June to November 1802, when the French were making a cartographic survey of the coast of Australia. They were courteously received by Governor King, despite the fact that the British Government was at war with France, and regarded the French presence in Australian waters with suspicion. But they were allowed ready access to supplies, even being given a favoured location on the eastern shore near Government House for their encampment, where the sick members of the crews were cared for. Lesueur took the opportunity to make a detailed plan of the town.

This plan, entitled 'Plan de la Ville de Sydney, Capitale des Colonies Anglaises aux Terres Australes', was published in Paris in the Atlas volume of the Voyage, which came out over the years 1807-1816. (See Fig. 4.6). Lesueur must have had access to a prepared plan to be able to complete all the details, but Grimes's plan of 1800 seems to be an inadequate starting point. The surveyor on the expedition was Charles Pierre Boullanger, and he carried out the measurements. The plan has an elaborate key of 38 items, but its spatial accuracy may have been a little distorted by translation into an engraving, and the regularity of the streets and the rows of buildings and the exaggerated size of the larger buildings may be less than accurate. (Indicated by comparison with known plans of Government House.) (6)

Neverthless, comparison of the original drawings made by Lesueur held in the museum at Le Havre, France, reveals the meticulously careful and observant eye of the author. The plan does indicate details which are not known by other plans or pictures, and is a valuable plan of its period, especially in conjunction with Lesueur's drawings. In particular, the extent of the town is

shown, the burial ground on the Parrammatta Road, the location of the windmills on the ridges, the gallows, and many other intriguing details. As well, the topography is skillfully included, with indications of cultivation and remaining ground-cover.(7)

In April 1806, Grimes returned from his protracted stay in England, and put his name to the 'Map of New South Wales' of 1806, which details all the land grants issued to that year. It must have been largely prepared by Meehan, who was working assiduously while Grimes was away. The contrast between this map and the one prepared in 1796, ten years before, reveals the spread of settlement in spatial terms. The hinterland between the coast and the Blue Mountains had been combed over for suitable soil for agriculture, and the settlement extended into the vicinity of Ryde, up the George's River, along the road to the Hawkesbury, along South Creek, and heavily congregated around the place then called Mulgrave Place on the Hawkesbury. (See Fig. 4.7)

Grimes supported the Macarthur faction, and was sent to England to testify at Lieut. Col. Johnston's trial after the Rebellion of 1808. Ignored by the bureaucrats in England, he had difficulty getting back to the colony after the trial, and in the end, resigned his post. Though he appears to have had little interest or opportunity in designing a town plan in the colony, the embryo settlements he surveyed formed nucleii of the developing villages of Concord, Ryde, and Windsor. He took on James Meehan as his assigned servant after 1800, and trained him in Colonial practice, and it was Meehan who subsequently went on to mark out the satellite towns around Sydney under the direction of Governor Macquarie.

G.W. Evans (1780-1852)

The second main surveyor who was active in this period was George William Evans. Born in London, he was given some experience as a trainee engineer, architect, and surveyor, and after a brief period in South Africa until the British withdrew, came to Sydney on the recommendation of Captain Kent in 1802.

In New South Wales, his career suffered some setbacks; he was dismissed by Governor King from his office of acting surveyor-general for fraud in 1805. He took up farming at Richmond on a 500 acre grant of river frontage land, and was literally swept away by the floods of 1806, his family clinging to their thatched roof for dear life. Re-instated in the Survey Department in 1809, he was sent to follow up and extend the route over the mountains blazed by Blaxland, Lawson, and Wentworth in 1813. Exploration then became his main interest and official endeavour. He became an experienced bushman, exploring the Shoalhaven with Meehan, mapping Van Diemen's Land, and accompanying John Oxley as second-in-command on his important long journeys down the Lachlan River and then along the

Macquarie, across the Liverpool Plains to the coast at Port Macquarie during the years 1817-18.(8)

It is probable that he selected the site of Bathurst for a township over the mountain barrier and recommended it to Macquarie. Evans was a very competent artist, and his views of Windsor, the two government houses at Sydney and Parramatta, and also of Sydney itself are well known; his sketches also illustrated John Oxley's Two Expeditions (1820), translated as etchings by an English engraver for the book. He was not so well regarded, however, as a writer of his journeys, and Lord Bathurst complained to Macquarie about the inadequacy of his descriptions of the country he passed through, and he was passed over as the leader of the major expedition thrust when John Oxley was appointed. Oxley commended his loyalty and help, and they made a good team in their explorations.(9)

Evans is represented in the early plans by one he drew of Parramatta about 1813. It is a useful plan of its year, possessing a key to buildings and leases. The original has not survived, but a copy is held in the Mitchell Library collection. (See Fig. 4.9). The original street widths are rendered ambiguous, however, by the way they are depicted, with a coloured line in the middle, and it is not clear whether Macquarie's planning decree of 1810 for the town has been made manifest or not.

James Meehan (1774-1826)

James Meehan was born in Ireland and arrived in Sydney in the 'Friendship' on 16 February 1800, transported for his part in the Irish rebellion of 1798. Details of his early training are not known, but he was quickly assigned to Charles Grimes, and helped him with his surveying. He went the following year with Grimes and Barralier exploring the Hunter, and then in 1802-3 with Grimes and Fleming to King Island and Port Phillip. He seems to have been a hard worker, assiduous in his duties, and Grimes commended his faithfullness and impartiality. He was conditionally pardoned in 1803 and received an absolute pardon in 1806. He measured farms in the County of Cumberland, on the Shoalhaven in NSW and on the Derwent in Van Diemen's Land.(10)

When Grimes returned to England in 1803, Meehan was placed under G.W. Evans as acting surveyor-general, but when Grimes went again to England after the rebellion of 1808, Meehan was appointed acting surveyor of lands himself with an adequate salary, and this appointment was confirmed by Governor Macquarie. John Oxley, however, was appointed in England as Surveyor-General in 1812, over Meehan. Surveyor G. Audley wrote in 1866 about this period of surveying in the colony, as being linked with the 'humorous, though not unkindly traditions of "Jemmy" Meehan, the trusty aid of more than one Governor...a characteristic specimen of the Irish "soogawn" or straw-rope surveyor, who has often no mean knowledge and skill

in his profession,' and added that Meehan 'had enough on his hands to prevent his troubling with new-fangled ideas of trigonometrical survey.' (11)

Macquarie esteemed Meehan's knowledge of the country and recognised his ability as a surveyor. He made him deputy-surveyor in 1812 and superintendent of roads, bridges, and streets, and collector of quitrents. He confirmed his land grants (130 acres at Bankstown, and 1140 acres at Ingleburn, which he named 'Macquarie Fields' after the Governor). The extent of Macquarie's esteem was expressed in a letter to Viscount Sidmouth in 1821:

> 'I have ... had an opportunity of witnessing his indefatigable assiduity in the fulfilment of his arduous duties ... His integrity has never, to my knowledge, been impeached, and I certainly consider him to be, both on account of his professional skill, and the faithful and laborious discharge of his duty, a valuable man.'(12)

It was James Meehan who drew the 1807 'Plan of the Town of Sydney in New South Wales', and carefully included the detailed range of information incorporated in it. The allotments are indexed and referenced, the locations are accurately described. This plan, not an easy one to read, was the basis of all subsequent plans of Sydney. It was not designed to be an elegant drawing; it was designed as an accurate plan. (See Figs. 4.7 and 4.8) The orginal plan has been lost, and the one commonly known was lithographed in 1898.

It is probable that Meehan was also responsible for the first town plan of Newcastle, and this plan was a formal arrangement of squares, two blocks deep extending from the harbour front at the mouth of the Hunter River. The market place was placed off the quayside, the church behind it. The lumber yard was alongside the wharf, and the hospital terminated the vista of the main street, King Street. Land adjacent to the river was reserved for government, as was the hilly land between the wharf and the ocean front. (Figs.5.15, 5.16 and 5.17 in chapter 5). The little town, however, quickly became hemmed-in in the 1820s, by a large grant to the Australian Agricultural Company, which was raising capital to exploit the coal resources of the valley. Land was granted hard by the western edge of the town, and room for expansion was limited.

Meehan also plotted the little group of town plans which Governor Macquarie had so much pleasure in stepping out in person during his first flush of town planning activity in the colony in 1810. He accompanied the governor on his tours throughout the known length and breadth of the settled areas around Sydney in the County of Cumberland, marking out the preferred positions of the major streets, indicating where the town squares were to be, and where the land reserved for public purposes was

to be marked out. These will be discussed in Chapter Five, together with the plans he drew under Governor Macquarie's direction for Liverpool, Hobart Town, and Bathurst.

Unfortunately, Meehan's plan of Sydney was not printed in the colony when it was completed on the 31st October 1807; printing came almost 100 years later, in 1898, when it was included in Volume 6 of the official Historical Records of New South Wales. This fact might have been the source of the curious and mistaken idea that there was 'no town planning' in Sydney in the early decades, an idea which was current amongst the fledgling planners of the early twentieth century, and which the historians of the day did little to dispell.

* * * *

Land Tenure and the Governors' Policies after Phillip

The question of land tenure has to be grappled with in order to gain an understanding of how the town of Sydney was to be laid out in the early years. We have seen how Phillip's plans, both that of June 1788, and the one he left behind him, have ambiguous elements. In the first place, the overiding need was to establish agricultural settlement, and Grimes' plans reflect this concern almost exactly.

In the town, though Phillip had stipulated on his last plan that 'all land was to be reserved for Government' west of his line between Woolloomooloo and Darling Harbour, he himself issued four leases just before his departure. These were for the officers, Captain Paterson, Lieutenant Macarthur and Quartermaster Laycock, who all had brought out their wives to the colony, and to Philip Schaffer, who Phillip appointed as a superintendent of convicts, and whose little daughter he housed at Government House after they lost their possessions on the ill-fated store-ship the 'Guardian'.The allotments he issued leases for were 100 x 200 ft (30 x 61 metres) for 14 years at 2s 6d a year.(13)

Under Major Grose's term as acting Governor (1792-94), a further 14 leases were issued. These included one to an ex-convict and another to a woman, but most for officers of the NSW Corps. Captain John Paterson, who was in charge briefly until 1795 issued only one lease. Governor Hunter, who arrived in 1795 and stayed five years gave twenty. The small number of leases during these years seems to indicate a lack of conviction that leases were even desirable at this stage. The instructions to the Governors were not helpful on this matter. (14)

Governor Hunter divided Sydney into four police districts, each with an elected watchman. He had the

houses numbered, and also had a plan of the town prepared (see Grimes, Fig.4.5).

The advent of Governor King, who had already grappled with problems implicit in the establishment of a relationship between the administration and the people on Norfolk Island, was a turning point in the management of land matters in New South Wales. King recognised that, for the emancipists and the soldiers who elected to stay on in the colony, there was a pressing need to provide them with a sense of security; they needed to feel they had a stake in the colony, that they could command some miminal rights and expectations.

On 5 July 1803, King re-iterated the General Order of November 13, 1802 that all agreements entered into had to be written up in special books kept for the purpose, and instructed that all land would revert to the crown unless deeds of entitlement were produced. These books were kept, not by the magistrates but by Michael Robinson at Sydney, Matthew Sutter at Parramatta, and Andrew Thompson at the Hawkesbury.(15) He tried to resume the buildings constructed by the government which had fallen into private hands by an Order of 11 June 1801.

King began a campaign to bring the settlement into order. He tried to establish a system for regulating and forming the streets of Sydney; he also tried to ensure that private property was defined by erection of fences. He had instructions printed 'to Regulate the Bounds and Conveniences of the Streets' which he had distributed to the military not living in barracks; he had Orders published in the Sydney Gazette throughout 1803, including one to force the householders to construct a five foot footpath and gutter in front of their houses. A record was to be kept of all householders and lodgers.(16)

In order to involve the general population in the task of supervising the streets, he appointed 'housekeepers' from each of the three principal streets to see that the improvements were carried out by their inhabitants.

These regulations were followed by the offer of more leases, and he increased their rent to 10s a year. Gradually, year by year, more town leases were taken up; by the month of August 1806, when King left the colony, he had issued 74 leases, and the three main streets of Sydney were filling up with shopkeepers, artisans, and householders, who were prepared to enter into a financial arrangement with the administration to secure their property rights in the town.(17)

Thus King was consciously using the issue of urban property rights to stabilise the town, and induce its citizens, whether ex-convict, or free settlers, or retired military men, to foster a common feeling for improvement. The town was starting to grow southwards.

In 1804 there were a total of 580 houses recorded, doubling the number of the year before, and the population, augmented by new convict arrivals had increased from 2163 to 3212. The map prepared by the Frenchmen Lesueur and Boullanger gives expression to this expansion.(18) (Fig.4.6)

The regulation of the way the town was being assembled, was controlled by the formation and policing of streets and the placement and construction of buildings. The regulations were modified by local circumstances year by year, with additional proclamations, notices and orders. Under Governor King, the settlement became more coherent, the streets more defined. King had profitted by his term as administrator of Norfolk Island, and his management of the closed community there had enabled him to grasp the need to balance public with private needs. Town planning had begun modestly in the colony, but it was an essential ingredient to the formation of the settlement itself.

Governor William Bligh and the Issue of Property Rights as a Factor in the Rum Rebellion of 1808

Governor Bligh seems to have been unprepared for the situation he found in Sydney when he arrived in August 1806. Nor was his authority made clear-cut by his instructions from London.(19) By personality and inclination he was a man impatient with insubordination. He lacked King's insight into the evolving circumstances of the colony.

Bligh had appraised the state of the town of Sydney as he saw it, and found it badly arranged and lacking focus. He also considered that Phillip's plan had been ignored. He started by re-planning and re-planting the Government Domain. This tract of land adjoining Government House, between it and Woolloomooloo Bay, was the site of the first attempts at cultivation in the colony. It was where Lieutenant Dawes had marked out the plots of the Government Farm; where the first unsuccessful crops had been sown and where they had failed. It had been neglected since then; part of it had been given to six leasees noted on Grimes Plan of 1800; and Boston's mill for grinding corn was located on the high point of the ridge. Bligh employed a large team of convicts to remodel the Domain to conform more closely to the fashionable English landscape style, with garden beds banished, informal groupings of trees planted, the terrain smoothed over and the rocks blown up and carried away. A long trench was dug, defining the western boundary of the Domain, and public thoroughfare was forbidden.(20)

Bligh's reasons implied more than a casual knowledge of garden arrangement. Aesthetic theory was linked to a standard of what might be termed 'political correctness' in the Regency period, whereby those deemed fit to be leaders could demonstrate their grasp of the over-all

picture; the judicious arrangement of landscape was a metaphor for a type of control over both 'wild' nature and the people he governed.(21) But the citizens of Sydney, having barely established a tenuous hold over their personal environment, were less than impressed.

Bligh also alarmed them by ordering some houses already built and occupied to be pulled down in July 1807. The main offenders were the householders who had built their houses on the rising ground behind Government House itself. The drainage from these dwellings aggravated the problems around the governor's complex, and Bligh's orders may have started off as an ill-conceived measure to correct this problem. Another area he targetted was that around St Philip's Church, where buildings were starting to crowd around the initial space marked out in the Dawes plan as the major parade ground of the town.(22)

Ten aggrieved townsfolk were ordered to pull down their houses. Some promises were made of land plots elsewhere as compensation; but some citizens simply refused to obey the order. David Dickenson Mann testified at Bligh's trial after the Rum Rebellion, that 'my circumstances were such that I could not do it without ruin to myself; and that I conceived, by the laws of England, I was entitled to a just and quiet possession.' Foveaux wrote to Castlereagh in September 1808 that he considered Bligh had 'violated private property' in Sydney.(23)

John Macarthur was one of the aggrieved: he had a large leasehold given by Governor King in 1806 which he intended to fence and build on near the parade ground. He publicly fixed a strong post on the site, and a senior official, just as publicly, pulled it straight out, with the dramatic threat : 'When the axe is laid to the root, the tree must fall.' Another owner was Sergeant-Major Whittle, who when ordered to pull his house down, signed his lease over to his commanding officer, symbolically evoking the protection of the army.(24)

Less than two weeks later, the governor himself was deposed. Alan Atkinson has pointed out that, though the causes of the rebellion have been widely discussed, they have not been seen in the light of a battle over property rights. David Neal, also, has joined in the examination of this event, judging it much more than a mere disturbance about the importation of rum into the colony. Frederick Watson's preface to volume 6 of the Historical Records of Australia, notes that the struggle over the control of urban land was an unacknowledged but potent factor in Sydney's only military coup.(25)

Richard Atkins, Judge-Advocate in the colony, maintained that the townspeople 'complained very much ... of the invasion of private property.' They were apprehensive that their buildings could be ordered to be taken down. His opinion was echoed by John Blaxland. At a meeting in

Sydney two weeks after the event, leading citizens agreed to reward the officers with a collection of money, so strong was their perception of the threat to their property.(26)

It is interesting to contrast the opinions of the townspeople of Sydney with those of the Hawkesbury settlers. At the Hawkesbury, the settlers were strongly behind Bligh: they saw him as a bulwark against the greedy trading practices of the army officers, who were manipulating the currency of the colony to discriminate against the small grain producers. They organised several petitions in favour of Bligh, and regarded Macarthur and Johnston as arch villains after the coup.(27)

But the rebellion had focussed attention on the town of Sydney itself, its planning, its streets and property, and the proprietorial rights of its citizens, whether emanicipist or independently arrived. Even the Governor, with the full weight of his authority, could not proceed to change the established order and property groupings in the town with impunity. The town was barely three decades old, but the bones of the plan had been set, and alteration could no longer be arbitrary.

Historians and the Study of Town Plans and Town Planning in Australia

The fact that Meehan's map was not published when it was made in 1807, or indeed, that the colony had to wait for another 25 years before a plan of any sort was freely available, meant that curious rumours arose about the origins of Sydney and the way the streets were planned. Even now, in 1993, there seems to be widespread ignorance amongst planners themselves about the process of colonial planning, and early this century, this ignorance was also rife. Then, it was in their own interests to claim that 'Town Planning' was a new discipline, a new way of arranging cities. To acknowlege it had been part of the settlement process from the beginning, was to belittle their own proposals.

John Sulman, for example, called 'the father of Australian Town Planning' by Max Freeland, almost disregards the whole process of colonial town planning in his book on town planning published in Sydney in 1921. This book, Introduction to the Study of Town Planning in Australia, with its misleading title, gives no introduction to planning 'in Australia' at all. Sulman gives a survey of overseas planning, a smattering of ancient examples, some 19th century City Beautiful examples from Europe, and takes as his exemplar, Ebenezer Howard's Garden City. He gives scant mention of colonial planning: gives his readers a minor example of one of Mitchell's town plans, a brief mention of Adelaide's plan, and leaves it at that. He disregards the accounts

of those centennial encyclopedists and their great tomes, the volumes Victoria and its Metropolis, (1888), and the Picturesque Atlas of Australasia,(1886), which deal in loving detail with the foundation and growth of towns. Worse, he fails to use the magnificent work of T.A. Coghlan, the Government Statistician in N.S.W., who traced the growth of town populations over the decades. George Taylor, who wrote the other pioneering work published in Australia, disregards Australian cities altogether. (28)

The neglect apparent in the work of these early twentieth-century writers on planning stems from a poor acquaintance with sources of local Australian history, and has to be seen in the context of the state of historical studies generally in this country. The discipline of History, as a subject to be studied seriously in the new universities, was itself struggling to establish its credentials in the colonies. The professors appointed both in Sydney and Melbourne, had a heavy teaching load as well as the task of defining their subject in the Australian context. George Arnold Wood teaching in Sydney (1891-1928), and Ernest Scott in Melbourne (teaching 1913-1938) had so much ground to cover, so many ideas to grapple with, that they could not include such questions as the spectacular rise of the cities and the influence of their town plans on their development.(29) Other writers of general Australian histories at the turn of the century, like Arthur Jose and Andrew Garran, James Bonwick and F.M. Bladen, tended to deal with themes which had become popular and easily recognisable: explorers, squatting, the wool industry, convicts, bushrangers, mining, and so on. (30)

The making of the academic discipline of history in Australia was the theme of an interesting conference held by the Academy of the Humanities of the Australian National University, Canberra in April 1993. Amongst the historians discussed were Arnold Wood, Ernest Scott, Max Crawford, Jessie Webb, Kathleen Fitzpatrick, Keith Hancock, Stephen Roberts, Edward Shann and Noel Butlin. Of these, only Edward Shann had a professed interest in urban history. When the speakers considered the personalities of the historians and how they interacted with each other and how they dealt with the handling of their material, a fascinating account started to emerge of the practices of historians over several generations. The changing styles of pedagogy, the changing fashions in research, the changing opportunities for publication, and the historians' changing attitudes to public engagement in their chosen fields of study were pursued. Historiography in Australia has emerged as a study in its own right. History can be seen as a discipline which had to chart out its own territory, and develop a reasoned inspection of its own national biases. The conference, however, did not deal with the writings of historians working outside the universities, leaving this aspect of

the practice of history, yet again, for another projected conference.(31)

The contributors to the Historical Society magazines, however, rather than the academic historians, displayed a continuing interest in local history tied to specific localities after 1901, and much good detailed spade work was done by interested amateurs. Pioneers of local studies who published in the Journal of the Royal Australian Historical Society, which appeared in 1901 and was published yearly and then quarterly after that, included Norman Selfe, Mrs A.G. Foster, J.P. McGuanne, Charles Bertie, W.S. Campbell, Ida Lee, J.H. Maiden, B.T. Dowd, and J.S. Campbell. After these, Marjorie Barnard, Flora Eldershaw, M.H. Ellis, Morton Herman, and the Havards, extended their range. The work of Herman, Ellis, and J.F. Campbell particularly, are relevant to the study of town planning.(32)

Unfortunately, however, it was a long time before the study of local history became academically respectable, and the teachers in the universities during the decades up to the second World War tended to re-inforce the bias away from local studies, concentrating instead on an 'Empire' perspective.(33) There was little interest or understanding of the role of the towns and cities in the development of the nation.

A.J. Brown and H.M. Sherrard, one an architect and the other an engineer, wrote an influential book, Town and Country Planning, in 1951, and even then they devoted all of three pages to the Australian experience in the 19th century. Even Denis Winston, trained at the Liverpool School of Planning, and appointed Professor of Town Planning at Sydney University, wrote in his major book, Sydney's Great Experiment, that had for its dominant theme the theory of imposing a 'Green Belt' around the built-up of greater Sydney, that the reservation of parks and open space in colonial cities, instead of being a systematic and pervading endeavour intrinsic to colonial planning, was 'a happy accident'. He had little knowledge of how the urban parks came about, and instead of linking the parks and reserves in to the slowly evolving and painfully considered colonial planning process, dismissed them as 'accidential'. He was not alone in his perceptions. (34)

The Planning Advocates in the early twentieth century in Australia, as they did in England, proclaimed 'Planning' as the new panacea for urban ills, and preached about the virtues of small country communities set close to 'nature', when the city was expanding year by year, driven by the economic forces and social perceptions engended partly by their own profession. There was much talk about the planning of Sydney in 1908-9 before the Royal Commission for the Improvement of the City of Sydney, but the remedies suggested were couched in the terms of the 'City Beautiful' movement, rather than those

of practical remedies for the resolution of city services and provision of suitable housing. The Town Planning movement had two Conferences in the years 1917 and 1918, which attracted public servants and architects who gave their opinions about possible reforms, but led by Sulman, they divorced their reforms from reality by proclaiming that they were not 'political' in any way. There was no review of colonial planning, no recognition that a tradition had already emerged in Australia.(35)

So, Leonie Sandercock, in her book, Cities for Sale, could say in 1975 that 'It may seem strange to write a book about the efforts to give some order to the process of urbanization in Australia when no comprehensive account of the process itself has yet been given.'(36) But then she too starts her account by tracing 'the emergence of the Town Planning Movement 1900-1920'. Once again, colonial town planning was ignored.

In the meantime, the geographers with a bias towards historical enquiry rather than towards statistical analysis, started to fill in some gaps. Starting from Griffith Taylor and his work on Australian landforms and his interest in how familiar forms had been utilised by the settlers, and continuing in the work of Denis Jeans, especially in his articles on the process of town formation in the 1830s. J.M. Powell was active in the seventies, writing about Victorian landscapes, D.W. Meinig and Michael Williams extended the enquiry into the formation of Adelaide and its county towns, and the limits of settlement imposed by climate and changeable seasons.(37)

A welcome development in the study of the symbolic representation and design of past landscapes appeared in 1988, which promises a new approach to the subject. This was a volume of essays, mainly by geographers, but with inputs from museum curators, historians and English scholars, edited by Denis Cosgrove and Stephen Daniels, The Iconography of Landscape.(38) The economic historians have also been considering cities and their growth and change in the Australian context, and a useful series of essays has been collected by Pamela Statham in her Origins of Australian Capital Cities.

A discipline new to Australia in the 1960s, Historical Archaeology, and its offshoot, Industrial Archaeology, aroused the interest of its students in the rewards of investigating the detailed remains of sites and buildings at close range, and constructing theories about their use and significance. This fitted into the study of 'material culture' and dallied with post-modern theories. Archaeologists became part of the 'heritage' team.(39)

In the seventies and eighties academic historians started to exploit the local history field; some in an earnest endeavour to turn away from the accepted themes of Australian historiography and deal with a local rather

than a national perspective, some enticed by 'heritage studies' which were seen as a more accessible and popular way of engaging in publicly-funded work outside their normal academic path. Some interesting work was generated(40), but its form and content came to be dominated by the 'guidelines' drawn up by the commissioning bodies, and the'politically correct' themes fashionable in the eighties and nineties came to be sponsored rather than original enquiry.

All in all, however, there is still a lack of perspective in urban studies, with evidence of a confusion of aims and an uneven standard of scholarship.

CHAPTER FOUR - 'ORDER AND USEFUL ARRANGEMENT'

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18. This map was prepared in Sydney in September 1802, and published in Paris in 1807. See Fig.4.6.

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29. Brian H. Fletcher, 'George Arnold Wood and Imperial History at the University of Sydney, Journal of the Royal Australian Historical Society, vol.79, pt 1-2, pp.54-72; C.M.H. Clark, 'Melbourne: an Intellectual Tradition', Melbourne Historical Journal, no.2, 1962, p.19; K. Fitzpatrick, 'Ernest Scott and the Melbourne School of History', Melbourne Historical Journal, vol.7, 1968.

30. Andrew Garran was editor of the Picturesque Atlas, (1886); James Bonwick wrote widely about early colonial themes, and transcribed the Appendices from the Bigge Reports in the nineties, thus making them available in Australia for the first time; F.M. Bladen edited these documents for the seven volumes of the Historical Records of New South Wales, from 1893; Arthur Jose wrote the History of Australasia, 1899, which was used as a school text for many years. The themes they enunciated have continued to be re-worked during most the present century.The growth of Australian cities, moreover, has been dealt with by Geographers and Statistitians largely in a piecemeal way, and many historians still tend to regard urban history as a non-academic study. The formation of such groups as the Sydney HistoryGroup in the 1970s and the Professional Historians Association of N.S.W. in the 1980s, and the publication of its Journal after 1992, may do a little to redress this bias.

31. 'The Beginning of History'. The papers of this Conference, though promised, have yet to appear in print.

32. Their articles started to appear especially during the 1920 to 1940 period.

33. W.K. Hancock and Stephen Roberts had strong Empire biases. Academic historians tended to go to English Universities to do their higher degrees. Balliol College in Oxford, in particular, attracted several notable historians from Australia.

34. Denis Winston drew his staff of lecturers mainly from Liverpool, and W. Holford, an advisor on Canberra's

planning, brought with him a small nucleus of English trained architects, versed in the English 'Garden City' tradition, who tended not to know about the Australian planning experience of the 19th century.

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40. Notable among the histories is Alan Atkinson's Camden, dealing with a farming district and its village, Oxford University Press, Melbourne, 1988. For Heritage Studies, see 'Guidelines' put out by the Heritage Council of NSW, and J.S. Kerr, The Burra Charter, National Trust of NSW, Sydney, 1974; Australia Icomos, Guidelines to the Burra Charter: Cultural Significance and Conservation Policy, 1987; Peter Marquis-Kyle and Meredith Walker, The Illustrated Burra Charter, Australia Icomos Inc, Sydney, 1992.

CHAPTER FOUR - FIGURES

Titles only: for Maps and full Captions see Volume II

Fig.4.1 Sketch and Description of the Settlement at Sydney Cove, Port Jackson in the County of Cumberland 16th April 1788. Attributed to Francis Fowkes, published London 24 July 1788. National Library, Canberra.

Fig.4.2 (a) New South Wales, Port Jackson, from the entrance up to Sydney Cove taken in October 1788. Pen and ink wash. British Museum (Natural History), London, Watling Collection.

Fig.4.2 (b) Detail of Sydney Cove in the previous Map. British Museum, (Natural History), Watling Collection.

Fig.4.3 (a) Charles Grimes, Plan of the Settlements of New South Wales, 1796. Reprinted in Historical Records of New South Wales, vol.III, 1796-1799, ed F.M. Bladen, Govt Printer, Sydney, 1895.

Fig.4.3 (b) Detail of Mulgrave Place (later Windsor) on the Hawkesbury River from the previous map. 1796.

Fig.4.4 Chart of the Harbour of Botany Bay, Port Jackson, and Broken Bay. Published May 1, 1802, by Cadell and Davies, Strand, London. From David Collins, An Account of the English Colony in New South Wales, second edition, London, 1804.

Fig.4.5 Charles Grimes, Plan of Sydney, May 1800. Reproduced in Historical Records of New South Wales, vol.V, 1897, foll p.837.

Fig.4.6 Charles-Alexander Lesueur and Charles Pierre Boullanger, Plan de la Ville de Sydney, September 1802. Engraved by Cloquet. Published in Francois Peron, Voyage de Discouvertes aux Terres Australes, 1800-1804, Paris, 1807. Original is held in the Museum at Le Havre, France.

Fig.4.7 James Meehan, Plan of the Town of Sydney, October, 1807. Photolithograph of a mid-nineteenth century copy of the original manuscript map held by the Dept of Lands (now lost). This copy was reproduced in 1898, for Historical Records of NSW, vol.6, opp. p.366.

Fig.4.8 Annotated plan of the Town of Sydney, 1807, re-drawn by J.F. Campbell, 1924. Journal of the Royal Historical Society, vol.10, pt.2, 1924.

Fig.4.9 Plan of Parramatta, 1813, attributed to George William Evans, later copy. Mitchell Library, ZM2.1301/1823, State Library of NSW.

Fig.4.10 T.L. Mitchell, Map of the North Shore of Sydney, 1828. Reproduced in John Sulman's, Town Planning in Australia, 1921, p.16.

CHAPTER FIVE

PUBLIC VIRTUE EXPRESSED AS TOWN PLANS - 1810-1822

> 'O'er the green Upland see new Hamlets spread,
> The frugal Garden, and the 'straw-built' Shed';
> ...See opening Towns with rival Skill display
> The Structure bold - the Mart, and busy Quay;
> Streets ably form'd by persevering Toil,
> And Roads the Trav'ller's wearied Course beguile.'
>
> Michael Massey Robinson's 'Ode for the King's Birthday', Sydney, 1811.

> 'He aimed to put a frame rather like a proscenium around the urban environment of Civil Society with the purpose of enhancing man's awareness of god and virtue.'
>
> R.S. Neale, writing about John Wood of Bath, Francis Greenway's architectural mentor.

With the advent of Lachlan Macquarie as Governor in 1810, town planning in the colony of New South Wales began to assume a more formal, architectural, and three-dimensional character. But it was still grounded in the principles established from the early decades of the colony, and built on the foundations which had evolved in western Europe.

The English Officers, trained in the climate of the eighteenth century Enlightenment, though they were interested in the native Aborigines who dwelt around the shores of Port Jackson, did not understand their unique culture. Though Phillip, Tench and Dawes, amongst others, tried to discern a pattern of behavior amongst them, they were only able to make a very limited assessment of the complexity of their society. The Aborigines represented to them the first primitive stage of what has been called 'The course of empire'. (1) Underlying their perceptions was the argument that was being expounded by the Scottish Moral Philosphers about primitive native peoples everywhere: that there were four broad stages in the progress of civilization, or 'Empire' : the first was the 'hunter-gatherer' stage, the nomadic stage, which the Europeans thought was to be naturally superceded by the next stages, that of the taming of animals (the pastoral stage), and the cultivation of crops, (the agricultural stage). Finally, the fourth stage of the 'progress of Empire' was marked by the ability to organise trade between nations (the commercial stage).(1)

One of the reasons that nomadic peoples were seen as 'uncivilized', was because they had no towns or cities, no settled, permanent places of abode. The limits of the tribal boundaries was not known by the Europeans; they

did not appear to have any means of measuring land that could be compared to that used by the European surveyors. The Aboriginal boundaries between communities, unknown to the Europeans in the nineteenth century, were not recognised until late in the twentieth century when the work of the Anthropologists began to be assembled into a coordinated body of knowledge. These older boundaries were derived from a different set of rules. When European settlement began, their system of measurement, derived from ancient European practices, was superimposed on the older system. Settlement, indeed, was dependant upon these boundaries being established. They were the way the Europeans organised their world. Their towns, the centres of their communities, were planned according to these measurements.

The Politics of Taste

Apart from this theory of empire, another theory was current at this time dealing with the management of land and landscape. This is discussed by John Barrell in his article 'The Public Prospect and the Private View: the Politics of Taste in Eighteenth Century Britain', and has relevance to the way the landscape was probably perceived by the Macquaries.(2) In this theory, the control over certain aspects of landscape was used as a means of legitimising political authority. This was a sign of those men who could produce abstract ideas out of the raw data of experience, and was considered a quality which was rightly exercised by those who were capable of thinking in general terms.

The landscape presented to the first European settlers, in its pristine state, did not compare with any known, controlled view. They had in fact to create their own landscape, one that they themselves could identify with. Even the need to plant grain crops meant that landscape had to be transformed; trees had to be felled, bracken cleared, and the ground tilled by hoe or plough to break into the crust. Captain Tench exclaimed with pleasure about the vista which had been opened at Parramatta in these first early years; it meant to him not only that wheat and corn were planted to feed the population and that there was a promise of a more regular supply of food available in the colony; it also meant that he could identify with the scene, that it bore some comparison with known landscapes in England.

The ideal, panoramic prospect, is seen as the analogue of the social and universal, which is capable of being surveyed, organised, and understood by disinterested public men. These men, as leaders, regard the objects in the landscape always as representative of ideas, and can categorise rather than imitate their originals in nature. So they study, not the objects themselves, but their relations. They are able to this by their ability to abstract, and their ability to comprehend and classify the totality of human experience. (3) Both Macquarie and

Bligh in their campaigns for town improvements, were planning in the context of this underlying idea.

Regulations under Macquarie

Macquarie proclaimed his town planning regulations for the management of Sydney through the pages of the Sydney Gazette, the official newspaper. He also set out regulations for Parramatta, Windsor, and the country towns of the County, and for Hobart in Van Diemen's Land. The regulations reflected, on the one hand, the need to control the circumstances on the ground, but they also reflected the principles that the Governor thought appropriate for a colony rising out of its first hard years into the prospect of future expansion. Mrs Macquarie also had an influence over some of the decisions with her interest in architecture and landscape planning. (4)

Governor Macquarie initiated an attempt at a discourse with the citizens of his towns, by publishing his regulations about the conduct of town business through the pages of the Sydney Gazette, and also exhorting them, by a type of published formal argument, to conform to his directions. Over the years, he was re-assured by the response from the citizens themselves. His public pronouncements were acknowledged by two long addresses also published in the paper, thanking him for his concern and acknowledging the improvements apparent in the colony.(5) These were probably written by Robert Howe, the editor, but even if the Gazette was the official mouthpiece of the administration, these replies give an indication that the populace as well as the Governor saw, in the steady delineation of streets and construction of official buildings during this period, a sure sign of the advancement of their society and its firmer establishment. The buildings and the very shape of the towns gave form and content to the society itself. The Hawkesbury settlers, in particular, were grateful for his efforts, and when he departed from the colony, commissioned a portrait to hang in their Courthouse.

Though English law was deemed to have arrived in the colony with the First Fleet, circumstances in the colony, so far removed from Britain, necessitated the issue of many detailed 'government and general orders' by the governors. These were published in printed form after the Sydney Gazette was established in 1803, and sent back to London. In effect, the Crown delegated legislative authority through the governor. This authority was challenged by Jeremy Bentham in England in 1802, and during Macquarie's time there was room for legal argument about how much latitude could be allowed to the governor. This difficulty lay at the root of the quarrel between the brothers Bent and Macquarie which developed after 1816.(6)

Macquarie himself was the prime mover in the decisions made to plan the towns, but he was supported by a slowly emerging group of technical people; architects, surveyors and engineers as well as builders and tradesmen. Apart from Meehan as surveyor, Captain J.M.Gill was Acting Engineer in charge of the mechanics and building labourers until his departure from the colony in July 1816, and he was then succeeded by Major George Druitt. But reliance on army officers was leavened by the appearance in 1814 of an important additional designer, Francis Greenway, an architect from Bristol, transported for concealment of papers in his bankruptcy. Greenway's professional contribution is considered here in the light of what he professed as well as what he achieved.

Greenway's polemical writings deserved to be studied as evidence of his attitudes to the role architecture and planning could play in 'elevating' the society now beginning to assemble in the colony. His letters to the Sydney Gazette in the twenties reveal his hopes and his convictions. His views, in fact, closely resembled Macquarie's in essence, in that he considered public works were tangible and apparent evidence of the public endeavours of the society, as well as being useful and functional parts of its fabric.(7)

Lieutenant John Watts was another but less influential figure who also arrived in 1814. Partly trained as an architect, he had served in the army in the West Indies before coming out in the 46th Regiment under Colonel Molle. Molle recommended him to Macquarie for his aid-de-camp. Living with the family at Government House, and participating closely with the Governor's daily routine of administration, Watts also planned several important building groups and supervised the repairs of the road to Parramatta and the building of the bridges along the way. He was also responsible for the construction of a large dam at Parramatta at the head of the river to consolidate the supply of fresh water for the town and prevent it being contaminated by the salt water from the tidal flows.(8)

A third architect arrived in 1816, Henry Kitchen. Young and inexperienced in colonial affairs, he lacked official patronage, and found it difficult to make ends meet. His promising career in England was never matched by his performance in New South Wales, and his remarks recorded by Comissioner Bigge about the practice of building in the colony is an embittered counterpoint to Greenway's eager posturing.(9)

Sources of Information

Primary research sources for the Macquarie period are derived from the Governor's Proclamations and Orders, which were printed in the sole newspaper, the Sydney Gazette, and transmitted to London by the Governor's dispatches. Macquarie's diaries, and personal papers

have also been consulted. Other records contemporary to the period are from a limited number of books dealing with urban matters, in particular the Present Picture of New South Wales, 1811, by D.D. Mann, illustrated by views by John Eyre, and W.C. Wentworth's account of the colony published both before and after the Bigge Inquiry. Commentaries by critics or visitors are few from this period. Though the initial company of settlers was comparatively large in numbers, the population of the colony had not increased markedly during the first two decades, and was still quite small overall. When Macquarie arrived, the numbers in Sydney have been calculated at 6158 in 1810, falling to 5475 in 1815 and then rising to 12,079 in 1820. Sydney was comparable in size to a present day medium-sized country town.(10)

Another book published in England about the colony and drawing from the Macquarie years, though not published until a few years later, was Joseph Lycett's Views in Australia, which had a descriptive letterpress about the state of the towns as well as a series of meticulously executed lithographs, and a map engraved by G. & H.B. Whitaker of the settled portion in the County of Cumberland and another by J.Souter of Van Diemen's Land. Another useful account, though concentrating on the ways and means of the land settlement process and its drawbacks, was published by James Atkinson in 1826. Both these books were published in London, as was Geographical Memoirs of New South Wales by Barron Field, which contained essays on topography, geology, timber resources, and astronomy in 1825.(11)

Reports from a visiting French expedition are useful, even furnishing a rare plan of Sydney drawn in 1819, 'Esquisse de la Ville de Sydney' (see Figure 5.1). Apart from this plan, the main plan we have of the town is one drawn c.1821, undated and not signed. The main groups of public buildings are marked in colour, the buildings around Macquarie Place and Sydney Cove, the church of St Phillip, the Military Barracks, and the group fronting Macquarie Street, and Fort Macquarie on Bennilong Point and the building which replaced Dawes' observatory. Omitted are the new stable building. By this time the streets of the town extended from Liverpool Street to Goulburn and Campbell Street.(See Fig.5.2) The new market place was connected to the new wharf in Cockle Bay, and then further along George Street, past the old graveyard where Maquarie had planned his projected cathedral, the street was lined by wattle-and daub huts, shops, rough brick kilns and clay pits. Apart from this, a 'Plan of the Town and Suburbs of Sydney', dated August 1822, was lithographed and published presumably in England (author unacknowledged), the principal buildings numbered and key in a copper-plate provided. (See Fig.5.3)

Plans of the satellite towns of Liverpool, Windsor, Pitt Town, Wilberforce, and Parramatta, however, signed by Macquarie himself are available from the Bonwick

Transcripts in the Mitchell Library.(See Figs.5.4 to 5.14) Another interesting plan, not of the town, but of Sydney's Government Domain and adjacent streets, by C. Cartwright,(Fig.6.3) surveyed in 1816, reveals a sophiscation of execution, if not of accuracy, which is a little puzzling and suggests that plans must have been made, perhaps sent to England, and are now lost. A contemporary copy of Meehan's plan of Hobart, made in November 1811, also survives, showing the new street plan superimposed on the previously unordered settlement there. (See Figs.5.18 and 5.19)

But the major source for this period is the comprehensive report on the colony of Commissioner J.T. Bigge, and its detailed appendices, and this provides, along with its modern analysis by John Ritchie, the most fruitful source of evidence of the times. The Report of Commissioner Bigge into the state of the Colony of New South Wales, ordered by the British Government and completed in 1822, provides a good vantage point from which the previous decade can be studied, and sums up the development of the town of Sydney and of the satellite towns which were starting to be established around it. Secondary sources are found in the writings of John Ritchie, M.H.Ellis, Morton Herman, and W. Hardy Wilson.(12)

'Public Virtue' expressed as Public Buildings and an Ordered Urban Environment

Under Macquarie, the eighteenth-century concept of 'public virtue' is expressed in the planning of the urban fabric, and the building of public buildings and works such as hospitals, barracks, churches, roads and bridges was endorsed. This was based on an articulated theory of social and economic progress associated with the Scottish Enlightenment, a philosophy expounded by a group of Scottish philosophers and developed through the works of Adam Ferguson, John Millar, Gilbert Stuart, Lord Kames, Lord Monboddo, and William Robertson and Adam Smith.

Adam Smith argued that the progress of civilisation could be seen to develop in a series of progressive stages: first came the hunting life, (we now refer to these people as hunter-gatherers), then animals were controlled and herded together to supply a more regular source of food, then agriculture was developed enabling the emergence of a more settled population, and the last stage was seen as the commercial, where surplus food and man-made goods were traded between peoples. The development of towns was a crucial part of the advancement of the society.(13)

This theory, though essentially a simple one, parallelled the expansion of European influence, following the naval discoveries of the seventeenth and eighteenth centuries, and justified the building of empires, which, it was argued, appeared almost like a natural process. The theory however was not merely a justification of power,

as the process was seen as part of a cyclical rise and subsequent fall of empires. Rome, Carthage, Egypt, the precursors of modern empires like those of Britain, Spain and France, all declined and fell; an infant colony like New South Wales was confidently expected to rise over time under the guidance of wise viceroys and administrators to emulate the colonising parent, and even to survive the decline of the parent. It was essentially an optimistic theory for Australia at this stage, and it dominated the serious literature produced in the colony, providing the poet and explorer with a rhetoric with which he could disregard the tainted convict beginnings of the colony and concentrate on the imperial destiny of a young nation.(14)

In the public poetry of the Macquarie era, especially in the celebratory odes of Michael Massey Robinson, we find a continuance of a tradition of Augustan verse popular in the eighteenth century. Robinson, appointed 'poet laureate' to the colony by Macquarie, unfailingly produced two panegyric poems to celebrate the King and Queen's Birthdays each year. This tradition was continued on by W.C. Wentworth in his epic poem Australasia, written for a poetry prize at Cambridge in 1823, in which he vindicated Macquarie's efforts for the moral reform of colonial society. Another later poem in this genre was a translation of a Latin poem written by S.Smith, made by Charles Tompson, a 'native born Australian', and published in the Sydney Gazette, on 17 February 1830. These early epic poems, scorned by the late-nineteenth century nationalists, are none-the-less valuable evidence of a rising spirit of national pride, and a spirit of moral improvement which was awakened by the process of settlement itself. Later literary critics, dismissing these early colonial poets as derivative and old-fashioned, have missed an opportunity to explore the awakening of a strong national sentiment, which was expressed in formal, measured verse.(15)

It was also a theory which was adopted by Governor Macquarie as he pushed ahead with an ambitious paternalistic building and town re-organisation programme, starting almost immediately he arrived in the colony to plan the details of the urban scene. He drew upon the pool of labour created by the convict system to provide the artisans and labourers for his projects. He saw the public works as concrete examples of public benevolence, and was determined to endow the colony with a goodly number of symbols of his term in office as indications to his people, not only of his desire to create a pleasing, ordered urban environment, but also to demonstrate that the colonists themselves, by their exertions, could achieve a more just and virtuous society. Behind his vision was the belief that the vicious origins of Botany Bay, rooted in crime and punishment, could be absolved by the demonstration of public order.

The strength of his public works philosophy is evident in the long list of buildings and works he submitted almost as a testimonial to Lord Bathurst after his recall in 1822. They were criticised by Commissioner Bigge, and disapproved by the administrators in London.(16) They remain however a touchstone of the faith Macquarie had in the virtues of simple architectural order and urban organisation. The London wits might deride his efforts, claiming that the benighted penal colony of Botany Bay had no right to aspire to 'architecture' at the ends of the earth. But Macquarie pursued a firm vision, and expressed a delight in planning and seeing his plans carried out. A writer in the Quarterly Review of February 1823 might declare:

> 'Ornamental architecture in Botany Bay! How could it enter into the head of any human being to adorn buildings at the Bay, or to aim at any other architectural purpose but the exclusion of wind and rain, we are utterly at a loss to conceive.'(17)

But the Macquaries, both the Governor and his wife, stuck to their plans, and transformed New South Wales physically from a struggling outpost to what could be perceived as a viable colony.

Underlying their convictions, however, was the philosophy of the 'course of empire', extolling the efficacy of public works in the process of elevating civil society. Public architecture could express stability, and orderly planning could denote coherence, knowledge of the society's place in the world, and its relationship with the metropolitan culture. Public Virtue could be allied to the progress of empire.

Macquarie was not so concerned with the relationships between private and public endeavour, but nevertheless he made some significant moves to allow the development of the market economy. He encouraged the tentative beginnings manifest in the development of Sydney's role as a depot port; he reorganised the location of the main wharfs, removing them from Sydney Cove, which was starting to become crowded and polluted, to Cockle Bay (or Darling Harbour as it was later known), where they had better access to a cleared market-place off George Street. But the town remained a mixture of leasehold and freehold grants, leavened with parcels of 'public' or crown land, some of which had the status of designated parks or spaces for particular purposes, some being merely left-over crown land or difficult land to develop.

As before mentioned, Macquarie himself conducted a formal dialogue with the citizens of Sydney through the pages of the Sydney Gazette over the years of his term of office. Greenway also tried to engage public attention through the pages of the Australian in the 1820s when Macquarie had departed, writing a series of letters to the paper trying to vindicate his contribution, his plans, and his

motives for the 'improvement' of the colony through the contruction of the buildings he designed. In the past, these letters have been partly dismissed as less than serious discussions about Architecture, and lampooned by later historians as evidence of Greenway's paranoia, but seen in the light of arguments for 'public improvements', they fit neatly into the mould surrounding the period presided over by Macquarie.

Thus Greenway's letters to the Editor of the Australian in 1825, and the long article he submitted to the Australian Almanack and General Directory of 1835, contain his beliefs about his profession as a architect and the importance he attached to the role of buildings in the society they embellished.

> 'Architecture,' he writes,'is an art which, in all ages, great princes and potenates have delighted to encourage, as one amongst those of the greatest importance to their subjects, and best calculated to convey to posterity the elegance, skill, and magnificence of the times in which they flourished. And so powerful has been the example and such the influence diffused by so great and liberal a patronage among all classes of society, that men of inferior rank aspire to taste in this noble science, and by a liberality of sentiments endeavour to vie with each other in promoting its objects - improving the national taste - augmenting its splendour, and imparting an increased value to its commercial and mercantile relations. When viewed in its proper light, architecture will appear to have (a) most considerable influence on all the comforts and luxuries of life. The advantages of erecting buildings, both public and private, must be obvious to all who consider that they are the first steps towards civilization - and they exert the most marked influence not only on the body but on the mind also.'

Greenway then continued: '... when societies are formed, and commodious buildings are erected, wherein the occupants may breath a temperate air, and combine social intercourse with virtuous enjoyment, men become enterprising, ingenious, spirited and active - speculative in mind, and vigorous in body. They progress in the agricultural and mechanical arts; and the necessaries, conveniences, and even the luxuries of life, soon become objects of desire and enjoyment.'(19)

Both Macquarie and Greenway, in their firm belief in the role that public works could play for the benefit of the society they were living in here in New South Wales, espoused the ideals of eighteenth century England. This view was echoed in the poetry of the time, by Michael Massey Robinson, and W.C. Wentworth; on the one hand they professed allegiance to the Crown, honouring the

monarch's birthday as a common point of reference, and on the other, they predicted the rise of the colony to become a worthy offspring, even a successor, to the mother country.

Town Planning Proclamations under Macquarie

Macquarie set down orders on 11 August 1810 that the streets of Sydney were to be made regular at 50 feet wide, with the buildings encroaching onto the straightened throughfares removed.(20) He wrote that there would accrue 'great Benefit' to the Public at large' from this measure, and that 'the additional Convenience and Ornament' acquired thereby would greatly benefit the town. His juxtaposing of the terms 'convenience' and 'ornament' is interesting, for they express his mental link between the two qualities.

He followed this with a plan to organise the streets of the town into five districts, policed from a watch-house in each to deter robberies and secure peace and tranquility for the residents. Permanent names were to be given to the streets, marked by posts and fingerboards. The previous names were to be changed from their old local designations like Spring Row, Windmill Row, Chapel Row, Barrack Row, Soldiers Middle Row, Bell Row and High Street to a new set commemorating King George, the English Prime Minister Pitt, and his minister Castlereagh, and the early governors of the colony: Phillip, Hunter, King, Bligh and Macquarie himself.(21)

Macquarie concerned himself with trying to regulate nuisances; he tried without avail to preserve some of the meagre stream of water in the Tank Stream from being further polluted by household washing, and access by animals. He set out an elaborate list of regulations for the control of the town markets, re-located in Cockle Bay near George Street.(22)

Macquarie also at this time formally established Sydney's first urban park, calling it Hyde Park after London's much larger public park, given by royal beneficence to the English public. It was flat land, then at the eastern edge of the town, previously used as an unofficial common, and therefore already stripped of its trees and vegetation. The park was not large, only 23 ha (57 acres) in size compared to London's 138 ha. The Governor was quite specific about the uses to which the park could be put and why he marked it out. He wrote:

> 'Being extremely desirous to do everything in his power that can contribute to the Ornament and Regularity of the Town of Sydney, as well as for the Convenience, Accommodation and Safety of the Inhabitants...'

he had re-named the streets and regularised their courses, had erected a wharf in Cockle Bay, and relocated

the Market Place. 'The whole of the Ground yet unoccupied in the Vicinity of the Town of Sydney, hitherto known as and alternatively called by the names of 'The Common', 'Exercising Ground', 'Cricket Ground', and 'Race Course' ...'being intended in future for the Recreation and Amusement of the Inhabitants of the Town, and as a Field of Exercise for the Troops'... was to be called Hyde Park.(23)

Brickmakers were forbidden to cut up the ground for their bricks there, carts were forbidden to cross over it, horses or cattle, sheep and pigs, which were previously grazed there were barred, and a Common reserved further out, eastwards over the Paddington ridge.

The northern boundary of the park was at first defined by the edge of the Governor's Domain, which the Macquaries regarded as part of their personal domain, as indeed, Governor Bligh had. Macquarie directed Greenway to design and build Hyde Park Barracks for the convicts to be accommodated overnight (1817-19), and placed opposite it two buildings which were to accommodate a law court and a school. The use of the two buildings were later altered at the suggestion of Commissioner Bigge, to a new church, St James,(1820), and a Court House (1819-28). These buildings rose as fine Georgian embellishments to the colonial town, facing each other across a plaza at the termination of Macquarie Street. This street was blocked off at the beginning of the park, and roadways were excluded. (24)

The western boundary was defined as Elizabeth Street, formerly known as Camden Street, and marked on Meehan's plan of 1807 as far as Park Street. This was then a street of scattered small wattle and daub thatched huts, backing onto the upper springs which fed the Tank Stream. These were gradually replaced by more substantial buildings in the next few decades. The eastern boundary was not sharply defined in 1821, except by a line on a map. There was a vegetable garden allotted to the convict barracks, and a site marked out for the Roman Catholic Chapel, permission being given for a site 'near the rubbish dump'. Further down the hill was a cluster of brick kilns, and John Palmer's garden and house.(25)

A painting of the Barracks done by Joseph Lycett about that time shows a few tree stumps remaining at the northern end of the park. Macquarie made no move to have the space planted. However the formal nature of the space later known as Queens Square began to take shape with the buildings to define it, and made it an appropriate place to assemble the population to have the official welcome to Governor Brisbane, when his Commission was read on 1 December 1821.

The intentions of both Macquarie, as governor, and Greenway as architect, were highly symbolic in essence. Macquarie, in naming the park had referred to its

metropolitan forerunner in London, and had expressed his intentions quite clearly; Greenway then took this reference one step further in the town plan he put forward to the Governor. In his grand plan, pride of place was given to a principal Church planned by Macquarie to stand on the burial ground site on George Street near the new markets (where the Town Hall now stands). He envisaged four main streets radiating out from a large Circus around the Church: one led to Hyde Park, one to Parramatta, one down to Cockle Bay and its wharves, and one, a mile in length, to York Street, through the Military Barracks to the entrance to the intended Fort on Observatory Hill.(26)

Hyde Park was, in Greenway's words, to be 'laid down in the most elegant style of landscape gardening'. The park itself was seen as a 'grand quadrangle', and around it would be sited all the main public buildings, taking advantage of the virtues of the site, its fine elevated location and its level topography. They were to be 'raised in a classical style, upon a level base, making the whole as grand a square as any in Europe'. Greenway also planned that a screen of the Doric Order with a colonnade corresponding to its surrounding buildings of Hyde Park Barracks and St James's Church, would act as an impressive entrance to Hyde Park from Macquarie Street.(27)

John Wood of Bath as a Mentor for Greenway

Greenway compared his plan to that laid down by Sir Christopher Wren for London, but it also bears a strong resemblance to schemes made famous by an architectural mentor nearer his home town: to the Circus and Queen's Square of Bath, designed and built by John Wood. In Wood's plan of the reorganisation of the town of Bath, the use of defined open spaces was crucial to the larger composition of town open space versus built-up area.

John Wood (1705-1754) was responsible for planning and building the great urban ensembles of the Queen Square (1726-36) and the Circus (begun 1754) at Bath, as well as numerous other buildings. Though living a generation before Greenway, Wood was part of network of families of master-masons in the West Country of England, as Greenway was. Wood's son, also named John, was a contemporary of Greenway's father and uncles, who were also engaged in the building trade.

Both John Woods, father and son, were influential men in the County of Gloucestershire. Their buildings represent to many people the climax of the English Palladian tradition there. The first John Wood was known as a mystic, antiquarian, surveyor, builder, and town planner, interested in the ancient monuments of Britain as well as those of Roman antiquity. He published several books, one on Bath itself, which he came to regard as symbol of a vision of a Roman but Christian Utopian city. To him,

the city was an amalgam of sacred geometric figures, used harmoniously. A historian of the city, R.S. Neale, expresses Wood's purpose as a town planner: "he aimed to put a frame rather like a proscenium around the urban environment of Civil Society with the purpose of enhancing man's awareness of God and Virtue." In this, Wood was drawing on Andrea Palladio's restatement of the rules of the Roman Vitruvius which had been translated from the Italian into English in 1721. In Bath, Wood was a very successful builder and entrepreneur, but he built not only for profit, he had an additional purpose to counteract the vicious and frivolous manners of his clientele, believing that architecture could help elevate society to a higher plane.(28)

If the figure of Wood is considered as a mentor adopted by Greenway, we start to see some interesting parallels. He was from the same district and well known locally. Greenway had designed a major building in Bristol close by, the Clifton Club at Clifton; his family were builders, stone masons, architects and designers. Greenway, like Wood, was convinced that the architect and builder had a special role to play in the elevation of society as a whole. In a convict colony, he clung to his vision of the possibility of better things, and to his belief in the transcendant qualities of architecture and its importance to civil society. In his published letters printed in the Australian in 1825 and in the later long essay contributed to the Australian Alamack and General Directory, 1835, Greenway was quite consistent in his recollections of his earlier stance to the Governor. He began their association with an outrageous letter admonishing Macquarie about his role in promoting architecture in the colony and instructing him about the niceties of architectural practice and design.(29)

Greenway saw himself as heir to a noble tradition in building which had nothing to do with his convict status. When first summoned by the Governor and requested to copy a plan for a house in Macquarie Place, Greenway remonstrated that the plan in question had "no claim to classical proportion or character" and went on to expound on the subject of 'architectural decorum' as he conceived it. He pointed to a parallel drawn from Anglican liturgy, claiming that an analogy could be drawn about the relationship of 'the Government and the Public' from the relationship between Christ and His Church, and that of a man and his wife. "Therefore," he wrote,"those who injure the one must injure the other." He uses this metaphor to impress on the Governor his view that architectural matters should merit serious consideration, and that public buildings in the colony, even at this early stage of its development, should reflect credit both upon their creators (that is, on both the designer and the patron) and their society. Thus the Governor, "as promoter and encourager of this most useful art" (of architecture) would add to the comforts of the Colony as

well as to the dignity of the Mother-country if he commissioned "elegant and classical buildings".(30)

The convict then proceeded to quote Sir William Chambers, a contemporary architectural theorist, drawing a parallel between the 'rustic language' of some folk poets and the 'mean materials' available in the colony. The fact that supplies were short, and the technology was simple was not necessarily an impediment to the creation of fine architecture. Using Chambers' words, he reminded the Governor: "Let it not be imagined that building merely as heaping stone on stone, can be of great consequence, or reflect honor either upon nations or individuals. Materials in architecture are like words in phraseology; having separately but little power; and they may be arranged as to excite ridicule, disgust, or even contempt - yet when combined with skill, and expressed with energy, they actuate the mind with unbounded sway."(31)

Greenway, like John Wood of Bath, was convinced that architect and builder had a special role in the elevation of the society as a whole. "The artist, mechanic, and labourer", he wrote,"are the ground-work of the riches and dignity at all nations. Everything, it is true, comes from the bowels of the earth: but it is made valuable to society by their skill and execution." (32) Macquarie recognised in him a zeal for improvement akin to his own, even if he was far removed in temperament from the stocky Cornishman, and used him to design the major buildings of his period of office.

Greenway's litigious attitude towards his opponents, and the alacrity with which he expressed and defended his views, can also be seen paralleled by Wood's attacks on those who opposed his schemes in Bath. Again, Greenway's contempt for the 'pickers and stealers' of his designs, for the corrupt contractors, and even for his possible rivals like Henry Kitchen, James Smith, and D.D. Mathew, is curiously consistent with Wood's denouncements of the 'piratical' architecture of those master builders who did not comply with his architectural directions.(33)

The fervency and passion of both men were rooted in their views of the world, and of the role of architecture and design in it. They saw it as a reflection of a Supreme Being who was the divine architect of all things, in whose work, as Wood expressed it, "we find nothing but perfect figures consisting of the utmost Regularity, the sweetest Harmony, and the most delightful Proportion."(34) They had the security of their convictions despite the less than ordered worlds they found themselves in.

Plans for Liverpool and the five Macquarie Towns

Maquarie set about selecting some six town sites within the County of Cumberland, apart from the already established Parramatta and Toongabbie. In November

1810, accompanied by Mr Moore of Moorebank, the official party of Captain Antill and James Meehan set out in a boat along the George's River, 'to view and survey' the ground intended for the new town of Liverpool. They found the proposed site ' in every respect eligible for the purpose'. They walked over the ground for the new town, and Acting Surveyor Meehan was directed to mark out the town with a square in the centre for the purpose of having a church hereafter erected within it. The selection of this particular site was probably influenced by Thomas Moore, who had established his farm and house on the bank, and who was a spokesman for the people who were establishing farms in the area.(35)

The George's River was prone to flooding, so the town site was selected in relatively elevated land so the people from the surrounding farms could repair there in times of flooding and in principle bring their stock to the higher ground. The site also fulfilled one of the principles of Phillip's Instruction of the laying out of towns - it was at the head of a navigable river. Liverpool's plan was quite ambitious, with blocks of land provided for future expansion. At the curve of the river, a town park was laid out, subsequently called Bigge Park in honour of Commissioner Bigge. One visiter, in an optimistic frame of mind compared its embryonic town plan to the newly extended town of Edinburgh.(Compare Figs.5.4 and 5.5 to Fig.0.5 and Fig.8.13).

On this tour of the County, Macquarie and his party were then rowed along the upper Nepean by boat, enjoying the 'fine and beautiful scenery' to where the river was joined by the'Warragombie' and noting the farms already established along its banks. On Monday 3rd December, accompanied by the two surveyors, Mr Cox and Mr Cartwright, he rode over the Richmond Common formerly marked out by Governor King, 'in order to examine and survey the proper ground for a scite for a town and township in that district, and chose a site near Pugh's Lagoon, intending to have the church, school-house, and burying ground ajoining the Lagoon. Macquarie noted that while the crops looked promising, 'the houses and habitations of the settlers were 'miserably bad', and the river liable to flooding.(36)

Two days later, Macquarie had chosen the sites for four additional townships, Castlereagh near the present city Penrith, Wilberforce over the river, Pitt Town, and extended the already established town of Green Hills, renaming it Windsor. Here he marked out a new and larger town square located south of the existing wharf at Thompson Square, intending a church to be built there. Assistant Surveyor Meehan accompanied him at each town site, and laid out the bones of the plan as Macquarie indicated. The criteria for town site selection was 'eligibility', and convenience, and its site was to be high enough to be safe from the floods. The town lots

were to be granted in conjunction with agricultural parcels of land between thirty and forty acres.(37)

Macquarie appears to have in mind a cluster of villages which could afford havens for the settlers, on which they could build their houses, grouping them together in civic communities, around a nucleus of church and school house. His plan was optimistic, and hasty. Only two of his five Hawkesbury towns achieved town status, and only several years later. Castlereagh never really got going at all, Pitt Town achieved a church and school house, and Wilberforce over the river a church-come-schoolhouse. But the settlers in the main did not build their houses in the villages; the problem of transport was too difficult. The slab huts and barns on their farms, left unattended, made easy pickings for thieves; the stored grain, meagre implements and the animals, left unattended, became too vulnerable.

A few years later, a better road was being constructed from Parramatta, with a bridge over South Creek, a ferry crossed the river, a large two-storey inn had been built, churches were rising, and the quarterly sessions of the Civil Court already put in place by Governor Hunter, were supplemented by twice-yearly meetings of the Governor's Court. Thus the pre-requisites for a town were being put into place, to support and complement the small farms of the district. Crucial to the status and growth of the small towns were two factors: an ability to produce a surplus of grain and livestock, with the means of transporting them to the market place at Sydney or Parramatta, and the stability engendered by the presence of the military and the establishment of a Court of Law in the town.

In founding these towns Macquarie was acting on his Instructions from London, originally issued to Governor Phillip, and re-iterated to each successive governor. According to these Instructions, the town area was to be mutually convenient to town and pasture lots, it should be near a navigable river if not on the coast, and land was to be set aside for fortications, soldiers' barracks, a town hall and other public buildings. A site was to be set aside for a church, and glebe land of 400 acres (160 ha) set aside for the clergyman's maintenance, and 200 acres (80 ha) for a school master.(38)

There was, in the Hawkesbury towns, an attempt to establish a hierarchy of urban land, land allocated for small farms, and common land for the depasturing of stock. The promise of the rich alluvial soils around the five towns, however, was not, in itself, enough to secure a livehood for many of the settlers. Floods were unpredictable and devastating in their effects. Larger landowers near the towns, Samuel Marsden and his son Charles, and Maurice O'Connell near Riverstone did not hem in the land marked for urban uses, as the larger grants did around Parramatta. There were eight grants of

between 200 and 400 acres (80 to 120 ha), but the remainder were in the order of between 30 to 100 acres (12 to 40 ha).

Windsor, the earliest of the Hawkesbury towns, remained the dominant centre. The town land contained granted land, as well as land set aside for defence or army purposes, civic uses and cultural uses like churches and schools. In a Government and General Order of 15 December 1810, Macquarie stated his intentions for the town. The town allotments were to form an 'inseparable part' of the farms and were not to be sold separately. The dwellings were to be brick or weatherboard, have brick chimneys and shingled roofs, and no dwelling was to be less than three metres high. A plan was to be lodged with each district constable.(39)

Windsor's plan was ambitious, and the buildings it attracted were surprisingly large and imposing for a recently-formed frontier settlement. There were two squares: Thompson Square at the older Green Hills nucleus, and another large new square in front of St Matthew's Square site.(Fig.5.6 and 5.7) However, despite Macquarie's efforts to entice the settlers into town, and in spite of his ambitious building program for the town, an oustanding red-brick church and a fine rectory, a court house, a bridge over South Creek, and new military barracks, and Convict Barracks, Commissioner Bigge remarked in 1820 that many of the settlers had not taken advantage of the offers of land in the town, and many of them were in 'a very abject state of poverty'.(40) The effort to establish a strong urban outpost on the Hawkesbury, an 'opening town' had not yet resulted in a prosperous town.

The Bigge Enquiry gives some details about the situation at the Hawkesbury at the end of the Macquarie period. In Windsor there were 14 soldiers housed in the barracks at Thompson Square. There was a large number of convicts, 94 in all, most of them engaged in Macquarie's extensive building program for the town. There were also two road-making parties centred on Windsor, 78 convicts, and also 31 for the Richmond road gang. All in all, 214 convicts were based on the town in 1820, most of all hutted near they worked, for example, near the brickyards or near Greenway's fine St Matthews church building. A large quantity of bricks were being manufactured, 2000 bricks per day; stringy bark was used for flooring, and Blue gum for cladding; iron bark for beams and joists. Cedar, once found in abundance on the river had by 1820 almost disappeared, having been 'wantonly destroyed' in the first wave of settlement.(41)

Despite all this building activity, Commissioner Bigge thought that the progress of the town was not as quick as he expected. A map held in the State Archives (Fig.5.6) shows the nucleus of the town as surveyed in 1810 with only a handful of buildings, but a large complement of

projected streets marked out. This plan is confirmed by a later one by Surveyor White, drawn in 1827,(Fig.5.7) and also a plan of 1835,(Fig.5.8) which details the buildings constructed in the town by then. The second large square opposite St Matthew's Church has not yet attracted the spread of buildings which clustered together around Tompson's Square,. and spread along George and Macquarie Streets.

Of the other Macquarie towns on the Hawkesbury, only Richmond grew as a developing town. William Cox gives some details about its formation in his evidence to Commissioner Bigge, which he stated was settled and laid out in 1816. Land for the town was purchased from Mr Bailey, who was given 200 acres elsewhere in exchange, and a part of William Bowman's land was also taken in exchange. Part of Richmond's plan also encroached on the town common, previously marked by Governor King. Cox had authority from Macquarie to allocate allotments in Windsor and Richmond. 'They are given to persons who rent low lands,' he stated,'and to various mechanics or industrious persons to induce them to settle in the Townships.' The size of these allotments could be up to two acres (just under one hectare). There was a stated condition that a house 26 feet (or 8 metres) long and 9 feet (or 3 metres) high should be built, shingled, and glazed with glass windows before the title of the allotment was handed over.(42)

A map of Richmond prepared in 1827 by G.B. White shows the town with a sprinkling of about forty houses by that time. The town blocks are rectangular, and the allotments quite large in size, averaging about one acre (or 0.4 ha). There was a reserve made for a Market Place in the centre of the town, and land reserved for a church, school, and burial ground. (Figs.5.10 and 5.11)

The other two towns of Castlereagh and Wilberforce had a simple grid layout, with rectanglar blocks. Castlereagh, with allotments from 0.4 to 1.2 ha, attracted an early school house run by the Rev. Henry Fulton, where some local boys were sent to be educated, including the poet Charles Tompson. Its cemetery ground for the earliest generation of first white settlers is still there, but the site, though elevated over the flood plain, had a serious difficulty with no easy supply of fresh water.(Fig.5.14) Competition from the Penrith, some few miles away on the western road, became too strong, and it was Penrith which attracted more development, with a courthouse built there by 1817.

Wilberforce, almost identical in plan to Castlereagh, on the western side of the river, was marked out in allotments of 10 acres, with roads of 4 rods in width. It had a square marked out for a school, which was built by 1820, a burial ground, and a block Reserved for Government in the centre, for a market place. It remained a small village, with a sprinkling of houses.(Fig.5.13)

Pitt Town, had the most curious plan of the five towns, in the shape of a small triangle, influenced by the spur of land overlooking the Pitt Town Bottoms, where the first agricultual land had been granted to the Hawkesbury settlers. The routes to the Wilberforce punt and the road north to Wiseman's ferry passed through this little village. Nearby, Governor Bligh's 'Model Farm' had been developed, with farm buildings, experimental planting and oak trees established.(Fig.5.12)

The town plans of Richmond, Wilberforce, and Castlereagh were very simple plans, marked by a certain perfunctory standardisation. Surveyor Meehan accompanied the Governor in his pacing out the sites of the towns. None of these five Hawkesbury towns was located on the road which after 1813 became the main road west from Sydney, so they tended to be geared to local rather than County rhythms. The smaller villages languished. Windsor, where the main building activity was concentrated, became, in the twenties and thirties a setting-off point for the pastoral push into the Hunter Valley, and Richmond's position made it a secure refuge when great Hawkesbury floods swept through. 'Public Virtue' expressd in buildings and works, did contribute to Windsor's ascendancy amongst the group, and made it the central urban place of the district.

Newcastle

Newcastle, the settlement on the Coal River, re-named the Hunter River, was a convict outpost from 1804, with the convicts put to work in the coal mines and gathering shells from the middens to make lime for mortar, and also cutting down the fine stands of timber - cedar and rose wood which were shipped down to Sydney and taken as ballast back to England. Macquarie had visited the convict outpost in January 1812, and there was a small town already in place, with a wharf and a Government House, and Macquarie walked through the town, without being tempted to pace out a plan himself.(Fig.5.12) He visited it again in November 1821, when he also made his way by horseback to Wallis's Plains where there were 11 families settled on their land. Coming back to Newcastle, he inspected the troops at their barracks and hospitals, the convict barracks and hospital, the lumber yard, the new pier, the jail and the store and various other public buildings, so the town was beginning to grow slowly.(43)

A handsome church with an elegant spire had been built by 1818, on the hill overlooking the town, and in 1822 two merchants, Bingle and Dillon, had been given a town allotment on which to erect a store, and requests from settlers for sites in the town had been received, and leases of allotments had been available after 1823. The 'Plan of the Town of Newcastle, Port Hunter, New South Wales, 1823' (Figs.5.16 and 5.17) is half-way

between the simple plans paced out for the County of Cumberland villages, and the squared town plans after Darling's regulations were laid down in 1829. The major public buildings are marked, lumber yard and stores are alongside the wharf, there is a fort at the entrance to the river mouth and a flag flying on the point. Adjacent to the square marked out for the church, there is a square for a market place, and between it and the river, another parcel of land Reserved for Government, making the foreshore accessible to shipping. The plan has a semblance of symmetry, with the public squares in the centre. Joseph Lycett, a convict who was stationed at Newcastle, produced some attractive paintings of the town as it appeared to him in 1818.(44)

The Plan for Hobart

Van Diemen's Land had been settled in 1804 when Governor King became perturbed with the almost regular visits of French exploring scientific parties. Though verbally reasssured that they had no plans for settlement, the French presence indicated to King that he should lose no time and make the British presence more firmly established. He despatched David Collins to Port Phillip Bay with instructions to seek out a suitable settlement place, but Collins rejected Port Phillip, when a suitable landing place with fresh water was not found, and sailed instead to the Derwent River in Van Diemens's Land. There was already an embyronic settlement at Risdon Cove, but Collins, dismayed with its difficult position, ordered the other Derwent sites to be examined, and decided that Sullivan Cove afforded more favourable conditions.(45)

The settlement of Hobart, however, was marred by anxieties of Aboriginal hostility and fears about the dwindling state of supplies. The production of food was not enough to feed the population, and Collins was also troubled by the neglect of the British Government in answering his requests for authority to create a criminal court and other matters. His despatches to London were not answered directly to Hobart, being sent via Sydney, and his people were dispirited by the sense of isolation. In the years between the establishment of settlement in 1804 and Macquarie's visit, the town was tenuously surviving as an embattled camp.(46) (Fig.5.18)

The arrival of the settlers from Norfolk Island, however, when that settlement was disbanded in 1804, created a new element in the Hobart society. No longer was the settlement merely one of convicts and gaolers. These settlers had completed their sentences and had expectations of assistance from the already meagre stores. There were some 333 arrivals, and then 242 came the next month. They tended to be eager to take up land and started farming along the alluvial soils of the Derwent River.(47)

The settlement at Van Diemen's Land endured a precarious existence until 1812 when the 'Indefatigable' arrived with much needed stores and 200 male prison labourers. This marked a turning point in Hobart's fortunes. Van Diemen's Land was to attract a great increase of free settlers in the 1820s from England, who settled the fertile pastoral lands north of the Derwent. Then the barely-surviving encampment which had no formal layout began to be changed to a thriving maritime and pastoral centre.

Macquarie himself had a direct hand in the transformation. He initiated a plan for the re-organisation of the town of Hobart, much as he did for the villages of the Hawkesbury and the town of Liverpool. Again with Surveyor Meehan, he paced out the intended streets of the town, and ordered the removal of buildings that interrupted their aligment. Hobart, according to the earliest known plan of 1804, resembled a military camp site, with Government House located near the shore line, the storehouses nearby with some isolated on Hunter Island, the officers and marines on the western side, and the convicts' huts near the river. (Fig.5.19) Unlike Sydney, however, where escape was difficult, Hobart was not so hemmed in with forbidding bushland, and the Aborigines were more in evidence. The numbers of new settlers rose to 800 by 1809.(48)

Governor Macquarie's visit in November 1811 was recognition that Hobart needed to assume a formal, more settled character. By that time some 600 people lived in Hobart, and another 400 around New Norfolk. Hobart still had the appearance of a temporary encampment.(Fig.5.15) John Oxley remarked that even then there were only a few dozen huts, crudely built of logs, palings and wattle-and daub, scattered on both sides of a fine stream of water, the marines' tents still stood in regular lines, and the government store built of brick was located at the mouth of the stream. The Norfolk Island settlers, however, had located two miles north of Hobart, and their white cottages had tolerably good gardens.(49)

Macquarie lost no time in planning for the reorganisation of the town. After the welcoming speeches and public pronouncements by the populace, he paced out the intended streets in company with James Meehan. He ordered the removal of buildings that interrupted the alignment of the streets, but he was careful to set in train a process of compensation whereby the twenty-one owners or occupiers of the displaced buildings were given other building plots, and twenty more were compensated by varying amounts. In the new plan, the streets were to be 60 feet wide, with footpaths of 8 feet on each side. Sites were set aside for a town square near the waterfront to be ringed with a second church, courthouse, and main guard house. Houses were to be sited 20 feet back from their front fences.(50)(Fig.5.19)

Macquarie's plan gave impetus for the revitalisation of the struggling outpost. Its grid system was simple and predictable. The sites of its public buildings were clustered around St George's Square in the centre. Government House was located near the waterfront and near the spot where the Flag Staff had been placed. Church, Court House and the Main Guard House were to be erected at Georges Square.

The Founding of Bathurst and Campbelltown

As we have seen, Governor Macquarie was interested in making excursions to 'new' or little known country. His tours were planned carefully, as vice-regal progresses, but time was also allowed for side excursions by the Governor himself. He considered these personal appearances essential for the cohesion of the colony, and necessary in establishing a sense of solidarity for the colonists.

His most elaborate tour was the one he and his party made over the Blue Mountains in 1815. Soon after the explorers Blaxland, Lawson and Wentworth found a crossing over the mountains, he sent Surveyor George Evans to follow up and extend their journey, and then determined that a road should be built over to the Bathurst Plains. From July 1814 to January 1815 William Cox and a party of convicts and soldiers pushed a road over the mountains, and the Governor and a large retinue of some seventy people took an excursion to the newly discovered country.(51)

There, on the banks of a river named after himself, Macquarie founded a town which he named after Lord Bathurst. As with the founding of Sydney, the spot was marked by a Flag-staff. Henry Antill noted that the Governor's large tent was placed behind the flag-staff, with the men's huts at each side. The artist John Lewin has left us with a picture of the occasion. (See Fig.5.21)

Apart from ten specially selected small settlers, however, who were given grants of 20 hectares of land at Bathurst in 1818, settlement of the transapline country was slow to start. It is of interest that these settlers, like those at the Hawkesbury, were given an entitlement of 0.8 hectares of town land to complement their agricultural holdings, despite the fact that the town was not surveyed and town blocks were not made available until the 1830s.(52)

The official town plan of Bathurst was not drawn up until 1833, and the town was little more than a name and a few huts for several years. In 1823 the Colonial Secretary referred to it as 'a fancied town' on an imaginary site. Macquarie was reluctant to issue permits to depasture stock west of the mountains. The larger stock-owners were mostly non-resident proprietors; there was difficulty in

communication with Sydney and the County of Cumberland, transport was both costly and slow; and there was the hostility of the natives in the area. The 1828 census gives the details of only 100 farms in the district. A traveller in the twenties describes it as having only nine or ten low thatched huts or cottages. Peter Cunningham comments on a school, and a Bathurst literary society and two mills built there in 1826. It appears that only a nucleus of a town had been assembled by 1830. Macquarie, instead of directing settlers westward, opened up more land to the south-west, to the County of Argyle. (53)

While Bathurst was some distance from Sydney, there was a congregation of small farmers being established in the south-west of the County of Cumberland. Meehan had reserved the site for a small town possibly as early as 1815 when the road from Liverpool was surveyed to Appin further south. The disasters occasioned from the floods on the Hawkesbury had directed attention away from placing settlers close to this unpredictable waterway to the lands which were termed the 'forest lands' of the County, despite the lack of a good stream of water being readily available. Foveaux and Paterson favoured the districts of Cabramatta, Bringelly and Minto where there were well-drained, open forest lands intersected by small creeks.

Surveyor Meehan, an Irish Catholic himself, had marked out farms in this district for the smaller farmer-settlers, who were predominately Irish. The road to Appin formed the western boundary of the town site, leaving 175 acres (70 ha) unoccupied between the grants of neighbouring farms. The appointment of Reverend Thomas Reddall as resident chaplain and schoolmaster at Airds, was the catalyst for the marking out of the township, with the proposal to erect a chapel and school house, as well as burial ground.

On 30 November 1820 Macquarie wrote in his diary that he proposed to 'mark out a Township, and the sites of a Chapel and a School, as well as a Burial Ground, in a convenient centrical part of the District of Airds'. Accordingly on the afternoon of 1 December 1820 before a crowd of some fifty settlers, he formally marked out the boundaries of the township, and named it after his wife's maiden name. But despite the fact that settlers then applied for allotments in the new town, over 50 in 1821, no private land was allocated until 1827. Only the church of St Peter's was built, and roofed by 1822. The second building was a three-roomed school house. At the eastern boundary of the town, high on a hill overlooking the prospective town, and on private land, Father Therry announced a gift of 5 acres (2 ha) for a church, school, and burial ground for his Roman Catholic flock. He built an ambitious two-storied church, St Johns, which was the first Catholic church outside Sydney.(54)

But then, again, the embryonic town had a slow start. William Bradbury built a two-storey house, with wooden stables, granary and barn by 1822, and William Howe applied for land in the town in 1826. The following year surveyor Robert Hoddle drew the first measured plan of the town. Land was reserved for a courthouse and gaol, which was not built; instead Cooper's public house was converted into a gaol and court-house, but even in 1827 the surveyor-general had not released any town allotments. Finally, later that year, the various streets were given names, but land was not released for occupation until 1831.(55)

The Age of Macquarie

With the advent of Commissioner Bigge's visit and his subsequent comprehensive report on the state of the colony of New South Wales, Macquarie's centralised, autocratic system of Government was considered to be inadequate for the colony, which was becoming less like a gaol and more like a self-sustaining country of potential resources which could be a suitable place to send British migrants.

It is, therefore, a time to take stock of what had been achieved in the four decades of white settlement in Australia. Remote from England, with a perilous journey to be faced by potenial migrants before they even began to meet the hardships of the land which felt at first to be alien to them, it was only natural to them to tend to concentrate in Sydney, and seek their living in an urban rather than a rural environment. Thus Sydney became re-inforced over the decades as the main central place, the budding metropolis of the colony, even though the soil was poor and unrewarding, and the immediate hinterland quite forbidding with what appeared to the new settlers to be an age-old trackless bushland around it.

The other towns established in the County of Cumberland: Parramatta, Liverpool, Windsor, and Richmond, were established as service centres for farming districts, and depots for convict road-gangs. They were ringed about with a wide band of mountainous country, dauntingly trackless to European eyes. Only to the south-west of the County, was land which could be converted to farmland, and only to the south-west was an easy passage to the higher lands of the Great Dividing Range, and the transalpine lands further out to the west.

The difficult route over the mountains to the west of the County, and the fact that Macquarie only allowed a few licensed settlers to cross over with their herds of cattle and sheep, postponed the opening up of that part of New South Wales for some years after the 'grand progress' of the Governor's tour of 1815. The County of Cumberland could be perceived as one coherent place, bounded by the mountains, with the Nepean-Hawkesbury

River ringing its borders. The land beyond was a tantalising problem for his successor.

It has been pointed out how the theory of 'the course of empire' had been endorsed by the philosophers as a legitimate idea for settling a colony. Another theory which was current in the eighteenth century was related to the politics of taste, especially taste in 'landscape' and its organisation. It was this aesthetic point of view that Greenway held, and Macquarie endorsed. It fortified Macquarie's zeal for improvement; in his now much quoted words: 'I found the colony in a state of infant imbecility' and considered that his public works programme had contributed to its rising state of potential prosperity.

John Barrell argues that in the 18th century 'political correctness' was demonstrated by such a facility of correct taste in organising landscape. This was seen as a means of of legitimating political authority.(56) To counteract his detractors, then, Macquarie emphasised his public works programme and his regulations to make the townships in the colony more orderly places. Unfortunately, Lord Liverpool in London took the opposite view. Public works, he suggested, were the offspring, not the cause, of internal prosperity, and regarded that 'mere speculation of improvement' on Macquarie's part did not justify unnecessary expense.

It was Greenway's little picturesque castellated Fort Macquarie next to Billy Blue's house, a fort despised by the military engineers, and his Gothic Toll House at the foot of Brickfield Hill on Parramatta Road, rather an avant-guard building for its time, which were disapproved of by Commissioner Bigge. Elsewhere in his Report Bigge had paid Greenway the compliment of influencing the style of architecture generally in Sydney.

> 'The style of architecture of the houses in Sydney is gradually improving under the direction and taste of Mr Greenway, the colonial architect, and more attention has lately been paid to the solidity of the construction, as well as to the selection of materials.'(57)

But the picturesque embellishment of the Fort on the one hand, and the even more highly decorated gothick Toll House on the other, made the solid efforts of churches, barracks, stores and other utilities in the town seem to be more like marks of the Governor's fancy than solid achievements. The Fort and Toll House could be seen as two architectural 'follies' in an imagined Park, a whim of the Governor and his lady.

The age of Macquarie is marked by the founding of the small satellite towns at the fringe of the County of Cumberland, and consolidation of the English settlement in the vicinity of Sydney. The postions of outlying

settlements, Hobart and Newcastle, were re-inforced. The Governor however did not follow up Oxley's discoveries west of the Blue Mountains with any organised plan of expansion, and his symbolic gesture of planting the flag at Bathurst did not indicate a foundation of a town until another decade had passed.

Macquarie's urban policy was driven by his perception of the role public buildings and public works could play in the transformation of a convict society into a self-sufficient colony. Civic order and urban decorum could be guiding influences in persuading the members of the society to cast off former habits, redeem themselves, and become useful citizens. Some Vitruvian principles of town founding underpinned his social considerations: a healthy site removed from marshland, a fruitful district, protection from ill winds, and the careful siting of important buildings, but these were meshed into a wider concern for the moral nature of the settlement.

CHAPTER FIVE

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2. John Barrell, 'The Public Prospect and the Private View: The Politics of Taste in Eighteenth-Century Britain', in J.C. Eade (ed) Projecting the Landscape, Humanities Research Centre, Canberra, 1987.

3. This idea was fostered by the pastoral poets like John Thompson in the eighteen century. It was re-enforced by the rise of the English Landscape movement and the informed taste of those considered 'politically correct' in that period.

4. John Ritchie, Lachlan Macquarie, Melbourne University Press, Melbourne, 1986, passim; James Broadbent and Joy Hughes, The Age of Macquarie, Melbourne University Press, Melbourne, 1992.

5. Idem, H.Proudfoot, 'Opening Towns, Public Virtue, and the Interior', pp.60-74. Sydney Gazette, 3 January 1813, 20 and 27 September 1817.

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8. Margaret and Alastair Macfarlane, John Watts, Sunbird Publications, 1992. pp.6-7, 49-51.

9. Henry Kitchen, written evidence in John Ritchie, The Evidence to the Bigge Reports, vol.2, Heinemann Melbourne, The Written Evidence, 1971, pp.137-16; Bonwick Transcripts, Mitchell Library, H. Kitchen to Commissioner Bigge, 29 January 1821, B.T. Box 26, pp.5938-83; 6 February 1821, 13 and 22 August 1821, B.T. Box 27, pp.6257-71, 6442-50, 6455-6.

10. Macquarie's manuscript diaries and personal papers are held in the Mitchell Library, State Library of NSW. Population figures are those given in various musters during Macquarie's term, and collated by Ged Martin in his chapter in Statham, The Origins of Australia's Capital Cities, pp.19-21, 26-27.

11. The books by W.C. Wentworth and Barron Field have been scarce editions since they have been published;

Lycett's Views, London, 1824, was reprinted in facsimile in 1971 in Sydney.

12. John Ritchie, Punishment and Profit, Heinemann Melbourne, 1970; The Evidence of the Bigge Reports, vols 1 and 2; J.T. Bigge, Report of the Commissioner of Inquiry into the State of the Colony of New South Wales, Commons paper 532, ordered to be printed 7 July 1823; Report of the Commissioner of Inquiry into the Judicial Establishments of New South Wales and Van Diemen's Land, Commons paper 33, February 1823; Report of the Commissioner of Inquiry on the State of Agriculture and Trade in the Colony of New South Wales, Commons paper 136, July 1823. Of the secondary sources, Macquarie's building programmes along with Greenway's buildings have been studied fairly intensively since William Hardy Wilson and publisher Sydney Ure Smith spearheaded a revival of interest in early colonial architecture after 1920. Their writings and drawings also fuelled the arrival of the neo-Georgian style of architecture which became fashionable between the wars, especially for domestic buildings. M.H. Ellis wrote Francis Greenway in 1953 as part of his larger studies on Macquarie and John Macarthur; but Morton Herman, however, was responsible for the book which became the standard book on the period, The Early Australian Architects and their Work, published in 1954. The buildings he described became the nucleus of an admired and subsequently revered group of buildings which symbolised a dawn of European cultural life in Australia, and which have been used as a basis for the study of architectural history in this country. Mrs Macquarie's contribution to the planning and building programmes, her knowledge of the current 'pattern books', has been re-discovered in recent years.

13. See Dixon, op. cit., Introduction.

14. See poetry of Michael Massey Robinson, and W.C. Wentworth's Cambridge prize poem, Australasia. Robinson's verse was recited at official occasions, and printed in the Sydney Gazette.

15. These early epic poems have yet to be re-evaluated and given their proper place in Australia's early literature. Broadbent and Hughes, op.cit, Elizabeth Webby, in her chapter 'Pipes and Odes', draws attention to them.

16. Bigge, op.cit; Lachlan Macquarie, New South Wales: Copy of Report, and Extract of a Letter of Major General Macquarie, relating to the said colony. House of Commons, 25 June 1828. Appendix to the Report. A List and Schedule of Buildings and Works erected and other useful Improvements made ... at the expense of the Crown, from 1 January 1810 to 30 November 1821.

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18. Sydney Gazette, 20 and 27 September 1820; 14 October 1820.

19. Francis Greenway, letters to the editor, Australian, 20 January, 3 February, 10, 31 March, 14, 25 April, 9 June 1825; Australian Almanack, 1835, pp.217-219.

20. Sydney Gazette, 11 August 1810.

21. Ibid, 6 October 1810.

22. Ibid, 11 February, 20 October, 1810.

23. Ibid.

24. See town maps, Fig.5.1, 5.2 and 5.3.

25. See maps above, with special reference to the Hyde Park vicinity.

26. Greenway to Macquarie, reported in Greenway's letter to the Australian, 20 January 1825.

27. Ibid.

28. R.S.Neale, The Wealth of Nations: The Expenses of the Sovereign, or, Private Vices, Publick Benefits?, University of New England, 1976. Inaugural lecture delivered at Armidale, p.16. Neale discusses the 18th century philosophers and the role of property in the nature of English Society and its government, and takes John Wood as an example of an enterprising individual who changed the face of urban Bath by his building schemes.

29. Australian, letters cited above: The Australian Almanack and General Directory, compiled by E.W. Shaughnessy, printed at the Gazette Office by Anne Howe, published by John Innes, Sydney, 1835, pp.217-235.

30. Greenway to Macquarie, reported in his letter to the Australian, 20 January 1825.

31. Greenway was here displaying his knowledge of contemporary architectural theory, and adding something of his own.

32. Ibid.

33. Greenway complained about these colonial architects in his submission to Commissioner Bigge, see Ritchie, vol.2, pp.124-128; see also M.H. Ellis, Francis Greenway, Angus and Robinson, Sydney, 1953, passim, for Greenway's paranoia about 'pickers and stealers' of his designs.

34. John Wood, An Essay towards a description of Bath, Bath, 1765, reprinted Bath, 1969; R.S.Neale, 'Bath: Ideology and Utopia, 1700-1760', in R.F. Brissenden and J.C. Eade Studies in the Eighteenth Century, vol.III,

Canberra, 1976, pp.37-54.

35. Lachlan Macquarie, Journal of his Tours, Public Library of NSW, Sydney, 1956. Macquarie's first tour of inspection of the colony, pp.1-41.

36. Ibid, pp.22-24, 28.

37. See Chapter One for Phillip's Instructions about the founding and formation of towns in the colony. Macquarie, Tours, pp.31-32. It is interesting to compare the distribution of settlers' lots at Savannah, Georgia, in 1733, where 50 acres of land around the town were complimented by 60 x 90 ft town lots, and a 'garden lot' of 5 acres. The main town was linked with four smaller villages, and space was provided for the settlers to bring in their families and animals for refuge in case of attack. See Mary L. Morrison, Historic Savannah, Savannah, 1979, p.ix.

38. These dimensions were set out in the above Instructions.

39. Historical Records of NSW, vol.7, p.138.

40. J.T. Bigge, Report on the State of Agriculture and Trade in New South Wales, p.40.

41. Ibid, pp.40-45.

42. Evidence of William Cox to Commissioner Bigge, Bigge Apendix, Bonwick Transcripts, Box 1, pp.1935-2025. Mitchell Library, State Library of NSW.

43. Macquarie, Journals of his Tours, pp.87-88; 216-222.

44. Joseph Lycett, (attrib), Inner View of Newcastle, c.1818, oil on canvas, Newcastle City Art Gallery. This view (Fig.5.17) is from a similar viewpoint as that taken by I.R. Brown and engraved by W. Preston, 1812, (Fig.5.15), with several conspicuous buildings added.

45. Historic Records of Australia, III, i, p.4; Lloyd Robson, 'Settling Van Diemen's Land', in Statham, Origins, pp.85-87.

46. Robson, Ibid, p.88.

47. Ibid, p.91.

48. Macquarie, Journals of his Tours, pp.31-3; R.J. Solomon, Urbanisation: The Evolution of an Australian Capital, Angus and Robertson, Sydney, 1976, pp.29-33.

49. Macquarie, Tours, pp,70-71.

50. Macquarie, Tours, pp.55-56, 61-62.

51. Sydney Gazette, 22 April 1815, 10 June 1815.

52. T.M. Perry, Australia's First Frontier, Melbourne University Press, 1963, pp.90-94; H. Proudfoot, 'Opening Towns, Public Virtue and the Interior', in The Age of Macquarie, Melbourne University Press, 1992, pp.68-74.

53. See Proudfoot, Ibid, p.73-74.

54. T.M. Perry, Australia's First Frontier, Melbourne University Press, 1963, pp.36. References in Carol Liston, Campbelltown : the Bicentennial History, Campbelltown, 1988. AONSW 4/1744; Macquarie's Journal, quoted in M.H. Ellis, 'The Foundation of Campbelltown, in Campbelltown and Airds Historical Society Journal and Proceedings, 1, 1948.

55. Liston, Campbelltown, City of Campbelltown, 1988, p.31.

56. Barrell,'The Public Prospect and the Private View: The politics of taste in eighteenth-century Britain', p.15, in J.C. Eade, Projecting the Landscape, Canberra, 1987, p.15.

57. J.T.Bigge, Report on the State of Agriculture and Trade, London, 1823, pp.102-103.

CHAPTER FIVE

Titles only; for Maps and full captions see Volume II.

Fig.5.1 Esquisse de la Ville de Sydney, 1825. Louis De Freycinet, Voyage autour du Monde, Paris, 1825.

Fig.5.2 Sketch of the Town of Sydney, c.1821. Mitchell Library, State Library of NSW.

Fig.5.3 Plan of the Town and Suburbs of Sydney, 1822. Lithograph. Detail. Author and place of publication unknown.

Fig.5.4 Plan of the Township of Liverpool, 1819. Archives Office of NSW, Map No.SZ293.

Fig.5.5 Plan of the Town of Liverpool, 1827. R. Hoddle, May 1827. Archives Office of NSW, Map No.3349.

Fig.5.6 Detail of an early Map of Windsor, 1810. Archives Office of NSW, Map No.SZ529.

Fig.5.7 Part of a Map of Windsor, 1827. Attributed to H.F. White. State Archives of NSW, Map No.SZ514.

Fig.5.8 Detail of a manuscript Map of Windsor, 1835. Lands Department of NSW.

Fig.5.9 An Outline Map of the Settlements in New South Wales, 1817. Jas Wyld, London, Archives Office of NSW, Map No.1123.

Fig.5.10 Plan of the Township of Richmond, n.d., c.1820. Archives Office of NSW, Map No.4984.

Fig.5.11 Map of Richmond, 1827. From G.B. White's survey. Archives Office of NSW, Map No.4985.

Fig.5.12 Plan of Pitt Town, 1815. Archives Office of NSW, Map No.4796.

Fig.5.13 Plan of Wilberforce Township, 1820. From the Bigge Appendix, Bonwick Transcripts, Box 3, Mitchell Library, State Library of NSW,

Fig.5.14 Map of Castlereagh, n.d. Archives Office of NSW, Map No.1655.

Fig.5.15 Newcastle in New South Wales, 1812. Drawn by I.R. Brown, engraved by W. Preston, published Novr. 30th 1812, by A. West, Sydney.

Fig.5.16 Plan of the Town of Newcastle, Port Hunter, 1823. William Dangar. Archives Office of NSW, Map No.SZ319.

Fig.5.17 Joseph Lycett, Inner View of Newcastle, oil, c.1818. Newcastle City Art Gallery.

Fig.5.18 Sketch Plan of Hobart Town in 1804. P. Statham, Origins of Australia's Capital Cities, Sydney, 1989.

Fig.5.19 Contemporary copy of Mr Meehan's Plan of Hobart Town, 30th November 1811. Department of Environment and Planning, Hobart.

Fig.5.20 Plan of George Town on the Tamar River, Van Diemen's Land, 1813. Plan G/8 Land and Surveys Department Hobart.

Fig.5.21 The Founding of Bathurst, attributed to John Lewin, 1815. Watercolour, Mitchell Library, State Library of NSW.

CHAPTER SIX

THE TRADITION OF URBAN OPEN SPACE AND THE CONCEPT OF THE 'COMMONALITY' OF PROPERTY

> 'Thus in the beginning all the world was America, more so than is now; for no such thing as Money was any where known...'
> 'It is easy to conceive without difficulty, how Labour could at first begin a title of Property in the common things of Nature, and how the spending it upon our uses bounded it.'
>
> John Locke (1689)

> 'A park is the most enduring of all monuments, and a perpetual source of good...Let us treat the open spaces as of the greatest value, and be very jealous of proposals for their diminution.'
>
> J.H. Maiden (1909)

John Locke, in his Two Treatises of Government, discusses the notion of private property at some length. At the end of his chapter 'On Property', he canvasses the principle of the 'commonality' of property in land as a balance between the possession of too little or too much land, as well as its aspect as a personal possession, on which personal effort and labour has been expended. He declares optimistically: 'Right and conveniency went together; for as a Man had a Right to all he employ his Labour upon, so he had no temptation to labour for more than he could make use of.'(1)

Locke is not widely quoted these days. As an advocate of the rights of private property, he considered that one of the main duties of the state was to protect these rights. But Locke also argued for the 'commonality' of property in land in some instances, and considered that the role of the state was also to balance the needs of those who held no interest in land, against the rights of those who owned property and expended personal effort and labour upon it. He argued that both groups must have some way of sharing in the common patrimony of the whole community. His view helped to shape the attitudes of the English colonisers in the eighteenth century.

The formation of towns in Australia in the colonial period provides us with some insights into how these theories were tested, and how they influenced the form of the towns and cities here. A strong tradition of reserving significant urban open space lands was set in place before the 1840s. It evolved from both theoretical and pragmatic beginnings.

The act of claiming New South Wales as a part of the British Empire under the British Crown, disregarding all previous uses by indigeous peoples, was, like it or not,

the starting point for settlement for the Australian pioneers. All land, until it was alienated by grant or sale, was held to be Crown Land. Sovereignty was accepted as a fact of life. The settlers accepted without question the concept that the Crown, as the embodiment of the collective 'people' themselves, was the guardian of the land. The Crown, in the persons of governor and administrators, surveyors and public servants, decided what restraints were to be imposed on the occupation of the land in the colonial situation. That the Crown dealt with this matter in a way that evolved as the colony grew and developed, is only to be expected. Local problems called for local solutions; but behind these solutions, as argued by Thomas Hobbes, stood the structure of the English legal system and the emblematic figure of the King.

In urban affairs in Australia, this dictum, once the town lands were put up for sale after 1831, was overlaid with more pressing considerations. The State itself had then to be in competition with market forces. These determined the price of urban land with respect to its location, its convenience, and a whole host of local considerations connnected not so much with its present use, but with future expectations. Its capacity for a 'higher and better use' in the urban hierarchy coloured the perceptions of its use at the time of sale. Evidence of this process of accretion of value is found very simply in the increase in the price of urban land over the decades after the initial sale, particularly in land located near the centre of the town or city.

The way the State dealt with this dilemma, was two-fold. The 'township reserve' was marked out to contain the town and provide some flexibility allied with the formal grid plan. The State also reserved special parcels of land in, or nearby, the newly marked out towns for special purposes. These purposes were determined partly by the assumptions and beliefs which had evolved from a rich European land use tradition, and partly from the facts of life in Australia. It was recognised that restraints had to be imposed on the process of property acquisition and physical resource use. The social and economic cohesion of the newly-formed and still dynamically evolving society depended on a firm and accepted base of landscape delimitation and environmental regulation, as much as it did on the opportunities for land ownership and transfer. The two activities were complementary in the colonial situation.

The Concept of Public Interest

The administrators on the spot responded to local pressures, and framed locally-specific regulations, but they also responded to general directives from London. Underlying the regulations was a concept of 'public interest', and that tended to evolve as the various settlements were founded from 1788 to 1837.

Louis Hartz, in his book, The Founding of New Societies, (1964), argues that the new colony is but a fragment of the old country of origin, reflecting some of its traditions and ideas, but not all. Moreover, the colony's own guiding principles are established at the time of its inception, so a colony founded in 1788, with its leaders steeped in the principles of the 'Enlightenment', with its faith in science and reason, and its belief in justice and toleration, has different ideals from one founded after the period when liberal reforms were introduced in England, after the Reform Act of 1832.(2) These liberal reforms to the electoral system brought a change of emphasis during the years 1832 to 1846, with the rising class of the bourgeoisie endorsing utilitarian virtues: the virtues of thrift, self-help, industry and hard work, morality, generosity, the ethic of improvement and the egalitarian ideal. So, according to this theory, New South Wales and Tasmania, founded from 1788 to 1803, have a different temper to those states founded in the thirties, South Australia and Victoria in particular. It is an attractive theory, and it is introduced here as a way of pointing out two distinct interpretations of the concept of 'public interest'.

The earlier colonies were settled under a single 'unitary' definition of public interest priorities, based on a perception of society as a community, or organic whole. It was a realistic, practical means of ordering priorities to achieve specific social and economic ends.(3) Thus we have the emphasis on loyalty to the Crown, re-iterated time and time again by Governor Phillip, as a means of drawing the people of the little colony together, whether they were prisoners or soldiers. Special attention was paid to the birthdays of the King and the Queen, special concern was displayed for the members of the Royal Family. The King, according to Thomas Hobbes, was the focus and embodiment of the body of the public. Even under Governor Macquarie, royal birthdays were celebrated by birthday Odes and Military Parades.(4)

By the 1830s however, the definition of 'public interest' was much more complex. Society was seen not as an organic whole but as a collection of discrete individuals bound by social contracts. Even though majoritarian theories were espoused by thinkers like David Hume and Jeremy Bentham, Crown officials in Australia tended to seek resolutions of conflicting interests by debate and compromise on the one hand, or by what might be called 'procedural' means on the other, for example, by the due process of law, and the issuing of administrative guidelines.(5) A body of precedent was built up, gradually endorsed by the Legislative Council, the legal system, and the public administrators. The Town Planning Regulations as they evolved from the 1830s were obvious examples of this process.

English and European Ancestry

Within the English and European land-use traditions, it was an established fact that those who held no property in land (provided they were of European stock) were entitled nonetheless to share in a complex mesh of customary rights and obligations related to the physical resources of the country. This was seen as a principle of 'basic needs', embodied in an understanding of 'public interest'. These political abstractions had to be converted into landscape reality. Even if the settlement dynamic in the early colonial situation was propelled partly by the desire for economic gain, the administration had to reserve certain prime sites for its own (and by definition 'public') use, withholding them from sale and occupation.(6)

A useful device was the formation of Trusts, whereby no ownership was implied by the body holding land in this way. The trustees could not dispose of the land or change its use without consultation with the government. This device could be be used to protect waterways, to protect special places, to distinguish certain types of land use.

Another device was that of the Crown Land Reserve. This was derived from more ancient practices, descended down through the Norman parks and hunting grounds in England, and adapted to more contemporary uses such as Botanical Gardens, forest reserves, and even native reserves.(7)

There was also the need to provide a common mesh of pathways, roads, access to rivers and waterways. Another category then appeared in the 1830s: the parkland designed to surround and contain the key urban functions of the town. At the end of the nineteenth century this parkland was seen as an important component of the 'Garden City'; in the European capital cities, it became part of the 'City Beautiful' movement, and the defensive walls of the old cities were transformed into a ring of parks marking an area of transition between the older city and its newer suburbs. In Australia, this pattern had its roots in the urban planning of the thirties and forties, and can be seen particularly in the plans of Adelaide and Melbourne.

Sometimes coinciding with one or more of these categories, was the provision of land for Public Recreation, a principle which came to be accepted more fully as the towns became more populous. There was not, at this stage, an acknowledged need to 'protect' landscapes for their scenic value. The appreciation of scenery was still considered a private attribute rather than a public pleasure.(8)

Most of these categories of land-use were forshadowed in the governors' instructions, and they became more defined as the population of the settlements grew, and they began to attract more British immigration.

The Reserve Lands of the Crown in their Urban Context

It is useful to look back again at the Additional Instructions sent to Governor Phillip on 20 August 1789. Included in his Instructions for the laying out of Towns, were orders that he should reserve land for special public purposes:

> '...You are also to reserve to Us proper quantities of land in each township, for the following purposes, viz., for erecting fortifications and barracks, or for other military and naval services, and more particularly for the building of a town-hall, and such other public edifices as you may deem necessary, and also for the growth and production of naval timber, if there be any woodlands fit for that purpose.'(9)

Land in each town was also reserved for a church and a school. So, here we have the principles of reservation enunciated in general terms for towns: Barracks and Fortications, a Town-hall and other public edifices, a Church, and a School. We also have a directive about the reservation of land for the growth and production of timber. This Instruction was repeated for every Governor up to the time of Macquarie.

After the Bigge Report was brought down in 1822, the Instructions were rewritten to include and identify a wider range of public uses. They were couched in general terms to coincide with the re-organisation of the county system of measurement applied to the extension of the colony. Governor Brisbane was advised by Lord Bathurst:

> '...first, in order of importance, is the reservation, which must be made throughout every county, of Lands to be used for Public Roads and internal communications; of lands to be set apart as the scites (sic) of Towns and Villages; of Lands to be appropriated for the erection of Churches, school-houses, Parsonage Houses and burying grounds; of lands which may be proper to reserve in the neighbourhood of populous places as vacant grounds, either for the future extension of Towns or Villages, or for the purposes of health and recreation; and of lands in the neighbourhood of navigable streams or the sea Coast, which may be convenient at some time to appropriate as Quays and Landing Places...'

More generally, Bathurst stressed that:

> 'Every object of public convenience, health or gratification, for the furtherance of which specific appropriations of Lands will probably be necessary, should, as far as possible, be anticipated and provided for before the waste lands of the Colony

> are finally appropriated to the use of private persons.' (10)

The problem was to identify, on the one hand, the future uses before the town attracted a large population without prejudicing, on the other, the impulse for growth.

When ~~Sir~~ Ralph Darling replaced Brisbane as Governor in July 1825, he was also instructed to allow for the same sort of land uses, with reservations for 'any other purpose of public convenience, utility, health, or enjoyment'. These lands were not to be occupied by any private person, or for any private purposes.(11) In Hobart in 1826, the Survey Commissioners recommended further reservations for public purposes and for the future expansion of the town. This problem was starting to restrict the growth of early settled towns like Hobart and Parramatta, where early grants literally hemmed the towns in.(12)

It has been mentioned that after 1829, the town plans themselves were constructed within surveyed 'Township Reserves'; that is, within a defined larger space, which afforded some potential land for future subdivision or reservation for specific purposes. These 'Reserves' can be clearly seen in some of the town maps included in Chapter 7: in the 1837 plan of Yass (Fig.7.16); in the 1839 plan of the village of Mururunda (Fig.7.18); in the 1849 plan of the village of Dubbo (Fig,7.19); and not least in Hoddle's plan of Melbourne (Fig.8.18). The Town Reserves, in fact corresponded with the older term 'Township', but in common usage, the two notions came to be used interchangeably.

The proportion of 'Reserved Land' within the original town blocks as compared with the land offered for grant or for sale, was crucial. It was set aside to complement the private land alienated. The evidence used here is partly linked to the town plans themselves and partly to the instructions sent from London in general terms and then translated by the surveyors on the ground.

The simple town plans, drawn up after the 1829 Darling Regulations were codified and accepted, were modelled on a basic grid form. There were, however, within the grid itself, sites marked out for public purposes: for a police station, a goal, a court house; for a town square, in hopes that a market would be attracted; sites for churches and cemeteries; a site for a school. Land was set aside for the 'glebe' of the minister of the church, for the support of a school-master. Sometimes a site for a hospital was added. In the town maps in Chapter Five, for example, even in Macquarie's time, in Windsor, Richmond, Liverpool, these uses were delineated; later in Chapter Seven, in plans for Goulburn, Bathurst, Bungonia, etc, these sites can be identified. Land was also put aside for the extension of the town, when it was expected to grow as a district centre.

When Sir George Murray, Secretary of State for the Colonies issued directives to Captain James Stirling for the settlement of the Swan River in 1828, he stressed that:

> 'in order to guard against the evils to be apprehended from an improvident disposal of the land in the immediate vicinity of the Town, you will take care that a square of three Miles (or 1,920 acres) is reserved for its future extension; and that the land within this space will not be granted away (as in ordinary cases) but shall be held in leases from the Crown for a term not exceeding 21 years.'(13)

Murray also said that Stirling should reserve 'all those peculiar positions within or in the vicinity of the projected Town, which from natural advantages or otherwise will probably be essential to the future welfare of the Settlement.' He enclosed a copy of Instructions sent by Governor Darling back to London for Stirling's guidance.

In 1831, when the Ripon Regulations were brought in, replacing the old system of Land Grants with the introduction of land sales by auction, the list of reserved lands for public purposes grew longer.

> 'The Crown reserved to itself all Lands within one hundred feet of high water mark on the Sea Coast, Creeks, Harbours, and Inlets, all Mines of Gold, Silver, and Coals, the right of constructing Roads and Bridges which may be necessary for public purposes, and the right of taking and removing such Stone, indigenous Timber, and other Materials, the produce of the Land, as may be required at any time for the Construction and Repair of Bridges, for Naval purposes and for other Public Works.'(14)

These above regulations did not apply directly to urban land, but affected the towns in a general way.

The instructions in general complemented the Darling Town Planning Regulations of 1829. They enunciated an important principle to be applied in the drafting of town plans, allowing for land to be set aside for specific public use as well as for private use. In more general terms, they endorsed the principle of the reservation of recreational land, land for health and enjoyment, and land for urban utilities, and tried to guarantee that these lands would not be privately alienated.

Amongst descendants of English and European land-use traditions, there are some special categories of Reserved Land which deserve attention for their distinctive roles in the shaping of towns in Australia. These are the English Common; the village square or town market place; and the Royal Park, Government Domain and Botanic Garden.

1. The Town Common

The early formation of town commons under Governor King is of special interest. These were planned to be complementary to the small grants to the emancipists and small undercapitalised settlers.

The central place of these special reservations in the plan of Norfolk Island is apparent from the island maps.(15) Lieutenant King reserved 'Arthur's Vale' and two smaller parcels of arable land for 'public need'. There King had the first ploughed agricultural land designated as land for production of public crops, that is, as land for growing food for the whole community. King was to apply the same principle when he became Governor in New South Wales after 1800. He directed that Commons be marked out at the settlements on the Hawkesbury. Both Norfolk Island and the Hawkesbury settlements had been settled by time-expired convicts, with a sprinkling of free settlers and retired soldiers who had elected to remain in the colony. As the convicts were encouraged to grow crops for themselves and their families, however, the relationship between the 'Common land' and the private land changed.

The stock brought to the colony began at last to prosper and multiply, and some provision had to be made for their control. At Sydney, after the early years of near-starvation, wandering animals became a hazard and a nuisance, polluting the surface water, damaging property, invading the gardens. King wanted to encourage both agriculture and animal husbandry, so he took advantage of William Cox's bankrupcy to distribute his stock amongst the smaller settlers at Mulgrave Place. On 11 August 1804 he established three major areas as Commons around the already marked out farms granted along the river and South Creek. He announced his intention in a Government and General Order:

> 'In order to secure to (the small settlers) pastorage...(I) allot, by grant under His Majesty certain grazing lands...such lands to be held and used by the inhabitants of the respective districts as common lands are held and used in that part of Great Britain called England.(16)

Thus, at a time when the Commons were under widespread attack from the Enclosure Acts in England, King was establishing them in New South Wales. There were three Commons marked out at the Hawkesbury, each of approximately 2,000 ha (or 5,000 acres). (See Fig.6.1) Closer in, the Field of Mars Common was also marked out to serve as grazing land for a community of soldiers turned settlers which had been granted small farms near the Lane Cove River. These lands were given as leases made out in the name of three people, 'who were named by the rest, and approved by the Governor.' No time was stipulated for the larger commons, but leases for 14

years were stated for smaller parcels of land near Prospect Hill and Baulkham Hills.(17) (Fig.6.2)

The Commons were close to the farms, elevated from flood waters, but it seems they were not very successful as a public resource. Some settlers used them, some abused them, some depastured their stock there but did not control their animals, some poached other peoples' stock. The commons were invested in Trustees, but this system started to break down in the next generation. At the Hawkesbury, rural uses were displaced by other 'public' uses: lands of the Windsor Common were used as a racecourse, as the site of the Hawkesbury Agricultural College, and later for the establishment of an Air Force School of Aviation; the Pitt Town Common lands by the 1890s became a small farms scheme, and then, when that failed, were used for a 'model' farm experiment.(18)

At Sydney, the marking out of a Common was a gesture by Governor Macquarie which was part of a plan to establish the Governor's own Domain more securely. In return, he designated a public park, Hyde Park, on the land already regarded as a 'de facto' common, and assigned 400 ha (1,000 acres) for an alternative Common south of the newly marked out road to South Head, part of which is now called Centennial Park. It was made in the form of a grant to the Judge-Advocate and magistrates of Sydney, as Trustees 'for the benefit of all the present and succeeding inhabitants of Sydney.'(19) It too, was shorn of its peripheral lands when the Army Barracks was moved from George Street, a Show Ground was established, and a Sports Oval built, all public uses of a different sort.

The idea of a Common persisted, however, in country districts, often used by travelling stock, sometimes as land along river banks; sometimes used by a group called 'The Commoners' who grazed a horse or a cow near the town.

2. The Town Square

In Australian town plans during the early 19th century provision was often made for a town square in a central location, as part of the grid. This square was a little different from both the village square in English villages, and from the market squares of traditional English towns. In the early plans before 1820, a square was allowed for: in Liverpool, Windsor and Richmond, but its purpose was conjectural rather than designated. Later, after 1829, some purpose were indicated, like the church in the square in the Bathurst plan, or a market at Appin. The market square was usually only half or a quarter of a section. Even in the Melbourne plan, where growth was expected to be rapid, only a small portion was marked out initially for a market place.

This may be due to the conditions in the Australian context. Hoddle, who planned Melbourne, was the most experienced

surveyor in the colony, and it is hard to imagine that he would disregard such an important urban function. The answer may lie in the sort of economy which was starting to form in the cities and larger towns. This system was based on a few staple products: whale products, sheep and wool, cattle, and timber, produced mainly for export. The local economy of the towns, while depending on these, did not trade them in a central place in the town. Local foodstuffs, grain, cheese, wine, fruit and vegetables also tended to be sent to the main city in the state in order to command a competitive price. The local market did not develop as it did in English town centres. So it is hard to find contemporary mention of market places, apart from those set aside in the capital cities.

There, market places tended to specialise, sale yards were built for cattle and sheep, grain was brought to the flour mills and produce merchants, whales were processed near the wharfs, timber was also handled at the wharfs, or cut and sawn near the places where they were felled. In the first fifty years of settlement, the structure of the economy was so primitive that markets could not develop in the little towns, transport was uncertain for the buyer of the goods as well for the seller. Goods had to be entrusted to an agent. The market was a commercial one centred on the city. Market stalls for local produce in country towns were rarely seen.

In theory, the control of town markets was vested in the governor, and revenue from market dues was paid into the police fund to cover expenses. After 1825, an elected town commission could be set up to administer the local market. A market had been set up in Sydney from 1807, and at Parramatta from 1812. In 1841 an elected commission operated the market at Parramatta. In Melbourne also, a Market Commission was constituted in 1841. F.A. Larcome considers that the forming of the markets commission was an 'important milestone in the development of local government in New South Wales.'(20)

It is instructive however to look at the fate of the markets proposed for the provincial towns of Bathurst and Goulburn. In each case a market square was set aside in the town plan. At Bathurst a meeting was convened at Black's Inn in the town by the police magistrate in September 1847 in compliance with a requisition signed by 65 local householders. Five market commissioners were elected, but there was opposition from the local store-keepers and the markets were only partly successful. At Goulburn (Fig.7.10), when the town was incorporated in 1859, the markets ceased to function, the site was re-named Belmore Square, and by 1899 was dedicated as a botanic garden.(21)

So, squares marked out in the original plan tended to survive in an altered state, for example, Richmond's market square (Fig.5.11) had room for a post office and a School of Arts later in the century, and a sporting oval

and grandstand took up the major part. East Maitland's market square (Fig.7.7) survived as a town park, the cattle market was held at the edge of the town. Village plans, for instance, those of Dubbo and Murrurundi, usually had no site marked for a market, and rarely had one for a court house.

In Australia, the difference between a proposed village and a town, is found in the presence or absence of court house. It was essential for the establishment of a town with functions symbolised by the presence of the law. The market place, on the other hand, though sometimes designated on the town plan, tended not to materialise in the form it had taken in English towns. There it was much more central to the town life. It tended to take the shape of a central square or a long street which bulged out to accommodate stalls and mainly pedestrian traffic for one day of the week or fortnight.(22)

3. The Governor's Domain and the Botanic Garden

Descended from the Royal Parks established in England by the Norman Kings, the Governor's Domain Lands and the Botanic Gardens appeared in the earlier colonial settlements in Australia. Domain and Botanic Gardens could be linked together, adjacent to each other, as in Sydney, Hobart and Melbourne, or could develop separately, as in Adelaide and Perth.

The first Governor's Domain land (sometimes spelt 'Demesne Land' as in C. Cartwright's Map) was situated beside the Government House in Sydney. It took up a prime site on the eastern side of Sydney Cove. It was used for the planting of the first crops, which failed, and as land for the horses of the Governor's stable, and for a vegetable garden. Governor Bligh re-arranged it to conform more closely to a landscaped park, with a 'Pleasure Ground' in front of the House, and Mrs Macquarie planned a carriage road around it to the point now known as Mrs Macquarie's Chair.(Fig.6.3)

Another Government Domain was established at Parramatta, defining the western edge of the town, where the first crops of wheat were successfully grown. It was simply called 'the Government Farm' in the early maps, but Macquarie issued an Order on 22 September 1810 defining it as a 'Government Demesne' and restricting public entry.

> 'Whereas much Injury has been done...by Persons most unwarrantably entering into the same and cutting down and removing Timber thereout,...any Person detected cutting down or destroying Timber therein, by stripping off the Bark or breaking down Branches, will be prosecuted as punished as Felons:'(23)

He warned against trespassing, and built a fence to reinforce his Order.

Thus, a major land-use component in the developing urban pattern in Australia has been the Botanic Garden. This tradition was started in the first Government Domain at Sydney, and gradually took up most of the site. It was established, in fact, but not specifically named, almost from the beginning of settlement. This specific interest was aroused by Joseph Banks when he accompanied James Cook on his first voyage of discovery, and 'Botany Bay' became the general name denoting the settlement itself. The wide variety of non-descript plants was a delight to the botanists in England and Europe, and a flurry of collecting commenced with the plants being sent back to England by the Governor himself, the officers, and special collectors.(24)

At the same time, many seeds and plants from Europe arrived, to be tried in the colony. The first crops of grain sown initially were close by the port; their failure spurred the need to find more suitable land away from the immediate coastline, at Parramatta, Tongabbie, and then at the Hawkesbury. Vegetables, spices, fruit trees, all kinds of plants were tried both officially and privately. Knowledge about the unfamiliar plants of Botany Bay was almost non-existent at this stage. Special gardens were used for acclimatising the incoming plants and seeds, and for assembling plants to send back.

Joseph Banks, with his recognised interest in collecting, his position as adviser to the King on horticultural matters, and later as President of the Royal Society and Director of Kew Gardens, was a key figure in this trading of plants. He was also an apologist for the colony itself; his recommendations were heeded by the Colonial Office in London, and he was influential in the appointment of early Governors in New South Wales.(25) There were depots both at Sydney and Parramatta where the plants were assembled. These formed part of the inquiry into the indigenous plant material, and contributed to the general store of botanical knowledge overseas. The study of botany was both a scientific and a popular pursuit. Kew Gardens became the mecca of the plant collectors, and also a popular resort for the citizens of London when they took their families out for the day.(26)

By 1806 the Sydney people came to regard The Domain as part of their town, and a tug-o-war between Governor and populace began. The people wanted to be able to gather wood there, cart the soil away, graze their animals, strip the place of its trees. Governor Bligh, however, decided that there was an argument for forbidding public access, the trees should stay and become part of a special Domain under his control. Moreover, he had plans to use it for the embellishment of his domestic or private space. He ordered the rocks which he considered unsightly to be blasted and taken away, he ordered a long

trench dug to mark the extent of the Domain land, and he forbade the townspeople entry.(27)

Bligh corresponded with Sir Joseph Banks and was a keen observer of the progress, or lack of progress, of agriculture in the colony. He was careful to send specimens of plants, shells, birds and animals to Banks in England. He championed the Hawkesbury farmers in their struggle with the manipulated market for grain. But he chose to re-arrange the ad hoc property boundaries in the town of Sydney, and alienated the townsfolk there. His closure of the Domain Land was resented in the town.(28)

It was Macquarie, however, who formalised the Governor's claim to the Domain land. On the 17 October 1812 he published a 'Public Notice' in the Sydney Gazette, advising that the whole of the Government Domain, from Sydney Cove to Woolloomooloo Bay, and defined by a stone wall and palings, was to be out-of-bounds to settler's cattle, sheep and other animals; and the removal of stones, soil, wood, or shrubs was banned. He revoked the out-of-date lease to John Palmer where a windmill and bake-house was in operation on the crest of the hill. The extent of the 'Governor's Demense' is shown on the Map prepared by C. Cartwright in 1816. (Fig.6.3)

He reserved instead for the townspeople's use the land hither-to and alternately called 'the Common', the 'Exercising Ground', the 'Cricket Ground' or 'Race Course'. This land, then at the edge of the town, and adjoining the Domain, he named 'Hyde Park'. Its extent was defined, from Liverpool Street to Macquarie Street, and from Elizabeth Street to a vegetable garden tilled by convicts to the east.(29) This small tract, elevated but cleared of fire-wood for some years, was at this time about 23 ha (57 acres) in size. To secure the park land, he had issued another directive that closed the park to wheeled vehicles, and had banned animals. Its namesake, Hyde Park in London had been a royal hunting preserve, with various other uses up to this time, when it became a major public open space with a tradition of popular use and public events, including hangings.(30) It is of interest to see on the map by Lesueur printed in 1802, that there was a gallows positioned at the southern end at Hyde Park in Sydney. This is a use revealed only on the map, and its position was not remarked upon in other documentary sources.(See Fig.4.6)

Once marked out, Francis Greenway incorporated Hyde Park into his extended plan of Sydney as a proposed 'grand quadrangle' where all the public buildings were to be raised in the 'classical style'. They were to be elegant as well as practical buildings which embraced the principle of 'public virtue', associated with the park. The park itself became a symbol of the benevolent intentions of government, and assumed a moral value.(31) The proposed buildings, however, were not realised, but

the Park was incorporated into Sydney life with some gusto. In 1830, an anonymous poem celebrated it:

> 'How little we thought,
> Fifty years could have wrought,
> Such a place as that darling Hyde Park.'

It became a favourite ground for cricket matches, horse races, and informal games.

For the Botanic Gardens, the date of 13 June 1816, has been adopted as the official day of its foundation, that day being celebrated by the Governor to mark the completion of the road designed by Mrs Macquarie to the point now called 'Mrs Macquarie's Chair'. This road is drawn clearly by Cartwright on his map of 1816. The Governor then appointed Charles Fraser, a soldier who was at once botanist and gardener, to be Colonial Botanist, and sent him with Oxley's exploring party inland in May of the same year to gather plant material.(32)

Allan Cunningham, trained at Kew Gardens, arrived in December 1816, under instructions from Sir Joseph Banks himself. He was to collect plants for Kew. Macquarie was also anxious to send Bathurst samples of over 500 plants 'totally different from those hitherto collected or known in this Country', dried specimens and seeds, and drawings 'by the Masterly Hand of Mr Lewin.' So began the long tradition of scholarly collecting and distribution of plant material centred on Sydney. In turn, each State Capital emulated the Sydney Gardens, and were supplied with plants to start and extend their own collections by Sydney.(33)

The Government Domain at Parramatta was of a slightly different character. It was much larger than Sydney's, and was used as farmland for growing wheat and other crops. It was similar to Arthur's Vale in Norfolk Island in intention; and indeed it was where the first grain crops were firmly established during the colony's first five years, using convict labour. Macquarie transformed its buildings to make a second Government House inland from Sydney, and discouraged the inhabitants from entering the grounds. Later governors used it until 1857, when it was made much smaller, and vested in the Parramatta Council as a local park.(Figs.6.2 and 6.4)

Botanic Gardens in Other States

The Brisbane Gardens had a token beginning when Governor Darling sent Charles Fraser to establish a Public Garden there, with Allan Cunningham to scout around for interesting local flora. On 1 July 1828, an area of 42 acres on the bend of the north bank of the Brisbane River was set aside, but it seems that the garden was used for utility reasons rather than for botanical research, as James Backhouse, visiting in 1836, described it as '22 acres of Government garden for the growth of sweet

potatoes, pumpkins, cabbages and other vegetables for the prisoners.' It languished quietly until 1855 when plantsman Walter Hill became Director and pursued an energetic planting programme of plant material collected from the rich Queensland tropical forests.(34)(See Figs.8.1(a) and (b) for location.)

For Perth, Sterling Square was marked out in 1829 adjoining the Government Domain, and set aside for a Botanic Garden, and James Drummond appointed government naturalist, without pay. He collected amongst the rich natural plant material of the west of the continent for sale in England, establishing contact with Captain Mangles and Dr Lindley, but the town square became a small park instead of a botanic garden. Later, King's Park on the eastern side of the river, was retained for the display of native flora.(35)

Melbourne Botanic Garden assumed an important place in the town life. Governor Gipps, reputed elsewhere to be wary of too many 'open spaces' as he considered them to encourage 'public disorder', nevertheless approved of the establishment of a public domain in Melbourne for 'the purpose of rearing and cultivating indigenous and exotic plants'. The first proposal of 1841, however, to use 50 acres on Batman's Hill adjoining the river came to nothing. But in 1845 Superintendent La Trobe chose a site of undulating land on the south side of the Yarra River about one kilometre east of the town, and Gipps again approved. This time a Curator, John Arthur, was appointed in 1846, and a modest 5 acres was developed. In 1852 Dr Ferdinand von Mueller was appointed Government Botanist of Victoria, and was made Director of the Gardens as well. Mueller arrived with an international reputation and a rage for collecting and classifying plants, and he set a 'cracking pace' for his contemporaries in Australia.(36)(Fig.6.5)

The townspeople in Melbourne, however, expected more. They wanted a 'pleasure-ground' rather than a Botanical Institution, and by 1871 a Board of Inquiry brought down a report favouring the definition of the Gardens firstly as a 'place of public resort for recreation and enjoyment', and only secondly as a Botanical Garden. W.R. Guilfoyle was appointed as Director. In this they were emulating the public gardens in Europe, and departing from the very distinctive pattern of Botanic Gardens in Australian capital cities. In the other capitals also, the emphasis changed gradually from a scientific interest in plants, demonstrated by collecting, acclimatization, and orderly planting, to gardens arranged 'for the people's pleasure', though the botanical interest remained as the basis and justification for their central position.(37)

In Van Diemen's Land, despite Colonel William Paterson's early collecting and gardening when he was sent to establish a foothold there after 1805, the town site he

chose at Yorktown on the Tamar was abandoned in favour of the site at Launceston, and his garden was quickly neglected. The Launceston Horticultural Society was founded in 1836, and in 1840 it acquired seven acres on Tamar Street, but support became more regular when the town was incorporated in 1848; in 1863 the grounds were transferred to the Municipal Council.(38)

In Hobart Town, Governor Arthur appointed three survey commissioners in 1825, Edward Dumaresq, R. O'Connor and Lt Peter Murdoch, to report on the most eligible situations for the various public buildings, and to point out the advisable reservations for the various governmental bodies. They were also to report on land required generally for all public purposes, 'either for the Health Convenience or Gratification of the Inhabitants.' The commissioners considered the extension of the town to the north, and in their plan doubled the number of streets, relocated Government House on the Domain, provided a twenty foot reserve along both sides of the rivulet, and recommended another market place, a new burial ground, and sites for special uses in the town.(39) But new parklands were not deemed necessary; they were not used as interruptions to the built environment as they were in Sydney, and certainly not used as Colonel Light used his parkland, or as the citizens of Melbourne later demanded.(Fig.6.7)

However, after the report was tabled in 1826 Arthur made plans for gardens in the Government Domain, and William Davidson was made Superintendant of Gardens in 1828. The Government Domain was located on the rocky knoll north of Campbell Street on Macquarie Point. A Botanic Garden had been started in 1818, under the Tasmanian Society, but in 1843 Governor Eardley-Wilmot sponsored the formation of a rival group called the Horticultural and Botanical Society of Van Diemen's Land, which then became the Royal Society, and entrusted the larger part of the new Government House grounds to their care and development. The first superintendent was F.W. Newman. In the meantime, Ronald Gunn, in the midst of a busy life as a public servant, had devoted himself to exploring and plant collecting in Tasmania and Victoria, sending valuable material to Kew Gardens during the decades from 1840. He established a strong tradition of participation in the wider world of scientific inquiry, and the Botanic Gardens then profited by exchanges with other Gardens. Its position on the northern edge of the town, has made it distinct and separate, and at the same time, accessible and central to the people of the town.(40)

Colonel Light also had plans for a botanic garden in his Adelaide green belt, allocating a small site on the western bank of the Torrens. When it was found to be unsuitable, another site was nominated and John Bailey was appointed by Governor Gawler as colonial botanist. Subscribers contributed to his salary in exchange for

free vine cuttings, plants, and seeds. In 1841, however, Bailey was retrenched when the first optimistic fervour of town founding in South Australia faltered under the impact of the depression. The idea revived, however, in 1854, and the Agricultural and Horticultural Society members were informed that the Governor had offered to surrender a site of 40 acres in the Police Paddock for a botanic garden. The site was adjacent to the original town blocks and part of Light's Green Belt, and was still covered with indigenous trees and scrub. George Francis was appointed as superintendent, and the gardens were opened to the public in 1857.(41)

Other Parks in Melbourne

In Victoria, though Hoddle had not designated a formally proclaimed Park in his original subdivision plan of Melbourne, the demand for public reserves was voiced in the Melbourne Port Phillip Gazette in 1839-41, in pleas for land for 'health and utility'. The Melbourne Town Council, elected for the first time on 1 December 1842 had no funds initially to develop or maintain a botanic garden, or any other sort of public garden.(42)

In 1844 a petition was prepared by the Council and sent to Lieutenant-Governor La Trobe asking that two sites, each of 500 acres, be reserved north and south of the town. La Trobe was in favour of the plan, and he forwarded it on to Sydney for approval by Governor Gipps. Utilitarian reasons were marshalled to justify the request: health and recreation were considered vital to the citizens' well-being. Moral improvement and re-inforcement of family values would be the result. English examples were cited. Council stressed that:

> 'it is of vital importance to the health of the inhabitants that there should be parks within a distance of the town where they could conveniently take recreation therein after their daily labour...experience in the mother country proves that where such public places of resort are in the vicinity of large towns, the effect produced on the minds of all classes is of the most gratifying character; in such places of public resort the kindliest feelings of human nature are cherished, there the employer sees his faithful servant discharging the higher duties of a Burgess, as a Husband, and as a Father.'(43)

All classes would benefit, they believed, middle-class and poor, and the parks would provide inter-class contact at its most benign level.

Thus the provision of parks became a moral imperative. Utility and 'nature' went hand in hand. Failure to designate suitable areas for parkland, and develop it in an appropriate fashion, pointed to lack of civic pride.

The citizens of Melbourne were already proud of their growing city, and they expected results.

Four square miles north of the town were set aside, becoming Royal Park and Princes Park. Governor Gipps gave his approval in 1836 for a Botanic Garden, the Western Hill Reserve was set aside, Flagstaff Hill was added, a square at the eastern edge of town was reserved and later developed as Fitzroy Gardens. By 1857, Melbourne was surrounded by a string of parklands, less encirling and consistent than Adelaide's but never-the-less defined. South of the city was the large South Melbourne Park, as well as the Botanic Gardens; adjacent to the Yarra was the Police Paddock, used for recreation as the cricket ground; there was the Survey Paddock and Sudley Park, Carlton Gardens and Flagstaff Hill.(44)(Fig.6.7)

The parks were now in place, but the dispute about who should look after them simmered between Governor and Town Council. The Government would appoint a body of trustees but baulked at granting full control. All Crown Reserves remained firmly in Government control. Committees of management as well as trusteeships were devised to arrange the sort of uses which were favoured in each park, sporting clubs wanted space, other citizens favoured more passive recreation like strolling by the river or visiting the gardens, but the Crown retained its role of ultimate guardian.

The Role of Open Space in Urban Morphology

Taken as a whole, the Botanic Gardens had several important attributes contributing to the urban structure: they were situated close to the centre of the town; they provided for the furtherance of scientific enquiry, and this was initially used as justification for their positions; they prospered both by the participation of private citizens and the interest of governors and public servants. They tended to increase in scope and area rather than diminish; they attracted the ordinary folk, and provided a common point of interest for both rich and poor. They were vehicles for friendly contact between the six colonies; their directors were scientists of standing; and they became places of public pride and enjoyment for the people of their towns and cities.

In the town morphology, urban parks in general were important; not so much in their intrinsic natural values as for the role they performed in the total urban context. They were used to contain the town and define it in its initial stages. This grew more important when the town started to expand, providing a clearly defined open space to contrast with the built-up area. Sometimes, they were blamed for impeding efficient town growth. Perth lost its early Garden through neglect; Stanley Jevons considered that the Gardens and Domain in Sydney

were wrongly protected, as the sites they occupied could be more efficiently used as wharfage. (45)

A comparison can be made with the old European cities, like Vienna and Copenhagen when in the nineteenth century they shed their defensive walls and fortifications, to create a ring of new parks and apartment blocks surrounding the old city core. This became a zone of transition between the old city and its newer suburbs; the 'banlieues' as they were called were utilised as the parks were in the Australian cities.(46)

It is interesting to trace the fate of local parks and open space through the decades. Parramatta Park is a glaring example of a park which became debased for many years after it was handed over to the care of a local Council. It grew progressively smaller as local clubs of all sorts appropriated parcels of land within it; and used them both for their club houses and for parking. Without constant vigilance, parks could slip into 'parking lots' very easily. J.H. Maiden, director the Sydney Botanic Gardens warned against the inclusion of other land uses in parkland at the turn of the century.(47) Now the pendulum has swung the other way, and 'bush-land', designated 'National Park' is sacrosanct. Areas appear as parkland coloured green on the map, but use is often restricted because of problems of supervision, maintenance, and loss of public safety.

Of course, urban open space was used for purposes other than parkland; it was used for utilities such as storage of water, dumping of sewage, tram depots, in fact public facilities of another kind. But as the towns grew larger, there had to be a conscious reason to retain them as open space in the built-up area. The Victorians had identified 'public health and recreation' as a need to be pursued at the local level, and could argue that parks were utilitarian in purpose rather than merely pleasant places to pass the time in.

Provincial towns like Geelong established botanic gardens; gold towns like Ballarat expressed their civic pride in gardens, even statues, to proclaim their elevation above other struggling towns and villages; Ballarat converted Yuille's Swamp, which used to supply the city's water, to a much admired Lake Wendouree, and by its western shore a botanical garden was established in 1858. The lake and gardens became centres of family and community life(48) But even small towns had open spaces within the context of their town blocks, which they could develop for sport, for gardens, or for some civic purpose. Braidwood and Beechworth are two examples.(Fig.6.8 and Fig.9.8)

Gold towns, particularly, used their open spaces as places for recreation or relaxation, and they often endowed them with carefully maintained gardens. Albury created a 'Botanical Reserve', Orange had its carefully

arranged garden with specimens marked with metal botanic names. Geelong's gardens were almost as old as Melbourne's. In the State of Victoria, especially, gardens, created in the era of self-improvement and local pride, and established with the wealth of the mines behind them, were legacies of the Victorian age.

In each State, moreover, there were echoes of the capital city's gardens put in place in the country towns. Finally, Canberra, as the Federal Capital, in the twentieth century, used parks and open space to establish its credentials as a national capital. This was 'public virtue' expressed in a large, landscape scale.

The Concept of 'Commonality' of Property

In this chapter, I have argued that the urban open space lands, perceived as belonging to all of the citizens, played a vital role within the grid planning system, helping to form the special shape of the town or city in Australia. Contrast between built-up town squares and open spaces became a subtle way of defining town character and aspirations.

These Reserve Lands in their urban context were descendants of a rich English and European land use tradition. Special categories of urban land played distinct roles in the formation of Australian towns and cities: the English Common, the village or town square, and the Government Domains and Botanic Gardens. They were put in place via the instructions sent from London to the Governors, but each Governor influenced the choice of particular sites, so the evolving picture of urban open space was both common and distinctive to every city and town. As the cities spread, however, and suburbs became self-governing in part, the original impulses from the nineteenth century became less well understood. The concepts of 'commonality', and 'public interest' were interpreted differently. The local vision became less well developed.

CHAPTER SIX : REFERENCES

THE TRADITION OF URBAN OPEN SPACE AND THE CONCEPT OF THE 'COMMONALITY' OF PROPERTY

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CHAPTER SIX

FIGURES

Titles only; for Maps and full captions see Volume II.

Fig.6.1 The Three Hawkesbury Commons, 1804. From H. Proudfoot, 'The Hawkesbury : Conservation Report' for the Hawkesbury Shire Council, 1987.

Fig.6.2 Land alienated in the County of Cumberland up to 1821. From Lynne McLoughlin, 'Landed peasantry or landed gentry', in G.Aplin (ed), Sydney before Macquarie, Sydney, 1988.

Fig.6.3 C. Cartwright, Plan of the Governor's Demesne Land in Sydney, 1816. Mitchell Library, State Library of NSW, Sydney.

Fig.6.4 Edward Ebsworth, The Government Domain at Parramatta, 1887, showing the Domain at 1857. Mitchell Library, State Library of NSW, Sydney.

Fig.6.5 Plan of the Botanic Gardens at Melbourne, 1870. From R.T.M. Pescott, W.R. Guilfoyle, Oxford University Press, Melbourne, 1974, opp.p.138.

Fig.6.6 Map of the Hobart Town for the Report of the Survey Commissioners, 1826. From C. Craig,'Early town planning in Hobart', Journal of the Royal Society of Tasmania, 1944, p.101.

Fig.6.7 G. Slater, Plan of Melbourne and its Suburbs, 1857, held by the Royal Geographical Society, London.

Fig.6.8 Plan of the Village of Braidwood, 1839. Archives Authority of NSW, Map No.1453.

CHAPTER SEVEN

A PLETHORA OF TOWN PLANS

> 'Careless of fear the bold surveyor strides
> Thro' boundless woods, or o'er the mountain tides,
> Hill, stream and valley, own alike his sway,
> And in smooth surface form the level way;
> The hills fall prostrate, and the vallies rise,
> High rears the arch above the precipice!'
> William Woolls, Australia, 1833 (1)

> ...'We have to ask on what basis, what design, what plan, did these surveyors-architects-planners cut their cruel lines?'
> Michael Austin, Fabrications, 1991 (2)

William Woolls, an Australian teacher and poet, was celebrating the expansion of empire in his long poem about Australia in 1833. One hundred and fifty years later, we find a different sort of view being expressed by a New Zealander, Michael Austin. And the land rights of Aboriginal people in Australia are again being canvassed after the High Court decision on what is known as the 'Mabo' Case.

Until now, we have taken the expansion of white settlement over the continent almost for granted. The notion of 'Crown Land' is firmly embedded in our thinking about space. Land bought from the Crown has been called 'alienated land', signalling the fact that it has been bought and paid for, and used for some particular purpose, within the system adopted by the government.

The very difficulties embodied in the Mabo controversy point to the central importance of the way that land has been distributed over the 200 years of European Settlement in Australia. It also points to the fact that our cities and towns are part and parcel of this process of land 'alienation', and are themselves a crucial part of the mesh of settlement over the continent. One can argue, in fact, that urban Australia became the strongest and most dynamic factor in the transformation of the landscape, that the towns and the capital cities they grew into became the main agents of change over the whole continent. The agricultural and pastoral industries of Australia were put in place by the events and forces which gathered pace in the cities, where their markets lay.

The Years after Macquarie and Bigge

In order to understand the big push of town formation which started after 1829, it has to be seen in the context of the recommendations of the Bigge Report. Governor Brisbane had been instructed to carry out these

recommendations, and the colony began to assume a different character during his four years as Governor, from 1822-1826.

In his Third Report, Commissioner J.T.Bigge had noted that the ratio of cultivated land to land area granted was much smaller than expected. He specified that more land should made available to the settlers in general. He wrote:

> 'To facilitate the location of land to settlers on their arrival from England, it has been proposed that the country intended to be settled should be previously surveyed and laid out in districts, subdivided into farms of such sizes as are usually granted; and that with reference to the locality of the country, and its natural boundaries, each district should not contain more than thirty-six square miles.
> 'It is further proposed that when such a survey has received the approbation of the governor, the inhabitants and settlers might have access to it, to enable them to select such situations as best suited to them, and insert the number of the allotment in their memorial to the governor'....'All allotments of land in the towns should be equally subject to this regulation...'(3)

Bigge had traversed the inland highlands with Oxley as his guide, and knew about the opening up of the Hunter Valley and the settlements in the Illawarra, both of which held the promise of agricultural development. His thinking had also been coloured by the depression taking hold of the English countryside after the end of the Napoleonic Wars and the dispersal of the English armies. The change which had been coming with the inexorable closing down of the open-field system of cultivation over the past two centuries in England had quickened its pace. Many Commons had been enclosed and even the look of the English fields and coppices had been changed. The rural poor had been shunted off their traditional lands, little hamlets had disappeared, villages had been decimated and the rural population forced to move.(4) Some moved to the industrial towns, into the slums created by the land speculators, some thought of going to far-off countries like America and Australia. It was a difficult choice, either way. But the emphasis in the dialogues in England was on the possibility of opening up land for farms and farmers, rather than for towns and townspeople.

Governor Brisbane had initially inherited the same Instructions that had been duly issued to Governors King, Bligh, and Macquarie about the formation of towns. They differed from those issued to Phillip in that instead of reserving land between every two grants of land, they ordered instead that between every thousand acres of land, a block of 500 adjacent acres be reserved for the

Crown. This was a general instruction which did not fit into the already established pattern of grants.

But in 1822 Oxley was informed of the principles behind the settlement of the new districts beyond Cumberland, ~~was to proceed~~. The country surveyed was to be divided into square 'townships', each being 36 square miles in area and bounded by 6 mile long straight lines running north-south and east-west. Each 'township' was to be divided into one-mile square sections, four of which were to be for the sites of villages. These principles had been suggested to Commissioner Bigge by Oxley himself and later embodied in Bigge's Report. The Counties were to be the basic unit of measurement, which then would be broken up into hundreds, and parishes.(5)

These village sites were envisaged to be the nucleii of the surrounding farming communities. Agriculture, however, was not seen as the start of a viable food-producing industry with a surplus which could be exported, but was considered only as farming at little more than subsistance level. At this stage, only wool was deemed a potential crop to be harvested for export to the mother country, with whale oil and timber as raw materials to be exploited as secondary exportable resources.(6)

In his letter to Brisbane, Earl Bathurst stressed there be the reservation of land in the towns or villages for 'every object of public convenience health or gratification'. Sites were to be established for the maintenance of churches and schools. Land was reserved for roads, parsonage houses, burying grounds, and also for the possible extension of villages, and the provision of recreation grounds.(7)

Where possible the Counties were bounded by natural features. By 1826 the greater part of the Hunter Valley, the Bathurst district, and Argyle had been divided into square 'townships' containing 36 blocks of one mile square. These blocks became the units into which the sale of land to free settlers was measured. The term 'township' was identified with a 'parish', and the term 'hundred' was not used. Thus in Australia, the term 'township' originally meant a large tract of land 36 miles square. It gradually became identified with a smaller urban, settled place - a 'town'.

These regulations determined the straight-line (magnetic north-south and east-west) grid which became the basis of land settlement over the face of the continent. The division of land into square units of measurement is similar to that proposed for the expansion of the United States by a committee set up by Thomas Jefferson in 1784. The towns then fitted into a grid system, and were structured accordingly.(8) The basic measurement of the square, intersected by a cross, in fact stems back to the ancient practices of the Roman planners, as discussed in

Chapter two of this thesis. The pattern had been adapted from ancient practice.

Under Brisbane, then, the basic structure was laid down for the founding of colonial towns. In accordance with Bigge's recommendations, secondary detention centres were established for more hardened criminals, so the existing urban centres would attract a population less identified with crime and punishment, and more with the opportunity for a new colonial life. Coal River (Newcastle) was seen more as a gateway to the Hunter River lands than as a hard prison centre; second offenders were sent instead to Port Macquarie or to the settlement at Moreton Bay where Brisbane was to be planned as the principal town.(9)

The Nineteen Counties

In 1825, when orders were received for the colony to be divided into counties, and for the land to be valued before being offered for sale, there were no maps compiled which could be used for even a basic guide. There was not even a comprehensive map of the County of Cumberland itself. Australia was literally a continent without maps. The large body of land had now been described from its coastline by Matthew Flinders in 1803 and more coastal exploration had been carried out by Phillip Parker King, but there had been little exploration beyond the County of Cumberland during the first decades of settlement, exploration being deterred by the maze of bushland valleys and gorges of the barrier of the Blue Mountains.

Oxley's two important expeditions of 1817 and 1818 had disclosed very promising land for both agriculture and the raising of European animals. The settlers, however were not encouraged in Macquarie's period to cross the range and expand the settled districts westward. Those who had expanding herds of sheep and cattle, started to push southwards, but official settlement had not been planned beyond the Blue Mountains, and even Oxley's maps of his journeys were not available until after 1820. There was also a worry about how to control the settlers, and how to establish the legal network for their protection so far out from Sydney.(10) In order to define the limits of location of the colony, it was therefore decided to limit the area available for settlement to a tract which could be mapped and subdivided quickly. Even so, there remained a lack of basic information which could be used to define the boundaries of the counties. (11)

By 1827 the Surveyor-General's Department had only 15 surveyors, three draftsmen and two clerks to cope with an enormous amount of work, both in the field and at Sydney. Oxley had died in 1826, Meehan had retired, so it was Thomas Mitchell, recently arrived from England, who began the main triangulation survey of the area defined as being within the limits of settlement. This area covered

the so called 'Nineteen Counties' which ringed the basic County of Cumberland. The limits of location imposed in 1826 were then revised in 1829 when more land had been described in physical terms with recognisable features mapped and explored.(Fig.7.1)(12)

In 1832, the year after the New South Wales Calendar and General Post Office Directory, had been first published, the Surveyor-General's Department, headed by T.L. Mitchell, with S.A. Perry as his Deputy, was the largest in the state, with twenty surveyors employed, and six more in the Road Branch; there were also six draftsmen and four clerks. The volume of work was onerous, and accelerating.(See Appendix I)

The limits of location were a measure which enabled surveys to be made quickly and were designed to contain the spread of settlement within measureable and recognised boundaries. They then became the areas within which the settlers could expect the laws of the colony to be upheld, roadmaking could proceed outwards to their limits and even postal towns were duly set up within their boundaries. Once determined, the founding of towns further out from the capital could proceed. The basic framework of measurement preceded the towns.

Urbanisation as a Central Component of the Spread of Settlement

In the thirteen years between 1829 and 1842, no less than fifty-three town plans were drawn up by the Surveyor-General's Office in Sydney. These plans were an attempt to direct settlement to suitable areas and to contain it within certain bounds.(13)

Though Governor Brisbane was not noted for his interest in the formation of particular towns, he laid the ground work for the subsequent burst of town planning activity. The population in the colony was beginning to increase significantly. In 1820, the total number of white people in New South Wales was 23,939; of these, 10,873 were convicts. By 1830, the population had risen to 46,276, with 18,571 convicts. By 1840, there were 129,463 people, and the ratio of convicted prisoners had fallen to 38,305, a percentage of 29.6 of the whole. By 1840-41, transportation was dropping markedly, to a mere 1,684, and there was an increasingly vocal body of opinion forming to exclude the transportation of convicts altogether. The perception of the colony was changing from a penal settlement to a land of opportunity for British migrants.(14)

In 1828, Governor Darling decided that colonial towns should be more systematically planned, and appointed his brother-in-law William Dumaresq, William Cordeaux, and John Busby to examine town planning in the colony in general, and the plan for Campbelltown in particular. They reported within the month, classifying the towns of

New South Wales according to a hierarchy determined by their location. Sydney and the sea ports had the highest classification; that included Newcastle, Port Macquarie, and the potential town of Brisbane, as well as Hobart and the port which became Launceston.(15)

In the second class of townships, towns which were at the head of river navigation, Parramatta, Liverpool, and Maitland, were listed. Towns in the interior, like Campbelltown, without the advantage of a stream of fresh water, fell into the third class. Castlereagh, Pitt Town, and Wilberforce, all had problems with their water supply.

Governor Darling decided in the interests of potential town dwellers, that in the towns planned within the limits of location, it was necessary to formulate instructions on their layout. On 7 May 1828, Darling appointed William Dumaresq head of the Board to consider the form of the towns. The Board reported on 18 June, and the plans were discussed by both the Legislative Council and the Executive, and with Thomas Mitchell. A Government and General Order was issued on 27 May, 1829. (16)(See Appendix II)

Towns were to be rectangular in shape with streets intersecting at right angles. The system recommended by the committee was a grid planning system, with standard town blocks of 10 square chains (4 hectares) divided into twenty building allotments of 0.5 acres or 0.2 ha. (See Fig.7.12). Frontages were of 1 chain (20 m) and depths of 5 chains (100 m). Streets were to be 1 chain (20 m) in width, with 9 foot (2.74 m) pavements on each side. Houses should be set back to allow for verandahs or shady front gardens. Parallels with older American towns can be drawn, for example, with New Haven and Savannah; and the American grid was later enshrined by Thomas Jefferson as the standard pattern for the western expansion in the American West.(17)(See Figs.0.3 and 0.4)

This grid, based on the square section, from this time onwards, became the standard block plan for towns in Eastern Australia for most of the nineteenth century. Even in most of the mining towns, after the first exciting years of the gold rush, when they sprang up with little or no official planning, this grid plan became the basic pattern of their second stage of development. It was chosen for its uniformity, predictability, and its ease of application. It was ideal for imposing recognisable order over the informal groupings of buildings which might have been initially attracted to the Government Reserves within the Limits of Location.

Mitchell had argued that some streets could be narrow, to counteract the hot winds, dust and scorching sun of the Australian summer, drawing on his experience in the Peninsular Wars, but Darling and the three Commissioners favoured the wide streets as the standard type.(18)

In some towns the main streets were to be 100 feet wide, allowing for 80 feet (24.38 m) for the road and 10 feet (3.05 m) for the pedestrians on each side. Cross streets were to have a carriage-way of 66 feet (1 chain or 20.11 m) and footpaths of 5 feet (1.52 m). Houses were to be 14 feet (4.26 m) from the footpath, enclosed with a open fence and were to have door-sills one foot above the level of the crown of the street immediately opposite.

A second set of regulations were issued two days later, specifying the conditions on which town land was to be alienated. Holdings were to be granted in fee simple, that is, capable of being owned outright, subject to a quit rent ranging from 6 pence per rod (25 square metres) at Sydney to 5 pence for sea port towns, 4 pence for riverside towns, and 2 pence for inland towns. Grantees were required to construct a dwelling place or store within three years on their allotment, else the land would be forfeited. They were also to lay and maintain a flagged footpath outside their house and construct a drain to the nearest common sewer.(19)

It was Campbelltown, the last of the towns that was designated by Macquarie and where he gave instructions for its marking out as a town in the County of Cumberland, in 1820, that became the forerunner of the more regular system of town planning. Robert Hoddle drew the first measured plan of Campbelltown in 1828, but the town lands were not available until 1831, and the settlers could not take formal possession of their allotments until then. These allotments promised in 1827 were free grants.(20)(Figs.7.6(a) and 7.6.(b))

The Ripon Regulations

Meanwhile, in London, there had been a continuing discussion in the late 1820s upon the question of the disposal of Colonial lands. The system of granting lands came to be seen as being inefficent, unjust, and open to accusations of partiality. It had not been able to secure a revenue base for the colony, or prevent the land being used for speculative, unproductive purposes. One contributor to the discussion was Edward Gibbon Wakefield, but there was a growing climate of opinion that the time had come for a more carefully regulated system to be put in place. The decision was made in 1831 to stop the granting of land, and instead oblige the settlers to purchase holdings. This would apply to both rural and urban lands.

So, by 1831, the system of free land grants ended. The instructions were sent to Governor Darling by Lord Goderich on the 14 February 1831. The Ripon Regulations as they were known were brought in, whereby all land, in the towns as well as in the rural areas, was to be put up for auction. This had far reaching consequences for the founding of towns in Australia.(21)

The rural land, once valued and surveyed, was to be sold by public auction in blocks, normally of one square mile in size, at a minimum price of five shillings an acre. The town lands, also, were to be surveyed and auctioned. The basic unit was the allotment, arranged in square sections of town blocks. This practice, especially in the larger towns, and particularly for Melbourne, reinforced the surveyors' work in establishing the shape, size and character of the town.

The three larger towns, illustrated here, embody Darling's new town planning regulations, and also became subject to the Ripon Regulations after 1831: Maitland, Port Macquarie, and Goulburn.(See Figs.7.7, 7.9, and 7.10) Each was considered a 'gateway' town for their districts and was designed to act as an administrative and trading centre for the farms around them. Despite the care taken by the Surveyor-General over the siting and drawing up of these three gateway towns, Goulburn's site was re-allocated to the west of the first plan by Governor Bourke,(See Figs.7.10 (a) and (b)), and Mitchell's innovative plan for East Maitland was disregarded by the settlers, who chose the flood-prone land over the river to the west.

Darling maintained a close watch over the development of the townships. He insisted that full details of the town blocks should be made available to the intending settlers. In Sydney itself he appointed a town surveyor, Edward Hallen, who was to attend to the order and regularity of the buildings, and prevent buildings encroaching on the streets. The town's water supply had from the first years been a major problem, and he supported a scheme devised by John Busby to pump water from the Lachlan Swamps, ordering work to begin in May 1827. This water supply had many difficulties, work on the tunnel which conveyed the water part of the way, was very slow and dangerous, the work was hard to supervise, and the scheme was not completed until 1837, ten years after it was commenced.(22)

In 1830, Darling secured measures to help control the nuisance of stray dogs in the principal towns, Sydney, Parramatta , Liverpool, and Windsor, and another to regulate the management of cattle in Sydney, and the supervision of their slaughtering. He instituted measures also to have the streets lit at night. He authorised the Colonial Botanist to lay out public walks and a carriage-way in the Government Domain, a popular measure which allowed the townsfolk to use the Domain as a part of their daily lives.(23)

The Basic Town Plan

The basic town plan which resulted from the adoption of these regulations, has been criticised by geographers and planners, as being too regular, too uniform, and too

unimaginative, with no aesthetic quality whatever to recommend it. I have set out to correct that impression. The grid standard proved to be both simple and adaptable, filling the need for both repetition and variety.

Some of the towns faded away almost immediately, but it is interesting how many of them survived as service centres, and as focal points for their districts. Contrasted with their progenitors, the towns and hamlets of the settled countryside of Britain, towns which had a long history of growth, decline, invasion, migration, re-growth, as times changed and circumstances altered, the towns in Australia had no past urban history to build on, no pattern already established that the settlers understood.

W.G. Hoskins remarked in his seminal work The Making of the English Landscape: 'Everything is older than you think', and sought to decipher the topographical clues of hitherto unregarded ditches, fence lines, ruins, walls, streets, shapes of towns and villages, which lay all about him. He says: 'What I have tried to do... is suggest a way of looking at towns as though they were a special kind of landscape - as indeed they are - to get behind the guidebooks and the individual buildings to the secret history of these places: to draw attention to what I think are some of the significant bits of urban landscape that point the way into this secret history.'(24)

Hoskins has the whole palimpsest of an ages-long tilled and settled landscape to beguile him; but even here in Australia, with only 200 years of European settlement, we have signals enough if we can read them. The great gap, however, stems from our lack of recognition of the pre-printing Aborginal past, the special places the Aborigines revered, how they named them, and what they used them for; and how we can bind this past use to our own thinking.

The Siting of Towns in a 'New Country' : Thomas Mitchell, Maitland and the Towns of the Thirties

As a forerunner to indicate that the grid plan could be used with flair and imagination, the Surveyor-General produced a plan of some virtuosity for East Maitland, a town at the navigable head of the Hunter river. It was unusually elaborate and had an arrangement of town blocks which were not drawn to illustrate the use of the standard block adopted by the regulations. The recommended block size and shape was 10 square chains (0.4 square metres) divided into twenty building allotments, and it was not in fact used; there were various block sizes and shapes, and provision of urban squares for a market place and a church, embellished by an avenue of trees for its approach, but there was little recognition of the major road leading to Newcastle, and

the plan could not be easily adopted as a model town layout.

Mitchell was known as a skilled draughtsman, but his Maitland plan has a curious air of unreality about it. Why did the town appear to have no centre, no focal point? There was no hierarchy of street widths, the main Newcastle Road was not used as a point of entry into the town; and the road north from Wisemans Ferry which skirted the town, had its passage hindered by the arrangement of town blocks at the southern approach. (Fig.7.7)

Denis Jeans claims that East Maitland "is the only plan of the period which can claim any distinction." (25) Mitchell had begun work on this plan before the regulations were proclaimed, and it appears that he was loath to change it to conform to the precepts of uniformity and predictablity. The plan might have been merely an experiment for Mitchell, to demonstrate how he could adapt elements of the squared blocks in a slighly abstract manner. Most of the settlers, however, preferred to build in the flood-prone West Maitland, ignoring the town of 'distinction and flexibility'.

Another interesting plan is the one proclaimed for Port Macquarie, dated April 1831. This plan provides the most significant demonstration of the imposition of order and consistency over an existing settlement; it marks the change of direction in the colony's policy, experienced in the thirties. The early growth of Port Macquarie, as a convict station for secondary offenders, from 1824, is shown in Figs.7.8(a) and (b). The revised plan of April 1831 ignores most of the buildings already on the site, the Convicts' Barracks, the Granary, various storehouses, and draws over them seven rectanglar town blocks. The Government House, Clergyman's House, Gaol, Military Barracks, Hospital and Church stay put, and there is provision for open space around these last two, and also at the mouth of the river.(Fig.7.9). The new plan is a practical symbol that the convict station was to be acknowledged as a regular town with the opening of the district for free settlement.

The town of Goulburn was also seen as a 'Gateway Town'. Its site was re-considered by the Governor himself, when he visited the outpost, and the town moved from its constricted site where it was first fixed and greatly extended. According to the New South Wales Calendar of 1832, 'a township has been fixed in a favourable spot, in the angle formed by the junction of the Mulwaree with the principal branch of the Wollondilly.' This was the small formal town plan set out in 1829 based on the regulations with a design prepared by R. Dixon and Surveyor Elliot. It was a classic small grid town plan with a central square.(Fig.7.10(a))

In 1832, however, the site was moved by the suggestion of Governor Bourke, across to the northside of the Mulwaree Ponds, where a larger town was marked out (Fig.7.10(b)). This town had better articulated civic spaces, a church allotment closing a vista, and was based on the standard block sizes. This design, though regular, was able to use the elements of the plan to good effect. Goulburn prospered modestly, and attracted fine public buildings, schools and churches. (See also Fig.7.11)

Two plans from 1833 could be taken as average samples of small town plans: Bathurst, by then starting to form up as a settlement, a town with only ten standard blocks marked out, grouped around a central square which was to be a site of a church, with public sites for hospital, gaol and court house, market place, police station, and prisoners' barracks. (Fig.0.6) Here, the older structures are left between the Macquarie River and the town. Even the flagpole near the river is marked; and it is possible to speculate that its site dates back to 1815 and Macquarie's grand crossing of the mountains, when Bathurst was founded initially. (See Chapter Five)

Another small town in typical style is Bungonia, 29 February 1833.(Fig.7.9). This plan had the three prerequisites: sites for court house, gaol, and church, along with two reserves next to the creek. All these plans are signed by Mitchell, and the drafting style is very similar to the Maitland plan. Jeans suggests in his article of 1981, that the procedures followed by the Surveyor-General's staff were fairly straight-forward. The town sites were chosen from the 'village reserves' which were selected when the counties were delimited in 1829. There were a great number of these, and they were marked on Dixon's map of 1837, but factors other than administrative ones also influenced the success or failure of the town's establishment.

Robert Dixon was a surveyor working under the Surveyor-General. He published this map while on leave in England without Mitchell's permission.(Fig.7.3) It was published by J. Cross in London, and dedicated by Dixon to Sir John Barrow. Dixon's map closely followed Mitchell's own official map of the Nineteen Counties, published 1834. Mitchell was furious and refused to re-instate Dixon when he returned to Sydney. His own elaborate map, however, is not as clear as Dixon's, which marks the village and town reserves clearly, and does not pay so much attention to the mapping of the Great Dividing Range.(26) Dixon's map is a most interesting, lively, and informative addition to our collection of early maps of the Colony.(See Fig.7.3).

Maps for Appin and Wollongong are included in this survey: Appin for its early date and the town's failure to flesh out the sections between the road through to Wollongong and the Georges River. The village continued to straggle along in a ribbon-development, reminiscent of

English village formation. Wollongong is included, as an example of a town which experienced rapid growth after it was founded in 1834, expanding southward by 1837 and then adding suburban allotments of 2 to 5 acres 0.8 to 2.02 ha).

A selection of town and village maps for the 1830s and forties are also included: Yass 1837, Berrima 1838, Murrurundi 1839, Dubbo 1849, and Camden 1842.(Figs.7.16 to 7.21) It can be seen that a measure of variety evolved within the basic framework of the grid, and the town reserve provided room for expansion where necessary in the foreseeable future.

The Administrative Process of Town Formation

The choice of town site was influenced, in part, by local opinion where possible. The district surveyor then made a plan of the ground, drawn from his field notes, and sent a preliminary plan to Sydney with a letter pointing out the details of the location. Though he indicated suitable boundaries and number of sections, he did not himself design the final town plan; this was done back in Sydney, either by Mitchell himself, or his deputy S.A. Perry, or John Thompson.

Once drawn, the plan was sent to the Governor and the Legislative Council for their approval. At this stage, the Governor might decide on alterations, either with the plan itself, or with names chosen for the town and its streets. The plan was then, with any amendments, sent back to the field surveyor, who made a final check on whether it fitted the terrain, and the boundaries. He was instructed to put strong posts about 12 feet high upon the angles and intersections, with boards nailed to the top, painted or marked with the number of each block, or letters for each defined reserve. Allotments were sold on the condition of building on the block within a year, adhering to the street line, and making a drain to a sewer; supervision of the process was very difficult, especially in the late thirties when people started buying allotments for speculation.(27)

This method of founding towns or villages was very perfunctory when contrasted with the rituals of town founding in ancient European practice, as outlined in Chapter Two. In essence, the process was a public service routine. There was no formal founding ceremony as there had been at Sydney and Norfolk Island, no positioning of the flag, no central spot where the town began. There might have been,in fact, a temporary inn at a river crossing, like the one near Dubbo, there might have been buildings around an out-station of a leasehold, or a place where the road was being constructed, or a point were there was a road junction. These conditions were also common factors in the English towns, but usually these towns had their genesis back in a long remembered past.

The boundary of the Australian town was marked out on the map, but not fully signified on the ground. Only the town blocks or sections were marked by corner posts and the allotments by a peg. The elements of the town were foreshadowed by the buyers at the sale, which was usually by auction. They were assembled as the years passed, and the place, as a town or village, was brought into use, and was incorporated into the mesh of roads, tracks, and facilities.

The Surveyor-General and his Department

The resources of the Surveyor-General and his Department in Sydney were crucial to the immigration programme embarked on by the Colonial Office in London. Major Thomas Livingstone Mitchell, grandly titled Surveyor-General of the Territory, Surveyor of Roads and Bridges and sole Commissioner for apportioning the Territory, was appointed in 1827 and had charge of a group of surveyors who together, by 1832, formed the largest Government Department in Sydney. Their numbers were large by colonial standards, but still small in the face of the enormous task expected. The Colonial-Secretary's Department under Alexander Macleay, had only fifteen clerks to conduct all official business put in train by the Governor. Only eight men formed the core of the Department of Works.

Mitchell had thirty men in his Department, and five more in the Road Branch he supervised.(28) His Deputy-Surveyor General was S.A. Perry. He was appointed by Sir George Murray, Secretary of State for the Colonies, and arrived in Sydney in 1829, a year after Mitchell's own appointment. He too had served as a military surveyor in the Peninsular War, and then was appointed professor of topographical drawing at the Royal Military College, London, from 1819 to 1824. Mitchell, jealous of his own position, was loath to turn over work to Perry, but used him to control the office when he was away from Sydney for long periods exploring in the colony, and when he returned to England in 1835 to 1841, where he was finalising his documents for publication. His impressive volume of battle plans and depictions of the fighting in the Peninsular Spain, was published in 1841 by J. Wyld, London. As well, he was busy preparing his equally impressive book on his on explorations in Australia, his Three Expeditions to the Interior of Eastern Australia, which was published in 1838.

So Perry had control of the Department in some of the crucial years of the 1830s. The most experienced surveyors were Robert Hoddle, J.B. Richards, Heneage Finch, and James Ralfe. Supporting them were Assistant Surveyors John Abbott, Henry Butler, Robert Dixon, John Edwards, W.R. Govett, William Jacques, M.R. Lewis, Felton Mathew, Peter Ogilvie, John Rogers, F.J. Rusden, G.W.C. Stapleton, John Thompson, and G.B. White. These were

mainly field surveyors, sent out into the interior, mapping the Counties and making the preliminary surveys for the towns and villages. These surveyors are listed in Appendix I, and biographical details supplied where known.

Draftsmen in the Department drawing or copying the maps were F.R. D'Arcy, T. Balcombe, Walker R. Davidson, James Larmer, T.S. Townsend, and H.F. White. Also employed were four Clerks headed by David Duncombe, who was overseer for F. Eager, H. Halloran, and C.H. M'Intosh. Apart the complement of thirty men, the Surveyor-General oversaw the activities of the Road Branch: employed were Assistant Surveyors John Nicholson. N.L. Kentish, Philip Elliott, Percy Simpson, John Lambie, and L.V. Dalhunty.(29)

Mitchell himself was an enigmatic character. He was an indefatigable worker, but had the fatal drawback of not being able to delegate authority. He was proud, and anxious to win acclaim in England; he was insubordinate to the Governors in Australia, a poor departmental head, a hard task-master, and an unforgiving opponent. But he was a meticulous and sometimes inspired draughtsman, and where he can be identified as the author, his plans have a felicity of penmanship and a flair for design, even within the confines of the regular and standard sections of his town plans. He set the standard, and his surveyors emulated it.(30) His illustrations for his book of journeys are of a standard unsurpassed by any other explorer, and have not yet been properly assessed as works of art.(31)

The depression of the 1840s cut into his large department, cutting his budget by more than half. The thirties, then, were the years of extraordinary endeavour in the task of surveying in the colony. The next decade was plagued by inefficiencies, and unavoidable changes.(32) The other States, Victoria, South Australia, and Western Australia, were setting up their own survey departments. But the pattern guiding the town plans had been set in the thirties.

The Role of the Governors

All three governors, Darling, Bourke, and Gipps, took an interest in the way the towns were being marked out and founded. They saw them as logical developments of the settlement process, places which could provide services, encourage business and trade, support local farming producers, perhaps attract a grain mill, provide sites for churches, for mail deliveries, a depot for police, and a court house. Bourke, for instance had the site of Goulburn moved over to the west of the previously marked out town, and had a big influence on the founding of Melbourne at Port Phillip when he visited the site with Surveyor Hoddle in 1837.(33)

The passing of Governor Bourke's Church Acts in 1836 and 1837, had an unforeseen influence on the laying out of towns: the Acts were introduced to allow freedom for any form of Christian worship, and if supported by a certain number of people, the building of their church was eligible for state aid on a matching private-public basis. This meant that the formal supremacy of the previous official religion, the Church of England, was lost, and its central position in the town plans, was contested in a very obvious and architectural way. It was no longer the obvious candidate for the central square of the town. On the town plans, the Surveyor-General still could give the central square as a potential church site, but its position was not then taken for granted. The other churches could be given free land, if they asked for it, and it could be allocated among the land marked out for private purposes. The marking out of suitable localities could be a matter of dispute for some churches, which did not necessarily want to compete with each other at close quarters.(34)

Another unforeseen result was that the town clock, previously linked to many church towers, and the reference point for local time, was no longer maintained by the state, and was handed over to the trustees of the various churches.(35)

Governor Gipps influenced the design of Brisbane, and also was the prime mover in the formulation of the Waste Lands Act of 1842. In New South Wales, it had been the practice to reserve lands for the smaller farmers around the town, but this was given formal expression in this Act, which set aside all land within five miles of the town for sale as small farms or 'suburban holdings'. It was Gipps who advocated a policy of marking out a ring of small portions, near the town, which increased in size as the distance from the town increased. At Brisbane, the town was surrounded by a reserve, then successive rings of suburban allotments, cultivation allotments, and then half sections (that is 320 acres), and then full sections. At Goulburn too, suburban allotments ringed the formal town.(36)

Under Gipps the role of the Governor in the distribution and management of Crown Land was considered crucial. He saw it as a great national and common resource which was the basis of the very structure of settlement. He opposed the squatters in trying to ensure that the concept of equity was followed in the future distribution of colonial lands. He declared, 'The right of the crown must ... remain absolute over all lands which have not been sold or granted.' It was a basic principle that 'the crown will not act capriciously, or unequally' in its custody of the land. Nor would it 'depart from established practice, except for the attainment of some public benefit.'(37)

Another four plans from the thirties, those of Wollongong, Yass, Berrima and Murrurundi (sic) have been included to demonstrate how the simple plan developed when it was applied to various sites and how the drafting style of the other surveyors did not always match Mitchell's meticulous style.(Figs 7.15, 7.16, 7.17, and 7.18). Dubbo, marked out in 1849, continued on the basic plan, and the blocks were drawn in an even more regular and predictable manner than those of some of the earlier plans.(Fig.7.19)

Private Towns in New South Wales

In the thirties and forties private subdivisions of towns were put up for sale, often adjacent to newly planned official towns. Some of these twin towns adopted the name of the official town, with a prefix of the direction - 'South' or 'North', 'East' or 'West'. In other cases, some land might be put for sale along the route of a major road, like St Marys, which was attracted by the building of a small church, 1837-1840, endowed by the King family. Some large landowners, like Helenus Scott at Cassilis, had a potential site surveyed for a village within their holding.(38)

A good example of a well-planned unofficial town was Camden, over the Nepean River from the planned Narellan. The Macarthurs had the town laid out, and they were careful to include land designated for public use, like sites for churches, for a school, and even a court house. They had marked out the town with some help from a surveyor, who might have been Mitchell himself, for the plan bears a resemblance to other plans draughted by the Surveyor-General. On the 23 July 1841 auctioneer Samuel Lyons sold off 44 half-acre allotments (0.20 ha) on their behalf. The town attracted a wheelwright, a cooper, and a stonemason, to begin with and the Macarthur's overseer. Around the town were clearing leases of between 30 and 130 acres (12.14 and 52.61 ha) leased from Camden Park. (Fig.7.21) The land was productive, and the settlers farmed them each year with a measure of success. The rhythm of the farming year was adapted to Australian conditions, and the district was prosperous. The town grew slowy as a self-contained urban unit related to the farming district.(39)

This was the exception rather than the rule for these private towns in New South Wales. Most were short-lived subdivisions with no allowance for public land or for common urban uses in the plans. The expansion of the colony was fuelled by hopes for continuing immigration and future prosperity. The depression of the early forties signalled, however, that the little villages springing up, especially around the mother-city of the state, had little viability. These on the whole were embarked upon with only paper plans drawn up, and with no urban services of any kind provided. Unfortunately, speculation in unserviced urban land became a feature of

Australian towns from this time,especially in the seventies and eighties.

Another exception to this pattern was West Maitland, an unofficial town, which continued to thrive on the river trade between the Hunter Valley and Sydney, taking the growth away from the official Maitland, and becoming strong enough to attract a court house, churches, and other substantial buildings.

Plans of Sydney

An official Town Plan of Sydney was engraved in 1831, titled 'Map of the Town of Sydney, 1831', drawn and engraved for the N.S.W. General Post Office Directory by permission of the Surveyor General, by W. Wilson. (Fig.7.22) It accompanied the first Directory compiled by James Raymond, Postmaster of N.S.W., with assistance from various government departments. It was the first publication to include a directory of householders as well as marking clearly the public buildings. As well as containing a List of Towns and Stations, it recorded useful information about the public institutions in the colony, and the names of those who staffed them, and it included an 'Index to the Several Roads' radiating out from Sydney. It gives a picture of the colony as it was developing by that time, and also includes the base map which forms the basis for subsequent maps issued during the decade of the thirties. There were two versions of this map: one was included as a folding map to the Directory, and the other was sold separately.

Summary

In this chapter I have described the formal procedure which was followed in defining and delimiting the areas which were occupied by the British settlers as they started to spread out from the capital, Sydney. Towns in Australia were created in the first place by the colonial administration, they were marked out before they were settled, and did not occur as assemblages of family groups or as fortified places, as they evolved in Europe. The services that a town offered in Australia were bound up with the central administration of each colony: the police, the court house, the post office, the school, even the churches after 1836 were subsidised by the Government. The road building, and later the railways were government enterprises.

I have argued that in order to understand the big push of town foundation which started after 1829, we have to see it in the context of the recommendations of the Bigge Report. Commissioner Bigge had noted that the ratio of cultivated land to land granted was much smaller than expected, and he specified that more land should be made available to the settlers in general, and that it should be surveyed before they were given access to it. He also

specified that all allotments in the towns should be equally subject to prior survey.

The 'Nineteen Counties' was in area about one fifth of NSW, and it was here that the boundaries of settlement were formally marked out, and the initial towns and villages founded. In the thirteen years from 1829 to 1842, no less than 53 town plans were drawn up by the Surveyor-General's staff. Governor Darling was the initiator. The basic unit was the town block of 10 square chains (4 ha), divided into 20 building allotments. Crown Land in the urban area marked out was to be set aside for public purposes.

Given the task, which had to be carried out quickly in order to lay the framework of a coherent mapping system, the choice of plan seems to be fairly logical, and even, in many cases eminently suitable. It was simple, flexible, repeatable, and easy to understand and recognise. All three governors, Darling, Bourke and Gipps took an informed interest in the way the towns were being marked out. They saw them as logical developments of the settlement process, places which could provide services, encourage business and trade, and support local small farmers. They could make sure that sites were provided for churches, for mail deliveries, as a depot for police, and a court house and gaol.

In 1831 the Ripon Regulations were brought in to end the system of free land grants in the colony. All land was to be put up for auction, after they were surveyed and valued. The town lands were to be bought and paid for, and allotments were to be sold on the condition that a building was to be erected within a year. The stage was set for a new era of free settlement and migration to begin.

In the next chapter, the establishment of Brisbane, Albany, Perth, Adelaide, and Melbourne will be discussed. The acceptance of more free migrants with their subsidised passages from England, meant that there was always pressure for more surveyed land, both in the towns and around them.

CHAPTER SEVEN - REFERENCES

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4. See W.G. Hoskins, The Making of the English Landscape, Hodder and Stoughton, London, 1955. Chapters 5 and 6.

5. T.M. Perry, Australia's First Frontier, Melbourne University Press, 1963, p.50; quoting Goulburn to Oxley, Colonial Secretary's Miscellaneous Letters, p.453, Feb. 1822; Historic Records of Australia, vol xi,p.99, Bathurst to Brisbane.

6. These principles were first expressed in Oxley's letter to Bigge, 15 January, 1821 (Colonial Office Papers, Public Record Office, London, 201/121, p.379-84), noted by Perry, Ibid.

7. Earl Bathurst to Brisbane, 'Summary of rules for Migrants going to New South Wales', Historical Records of Australia, XI, pp.434, 444, 455; Brian Fletcher, Ralph Darling: a Governor Maligned, pp.140-41.

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11. Brian H. Fletcher, Ralph Darling: A Governor Maligned, Oxford University Press, Melbourne, 1984, p.142-145, 173-74.; Jeans, op.cit, p.191.

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13. See Jeans, op.cit,p.192-3.

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17. See Introduction to thesis.

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24. W.G. Hoskins, op.cit, p.295.

25. D.N. Jeans, op.cit, pp.193-5.

26. Robert Dixon, Map of the Colony of New South Wales, published in London by J. Cross, dedicated to Sir John Barrow, 1837. See J.H.L. Cumpston, Thomas Mitchell, Oxford University Press, Melbourne, p.158. Mitchell's map of 1834 was dedicated 'to the Right Honourable Edward Geoffery Smith Stanley and compiled from actual measurements with the chain and circumferencer according to a trigonometrical survey.' It was also called the 'Map of the Colony of New South Wales', and was scaled to one inch to a mile. Dixon's map followed Mitchell's closely, but simplified it, and was easier to read.

27. D.N. Jeans, 'Official Town-Planning Procedures in New South Wales, 1828-42', Journal of the Royal Australian Historical Society, vol.67, pt.3. pp.227-237.

28. New South Wales Calendar and General Post Office Directory, 1832, Sydney, 1832, pp.8-13.

29. Alan Atkinson, 'The Government of Time and Space in 1838, The Push from the Bush, No.5, December, 1979. p.8.

30. The drafting style of the first series of maps after 1830 was usually quite uniform. It was Mitchell's practice to sign the finished map with his own signature when it went went finally to the Governor and the Legislative Council.

31. Mitchell illustrated his journeys of exploration himself, and was a master of the fine picturesque view fashionable in the thirties; he then had his original sketches lithographed in London. His methods of travel are outlined in D.W. Baker, 'Thomas Mitchell as Explorer', Journal of the Royal Australian Historical Society, vol.80, parts 1 and 2, 1994, pp.24-45.

32. Andrews, Alan E.J., 'Surveyor Thomas Scott Townsend, his work in Australia, 1831 to 1854', Journal of the Royal Australian Historical Society, vol.79, parts 3 and 4, 1993, pp.170-75.

33. D.N. Jeans, op.cit, 1965, pp.227-237; also H. Proudfoot, 'Riversdale, Goulburn', Conservation Analysis, for the National Trust, NSW, 1983.

34. Graeme Davison, 'Punctuality and Progress: the foundations of Australian standard time', Australian Historical Studies, vol.25, no.99, October 1993, pp.177-178; A. Atkinson, op.cit.

35. G. Davison, op.cit.

36. 'The Recommendations of Governor Gipps for Land Regulations within the Limits of Location', May 1844, in C.M.H. Clark (ed.) Select Documents in Australian History, Sydney, 1950, p.246. Quoted by A. Atkinson, The Muddle-Headed Republic, Melbourne, Oxford University Press. 1993, p.37.

37. George Gipps, see A. Atkinson, ibid., p.37 and p.114.

38. Examples of private towns clustered around the major state capitals, where speculators would plan a subdivision on suburban blocks. These were usually notorious for their lack of land for public uses or open space, as well as failure to provide even basic services. Some private towns, however, attracted public uses in the long run.

39. Alan Atkinson, Camden, Oxford University Press, Melbourne, 1988; H. Proudfoot, 'Historical Review' for Travis Partners, 'Camden and Narellan Town Centres Heritage Analysis', January 1990.

CHAPTER SEVEN

FIGURES: Titles only; for full captions see Vol.II.

Fig.7.1 New South Wales, the Nineteen Counties. From T.M. Perry, Australia's First Frontier, Melbourne University Press, Melbourne, 1963.

Fig.7.2 T.L. Mitchell, Map of the Colonyh of New South Wales. Drawn by Mitchell, engraved by John Carmichael in Sydney, republished in London, 1834. Detail. Copy held by author.

Fig.7.3 Robert Dixon, Map of the Colony of New South Wales, published by J. Cross, London, 1837. Mitchell Library, MC811/gbbd/1837, State Library of NSW.

Fig.7.4 Robert Dixon, ibid. Detail of the southern highlands.

Fig.7.5 Location of towns planned by Government within the 'Limits of Location' up to 1842. From Denis Jeans, Australian Planning Institute Journal, vol 3 no 6, October 1965, p.188.

Fig.7.6 (a) Plan of Campbelltown, c.1844, Campbelltown and Airds Historical Society, from C. Liston, Campbelltown, Allen and Unwin, Sydney, 1988.

Fig.7.6 (b) Plan of Campbelltown, 1844. Rejected plan. Archives Office of NSW, Map No.2281.

Fig.7.7 Plan of Maitland, A.D.1829, signed by T.L. Mitchell, Archives Office of NSW, Map No.3634. Facsimile.

Fig.7.8 (a) Ground Plan of Port Macquarie, H. Langdon for Capt F. Allman, 8 April, 1824. Preliminary survey by James Meehan. Archives Office of NSW, Map No.74.

Fig.7.8 (b) Plan of Port Macquarie by Capt Wright, March 1826. From F. Rogers (ed) Port Macquarie, Hasting District Historical Society, Port Macquarie, 1982.

Fig.7.9 Plan of Port Macquarie, April 1831. Prepared by surveyors Ralfe and D'Arcy, signed by Mitchell. Archives Office of NSW, Map NO.3679. Facsimile.

Fig.7.10(a) The first plan of Goulburn, 1 October 1829. Archives Office of NSW, Map no.2781. Detail.

Fig.7.10(b) Plan of the Town of Goulburn, 19 June 1833. Archives Office of NSW, Map No.2798. Fascsimile.

Fig.7.11 Plan of Goulburn including the Old Township, compiled by E.H. Arnheim, 1859. Archives Office of NSW Map No.3483.

Fig.7.12 The standard section or block brought into use by the 1829 Town Planning Regulations. Diagram by D.N. Jeans. Australian Planning Institute Journal, October 1965, p.192.

Fig.7.13 Township of Bungonia, signed by T.L. Mitchell, 27 February 1833. Mitchell Library, State Library of NSW. Copy from D.N. Jeans and P. Spearritt, The Open Air Museum, Allen & Unwin, Sydney, 1980, p.46.

Fig.7.14 (a) Plan for the Town of Appin, April 1834. Archives Pffice of NSW, Map No.1170.

Fig.7.14 (b) Plan of Appin, October 1842. Archives Office of NSW, Map No.1171.

Fig.7.15 Plan for the Town of Wollongong, 1834. Archives Office of NSW, Map No.5963. Working model.

Fig.7.16 Plan for the Town of Yass, 1837. Archives Office of NSW, Map No.6138. Signed by S. Perry. Note township Reserve.

Fig.7.17 Plan of Berrima Township, Sept 1838. Archives Office of NSW, Map No.1376. Surveyor Fernyhough.

Fig.7.18 Plan of the Village of Mururunda (sic), 1839. Archives Office of NSW, Map No.3942. Note Village Reserve.

Fig.7.19 Plan for the Village of Dubbo, 1849. Archives Office of NSW, Map No.2617.

Fig.7.21 Plan of the Village of Camden, the Glebe, and adjoining Farms, August 1842. Macarthur Papers, A4217, Mitchell Library, State Library of NSW.

Fig.7.22 Part of the Map of the Town of Sydney, 1831. Drawn and engraved for the New South Wales Calendar and Post Office Directory, by W. Wilson by permission from the Surveyor General.

CHAPTER EIGHT

THE FOUNDING OF THE OTHER STATE CAPITALS AND THE LEGACY OF DARLING'S 1829 REGULATIONS

> The Government of a new Colony alone determines the sites of the towns, and the direction of the roads; whereby it has the power to give a considerable market value to certain portions of territory.
> Edward Gibbon Wakefield,'A Letter from Sydney',1829.

> If adequate encouragement could be held out to the enterprising young men of rank and connections; if young men and women, in the intermediate ranks of life, are accustomed to look to the colonies as the most certain means of obtaining a comfortable settlement; and if the poor could be persuaded that it would be better for them to purchase a passage, by binding themselves to serve as a bondsman a few years after their arrival in the colonies, than to wear out an abject and hopeless life at home, the country might be materially relieved of the useless population by which it is likely soon to be encumbered.
> Quarterly Review, no lxxviii, art.8. 1829. On the State and Prospects of the Country.(England)

Concurrent Events in 1829

While Governor Darling was pondering the new Regulations for the laying out of towns in Eastern Australia in May 1829, Captain James Stirling and his party of free independent settlers were sailing towards the Swan River to found a colony in Western Australia. In the 'Parmelia' and her escort, the 'Sulphur', some 669 settlers and 100 soldiers, seamen and a handful of officials were embarked. They were to be followed by another 1050 people in 1830. Stirling's persistence in lobbying the Colonial Office since the time he first saw the Swan River two years before, had borne fruit. (1)

In the same year, north from Sydney, the convict outpost named after Governor Brisbane was growing slowly and despondently. The commandant, Captain Logan, imposed a routine of frequent floggings for the growing group of re-convicted convicts. Their numbers increased from 195 in 1827 to 553 in 1828 and 940 in 1829, augmented by 18 women prisoners and 150 soldiers and their families. The numbers of prisoners peaked in 1831 to 1019 male convicts. The plan of Brisbane Town in 1839, thirteen years after it was proclaimed a penal settlement, was barely that of a town; it was more like a temporary encampment. (Fig.8.1(a))

After some uncertainty about its future, Governor Bourke decided to keep the penal settlement at Moreton Bay

going, more to avoid another uncontrolled grab for land like the one he had witnessed when the Port Phillip district was thrown open to free settlement, than to confirm its suitablity as a site for a major centre for its region.(2)(See the Brisbane Town Map by Robert Dixon, where he laid a square grid over the site. Fig.8.1(b))

In Newgate Prison, in the same year, 1829, Edward Gibbon Wakefield was putting the finishing touches to his Letter from Sydney, which was published under the editorship of Robert Gouger. This 'outline of a system of colonization' was a polemic which advocated 'systematic colonization' in Australasia, and was first published as a series of letters to the Morning Chronicle, and then collected into a book by the publisher Joseph Cross of London. Wakefield maintained that the 'waste lands of the crown' could be readily sold and the proceeds could then be applied to the emigration of labourers to the colony. Wakefield made no secret of the fact that he had read the 'useful little books' of Mr Curr, Mr Widowson, and Mr Atkinson about the colonies. He had formed his ideas on migration from the remarks of these writers, and had come to the conclusion that it was 'the scarcity of labourers' that was an insuperable bar to any extensive cultivation of the soil in the new colonies.(3)

In his book,Wakefield had posed as a new settler emigrating to Australia with some modest capital, and taking up land to farm. He found that 'The novelty of the thing pleased me at first; but I soon tired of the clear Italian skies, the noble forests, and the sublime solitude of the untrodden wilderness.' He began to realise that 'In the desert, almost every want is severely felt before it is supplied. Everything, from the very beginning, has to be created or brought from a great distance.' He also realised that the role of the administration is crucial..'It is the local Government which supplies the means of production, and which, again, is the principal purchaser for consumption.' (4)

He then turned his attention to the matter of the siting of towns. He recognised that the governor or government of a new colony had the power to determine the sites of towns and the direction of the roads, and consequently it controls the market value of much of the land it sells. The governments of all 'new countries' then exercise an imperceptable despotism over the affairs of all their subjects, by means of their power over all the 'waste land'. Wakefield goes on to remark 'That the history of settlements in desert countries abounds with fluctuations in the value of land and of labour, arising solely from fluctuations in the proportion between the people and the territory for their subsistence...'(5)

Wakefield's theories were to be tested by the formation of the National Colonisation Society in London in 1830 and the South Australian Land Company in 1832, which presented Lord Goderich with a submission for the

endorsement of a 'private' colony. Lord Goderich regarded it, however, as a 'subversive' measure; in fact, it was rejected on the grounds that it was undesirable to provide such a vast territory to a private company, while excluding the Crown. It would be tantamount to handing power to a republican state within the realm of the British Crown.(6)

A hundred years before this, in 1726, Jonathan Swift had written about the imaginary land of Lilliput. Gulliver was shipwrecked among the Lilliputians. His book was a satire about various systems of government and the societies they engendered, about the 'true believers' of the eighteenth century. The little people of Lilliput had two antagonistic parties, one which maintained that the way to eat eggs was from the pointed end, the other which maintained that this was wrong and the eggs should be eaten from the rounded end; trivial issues generating much heat, before the mediator devised a compromise. Swift located the island of Lilliput in the Antipodes off the coast of Van Diemens Land and near Kangaroo Island. (Fig.8.2) So South Australia has for its 'mythical founder' a character who became one of the better-known figures of English literature, and though Swift did not claim to be a prophet, his adventure story became a uncanny projection of the later events in South Australia. Disputation was to become endemic in the colony.(7)

South Australia and Adelaide

Interest in colonization revived in London after Captain Sturt and Captain Colet Barker visited London in 1833, coinciding with the publication of Wakefield's England and America. A new body called the South Australian Association was launched and the Duke of Wellington was persuaded to endorse their plan. The Act for the Establishment of the Colony of South Australia was passed on 15 August 1834, with control divided between the Crown and a Board of Commissioners. The Act, however, stated that no action, such as prior surveying of the land, was to be undertaken until the stipulated sums had been raised from the sale of lands. This gave rise to major problems. Between July and September, fifteen ships laden with British immigrants, arrived in South Australia. The Governor, Captain John Hindmarsh, with authority from the Colonial Office, decided that the site of the major city should be Port Lincoln; Colonel William Light, with authority from the Commissioners, considered the site on a rise above the Torrens River would be much more suitable. Their quarrel over this matter was to foreshadow a history of disputation in the first years of settlement before Governor George Grey took complete control in the name of the Crown in 1842. Light, after his hurried survey of Adelaide, also had instructions to determine the sites and make surveys for secondary towns, begin the surveys of suitable rural land, and to survey possible harbour facilities, all at the one time. The

task was much too ambitious for a small survey team to carry out.(8)

Light's Plan for Adelaide has been generally lauded by planners in Australia. For his survey, Light took bearings from Mount Lofty over the coastal plain, and planned his town about five miles inland, avoiding the sandy flats adjacent to the shore.(See Fig.8.3) His basic idea was to surround the two parts of the plan, the City to the south, and North Adelaide across the river, with a generous belt of parkland, and to articulate the built arrangement by a number of civic squares.(Fig.8.4)

The regular blocks were marked out in half-acre allotments and put up for sale, and the rural portions were also surveyed by 1840. This had an unforeseen effect on the growth of Adelaide. The high cost of city blocks made speculation in land, both urban and rural, attractive, and villages appeared like magic, the result of subdivision of the rural blocks around the fringe of the main settlement. The city had generated its suburbs almost immediately. The result was that the main settlement grew very slowly and was characterised by low densities, while the suburban nodes influenced its shape, and the straight tracks running across the flat plain between the thirty or so villages and Adelaide, became in the course of time, suburban trunk roads attracting 'ribbon development'.(9)

So the claim that Adelaide was a forerunner of the 'Garden Cities' of the late nineteenth century, needs qualification, and dissenting opinion has pointed to structural faults in the 'far-sighted' plan. Its development was not as simple as that planned by the Commissioners in London. Even amongst Australian cities, the distinguishing features of the plan can be seen to be far from unique.

Melbourne, for instance, was planned by the experienced surveyors of New South Wales in 1837, the same year that Adelaide was being surveyed by Light. Robert Hoddle, accountable to Governor Bourke in Sydney, and the most experienced surveyor in the colony, laid out a plan for Melbourne which made provision for selected reserves near the formal city core to complement the regular, planned streets, and allow the city people 'open space'.

In ~~a~~ South Australia, a colony which proved to have only a limited amount of fertile and productive soil, Adelaide has grown with its urban sprawl over much of the rich 80,000 hectares of coastal plain, alienating the land for urban use as it grew, instead of harbouring its potential for both urban and agricultural use. A drawback of its position is that the hills east and south of the city leave it exposed to the hot winds of summer and the chilly west winds in winter. It has been called 'a pleasant exercise in geometry', which has serious drawbacks.(10)

But of course, Adelaide people have always maintained a disdain for the tainted backgrounds of the mother-city of Sydney and the other capitals of convict-settled states. In their 'Paradise of Dissent' they commenced building a 'model' city, which they maintained was far ahead of its time. This was a pleasant fiction, but this view discounted other models, such as the one provided by Edinburgh's New Town extension, planned between the years 1752 and 1822, and the plan of that other growing city, Melbourne, over the border in Victoria. Adelaide's dominant idea of an encircling parkland around the centre of the city was by no means a unique planning innovation. (Fig.8.3 and Fig.8.4)

Many country towns in South Australia were to be planned as small replicas of the capital, and this was continued on by George Goyder after 1864 when he provided his surveyors with a 'model' town plan to be followed. This became the basic model for South Australian country towns for the rest of the century.(Fig.8.5) Out of 218 towns surveyed in this period, 179 had dominant parkland elements ringing the town. Sometimes it was appropriate, sometimes it was not.(11)(Fig.8.6)

The Influence of the Explorers

The journeys of exploration by Charles Sturt in 1828 to 1831 and the publication of his Journals in London when he returned there in 1833, was very timely. The debate over the pressing need to find some outlet for the increasing population in Britain was mounting. The arguments for colonization in the Greek sense were being assembled, that is, for the trans-planting of a society, with its institutions intact, with its subjects being governed, and protected, by a similar system of law.

The explorations of Sturt with his careful assessment of the soil, climate and resources of the country he had traversed and his successful charting of the 'great river' system of the Darling and the Murray, were reinforced by the journeys of T.L. Mitchell, published as a book in 1838, and also read with great interest by the 'Systematic Colonisers' in England. Mitchell described in glowing colours a vast tract of country to the south of the Murray River, land which could be taken up and developed by stalwart Britons. The geography of Australia was unfolding as the demands for more emigration grew more insistent. Sturt wrote at the end of his second journey:

> 'From the above account it would appear that a spot has, at length, been found upon the south coast of New Holland, to which the colonist might venture with every prospect of success, and in whose valleys the exile might hope to build for himself and his family a peaceful and prosperous home.'(12)

Mitchell was clearly delighted by the country he passed through on his third great exploration southwards to the undiscovered country he called 'Australia Felix'. Despite the presence of several native parties, which he disregarded, he wrote on the 21 September 1836:

> 'To the westward the noble outline of the Grampians terminated a view over vast plains, fringed with forests and embellished with lakes...Certainly a land more favourable for colonization could not be found. Flocks might be turned out upon its hills, or the plough at once set to work on its plains. No forests required to be rooted out, although there was enough of wood for all purposes of utility, and as much also for embellishment as even a painter could wish.' (13)

Near the end of his account Mitchell considers the general character of this newly-discovered country in relationship to the country he knew in New South Wales. The lines of communication must be constructed to link Sydney on the seaboard to the productive land in the interior. He still considered that the colony formed 'an excellent field for the employment of convicts...as the future prosperity of the country, depends much on the completion of such public works....With a well arranged system of roads radiating from such a harbour, even the sandstone wastes, extensive though they be, might be overstept, and the good parts being connected by roads, the produce of the topical and temperate regions might be then brought in to a common market.' From his experience in his Australian travels, Mitchell had formed the opinion that in general, the land in Australia comprised one-third probably of 'desert interior plains; one-forth, of land available for pasturage or cultivation; and the remainder (was), of rocky mountain, or impassable or unproductive country.' But Australia still offered promise to British settlers. He considered that land southwards from the Murray, with its vast extent of open, grassy downs, offered 'just what was most necessary, for the prosperity of the present colony, and the encouragement of a greater emigration from Europe.'(14) These, then, were the words that drew the aspiring colonists to their far-away destinations in South Australia and Victoria.

As well as offering all this, Mitchell thought that Australia also held out to the colonists the chance to build a new society which could learn from the mistakes of the old countries in Europe. His optimistic vision was not spelt out in his books; it was vague, but tied to the surveyor's work he was doing. The vision of the early poets of Australia: Erasmus Darwin, Robinson, Field, Wentworth, and Woolls, writing with such optimism and verve in formal heroic verse, had started to be realised.(15) He wrote, on completing his Third Journey:

> 'This territory, still for the most part in a state of nature, presents a fair blank sheet, for any geographical arrangement, whether of county divisions - lines of communication - or sites of towns, &c.&c. The growth of a colony there, might be trained according to one general system, with a view to various combinations of soil and climate, and not left to chance, as in old countries - or, which would perhaps be worse, to the partial or narrow views of the first settlers. The plan of the whole state might be arranged there, like that of an edifice, before the foundation is laid, and a solid one seems necessary, where a large superstructure is likely to be built.(16)

Mitchell dreamed of grafting 'a new and flourishing state', on a region he considered 'so desolate and unproductive'. This, he thought could be undertaken by England alone with her command of the sea lanes.

Mitchell was reflecting in part the views of the Utopian philosophers, Robert Owen, and James Silk Buckingham, and other social reformers, and of course Edward Gibbon Wakefield. There was a current of Utopian thought circulating in England; there were debates about how society could be reformed to eliminate the disparity between the rich and the poor. Reforms were in the air in the thirties, despite the disillusion with the alarming results of the French experience, and the warnings by Edmund Burke.

At first deliberation, emigration opened up an easy and obvious field where reforms could be tried without the dead weight of tradition to hamper them. But the colonists themselves, by now experienced immigrants, had conflicting views, engended by the circumstances they had found here and had had to come to terms with. Their politics were pragmatic, self-interested, and opportunistic on the whole. The 'fair blank sheet' was a fiction in more ways than one. The Aborigines were hard to fit into a reformist agenda, and the already established colonials were working out their own solutions. The better educated colonists, however, had one eye on political trends and events in England, as Mitchell himself did.(17)

Western Australia

In Western Australia, the promise was, from the beginning, much greater than the reality. Governor Darling, cautious about the French visits of exploration along the southern coasts of the continent, was mindful of a greatly extended coastline without an official British presence. George Vancouver, who had sailed with Cook for seven years in the Pacific, was appointed to lead an expedition to the South Seas and the north-west coast of North America. On his outward voyage, he anchored in the calm waters of King George's Sound in

1791. Matthew Flinders, on his long expedition to circumnavigate the continent, called there to refit the 'Investigator' in December-January 1802-03. The French were following hard on his heels, calling there the next month, and they again called in 1826.(18)

Following instructions from London to send parties to establish bases at Western Port (Victoria) and Shark Bay on the west coast of the continent, Governor Darling despatched the 'Amity' with a small party of two officers, 18 rank and file soldiers, a surgeon, and 23 convicts, under Major Edmund Lockyer, to form a outpost at King George's Sound in the West. They arrived on 25 December 1826 after a difficult voyage, being blown off course battling the strong summer gales of Bass Straight. Lockyer chose the site of Albany near a small stream. On 21 January, 1827, Lockyer wrote:

> 'This day at sunrise the colours were displayed on the Flagstaff, and at twelve o'clock a Royal salute was fired from the Battery and a Feu de Joie by the Troops, and an extra allowance of Flour with Raisins and suet was ordered on the occasion to be issued to the Troops and Convicts; a number of the natives having come to the settlement in the morning the seine (net) was Hauled on purpose to give them a feast; about Three hundredweight was taken of the Capital Fish. The day proved fine and the whole went off well.'(19) (Fig.8.7(a))

There are echoes here of the landing at Sydney Cove and Norfolk Island in 1788. But the settlement of King George's Sound was further complicated by the arrival of Captain James Stirling in Sydney and his voyage to the Swan River in March 1827. He wrote a glowing report of the Swan, stressing its useful position for trade with Asia, and its nearness to India. Contrasted with Lockyer's cautious report of the Sound, and the difficulty of access from Sydney, Stirling's praise of the Swan pursuaded the British Government to allow a private syndicate to float a colony to settle the Swan River. Stirling then requested that the convicts and troops be withdrawn from the Sound, and they were evacuated in March 1831, and the settlement there proclaimed as part of the Swan River Colony.(20)

The camp formed at The Sound could be read as the beginnings of a town, as Captain J. Wakefield had laid it out on top of a flat and clear area at the foot of Mt Meville, a rise a little way from the shore line. The buildings were grouped around the perimeter of a 'parade ground' which ran north-south along the site of the present Parade Street. The 'parade ground' was two chains wide (132 feet or 10 meters). The flag staff was placed at the entrance of the parade ground, and another at the shore line.(21) Similarities with the plan of the Norfolk Island settlement under Lieutenant King are quite marked, and also with the first plan of

Sydney, with its projected parade ground between the principal official buildings. Echoes of Parramatta and Toongabbie as they were first planned can also be seen. (See Figs.8.7(a) and 8.7(b), compared with Figs.1.3, 2.10, and 3.2).

King George's Sound was the subject of one of the most detailed and attractive panoramas produced in the first settlement period. Printed in four parts by R. Havell, in London in 1834, the aquatint was based on a drawing by Lieut. Robert Dale. In the iconography of settlement, with its contrast between native possession and the Europeans' tenative beginnings, it has a special place. (Fig.8.9)

The buildings however, were not destroyed as they were at Norfolk Island, when the first settlement there was abandoned in 1814. At Albany the buildings and one lone ex-convict, Thomas Neville, who elected to stay, were bequeathed to the Swan River settlers, but they themselves were in a parlous condition, and the soil near Albany was not considered rich enough to entice them down from Perth. But Stirling ordered the surveyor Raphael Clint to start surveying a small area around the parade ground into blocks of nine-tenths of a acre in 1831, and when he visited the site the Surveyor-General J.S. Roe and assistant surveyor Ommanney continued laying out the town.(22)

Roe and Ommanney did not adapt the parade ground as the focus of the town, but used the ground to form the north-south Parade Street and planned York Street as the widest street and the central road, the 'cardo'. It became the main avenue of movement inland from the port. Stirling Terrace was also planned as a wide east-west road, forming the 'decumanus',and the blocks along the shore line were divided for private ownership. (Fig.8.8(b))

The block size of 10 square chains evolved by the NSW surveyors was not used either here or in Perth. The town site had its own pecularities: small hills, cliffs, sand dunes and marshes, and large granite boulders scattered about. But the main north-south axis was established as the 'cardo', and the 'decumanus' followed the route of the sun across the sky. It was many years before the plan was fleshed out with town buildings. The flag was flown, hopefully, at the old parade ground and on the point, but ships were few and far between. Albany shared Perth's stagnation in the 1830s and 1840s.

Perth and Edinburgh

Perth itself had an ambitious start. Governor Stirling's instructions from the British Secretary of State for Colonies, Sir George Murray, included the directive that the town was to be founded as the future seat of government of Western Australia. He was instructed that the town should be laid out on a regular plan, and that

sufficent land was to be reserved for public purposes. A central zone of 1920 acres should be available only for leasehold for up to twenty years, so that land would be available for future resumption as the town expanded. His instructions also suggested that the town should be sited at the confluence of two waterways.(22) (Fig.8.10)

On the 12 August 1829 Mrs Helen Dance, wife of one the senior officers, founded the city of Perth by striking a symbolic blow with an axe on a casuarina tree. Then Septimus Roe, the surveyor, laid down the lines of the first street pattern over the following weeks. The 'township reserve' containing the town was three square miles, and Roe planned the lateral town streets parallel to the shore line. The major streets were named after Wellington, hero of Waterloo and Prime Minister of England, Sir George Murray, Secretary for the Colonies, and R.W. Hay, his under-secretary. The site was bordered by the river, Mount Eliza to the west, and by a chain of ponds to the north. It has been claimed that the model for the lay-out was Edinburgh, whose 'New Town' had drawn favourable comment among the surveying professionals in England.(23)

Governor Stirling, indeed, was a Scot, and would have known the Edinburgh extension well. It was a very innovative scheme for its time, and all things being equal, would have provided an admirable model. Its plan had evolved over a period of years from 1752 to 1822, and marked a neo-classical high-point in the city's history. It was all the more remarkable for having been set in train by the City Corporation itself. The initiative was taken by the Convention of Royal Burghs of 1752, and espoused by George Drummond. At that time, Edinburgh was emerging from a long period as a fortified town, centred on the Rock which had been a strongly defended castle, Clustered around the castle and nestling on its eastern side was the walled town of Edinburgh, which followed 'the long mile' down to Holyrood Abbey, which became Holyrood Palace after the Dissolution. It was a classic example of a large medieval ribbon-development town.(Fig.8.12)

The city began to grow after James I was made Elizabeth's successor and King of England and Scotland, and the wars between England and Scotland were resolved. It began to attract a strong intellectual elite, James Hume, Adam Smith, James Boswell, Walter Scott among them, which in turn made possible the founding of more schools, a university, and produced influential magazines and a thriving book trade. North of the Royal Mile was a small loch, and bridges had to be built for the town to extend that way. The Town Council itself bought the land and called a competition for the design of the New Town. George Drummond argued strongly for organised expansion:

> 'Enormous cities are sometimes attended with real disadvantage such as vicious luxury, a general

> deprivation of manners, and a loose or neglected police, but let us boldly enlarge Edinburgh to the utmost. As it is not the seat of Government it can never become a centre of luxury and vice.'(24)

James Brown acquired the land for George Square and made a start with the buildings there. Bridges were made for the crossing from the Old Town to the New. The competition for the design was won by James Craig and Robert Reid, and decade by decade the town started to grow. By 1822, as James Gillespie designed the last of the early squares, Edinburgh was famous for its dignified and orderly planning, and a model to the antipodean towns both in its plan and its philosophy. (25) (Fig.8.13)

Just as John Wood of Bath served as a mentor for Greenway, the Edinburgh planners influenced the towns of Perth and Adelaide, though not acknowledged in the latter case. Another prospective town in Western Australia, Australind, with its paper plan with articulated open space and city squares, was however a grandiloquent fantasy, a parody of the slow-growing and carefully thought-out plan of Edinburgh.

Paper Plans Never Built: Australind and Maslen's 'Town for Australia'

Australind, indeed, is a text-book example of over-confident planning. Inspired by all the talk in London about the opening up of the Australian lands for settlement, the Western Australian Company was formed in 1839. One of the main inducements held out for 'planned' settlement was 'its great distance from the Convict Settlements, and the consequently superior social condition which already exists in Western Australia.' Apparently learning from the mistakes of the South Australian settlement, 'an efficient Surveying establishment' was sent out before the intending colonists arrived. High-flown sentiments in tune with the current climate of opinion in Britain, with both ulititarian and commercial overtones, were expressed by the man appointed as Chief Commissioner, M. Waller Clifton:

> 'I may see the new settlement take an important station among the Colonies of the British Empire, and Australind as the maritime capital of Western Australia, not only the emporium of trade and commerce, but distinguished for its high moral, religious and intellectual character.'(26)

Land, only recently granted to the first Governor of the State, Sir James Stirling, to himself and one Colonel P.A. Latour was purchased by the Company. A town of 1000 acres (400 ha) was planned,'exclusive of reserves for public objects, such as quays, streets, squares, churches, and public gardens, in or adjoining the town.' Sale of rural lots of 100 acres (40 ha) were accompanied

by four allotments of urban land.(27) Only a small party of settlers arrived; they found a paper plan of a town, (Fig.8.14), but little else. Their rural land was far from fertile, and there was no administration to refer to. The settlement had no chance of success. Today it cannot be seen on the map. Only a name of a road near the Leschanault Inlet commemorates the venture.

Another text-book plan was offered by a writer from India, who published a book in London in 1830, called The Friend of Australia: or, a Plan for exploring the Interior. It was written by T.J. Maslen, who described himself as a 'Retired Officer of the Hon. East India Company's Service'. Almost nothing is known about Maslen, and the sources for his book are not known.(28) The Journals of the major explorers were not published when he wrote, and the tone of the book is coloured by his Indian experience. In fact, the naming of the Great River as a 'Desired Blessing' seems to hint that it may have been written by an Indian, or a man from China. It is an Asian expression, rather than an English one. The book received some attention in the thirties and was published a second time in 1836. Maslen proposed a model plan for Australian towns, advocating a hierarchy of streets for the accommodation of different classes of people and different functions. There were no back lanes to foster 'vice and wickedness', there were regulations to guard against 'envious feelings'. The tenor of the expression again seems to give a hint of an Asiatic voice rather than a European one. There would be a belt of parkland to surround the town, somehow injecting an agrarian mythology into the mixture. (Fig.8.15) Maslen here adopted the easy generalisations of 'environmental determinism', something late nineteenth century and early twentieth century planners in England and Australia would espouse with enthusiasm. But his advice in the 1830s on town planning matters went unheeded, and his offer to explore the interior was received with silence.

But Maslen's other plan which depicted the interior of Australia and indicated the route of 'a Great River or the Desired Blessing', a imaginary river which rose west of the eastern mountains, travelled northward through Queensland, assembled itself in a land-locked lake on the way, and debouched north of the present town of Broome, was to haunt the dreams of aspiring explorers for most of the remainder of the century. It was not only Maslen's dream, it was Mitchell's and Leichhardt's, and the nightmare of Burke and Wills.

Melbourne, 'Marvellous Melbourne'

Even before gold was discovered in Victoria, and even before T.L. Mitchell approached Westernport Bay in 1836 on his Third Expedition, the site of Melbourne was occupied by two parties of Europeans who had come over The Straits from Van Diemen's Land seeking land and pasture for their flocks of sheep. They had already

built their houses and established their farm buildings there.

The Port Phillip District had received some attention from 1798 when George Bass entered Westernport and later in the same year returned with Matthew Flinders, discovering Bass Strait and sailing around Van Diemen's Land in a small sloop. Governor King, prompted by a visit by a French exploring expedition, directed a surveying party under Charles Grimes to land there and survey the country around Port Phillip in 1803. James Meehan was one of the party, and James Flemming, a gardener. Flemming reported that the most eligible place for a settlement was on the Freshwater River. David Collins was appointed Lieutenant-Governor of a proposed settlement, and sailed from England with a detachment of marines and about 300 convicts, arriving in October 1803, but Sullivan's Bay, the place he decided upon for the settlement, proved to be disappointing, and Collins abandoned the site and sailed instead to found Hobart on the Derwent in Van Diemen's Land.

Another attempt, again prompted by another French expedition's arrival in Sydney in 1826, went south to Westernport, but this small party was recalled when the French threat was considered past in 1827. In 1824 Hamilton Hume and William Hovell had journeyed overland from Sydney, crossed the Murray River and reached Port Phillip. But the government initiative lapsed, and it was not until 1834 that the Henty family, retreating from their Western Australian experience, went east and landed in Westernport, and established an illegal foothold there. John Batman and William Fawkner came the following year to Port Phillip itself, and Batman signed a 'Treaty' with the local Native Tribe. Governor Bourke in Sydney declared any such treaty illegal, but was moved to expedite an order from Lord Glenelg of the Colonial Office and authorise settlement of the area under the Crown Lands Regulations of New South Wales on 14 September 1836. He appointed both a Civil and Military contingent for Port Phillip. (29)

The Goulburn Police Magistrate, George Stewart, had reported that on 10 June 1836 at Bearbrass or Bearpurt, the first name for the settlement there, that 'the town...is on the left hand of the Yarro, about seven miles (10.2 km) from its mouth, which at present consists of thirteen buildings, viz, three weatherboard, two slab, and eighteen turf huts.' There was also a small growing colony of tents, which continued to house a proportion of the Port Phillip pioneers for some decades.(30)

Aboard the first ship from Sydney were three surveyors, Robert Russell, F.R. D'Arcy, and W.W. Darke and their equipment. Captain William Lonsdale was charged with the selection of a suitable site for an urban centre, and he decided on a site north-east of John Batman's cottage and parallel to the Yarra River. 'The orderly marking out of

Crown Land and its sale ensured that occupation and development could be independent of government but have the full protection of law supported by the power of the state.'(31) The settlers already there had asked for the appointment of a police magistrate and a police force for the district, but the survey of land for the town, and its sale, created the physical framework for its distinctive spatial character, bequeathing to each succeeding generation a fixed and stable frame for their urban endeavours.

Governor Bourke, losing no time before he visited the new settlement, came down from Sydney with Robert Hoddle, the most experienced of the New South Wales surveyors in March the next year. The site of the town, sketched out by Russell, was agreed upon, 24 sections in the mould of the Darling Regulations, 8 sections near the river and 3 sections deep as befitting a substantial potential centre and port to the district.(Fig.8.17) Hoddle defined the Government Township Reserve containing the town, at one mile (1.61 km) north of a reference point on the summit of Batman's Hill and a north-south boundary two mile (3.22 km) to the east. The Yarra River on the south and the Moonee Ponds to the west formed natural boundaries to the reserve. (Fig.8.18) The main difference with this plan and the plans employed in the New South Wales towns after 1829, was with the adoption, at Governor Bourke's suggestion, of laneways to give access to the allotments from the back, thus avoiding the need for vehicles to cross the footpaths bordering the streets.

This departure from the basic grid section was opposed by Deputy-Surveyor General S.A. Perry in Sydney. He foresaw that the so-called 'little' streets would interrupt the 'free circulation of air' and lead to demands for additional levels, drains, and the formulation of narrow streets.(32) But the survey went ahead incorporating Bourke's suggestions. The boundaries of the sections were trenched, and the individual allotments were pegged. The first sale of land was held on 1 June 1837, with allotments purchased at the minimum price of five pounds with an undertaking to build within a year. Prices escalated quickly during the next 22 months, and by that time, most the land within the present centre was sold. (Fig.8.19, Plan of Central Melbourne) and (Fig.8.20, Liardet's recollection of a Mebourne land auction)

The colonial gentleman Thomas Walker from Sydney journeyed overland to assess the situation in 1837. He recorded:

> 'The town (in futuro) seems comparatively crowded with inhabitants, but without habitations. They come so fast that it is impossible to provide themselves with houses, and they are living in tents and huts of all manner of shapes.'... He went on to say:'I have not the least doubt, that this settlement will rise more rapidly than any in this colony was ever known to do, and that it will soon

> become one of the most important and flourishing districts of the colony. With so much good land in the neighbourhood of a sea-port, and so fine a country for sheep all around it, whilst the elder colonies within any reasonable distance of the coast, are already over-stocked, there is nothing to prevent it becoming populated and prosperous.'

He was impressed with its central location in relation to the other colonies, and purchased a block or two in the town, resolving to come again and invest in land when the surveyors had made more progress.(33)

From over the Yarra River, an artist took a bird's-eye view of the town in 1838. The street system with its regular grid is boldly marked out and cleared of the timber which was still covering most of the site. There was a close alignment to the river bank where small ships could pull in. The creek bed along Elizabeth Street can be seen in the drawing, and Flagstaff Hill rises gently to the north-west. (Fig.8.21) There was not the same emphasis on displaying the Union Jack in this settlement as in the earlier Sydney, Norfolk Island, Hobart and King George's Sound.

This time, the settlement was starting to assemble. A commentator, observing the town, could not categorise it exactly. It was already showing signs of flourishing. Garryowen, a newspaper columnist wrote:

> 'Melbourne in 1840 was certainly not a city and could hardly be called a town; it did not even partake of the characteristics of a village or hamlet. It was a kind of big 'settlement', in groups pitched here and there, with houses, sheds, and tents in clusters, or scattered in ones and twos. There were streets marked out, and stores, shops, and counting-houses...but the majority of the business or residential tenements were made up of colonial wattle-and-daub, roofed with sheets of bark or coarse shingle...'(34)

The regularity of the town plan was not questioned at this stage, indeed it was welcomed. The influx of people from the British Isles, from Van Diemen's Land, and Sydney itself, was without precedent. The surveyors had to impose a framework which provided fixed points for the settlers to refer to amid the hustle and bustle of disembarking and unloading their possessions. The new town, however, did not spring up on the seashore, but a couple of miles inland on the north bank of the Yarra River, where the town was formally marked out. The plan indicated in itself, that the administration was in control of the situation.

The colonial city that achieves success in its early days, can thereby hope to achieve a central area which is not quite dwarfed by later transformations. For the

newcomers it was a relief to know that the plan was fixed so soon. Melbourne, indeed, profited by the experiences endured by the settlers in Sydney, the experiments that had been tried there, and the solutions that had been found to work. Governor Darling's town planning regulations had been accepted by the Sydney surveyors as the most rational and efficient pattern to use for the laying out of new towns, and of the new towns, Melbourne was conceived as the largest and most important potential new city. The regulations themselves imparted a welcome air of certainty in a still strange environment.

George Tibbits has written of the Survey of Melbourne:

> 'Of all the aspects of work undertaken by government in the earliest years of settlement of the Port Phillip District, the most enduring and without doubt the most influential for later generations was the survey and sale of land. It was one of the most important aspects of government protection. The orderly marking out of Crown Land and its sale ensured that occupation and development could be independent of government but have the full protection of law supported by the power of the state. To gain this protection had been a principal reason for the settlers asking government recognition of their occupation of Port Phillip. The survey and sale also created the framework within which the distinctive spatial character and built imagery of Melbourne could develop, enabling the township to both reflect its changing history and maintain a sameness over generations.'(35)

Several circumstances combined together to make the mood one of optimism: the colony was experiencing a period of prosperity, prices of its commodities were favourable, the wool trade was flourishing, the borders of the settled districts were expanding. In England, the campaign to encourage emigration to the colonies was widely acclaimed as a panacea for the ills of poverty and the dispossession of the rural workforce there. The voyage outward was becoming quicker with the new steamers replacing the older sailing ships, making transport across the world both easier and cheaper. And, as well as these factors, the site of the town itself augured well. The land sloped gently down to a fresh-water river; it was backed by land of rich potential, with even richer lands further out which were easily accessible. It was not like Sydney with its daunting barrier of what Mitchell called the 'desolate and unproductive' land of the Great Dividing Range. After the difficulties experienced in the establishment of Sydney, the foundation of Melbourne, once embarked upon, seemed to have great promise indeed.

At the same time, early Melbourne can be seen within the context of its surrounding parishes, marked out to extend its influence locally and control the push for grazing

land. A useful map depicts its situation, 'Map of part of the colony of Port Phillip exhibiting the situation and extent of the sections marked out for sale at Sydney on 12th September 1838', engraved by J. Clint. Surrounding the town, in the Jika Parish, the land between the town blocks and the larger sections was divided into allotments of 25 acres (10 ha).(Fig.8.22) This graduation between the town lands and the grazing lands was advocated by both Governor Bourke and Governor Gipps in accordance with the plans of towns and their adjacent small farms or 'suburban' allotments laid out in New South Wales in the mid 1830s and 1840s.

Other Victorian towns followed the square grid design of Melbourne. Geelong, under Robert Hoddle's direction, was laid out in 1838, hard on the heels of the capital. (Fig.8.23) Surveyor C.J. Tyers laid out a plan of a town at Portland Bay, where the Hentys had settled, in 1840. Other towns like Mitchellstown (1838), Alberton (1842), Hamilton (1850) and Portarlington (1850) continued the square grid form. (See Figs.8.23 and 8.24)

Melbourne as an 'existential' city

Compared with Sydney, Melbourne was essentially a rational creation, an archetypal trading place.
It was granted municipal government in 1842, within five years of its foundation, in the same year that Sydney embarked on its long troubled history of local government. Its population had reached 6,000 people the year before, and was growing daily. Melbourne was rapidly becoming a city, an 'existential city' which, apart from its increasingly productive hinterland engendered by the pastoral expansion in the wake of Sturt and Mitchell, was growing independently.

Economist Jane Jacobs, in her book The Economy of Cities, points out that 'Cities cannot be simply 'explained' by their locations or other given sources. Their existence as cities and the sources of their growth lie within themselves, in the processes and growth systems that go on within them. Cities are not ordained, they are wholly existential.'(36) As we have seen, there were various attempts to found a settlement in or near Port Phillip, but none succeeded before Melbourne was founded.
Colonial cities in particular, which are not generated by an organic or indigenous growth on the land on which they stand, have an apparent dynamic once they are established, a dynamic towards growth and accretion which is generated by a combination of forces which arise partly within the city itself, but are also augmented by forces started off well outside the city, like tactical considerations on the other side of the world.

CHAPTER EIGHT - REFERENCES

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CHAPTER EIGHT

Figures: Titles only; for full captions see Vol.II.

Fig.8.1 (a) Plan of Brisbane Town, Moreton Bay, 1839. Dixson Library, State Library of NSW. Taken from P. Statham, The Origins of Australia's Capital Cities, Cambridge University Press, Melbourne, 1988, 'Brisbane: Making it Work', by R. Johnston and H. Gregory, p.255.

Fig.8.1 (b) Brisbane Town, Map by Robert Dixon, c.1845. Detail. Mitchell Library, State Library of NSW.

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Fig.8.9 Lieut Robert Dale, Panoramic View of King George's Sound, Part of the Colony of Swan River. Acquatint engraved by R. Havell, London, 1834. Nan Kivell Collection, National Library, Canberra.

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Fig.8.12 Plan of the City and Castle of Edinburgh, William Edgar, 1742. From P. Abercrombie and D. Plumstead, Civic Survey and Plan for the City of Edinburgh, Edinburgh, 1947, p.12.

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Fig.8.14 Plan of the Town of Australind on the Leschenault Inlet, Western Australia. Smith Elder & Co, Cornhill, London, 1840.

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Fig.8.16 Robert Russell, Government Camp at Port Phillip, established 1836, surveyed 27 June 1838. Signed and dated 27 June 1883. La Trobe Collection, State Library of Victoria, H24513.

Fig.8.17 Robert Russell, Map shewing the site of Melbourne in March 1837. La Trobe's Collection, State Libray of Victoria. This copy from Liardet's watercolours of early Melbourne, Melbourne, 1972.

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Fig.8.19 Early Subdivisions of Melbourne Allotments, c.1840. From a plan of the township of Melbourne. Detail. Pen, ink and pencil, unsigned, State Library of Victoria, 812.02 BJE 1840. From G. Tibbits and A. Roennfeldt, Port Phillip Colonial 1801-1851, Melbourne, 1989.

Fig.8.20 W.E.F. Liardet, Government Land Sale at Melbourne, June 1838. La Trobe Collection, State Library of Melbourne.

Fig.8.21 Melbourne in 1838 from across the Yarra Yarra. Bird's-eye view. La Trobe Collection, State Library of Melbourne. From M. Lewis, Melbourne, Melbourne City Council 1994.

Fig.8.22 Map of part of the Colony of Port Phillip, 12 September 1838, shewing the division of sections around the town of Melbourne. From E.& E. Kunz, A Continent Takes Shape, Collins, Sydney, 1971.

Fig.8.23 Plan of the Town of Geelong 1838. Central Plan Office, Division of Survey and Mapping, Melbourne, CPO Sydney G15. Vic Image Melbourne.

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CHAPTER NINE

A PERSPECTIVE ON THE FIRST SIXTY YEARS OF URBAN SETTLEMENT

> 'I will (tell) the story as I go along of small cities no less than of great. Most of those which were great once are small today; and those which in my own lifetime have grown to greatness, were small enough in the old days.'
>
> Herodotus, 5th century B.C.

> 'The machinery of government is not a grand achieved result...but a workable and changeable instrument.'
>
> Walter Bagehot, The English Constitution, 1975.

> 'A general picture of the current state of a civilisation so suddenly improvised...could be considered fanciful were it not for the proximity of the events.'
>
> Ernest de Bosseville, 1831.

Settling and Planning

The prospect of settling such a vast land mass as Australia was a daunting one. It was not contemplated in grand terms as a settling of a continent at first, rather as the occupation of a discrete sea-board County centred on Sydney. Of the other states, two were settled individually, from London, and referred back to London for general instructions and policy. The remainder, Van Diemen's Land, Queensland, and Victoria, were settled from Sydney, and the Sydney surveyors provided them with their distinct urban shapes. That these can be compared with the plans of towns settled directly from London, points to the fact that the surveyors and governors were working out solutions on the spot which corresponded largely with the surveying conventions of the time in England.

Governor Phillip, worn out with regulating a settlement of about 3,000 souls, and containing them within the small coastal plain stretching out from Sydney Harbour to the Blue Mountains, went back to England within five years. The outfitting of the First Fleet was itself a major achievement; the voyage to the Antipodes with a thousand people or more, was a logistical problem as well as a feat of navigation and exploration.

From the beginning, town planning was a matter of necessity rather than of choice. There was no indigenous produce to send back to the mother-country, no building style which could be used for a pattern; there was no handy fresh water supply, nor ready supply of familiar game for food. There was no substructure of villages and

towns, no roads, no bridges. Even Lieut. Dawes, a naturally optimistic man, having explored the country out from Sydney, could not imagine how the colony could persist for long, dependent as it was on food and labour from England.(1)

But little by little the pieces of the puzzle started to come together. Armed with the confidence of the English in the Age of Enlightenment, the officials of the colony deployed their resources to make a pragmatic beginning. They concentrated on the town at Sydney Cove; but they sent half the colony to Norfolk Island to subsist there, living on the tame nesting birds when supplies at Sydney became perilously low. They farmed the soil at Parramatta; they defied the mammoth floods at the Hawkesbury; they fished for unfamiliar fish, then for seals and whales; they found coal at the sea shore, and sent back to England marvellous timber to provide ballast and profit; they started to understand the seasons, to roll with the good seasons and cut back in the bad. They imported exotic animals, which started to prosper and spread.

At the heart of their combined endeavours was the port of Sydney, and the town which was starting to grow around it. This thesis has been a study firstly of the city which formed around the port: how it formed, rather than why; and secondly, how, in the course of six decades, it started to engender more towns, and at the end of the period, spawn Melbourne, another city at the southern shore of the continent, which grew to rival Sydney herself.

At the end of sixty years, many of Australia's towns and most of the capital cities were virtually in place. The potential colonial capitals were confirmed in their leading places as generators of diverse activities; they were the starting points of arrival, and the producers of local wealth. Enterprises got going there, and the potential cities were starting to gather in and focus the sale and distribution of the products from their hinterlands.(2)

Australian villages, towns and cities are especially interesting because they were formed around the edge of a continent where previously there had been no permanent urban settlements. There was plenty of space, indeed too much, but space was not the problem. The cities were far from being accidental. From the beginning there was a determined effort to make them logical places of settlement; their siting was carefully considered, how they fitted into a complex web of named and connected places was consciously and deliberately planned.

The conventional wisdom of some town planners in the past has been to disregard the rise of the cities as existential places, and criticize what they have seen as a failure to 'plan' successfully. So much so that the popular perception of the city as a place, especially

Sydney, has been tainted by the planners themselves, who seek to muddy the waters of past development so much that a confused public has little idea what is 'good' or 'bad' planning. In segregating land uses, they have insured that a fruitful and productive mixture of land uses is no longer possible. Far from trying to accommodate the functions of a healthy city, healthy in terms of work places and common meeting places, they have isolated these uses from the living areas with disdain. The prejudice against mixed uses stems from the garden city movement in Europe, but it is so ingrained now in Australia that it has become celebrated mistakenly as a democratic right. It is timely now, in this post-modern period, to reconsider the causes for this segregation of urban uses, and see the original motives behind this trend.

I have argued in this thesis that there was a continual effort to organise the urban places in Australia, not from the time in the twentieth century when town planning, like other twentieth century ideas concerned with social organisation, reflected social and political theories of class and power, but from the very beginning of European settlement. Far from the society moving in the direction of planning, with nobody consciously moving it, there was a body of people, governors,administrators, and surveyors, expressly charged with ordering the urban places in spatial terms. Their work has not been sufficently recognised; their failures have been deplored, but their modest successes are taken for granted or dismissed.

We have to concede that the settlements were more than camps, even from the beginning. The placement of specific groups of buildings around Sydney Cove was not haphazard; there was a consistent attempt at order; within five years there was a hierarchy of both building types and functional usages, and a hierarchy of urban spaces was starting to emerge.

The French Commentators

It is a curious fact that there was at the time of the founding of Sydney another European power, France, interested in the possiblity of settlement here. Their interest was not strongly formulated; indeed, they professed only 'scientific interest', but the range and calibre of their maps gives them away.(Fig.9.1)

There was keen French interest also in the effectiveness of the English transportation system. Frenchmen Alexis de Tocqueville and Ernest de Blosseville, were both vitally interested in the 'planting' of settlements, the former in America, the latter in Australia.(3) The French had been a palpable presence over the first decades of settlement with their scientific expeditions of discovery and recording. As I have pointed out, French cartographers had supplied some important maps charting

the progress of the colony, perhaps as a rueful look at lost opportunities. Even in 1835, they were still refusing to recognise the name 'Australia', preferring to displace the earlier 'Nouvelle Hollande' as a name for the continent, with 'Nouvelle-Galles du Sud'.

It is interesting too, that French maps and plans are among the most detailed of the period up to the 1830s. The voyages of the French expeditions to the South Seas embraced particularly a visit to New South Wales and the coastline of Australia. Even after the defeat of Napoleon, French scientific voyages were carefully fitted out and sent to the Far East and the Pacific Ocean. Blosseville's text, published in Paris in 1831, had been preceded by the voyages of La Perouse, Nicholas Baudin, and that of Louis Claude de Freycinet and his company, who visited Sydney in 1819. Freycinet then sailed along the south coast of the continent, naming physical features with French names as he went.

De Tocqueville was fascinated by the rapid rise of townships in America as foci of settlement. He wrote in his now famous treatise which was first published in 1835: 'It is not by chance that I consider the township first,' when he discusses the Government of the Union and the concept of democracy and the doctrine of the sovereignity of the people.(4) He detects that the role that the formation of towns had in the organisation of local power was crucial. In this, he gives us some insights into the lack of commitment in Australian town government.

De Tocqueville writes: 'The township is the only association so well rooted in nature that wherever men assemble it forms itself.' He considers the New England township as a model; it is half-way between a 'canton' and a 'commune' in France, generally having from two to three thousand inhabitants; 'it is therefore not too large for all the inhabitants to have roughly the same interests, but it is big enough to be sure of finding the elements of a good administration within itself.'(5)

He has also some interesting remarks about historians in a democracy, their perceptions of 'general causes', and the fact that they attach much importance to them and disregard the roles of individuals. 'Historians who live in democratic ages are not only prone to attribute each happening to a great cause but also are led to link facts together to make a system...'

> 'Once the trace of the influence of individuals on the nations has been lost, we are often left with the sight of the world moving without anyone moving it...Thus historians who live in democratic times do not only refuse to admit that some citizens may influence the destiny of a people, but also take away from the peoples themselves the faculty of modifying their own lot...'(6)

This remark could be also applied to urban planners and geographers. When we list the printed planning regulations with their detailed complexity, without knowing who introduced them, and why, we make the understanding of the motives behind their enactment more difficult to grasp. In dismissing the urban planning measures introduced in the first generation of planning here, we do a disservice to both the early planners, and to our own history.

Ernest de Blosseville, in his account of the progress of the penal system in Australia, is careful to include something of its early spatial characteristics. He writes: 'The history of the English settlements in the southern lands presents no resemblance to subjects previously dealt with by historians.' He stressed that at first, the early years of the colony had to be dealt with in more detail than the later years, and thought that in proportion as the nation grows, the account could return to more narrow confines.(7) The close attention given here in this account to the earliest years of urban formation in this country follows his suggestion.

Many of the maps and plans of urban areas usually tend to be used as illustrations, and not interpreted as direct evidence of particular things.(8) I have, however, found more direct information about the workings of the colonial society embodied in the maps themselves. Again, the grid plan has been dismissed as lacking aesthetic importance. For some, its form became opposed to 'nature'. The planners involved in the early town planning movement struggling to gain acceptance in the twentieth century, came out strongly against it, deriding its apparent simplicity. The curved line became a metaphor for nature, for freedom, for the 'new' planning. The new idea was to design 'for nature'. The conventional wisdom of the new town planners became widely adopted in the fledgling profession. Before them, so they claimed, there was no 'planning' to speak of. They thought they themselves could direct the misguided public to newer, clearer goals.(9)

Urban Morphology

The study of the town plans themselves, interrogated in terms of their status as evidence for the kinds of information that they convey, has cast some new light on the early form of urban settlement in Australia. Four stages of development in the plans have been discerned:

1. The Parade Ground.
2. The appearance of the Regular Grid.
3. The adoption of the Square Grid Form.
4. Variations on the Square Grid Form.

1. The First Stage - The Parade Ground

The study of the morphology of the towns in Australia shows that their plans exhibit some characteristics which are shared between the earliest settlements. The first published arrangement at Sydney Cove, the 'Dawes Plan', indicates a large formal space marked out between some projected public buildings which subsequently were not built. The width of this space has been praised for its 'far-sighted planning',(10) and the space taken as a beginning of a system of streets.

However, when we compare this plan with those first early plans at Parramatta and Toongabbee, and those at the settlement at Norfolk Island; and to the plans at early Brisbane, at King George's Sound, and at the early Fremantle, we can see that the genesis of this 'space' was the military parade ground, not a street. The parade ground was used for marshalling both soldiers and convicts. It was the first cleared space, and the focus of the embryo settlement. (See Fig.1.2 for Sydney, Fig.1.5 for Parramatta; Fig.2.10 for Toongabbee; Fig.3.2 for Norfolk Island; Fig.8.7(a) and (b) for Brisbane). The bird's-eye view of Fremantle, Western Australia, 1832,(Fig.9.2) re-enforces this point. The main wide space around which the buildings are grouped leads up to the goal, the principle building; the flag-staff, though not in this case at the principal space,is conspicuously placed at the shoreline.

This parade space was normally associated with the placing of the flag and the position of the flag-pole, at the prime landing-place firstly at Sydney, and then at Norfolk Island, Van Diemen's Land, and King George's Sound. The flag-pole or flag-staff, of course, as previously pointed out, was a symbolic vertical pole, with orgins from ancient Egyptian, Greek, and Roman practice, the starting point for all urban measurements.(11)

Old beliefs tend to re-surface again, even in the twentieth century - the flag-pole in the 1980s became the revived symbol once again at the top of the new Parliament House in Canberra.

2. The Second Stage - Appearance of the Regular Grid

The second pattern which displaced this first one in the urban morphology, was the rectangular grid, based on the north-south cardo, and the east-west decumanus. The streets, rather than the parade space, became the backbone of the settlement. They lent the arrangement its structure. The grid gave the streets predictable dimensions, and served as a basis for further measurement. Paradoxically, these measurements were vital to the formation of social cohesion in the colony. Boundaries could be fixed and made official, disputes over property rights could be resolved quickly. In

theory, the pattern thus formed could be added to easily, catering for the increase of urban population. The pattern became quickly accepted because it was so simple, expandable, and corresponded with the human being's natural orientation to the passage of the sun and the cardinal points of the compass.

But, despite this, there was no obvious crossing-place that dominated the plans of the period up the 1820s. Taking Richmond or Wilberforce as typical, the grid accommodated a 'market' square, but the market did not become the focus of the town.(See Fig.5.10 and Fig.5.13). When church-building began in earnest, there was not one church that dominated the others; each denomination laid claim for subsidy under the Bourke regulations of 1836, so there was not the opportunity to make one church the focal point of a town. Nor was the plan based on a perfect Vitruvian square, in contrast to some early planned towns in America.

Sydney, despite its commanding position at Port Jackson, started its satellite towns almost at once. The settlement at Norfolk Island, based on a convict population, reflects the first attempts at planning at the original Sydney at Port Jackson, with its emphasis on the flag, and its parade up from the shore climaxing with the Commandant's house.

Parramatta, too, was started early in 1790, and when the soil reserves there faltered, Toongabbie became its extension. These towns exhibit some formal characteristics. Dawes at Parramatta articulated the most carefully planned and controlled of the penal towns. It has a cardo-decumanus orientation, with its long straight George Street east-west, heading to a climax at the hill where the governor's house was set, crossed by Church Street on the north-south axis. (Fig.1.6)

George Street can be read as both a parade or a street; with a baroque impulse forward from the wharf to the principle building, making a variation to the straight grid. Its plan by 1820 can be compared with that of Williamsburg in Virginia, and Philadephia in Pennsylvania.(12) (See Figs.9.3(a) and (b))

Further north, Coal River, or Newcastle as it became known, was settled. The convict station there was planned in 1804 for second offenders; by 1820, its plan was ordered and focussed on the town square on the one hand and on the river on the other.(Fig.5.16) In Van Deimen's Land, Lieut-Governor Collins, in 1804, had difficulties in commanding a coherent plan. Remote from Sydney, its plan was not re-organised until Macquarie and James Meehan visited the outpost in 1811.(Fig.5.19)

The towns founded by Governor Macquarie after 1810, and laid out by James Meehan, also employ a simple rectangular grid system in their lay-out: Liverpool,

Windsor, Richmond, and Wilberforce in New South Wales. They demonstrate a transitional form between the parade settlements and the formal square grid.

After Governor Macquarie and the Report by Commissioner Bigge, there was an effort to further systematise and codify the process of town formation. Governor Brisbane was instructed to institute a system of parishes, within the larger areas of the counties, making them the basic unit of administration, within which the towns and villages could be founded at a later stage.

3. The Third Stage - The 1829 Regulations and the Adoption of the Square Grid Form

The Darling Regulations of 1829 were foreshadowed in the Government Orders imposing the limits of location before survey in 1826. Governor Darling, in 1829, refined the boundaries delimiting the Nineteen Counties, clustered around Sydney, marking them as the limits of Settlement, within which the laws of the colony were administered, and where the towns and villages could be planned. These were revised and formally proclaimed in the NSW Government Gazette, 27 May, 1835, and 28 November in the same year. Darling also set up a Board of Inquiry into the planning of towns, which recommended important changes. These he proclaimed as regulations to be followed on 5 March, 1829. These Regulations then became the main guidelines for the planning of towns in New South Wales, Victoria, and Queensland.(13)

In New South Wales, then, the standard town block, or square section, measured 10 chains (or 200 metres), with allotments of 1 chain by 5 chains (20 x 100m) fronting the main streets, and 2 by 2.5 chains (40 x 50m) on subsidiary streets. That means that half acre (or 0.2 ha) blocks made up the backbone of the planning pattern. Examples of this pattern are illustrated in Chapter Seven.

These standard regulations were exported to Victoria, via the surveyors sent down from Sydney to survey Melbourne, and then the other Victorian towns, as we have seen in Chapter Eight. They also influenced the way Perth was founded. Stirling was sent instructions in 1828 by Sir George Murray, Secretary of State for the Colonies, that Perth, the designated capital of the Swan River colony, should be planned inside a township reserve of three miles, or 1,920 acres, and that the land within this space is not to be granted away, but held upon leases from the Crown for 21 years. He enclosed a copy of regulations sent from Governor Darling of NSW as a model.(14) He also cautioned 'that care must be taken to proceed on a regular plan...with sites set aside for Churches, Cemeteries, and other Public Works of utility and general convenience.'

4. Variations on the Square Grid Form

Governor Bourke himself was to depart from the pure square section when he visited Melbourne in 1837 to supervise the inauguration of the city. He proposed that a laneway be surveyed in the middle of the square section, 33 feet (10 m) in width, to give access to the back of the blocks without the need to cross the footpath fronting the street. The street was staked out at 99 feet (30 m), in anticipation of continued growth of a kind not witnessed in Australia before. Surveyor Hoddle, and his superior in Sydney, Deputy Surveyor-General Perry, opposed this plan, but were overriden by the Governor.

Miles Lewis has pointed out that Hoddle, loathe to depart from the 1829 Regulations, tried various strategies to make the laneway less likely to be turned into a 'little' street, but in the end surveyed a smaller street of one chain (66 feet or 20 m) wide in between the main streets in 1848, and by 1852 was making the blocks uniform in size with smaller town allotments at a quarter acre each (0.1 ha), twenty to the section.(15)

In the 1860s in New South Wales, also, the archetypal square block was varied by the addition of a back lane or 'little' street. Town Plans designed from the sixties can be distinguished from earlier plans, and the extensions of earlier towns can be easily picked out by their slight change of form. Rectangular town blocks became more common. But the form was still based on the square or rectangular figure, and the streets were squared off at right angles.

Comparisons

In his discussion about the shape of villages and towns in England, W.G. Hoskins postulates three main types of villages: those grouped around a central green or square; those strung out along a single street, and those fragmented villages with only a tenuous relationship between the buildings. He thinks that the three types reflect early cultural differences. The central green village almost invariably contains two recurring features: a well, and a church. The school and a smithy were also allowed on the green in later years. Most villages as well marked a stopping place between larger towns. The towns became more important as they were able to attract a market; they might depend on the patronage of a manor or defended castle, which then afforded them protection.(16)

We have seen that the urban places in Australia did not evolve in this way. They became, as Jane Jacobs calls the cities of the Far East settled by Europeans, 'existential cities'. They depended on their umbilical cords from England both for their settlers and for their prosperity.

They grew relying mainly on these factors as well as on their own internal activities. The products of their hinterlands were of secondary importance.

We can compare Australian cities to American ones in their emphasis on grid planning patterns. The classical forms exhibited by the east-coast cities of America, were deliberately planned, and in the eighteenth century, were complemented by the neo-classical architecture they favoured. Their forms can be seen as text-book exemplars of the grid; New Haven, Savannah, Williamstown, Philadelphia, and later Salt Lake City amongst them.(17)(Figs.9.3(a) and 9.3(b))

We can also compare some Australian plans to some of the New Zealand settlements. The first plan of Wellington, for instance, drawn up in 1839, came out with the colonists themselves, and has echoes of the plans of Adelaide and Perth, and more than a hint of Australind in Western Australia, the grandiose scheme that failed dismally.(18) The proposed town of Wellington was to contain:

> '1361 acres inclusive of Streets, a Terrace around the Town thus allowing 261 acres for Government purposes, Squares, Public Buildings, Hospitals, Schools, Markets, Wharfage etc and 1100 acres for the Colonials for Building purposes etc.'(19)

The comparison with the Perth plan is compelling, indeed with the plans evolving for New South Wales towns. But then a more ambitious tone crept in: ample reserves for all public buildings, a botanical garden, a park, extensive boulevardes, and a green belt. Public convenience and a beautiful appearance were desired goals.(20)

These ideals echo the new temper of the thirties and forties in England when liberal reforms brought in a change of emphasis: the older principles of the Enlightenment, faith in science and reason, belief in justice and toleration, were gradually displaced by the virtues of the rising class of the bourgeoisie: the virtues of self-help, industry, morality, the ethic of improvement, and the egalitarian ideal. There are Australian parallels here with Adelaide, founded a couple of years before Wellington, also on Wakefieldian principles.

The antithesis of the squared grid town is found in the hastily-run up gold towns of the 1850s. The tents sprang up as the prospectors poured in from both Melbourne and Sydney, and sailed out from Britain, and America, gripped with a gold fever. A description of a typical gold rush was the one at Brown's near Ballarat in Victoria in 1855. A party of diggers sank a shaft at 20 feet and struck payable gold; another party bottomed at 40 feet about a mile away. The news spread quickly and in a few weeks

John Brown's run was a busy hive of activity. Hillside, gully and flat were burrowed with shallow holes and dotted with diggers' tents. There were little tent towns springing up nearby, digified with the names Monkey Gully, Bull Saddle, Salt Junk Creek, and Pink Lead. A large township sprang up at Brown's, the original gold site, as if by magic, with stores, shanties, dancing saloons, butchers' and bakers' shops all of calico.

> 'The town...followed the diggers up and down the lead, pitching temporarily here and there, uncertain as to its abiding place, until it finally settled down where a little hamlet now marks what was once a bustling town, with thousands of inhabitants...The nomadic proclivities of the township were remarkable. It originated at Monkey Gully, more than two miles from where it finally settled. Then it clustered around Mullocky Point. From there it crept over to Budgeon's Flat, and then took a final jump to the banks of Brown's Creek, at the ford. Here it was in sight of Watson's Hill, where the first discoveries of gold were made! At the ford it assumed a more permanent character. Wooden buildings took the place of bark and calico structures for the shops and shanties.'(21)

The gold decades were marked by the appearance of these peripatetic calico towns. The best records of their beginnings are found in the sketches, the paintings, and the photographs, rather than in any plans. The plans did not precede settlement in these cases. When all the excitement had died down, the surveyors came in with their theodolites and marked out the principal streets in a squared grid. They called the householders to order, making them toe the street line, much as they had in the Sydney streets in Governor Macquarie's time. (See the plans of Beechworth, Fig.9.8 and Gulgong, Fig.9.9.)

In the twentieth century, we see their survivors resembling much the same form as their planned sisters. Some grew to become wealthy and influential, like Ballarat and Castlemaine in Victoria, and expressed their wealth in their boldly built and decorated buildings; some retained more sober Victorian facades, building the stores and churches and clubs in durable stone and brick, like Orange and Gulgong in New South Wales, and stayed on to act as centres for their pastoral and agricultural districts.(22)(Fig.9.4) Interesting though they are, these towns are the creatures of the years after the decades covered in this study, and I will not pursue their fortunes in this thesis.

Questions and Problems

At this point, I will go back to the set of questions and problems asked in the Introduction. They deal with the formation of the plans, the location of the towns, and

the morphology of the towns as they started to assemble and grow.

There are seven questions which have been part of the inquiry into the town plans and the formation of towns in Australia, and these have underpinned the structure of this thesis, and I repeat them here:

1. What customs and traditions from the store of Western knowledge were translated into the rites of founding towns in Australia?

2. What plans were adapted from known patterns of towns drawn from the European and English traditions?

3. How did the towns we now know, come to be located where they are?

4. What proportion of public land was reserved from sale within the town structure?

5. What are the recognisable characteristics of official Australian town plans?

6. What made the initial sites of the capital cities so powerful as centres?

7. Why were the links between the cities so poorly developed?

1. Founding Rites

What customs and traditions from the store of Western knowledge were translated into the rites of founding towns in Australia?

I have argued that the founding rites of the colonial towns and cities were given considered emphasis from the time of the first landing at Sydney Cove. This emphasis, moreover was echoed at Norfolk Island, Parramatta, Newcastle, King George's Sound, and later at Bathurst. It was a method of laying claim to the land, and further developments stemmed from this. It was symbolised by the planting of the flag, the ancient 'gnomon', a further symbolic link between earth and heaven; a link which also bound the potential city to its progenitor and its monarchy, to the mother city which had sent the emigrants.

Once the British felt secure in their claim, and did not fear the arrival of other European powers to rival their position, the necessity for formal ceremonies receded. They did not encounter organised resistance from the native people on any large scale, the battle was more to establish a fruitful economy within the perameters afforded by a capricious climate and a harsh inland environment.

So, when Melbourne was starting to form, already going forward in leaps and bounds, the nearest we can get to a formal ceremony was the visit of the Vice-regal party in March 1837. Governor Bourke arrived on the 'Rattlesnake', when his barge was followed up stream by all the boats in the port, and the settlers turned out cheering heartily. (23) The formality of the ceremony had been toned down.

So, the founding ceremonies, by 1837, had been transformed. Loyalty to England, personified in the monarch, was not so important as the belief in commercial progress, symbolised by the auction of land. The first official proclamation on the new settlement in Victoria was printed in the New South Wales Government Gazette on 26 August, 1835, and in next year on 14 September 1836, Governor Bourke sent Captain William Lonsdale to be Police Magistrate, 30 soldiers, and a small staff of surveyors.(24)

As for the small towns, they were conceived mainly as rural centres and stopping places along the main routes pushing out from the capital cities of each state. Their plans were prepared by surveyors sent from the central survey office and approved by the Governor and Legislative Council. From the start, they depended on support from the capital - for the making of roads, the establishment of a system of laws and regulations, the building of administrative buildings. But it was not always the case that their foundation was linked to decisions made elsewhere: in some cases the settlers petitioned the Governor to have a town surveyed and established.(25) The symbol of the town was the grid plan. Only the hastily-erected shanties of the goldfield towns departed from this norm, and that only for a comparatively short time. As well, the tent suburbs attached to the capitals, which persisted from time to time all though the nineteenth century, were tolerated in the widely perceived hope that they were to be short-lived.(26)

2. Adaptation of plans from known models

What plans were adapted from known patterns of towns drawn from European and English traditions?

In the foregoing chapters, I have traced the evolution of the town plans as they influenced the shape of the urban settlements in Australia. I have argued that the grid right-angled block was the basic component of the plans, arrived at fairly quickly; it started to be used as a standard form by Macquarie's time, and was modified and further standardised to become a square grid by 1829.

The grid, of course, was the archtypal colonial form, and I have argued for its virtues as a practical, repeatable, expandable and easily recognised standard. I have also argued that the later post-Romantic disdain for the grid, practised by the town planners in most of the twentieth

century, has led to the development of an unnecessary blind spot in the planning profession. In Australia, the grid plan was not used mechanically, it was adopted and then tried out in various locations and in various combinations; in its country town guise, it proved to be the most adaptable plan form.

It is hard to deduce whether the habitations of the Aborigines had some bearing on the way towns and villages were shaped in Australia. Though some nineteenth century drawings depicted Aboriginal Encampments, little work has been done so far on the relationships between the wurlies or on the form that was adopted to surround or contain the habitations.(27) Even traces of formerly favoured Aboriginal seasonal sites are poorly documented in this respect. The first primitive dwellings got up by the early European settlers were a mixture of traditional European and traditional local techniques, employing bark, cabbage tree fronds, twigs and mud. The arrangement of the groups of wurlies, or gunahs, as they were variously called, is usually depicted in early drawings more as a picturesque composition than an orderly assemblage. All the same, Eugen von Guerard, in one of his finished drawings has shown seven wurlies arranged in a small circle, with another similar group nearby, in parkland near Adelaide in 1858.(Fig.9.5)

3. Location of the towns and cities

How did the towns we now know, come to be located where they are?

The location of cities was determined by several factors bound up with the enterprise of emigration.(28) The towns, on the other hand, were located in particular places because of a range of internal factors and conditions peculiar to each colony.

The location of the main cities around the rim of the continent, and their development as ports in the age when the British enjoyed the control of the sea lanes, was fortuitous. Their astronomers had developed the techniques which enabled their ships to sail great distances. The voyage of the First Fleet, before Cook and Maskelyne, would hardly have been possible. The Antipodes was almost a legendary place, but the banishment of the prisoners from the English gaols became the start of a great enterprise.

Landfall at first was to a place known by Europeans only from the reports of Cook and Banks. It was rejected for a port found a few kilometers north. This was the pattern for other urban settlements: an initial hesitancy to find a favourable place, and then, once settled, a building-up and concentration of effort and activity. Some common factors are apparent: the presence of a fresh-water stream, the avoidance of low flood-liable lands, the need to have a safe anchorage.

At Sydney, there was also an implied threat from the presence of the French ships which coloured Phillip's thinking in the first weeks of settlement. The French threat was also behind the settlement of Van Diemen's Land, the earliest attempts at Port Phillip, and King Georges's Sound. At Port Phillip, also, hostilities from the native tribes were an inhibiting factor. Sydney was chosen before the land contiguous to the port had been explored. More was known about the sites of the other cities, and the presence of good agricultural land in the capital's hinterland was a bonus. It is remarkable, however, in most instances, how little detailed knowledge was available before the choice was made.

Country towns were not so definitely placed. In the early years, apart from the towns established in the County of Cumberland, at the head of the harbour and on the Hawkesbury, towns started to emerge only at the Hunter River, reached by ship, at Norfolk Island, and at Hobart in Van Diemen's Land.

The system of dividing the territory into counties was instigated by Governor Phillip, when he proclaimed the extent of the County of Cumberland on 4 June 1788.(29) By 1821 the districts of Argyle, St Vincent, Bathurst, Camden, Illawarra, Hunter Valley, Manning River and Port Macquarie were added, but not named formally as counties until 1829, when under Governor Darling Government Notices proclaimed their names and their boundaries were established. Nineteen Counties were then arranged to surround the initial County of Cumberland. Once the boundaries had been decided upon, the Surveyor General was instructed to set aside land for public reserves, and for the sites of villages and towns within the 'townships'. These 'townships', each of thirty-six square miles in area and bounded by six-mile long straight lines, virtually became the 'parishes' which had been required by Lord Bathurst in 1825.(30)

Each 'township' or 'parish' was to be divided into one-mile sections, and four of these were to be reserved for the sites of villages. In the event, some village reserves became the nucleus of a town, once the land was taken up by the incoming settlers, who might then proceed to petition the Governor for its establishment. Some were ignored as urban places, and fell by the wayside, such as Leamington in the Hunter Valley. A map showing a typical arrangement of the village reserves can be seen in the map of Port Phillip by J. Crofts, 1839, where four are distributed north the city of Melbourne.(See Fig.9.6) That these reserves turned out to be merely theoretical in the subsequent suburbanisation of Melbourne, did not deter the surveyors from long term plans for village reserves in country districts.

In the forties, an interesting Atlas of the Australian Counties up to 1843-1846 was published by William Baker

in Sydney at his Hibernian Press.(31) It was based on information from the Surveyor General's Office, and was dedicated carefully to him on each County map. It was the first attempt to produce an over-all survey of the Colony, County by County, at that time. Somewhat crude in execution, it is a fascinating exercise in the assembling of information at that early date and making it available to the public. Each of the maps in composed on a grid, and locates lands granted, purchases, and unlocated lands. It includes plans of towns, existing and projected, as insets. Twenty one Counties are mapped, including Port Phillip.(Fig.9.7)

4. Land for Public Purposes Reserved within the Urban Area

What proportion of public land was reserved from sale within the town structure?

All through the instructions from London, and then in the proclamations by the Governors, there is a continuing thread of insistence on the need to reserve particular lands for public purposes.

Public purposes like the upholding of law and order, with its infrastructure of police stations, police paddocks for their horses, gaols, and court houses, were essential to the sense of security of the widely dispersed rural population as well as to the people of the more closely settled urban areas. The progression from village status to town was often marked by the presence of a magistrate and the cycle of court hearings as a part of the legal year. The presence of the churches was also a sign of the arrival of town functions, and with the state aid programme endorsed by Governor Bourke, the churches enjoyed a modest building boom after the 1836 Church Act was implemented.(32) And side by side, the churches started to sponser the schools.

Sites for these public, and public-supported functions were reserved in the town plan. Likewise, there might be a site for a municipal building to house a reluctant town council, a hospital building built by the Crown, or a place set aside for a market. I have remarked elsewhere on the uncertain fate of some of these uses. But, nonetheless these public functions over-all reinforced the establishment and development of the town as an entity.

There was a special need for public open space in the towns and villages, despite the fact that they might appear to be embedded into the countryside with rural land at their front door. Reserved open space had the potential to be used for a meeting place, a sporting venue, or for the building of a local hall. The town ovals became important places especially for the children of the district. As well, towns often reserved a large area adjacent to the grid of the streets, for a

showground, where once a year, the local producers could show the quality of their wares, and compete for local approval. It was also usual to reserve land along the river banks for public use.

I have argued that in the cities and large towns, particularly, public open space had an important role to play in the formation of the urban morphology. The contrast of build-up area to public open, landscaped area was a largely unacknowledged but benign factor in the fostering of local pride. It provided a neutral classless space where townspeople could meet on equal terms. Botanic Gardens were established in the very heart of most cities, and were cherished as a particularly Australian tradition.

5. Characteristics of Official Australian Town Plans

What are the recognisable physical characteristics of Australian town plans within the period studied?

1. The town plans are based on a formal geometric figure derived from ancient town planning practice.

2. Central to the first colonial settlements, was the placing of the flag-staff and flag to signify its antecedents. The flag-staff, descended from the ancient 'gnomon', was also a symbol of the link between the earth and the cosmos. Once the English felt secure in their tenure, however, the founding ceremony was more informal, and in the case of minor towns and villages was only marked by a notice of the gazettal of the plan and the sale of land by auction.

3. The township reserve was marked out, like a city wall, to contain the figure of the town, and allow for adjacent associated uses and extension. The typical town reserve was 3 miles by 1 mile in area (or 4.82 km by 1.6 km) on land situated on a river.

4. Within the rectangular or square figure of the plan, there are reservations made for public uses and buildings. The grid was adjusted to fit the topographical characteristics of the site, by the surveyor in the field.

5. The streets were measured at right-angles to each other, and provide the back-bone of the plan. The standard width of streets was fixed at 66 feet (or one chain, or 20.11 m) with footpaths of 9 feet (2.74 m). Main Streets were 80 feet (or 24.38 m) with footpaths of 10 feet wide (3.04 m).

6. The square sections (or town blocks) recommended by the Darling Regulations of 1829, are measured at 10 chains (or 200 metres), and contain the town allotments each measuring 1 chain by 5 chains, or half an acre.

7. Though there were regulations to encourage building on the town allotments at first, after 1831, when urban land was sold, these were not so easy to apply.(33)

These seven points can be compared with eight listed by Miles Lewis in his work on Melbourne. (34) Lewis does not trace the ancient origins of the grid plan, and does not attach the same importance to the flag staff. He does however, go on to mention the use of smaller 'suburban' allotments close to the town, which were shared in some cases in long strip allotments. He points out that the surveying of rural land is generally into sections of 1 square mile, on a north-south, east-west orientation, around Melbourne and Victorian towns. Lewis was concentrating on the growth of central Melbourne, his purpose was to explain the nature of the land subdivision around the main formal grid plan of the city.

6. Factors that Re-enforced the Primacy of the Capital Cities in the Early Colonial Period

What made the initial sites of the capital cities so powerful as centres?

The primacy of the Australian capital cities has often been remarked upon. Once settled, once the sea lines of communication were in place, they outdistanced their puny competitors with rapidity, and maintained their lead up the present day. Emphasis has been placed on their growth and development, and the sale of town lands was one of the compelling factors in this process.(35)

The fact that each capital was, from the start, the administrative centre of its region, and the fact also, that the region itself still had to be explored, made the capital cities both originators and havens. They were the starting points of enterprise, and the base from where the settlers went out, and the haven to which they returned. The very fact that Australia was Europe's antipodes, re-enforced the central role of the capitals; there was no easy return to the motherland, the long and dangerous sea voyage precluded that. Once the emigrants got here, the capital city was the only physical base they had.

Another potent factor in the city's primacy was bound up with the settlement process and the marking out of the town plans. In the early stages, urban land was granted by the Governor, and the grantees were favoured on the basis of their ability to command or attract capital to the colony. A means of capital formation was found in the credit commanded by the officers of the New South Wales Corps, and that partly explains their strong hold on the infant colony before the 1820s.(36) But as the resources of the colony began to be tapped and developed: whale oil, timber, wool, hides, there was the opportunity for ~~some local capital formation, and this was given a great~~

some local capital formation, and this was given a great push forward when the Ripon Regulations of 1831 were introduced and allowed the initial sale of urban land when the towns and suburbs of the cities were planned and marked out. The small parcels of land were then within the reach of a much larger section of the population, and they then had the opportunity to use them as collateral, to build on them metaphorically as well as physically.

It has been usual to deplore the activities of 'big' developers of urban land, but the subdividers themselves were agents in this process. John Locke has not had a vogue in this century, but it was this building up of capital, using the urban land itself, that contributed greatly to the expansion of the cities in Australia. The 'workers' as well as the small capitalists participated in this venture. The rural industries were still mainly the province of the larger capitalists, who had the capacity to weather the uncertainties of the climate, but the cities and especially their suburbs became the strongholds of the 'workers' and small holders.

In a strange way, in the ongoing argument conducted both in the colony and in the English Parliament in the decades following the Reform Act of 1832 in Britain about franchise extension and reform, this widening of the colony's base of urban small holders was fortuitous for the urban population. In a nutshell, after some confused argument on both sides of the world, the Australian Colonies Government Act passed in Westminster in 1853 allowed the introduction of franchise on the basis of householders who had property worth 10 pounds. This was greeted with delighted amazement by the Democrat faction in the colony, and with misgiving by the conservative Legislative Councillors. This meant virtual household suffrage in Sydney, as the colonial 10 pounds was worth much less than the English sum, and most homeowners in Sydney qualified. So, basing the Act on comparable conditions in England itself, and in ignorance of the detailed facts of colonial affairs, Westminster handed the colonial householders the vote on a plate.(37)

It is a curious fact that the political life in the colony was linked with the endeavour of planning the towns, not deliberately but by a strange conjunction. The measurement of a town allotment led eventually to the ability to cast a vote in the State Government. It was a paradox that was quickly embraced in Australia.

7. Why were the Links between the Cities so poorly Developed in Australia?

At the end of the twentieth century we now have to grapple with the legacy of the lack of rapport between the eight cities of the Commonwealth. Its roots are historical and understandable. Each colony was settled at a different time, and was fashioned by the beliefs and changing practices of its time. They each, separately,

measured themselves against London, the mother city of them all. Despite this, the heritage they share, to use a now 'debased' word, is capable of providing a strong ideological bond between them.

Not so strong are the physical links between them. Despite modern technology, the cities up to the last twenty years have tended to be isolated within their state boundaries. The rivalry between Sydney and Melbourne, for instance, is legendary, and not particularly friendly.(38) But trade and communication between them is starting to be more reciprocal as overland transport networks are upgraded and electronic networks are extended. Though barriers were erected in the past in the differing rail guages, and the decline of coastal shipping in the second half of this century added to their sense of physical isolation, the magnetism of the capital cities has, since World War II, spread along their road corridors, and air traffic between them has increased enormously.

Melbourne has found allies in Adelaide and Launceston; Sydney is closer now both to Canberra and the Gold Coast. It is the possibility of strongly based cities trading with similar-sized city economies that drives economic growth in a federated Commonwealth, rather than dependance on export-related products being sent abroad to compete with goods with initial advantages based on subsidies imposed by other, foreign economies, or produced with cheap labour supplied by lower standards of living.

Some theorists, like Jane Jacobs, see this interaction as the key to a strong national economy. Cities, not whole States, could be the points of departure; equal reciprocal trade between equal cities can be seen as the most constructive sort of trade, where each city can benefit from the strengths of the other.(39)

As the great cities of Britain, which nourished us in our colonial years - London, Liverpool, Southhampton,- fade into the European Common Market, and become much more concerned with competition with Paris, Brussells, and Berlin, we will be compelled to strengthen our ties with our own cities, and see them, not as competitors, competing for the short-change handed out by the Australian Commonwealth Government, but as innovative centres for the replacement of foreign goods, trading with each other. This role, as well as that of being the administrative centres and guardians of our lesser institutions, promises more.

Additional Question

One more question should be asked, and this pertains to the inquiry itself, rather than to the questions and problems that have risen along the way.

Why has the early history of town planning been largely ignored in the twentieth century in this country? Or if it is not completely ignored, why has it been dismissed as of little importance?

In Chapter Four I addressed this question following a discussion about the map of Sydney made in 1807 by James Meehan. This map was not published in the colony until 1898, when it was included in the Historical Records of New South Wales, vol.7, edited by F.M.Bladen, Government Printer, Sydney. This meant that ready access to this most important map was not possible until then, and explains how curious rumours had grown up around the early period of colonial planning. It helps to explain how the architects, planners and historians of the later colonial period, were in ignorance of these important early designs and regulations which were worked out over the first sixty years of European settlement.

This lack of knowledge was compounded by the tenuous beginnings of the discipline of history after the state universities were founded. For detailed local knowledge, the main source became the articles written by enthusiasts for the magazines of the Historical Societies. Planning advocates in the early twentieth century, mostly trained in England, continued this disregard of the local tradition, and after the Town Planning Department was formed under Denis Winston at Sydney University, a bias towards English and European examples as models became further entrenched, with little examination of the Australian experience.

The situation started to change after 1960 with a gradual awakening of interest both in the universities and in the wider community. The importance of the urban groupings in the organisation of the immigrant community over the decades when it was assembling during the nineteenth century was beginning to emerge as a crucial factor in the settlement process itself.

Conclusion

The first sixty years of urban settlement in Australia were the years when the new settlers in each state formed their capital cities as bases for their endeavours. These then became the centres from which the system of demarcation of counties was organised, and from which the surveyors were sent out to plan the towns and villages as subordinate urban places.

The capital cities themselves produced goods and services; it was no accident that they grew larger as more migrants arrived after the convict period. They multiplied their initial capital within their own boundaries a thousand times; they encouraged the growth of clustered suburbs around them; they became the main generators of wealth for the colonies.

I assert this conclusion knowing full well that the emphasis has been otherwise. The areas explored by the historians have been tied to the transportation of convicts and their influence, the struggle over the control of rural land, not urban land, the rise of workers' organisations, not their settlement as householders in the towns and cities. The myths engendered by many of our writers and historians are linked to vague concepts: mateship, sporting prowess, mining, gold finding and gambling, courage in wartime, religious freedom and other themes. We have been puzzled by the enormous growth of our cities, without trying to research its causes adequately. The spatial organisation of our towns and cities has largely been taken for granted. I have tried here to re-think this spatial organisation and discern its strengths.

Though I have largely concentrated on the foundation and establishment of the capital cities, I have also pursued the advent of the smaller country towns as part of the urban web generated by the cities during the period. The plans of the towns echoed those of the cities, but in a select and condensed form. They lend depth and strength to the argument. A useful table of these towns surveyed during the years up to 1848 is found in Appendix IV.

I have also concentrated on the role of the land managers: the surveyors, the Governors, and the administrators who were instrumental in putting the jig-saw together. They did not see the final results of their actions in their lifetimes; but they tried to plan for a future which was capable of adaptation and adjustment. 'The fair blank sheet', envisaged by T.L. Mitchell, was a metaphor for a new start, but did not exist in practice. I have tried to suggest here how several categories of things, theoretical, institutional, and local, impinged upon the landscape to transform it.

Just as the Renaissance landscape was transformed in sixteenth century Italy by the arts of the mathematicians and cartographers, and the map-makers eventually led to new ways of perceiving the English landscape in the seventeenth and eighteenth centuries, so the Australian landscape was transformed by the surveyors in the nineteenth century, as they went about their daily tasks. Their imposition of a geometrical landscape proclaimed a new conceptual environment, particularly in the towns and growing cities, which became the spearheads of the changing, more settled landscape.

CHAPTER NINE

ENDNOTES

1. William Dawes to Nevil Maskelyne, April 1791, Dawes Letters held at Herstmonceux Castle, part of Greenwich Observatory, Sussex.

2. Pamela Statham, The Origins of Australia's Capital Cities, Cambridge University Press, Melbourne, 1989, Introduction.

3. Alexis de Tocqueville, Democracy in America, vols.I and II, first published Paris 1835; Collins, London, 1968; Ernest de Bosseville, Histoire des Colonies penales de l'Angleterre dans l'Australie, Paris, 1831.

4. de Tocqueville, op cit. vol.1, pp.73-78.

5. Ibid., p.75.

6. Ibid., vol.2, pp.637-38.

7. Colin Foster, 'The First History of Australia', in Journal of the Royal Australian Historical Society', vol.79, 1993, p.120, on de Blosseville's history.

8. See Chapter Two.

9. See Chapter Seven.

10. Various writers have praised the form of Phillip's first plan; the most important being Alan Frost,in his Arthur Phillip, His Voyaging, Oxford University Press, Melbourne, 1987, pp.198-201, where he discusses the probable sources of this plan.

11. I discussed this idea in detail in Chapters 2 and 3.

12. See T.M. Perry, Australia's First Frontier, Melbourne University Press, Melbourne, p.7,n.4. NSW Government Gazette, 27 May 1829, pp.345-58; and 28 November 1829, pp.855-8. See Appendix for the 1829 Regulations, proclaimed 5 March 1829.

13. New South Wales, of course, at this stage incorporated parts of Queensland and Victoria.

14. Miles Lewis, Melbourne, Melbourne City Council, pp.24-25; Pamela Statham, Origins of Australia's Capital Cities, Cambridge University Press, Melbourne, pp.132-133; Geoffrey Bolton, pp.144-148.

15. Lewis, Ibid.

16. W.G. Hoskins, The Making of the English Landscape, Hodder and Stoughton, London, 1955, pp.58-65.

17. Vincent Scully, American Architecture and Urbanism, Thames & Hudson, London, 1967, p.30-35. At Philadelphia, part of William Penn's instructions for laying out the city are displayed on the pavement of Welcome Square: 'Let every house be placed to the middle of its plat, so there may be ground on each side for gardens or orchards or fields, that it may be a green country town, which will never be burnt, and always be wholesome.' Governor Phillip had something like this in mind when he was planning Sydney.

18. See Chapter 8.

19. Michael Austin, 'Notes on a Colonial City', Fabrications, Journal of the Society of Architectural Historians Australia and New Zealand, 2:3, 1991, pp.37-38.

20.This insistence on 'a beautiful appearance to be secured as far as possible' betrays the non-professional stance of the framers of the scheme, and forshadows the pleas of the later 19th century, when Garden Suburbs were being planned. See Robert Freestone, Model Communities, Nelson, Melbourne, 1989, chapter 2.

21. Patrick McGrath, The Story of Browns and Scarsdale, Sands and McDougall, Melbourne, 1912, p.17.

22. Weston Bate, Lucky City: the First Generation at Ballarat, 1851-1901, Melbourne University Press, Carlton Victoria, 1978; Keast Bourke, Gold and Silver: Photographs of Australian Goldfields from the Holtermann Collection, Penguin Books, 1973.

23. Alexander Sutherland, Victoria and its Metropolis, Melbourne, McCarron, Bird, 1888, p.134; see also James Bonwick, Discovery and Settlement of Phillip, George Robertson, Melbourne, 1856.

24. Proclamation of 26 August 1835, New South Wales Government Gazette; and Proclamation 14 September 1836.

25. F.A.Larcombe, The Origin of Local Government in New South Wales, vol.1, Sydney University Press, 1973. Chapter 9, 'General Permissive Incorporations 1858'. Larcombe points out that after the Municipalities Act of 1858, during the next nine years, ninety-one petitions requesting municipal status were received by the Governor. Under the Act, 50 householders could petition for a municipality. See Appendix 3 for a summary of these incorporations from 1858 to 1866 in NSW.

26. Tent suburbs were rarely remarked upon, but showed up in the census statistics. Of course, gold towns, started off as collections of tents but it seems remarkable how the principal street formed quite quickly. Early photograghs show this clearly, and early paintings of Melbourne and Adelaide show them very quickly tented.

W.F.E. Liardet, in Liardet's water-colours of early Melbourne, Susan Adams and Weston Bate, Melbourne University Press, Melbourne, 1972, depicts some tent dwellings; Stanley Jevons remarked in his essay on Sydney, 'A Survey of Sydney', 1853, about the self-built humpies at Redfern composed of tents combined with all sorts of materials readily at hand. Ms held by Mitchell Library.

27. European drawings have revealed few clues to the form and structure of the camping grounds. Apart from the depiction of the materials used in the individual shelter itself, the drawings usually present the wurlies singly, or in a picturesque group. Eugen von Guerard is one of the few artists who drew a group of wurlies in an ordered circle.

28. Arthur Phillip, despatch to Under Secretary Nepean, Historical Records of New South Wales, vol.1 pt.2, 9 July 1788, Enclosure, p.155. He wrote: 'His Majesty's Commission, with that for establishing the Courts of Civil and Criminal Judicature, were read soon after landing, and as it is necessary in Public Acts to name the County, I named it the County of Cumberland, and fixed its boundaries by Carmathen and Landsdown Hills to the westward, by the northern parts of the Broken Bay to the northward, and by the southermost part of Botany Bay to the southward.' The hills to the west could only be seen in the distance, and had not been explored at this date; the southern boundary at Botany Bay was later amended, and the County defined by the Nepean-Hawkebury River.

29. See T.M. Perry, op. cit., p.7,n.3. and Appendix 1. Government Orders imposing the limits were proclaimed in 1826 and 1829, before survey. In 1835 they were revised when the surveyors had been able to map them more exactly.

30. This regulation was the spatial origin of the places where potential villages and towns were later marked out. They were not determined by temporal factors, like the time it took to move to one village from another, and though determined in long run by topographical considerations as well, at first the four sites of one-mile sections were marked within each County boundaries. For details see Chapter Seven.

31. William Baker, Baker's Australian County Atlas, designed and printed at the Hibernian Printing Office, Sydney, 1843-46. The copy at the Mitchell Library has an interesting handwritten list of subscribers, and shows the Electoral Districts of NSW with names of the Members of the Legislative Council. Copies were limited at the time of printing, and are now very rare.

32. Joan Kerr and James Broadbent, Gothick Taste in the Colony of New South Wales, David Ell, Sydney, 1980. Chap

5. Governor Bourke, Act of Government and Council, 7, William IV No 3, 1836, 'to promote the building of Churches and Chapels and provide for the maintenance of Ministers of Religion in NSW'.

33. The pace of change was set in Melbourne, where allotments changed hands so quickly, that there was little time to erect a permanent building.

34. Miles Lewis, Melbourne: the City's History and Development, Melbourne, 1994, p.25.

35. See Graeme Davison, The Rise and Fall of Marvellous Melbourne, Melbourne University Press, Melbourne, 1978; Sean Glynn, Urbanisation in Australian History, Thomas Nelson, 1970; M. Neutze, 'City, Country, Town: Australian Peculiarities, Australian Cultural History, No.4, 1985.

36. D.R. Hainsworth, The Sydney Traders. Simeon Lord and his Contemporaries. 1788-1821, Sydney University Press, Sydney, 1972.

37. J.B. Hirst, The Strange Birth of Colonial Democracy, Allen and Unwin, Sydney, 1988, pp.17-18.

38. Jim Davidson,(ed), The Sydney-Melbourne Book, Allen and Unwin, Sydney, 1986. Compares the differences in the culture of the two cities.

39. Jane Jacobs, Cities and the Wealth of Nations, Viking, Harmonsworth, 1985, chapter 10, 'Why Backward Cities Need One Another', pp.135-155.

CHAPTER NINE

FIGURES: Titles only; full captions in Vol.II.

Fig.9.1 Plan du Comte de Cumberland, a la Nouvelle-Galles du Sud, 1822, Louis de Freycinet, Voyage autour du Monde, 1817-1820, Atlas, Paris, 1825.

Fig.9.2 Bird's-eye view of Fremantle, Western Australia, from the Canning Road, aquatint, London, September 1832. From a watercolour by John Buckler. Mitchell Library, State Library of NSW.

Fig.9.3(a) Plan of Wiliamsburg, Virginia, c.1800. From Vincent Scully, American Architecture and Urbanism, Thames and Hudson, London, 1967, p.34.

Fig.9.3(b) Ibid, Plan of Philadelphia, Pennsylania, 1682.

Fig.9.4 Map of part of Ballarat, 1861. Ballarat Municipal Library, from Weston Bate, Lucky City, Melbourne University Press, Melbourne, 1978, p.168.

Fig.9.5 Eugen von Guerard, Native Wurlies near Adelaide, 1858. From B. Whitelaw, Australian Landscape Drawing, Melbourne, 1976.

Fig.9.6 Map of part of the Colony of Port Phillip, land sections for sale at Sydney, 12th September 1839. Coloured engraving, published by J. Crofts, 1839.

Fig.9.7 Map of County Macquarie, 1843, from Baker's Australian County Atlas, William Baker, Hibernian Press, Sydney, 1843-46. Mitchell Library, State Library of NSW.

Fig.9.8 Plan of the Township of Beechworth, 1856. Surveyed by A.L. Martin, lithographed at the Surveyor General's Office, Melbourne. Archives Office of NSW, Map No.5890.

Fig.9.9 Plan of Preliminary Surveys for the Design of the Extension of the Village of Gulgong, 1876. J.C. Dalgish. Archives Office of NSW, Map No.2922.

APPENDIX I

Surveyor General's Department, Sydney, 1832.
From the New South Wales Calendar and Post Office Directory, 1832, Stephens and Stokes, Sydney, 1832, facsimile by The Public Library of New South Wales, Sydney, 1966.

Surveyor General's Department, pp.11-12.

Major T.L. Mitchell, Surveyor General of the Territory, Surveyor of Roads and Bridges and sole Commissioner for apportioning the Territory.

S.A. Perry, Esq., Deputy Surveyor General.

Surveyors:
Robert Hoddle, J.B. Richards, Heneage Finch, and James Ralfe, Esquires.

Assistant Surveyors:
John Abbott, Henry Butler, Robert Dixon, John Edwards, W.R. Govett, William Jaques, Mortimer Lewis, Felton Mathew, Peter Ogilvie, John Rogers, F.J. Rusden, G.W.C. Stapylton, John Thompson, G.B. White.

Draughtsmen: T. Balcombe, F.R. D'Arcy, Walker R. Davidson, John Larmer, H.F. White, T.S. Townsend.

Chief Clerk: Mr David Duncombe,
Clerks: Messrs H. Halloran, C.H. M'Intosh, and F. Eager.

Note: Several of the Draughtsmen were promoted to assistant Surveyors, or Surveyors in later years.

COMMENT ON THE COLONIAL SURVEYORS

As a body of men, the Surveyors of New South Wales before 1850, were an interesting lot. They were well educated, trained mostly in the schools attached to the naval or military training colleges in England. The best of them were vitally interested in the progress of the colony, took part in many aspects of colonial life, and contributed significantly to the store of local knowledge being assembled early in the 19th century.

They led strenuous and hard-working lives, often in trying conditions, working in pairs or isolated in the field, and their rewards were often meagre. It is noticeable that a proportion of them died young, or as the result of accident or misadventure. Some grew to positions of great influence in colonial life. They were key figures who, often largely unacknowledged, as they were part of the public service, were responsible for far-reaching decisions in land matters.

Many of them had other talents, in the field of art, and left sketches, and very competent drawings, like those by Mitchell, Piguenit, Hodginson, Russell, and Dixon. They also left written documents, field books, diaries, and manuscript or published journals of their expeditions. They were explorers, geologists, topographers, practical astronomers, and trained observers. Some followed varied career paths, when life in the field became too demanding.

The depression of 1840s forced a reduction in the number of surveyors in the Surveyor-General's department. Some were transferred elsewhere, and some became 'licensed surveyors' with a third of their salary and the right of private practice; they were difficult for the department to control. Some took up land in the districts they surveyed, like William Dangar in the Hunter Valley and New England. Some became Land Commissioners, supervising the sale or lease of crown land.

The other States, also, shared some talented and energic men as official surveyors, and I have added some of their names to the primary list.

Above: Portrait of an Australian surveyor, c.1830, identity not known but Heneage Finch is suggested, artist B. Clayton. Mitchell Library, State Library of NSW.

APPENDIX I

MAJOR MITCHELL'S SURVEY DEPARTMENT, 1832

List of Surveyors, with brief biograghical entries where known.

Mitchell, T.L. (1792-1855), born at Craigend, Scotland, son of John Mitchell and his wife Janet, nee Wilson. Gazetted second lieutenant in 1811 in the 95th Regiment and served in the Peninsular War, chiefly engaging in obtaining topographical intelligence. Was selected by Sir George Murray to produce maps of the battlefields. In 1827 he published a useful little book, printed by Samuel Leigh, Strand, London, Outlines of a System of Surveying, for geographical and military purposes; comprising the principles on which the surface of the earth may be represented on plans.* It was 'based on 16 years experience, and originated among the mountains of Spain and Portugal during the war.' In one section he estimates the possible influence of surveying techniques on the production of topographical and panoramic landscapes during the second quarter of the century. He deals with the construction of field sketches according

to the principles of surveying, especially where the terrain was difficult. He married Mary Blunt, daughter of Sir Richard Blunt, and arrived in Sydney in 1827, as successor to surveyor-general John Oxley, who died in 1828. He led the 1831-2 expedition north to the Liverpool Plains, taking George B. White and Heneage Finch with him. He went exploring again in 1835 to trace the Darling River; the botanist Richard Cunningham was killed by natives. In March 1836 he set off again to trace the Murray to the Darling; he then struck southwards across promising country he called 'Australia Felix' to the southern coast, and found the Henty brothers established at Portand. He took G.W.C. Staplyton with him.(See his Three Expeditions into the interior of Eastern Australia, T.& W. Boone, London, 1839). His other great work, his Maps and Plans of the Principal Movements, Battles and Seiges...during the war from 1808 to 1814 in Spanish Peninsular and the South of France, was published by J. Wyld, London, 1841. In 1845 he began his fourth long journey in south-western Queensland, taking the young Edmund Kennedy with him, but failed to find the expected northerly flowing big river. A very talented man, a very skilled draughtsman, but a difficult leader, Mitchell clashed with the governors, but was admired by the small settlers who thought he took their part against the big squatters. He died on 5 October 1856 of pneumonia brought on by his surveying work near Braidwood. ADB entry by D.W.A. Baker, and 'Thomas Mitchell as an Explorer', JRAHS, vol 80, June 1994; J.H.L.Cumpston, Thomas Mitchell, Melbourne 1954; B. Smith, European Vision and the South Pacific, Oxford, 1960, pp.211-12.

Perry, Samuel Augustus (1792-1854), born in Wales, appointed ensign in the Royal Staff Corps 1809, promoted lieutenant 1811; served in the Peninsular War under Sir George Murray. Married 12 April 1817 Caroline Elizabeth Johnson. Taught topographical drawing at the Royal Military College until 1823; went to Dominica as private secretary to the governor. Sir George Murray, then secretary of state for the colonies, appointed Perry as deputy surveyor-general and he arrived in the 'Sovereign' in August 1829, with his wife and family. Mitchell was less than welcoming, and critised Perry, but Perry virtually presided over most of the work of the Department, particularly when Mitchell was away in England between 1835 and 1841, and from 1847-48, or when he was absent exploring. It was under Perry that most of the surveys of towns, villages, and allotments were made. He also made a detailed survey of the Clarence River District in 1842, and went with Colonel Barney to northern Australia when Port Curtis was being planned in 1846. He retired in 1853, and died the following year at Kiama. Considered 'a loyal and capable administrator and a skillful surveyor.' Bernard T. Dowd, ADB, vol.2; Nancy Gray, Descent, 2, 1964.

Abbott, John, (1803-1875), born in NSW, a son of Major Edward Abbott, who served in the NSW Corps from 1789 to

1810, and his wife Louisa, daughter of Admiral Smith. By 1824 John was was clerk to the Hobart Town bench of Magistrates. He moved to Sydney in 1828 and joined the NSW Survey Dept, by 1832 he was assistant surveyor in charge of the approaches to Lennox Bridge at Emu Plains. He later returned to Van Diemen's Land and was appointed Registrar between 1840 and 1857. He sketched in watercolour and wrote the words for the 'Song of the Fair Emigrant'. Kerr, DAA.

Balcombe, Thomas Tyrwhitt (1810-1861), born at the island of St Helena, 15 June 1810 to William Balcombe, and Jane, nee Cranston. His father was appointed Colonial Treasurer, and the family landed in Sydney on the 'Hibernia' in April 1824. Went to Sydney Grammar School, worked for the Australian Agricutural Company at Port Stephens, but had a bad head injury while riding. Joined Survey Dept in 1830 as a draughtsman, but not well regarded as an office worker. Became a field surveyor, worked in the Murray River district. Married Lydia Stuckey 1840; they had three children. Prepared sketches for lithographs of the gold fields; specialised in animal and sporting prints, also painted in oils. Died Paddington, at Napoleon Cottage 1861. Kerr, DAA.

D'Arcy, Frederick Robert, appointed draughtsman c.1830. Well connected, but a poor draughtsman. Sketched with Govett; assistant surveyor in 1836 with Robert Russell at Port Melbourne, then set up as private surveyor. Came back to NSW, moved to Hartley, then worked at the Hunter Valley, and moved to Queensland. Kerr, DAA.

Davidson, Walker Rennie, (1808-1876), born Perth, Scotland 16 March 1808. Trained in Scotland, arrived Sydney 1829; draughtsman Survey Dept 1830, married 19 July 1836 Christina Sarah Murray. Surveyor at Bathurst, 1838, district surveyor 1844. Informed amateur geologist; surveyor-general 1864-68, died Deliniquin NSW, 20 Nov 1878. ADB Biographical Reg, 1987; D.W.A. Baker, RAHSJ, 80,1, June 1994.

Dixon, Robert (c.1800-1858), assistant surveyor in Survey Dept. In 1829 surveyed areas south-east of Sydney, and at the Limestone Plains near the sites of Queanbeyan and Canberra. Went to the Hunter River, and there also completed extensive and energetic surveys. Some of his views were lithographed in England. While on leave in England he arranged for the publication of a map of the twenty counties of NSW, without Mitchell's permission. When he returned, he was dismissed. He was sent to Moreton Bay in 1839, as a surveyor, married, and was made surveyor of the district. Almost immediately he published another unauthorised map and was suspended. Later managed a gold mine at Bathurst. Died in 1858, buried in Camperdown cemetery. Patricia MacDonald, Joan Kerr, DAA.

Finch, Heneage,(c.1802-1850) son of E. Finch, vice-admiral, and grandson of the Earl of Winchelsea, England.

Graduated from Christ Church Oxford. Arrived in Sydney in the 'Grenada', appointed at 22 in 1825 as assistant surveyor, supervised the road-making to the Hunter Valley 1825-31, and worked in the Hunter Valley. Went with Mitchell on his first expedtion in 1831-32, attacked by Aborigines near Narrabri. Transferred to Sydney, then Port Macquarie; resigned 1840. Died Liverpool NSW, 19 Sept 1850 (acidentally killed); ABD Biographical Register 1987; D.W.A. Baker, JRAHS, 80,1, June 1994. Portrait of a colonial surveyor by B. Clayton in Mitchell Library, may be of Heneage Finch.

Govett, William Romaine (1807-1848), surveyor, born at Tiverton, England on 3 Oct 1807, son of John Govett, surgeon and mayor. At twenty he went to London, and assisted by Lord Harroway, he obtained a passage to NSW and an appointment in the Survey Dept. He was sent to survey in the Blue Mountains. He sketched, and was interested in the Aborigines. He returned to England and there published 20 essays on colonial life, illustrated by 10 of his own drawings and one by Charles Rodius, in the Saturday Magazine. He died at Brighton on 22 August 1848, aged 41, buried at Tiverton. Portrait by G.Day, in the Dixon Gallery. Sketches in Mitchell Library and Australian National Library.

Hoddle, Robert (1794-1881). Born in London on 20 April 1794, married Mary Staton at Surrey, England in 1818. (later married Fanny Agnes Baxter in 1863 in Melbourne) He came to Australia in July 1823, and was appointed assistant surveyor to John Oxley. Sent to survey the site of Brisbane, and also, by then the most experienced surveyor in the department, conducted surveys in the Macdonald Valley, at Liverpool, and elsewhere in the County of Cumberland. He went with Governor Bourke to supervise the laying out of Melbourne in 1837, and within the year also surveyed and planned Geelong. He conducted the first land auctions at Melbourne. In 1842 he became an alderman on Melbourne's first city council. He was appointed Victoria's first surveyor-general in 1850. He sketched and made watercolour drawings. Kerr, DAA; R. Wright, George Tibitts, Port Phillip Colonial, 1989.

Larmer, John, draughtsman; later involved in the plan of Braidwood, as assistant surveyor.

Lewis, Mortimer W. (1796-1879), born in London, at 19 he was appointed surveyor and draughtsman to the Inspector-General of Fortifications. Appointed assistant surveyor in the Survey Office of NSW, arriving in March 1830. He was engaged in mapping the Blue Mountains west of Sydney. Mitchell appointed him town surveyor of Sydney, and then in 1835 colonial architect, an office he held for 15 years, until 1850. He designed public buildings in the neo-classical style, and has many notable stone buildings still standing in Sydney. Morton Herman, ADB.

Mathew, Felton, (c.1807-1847); assistant surveyor, Sydney, 1807; m. 1832 Sydney. Appointed to NSW Survey Dept; arrived Feb 1830 in 'Morley', married 1832 Sydney, appointed town surveyor of Sydney 1836; Surveyed in the west of the County of Cumberland and the Macdonald Valley, accompanied by his wife, who wrote an interesing diary of their travels. Offered position as acting Surveyor-general of New Zealand, 1839, offer withdrawn; Justice of the Peace. 1840. Died Lima, Peru, 1847 (on route to England); ABD Biog Register, 1987.

Richards, J. Bryne, surveyor, active in the County of Cumberland, re-surveyed the early town of Liverpool; then went west of the mountains, surveyed the Village of Orange in 1829. District Surveyor in the 1830s. He died at Kelso, where he is buried in the Holy Trinity Churchyard.

Rusden, F.J., assistant surveyor, worked on plan for Murrurundi, 1839.

Staplyton, Granville W.C. (1800-) son of a major general and grandson of Viscount Chetwynd. Became an assistant surveyor in 1829; Mitchell chose him for his 1836 expedition into Victoria Felix; he was competent, but did not get on with his superior, whom he cordially despised. He kept a detailed journal of their journey. In 1839, along with R. Dixon and James Warner he was sent to Brisbane to survey the coastal belt east of the range and south to the Richmond River. See D.W.A Baker, JRAHS, vol 80, June 1994; Alan E.J. Andrews (ed) Staplyton with Major Mitchell's Expedition 1836, Hobart 1986; Gregory C. Eggleston, Major Mitchell's 1836 Expedition, Melbourne, 1992.

Thompson, John (1800-1861), sketcher and surveyor, born in England on 3 Sept 1800 to John Wyatt Thompson, a miniature painter. Appointed principal draughtsman to the NSW Survey Dept. He married Ann Mary Windeyer in St James Church, 11 February, 1830. Manuscript book of Views in the Mitchell Library, sketched between 1827 and 1832. Colonial correspondent to John Claudius Loudon, he provided a plan of Alexander Macleay's garden at Elizabeth Bay to Loudon for his Suburban Garden and Villa Companion, London, 1838. He is known to have written an account of Colonial Architecture but if ever published, it has not been located. Portrait by Charles Rodius in Mitchell Library. Broadbent and Kerr, DAA.

Townsend, Thomas Scott,(1812-1869) appointed draughtsman in Survey Dept NSW 1 April 1831, at the age of nineteen. Mitchell praised him 'as a most industrious and useful young man, bred in a Surveyor's office in England.' He was sent in 1836 to relieve assistant surveyor Francis Rusden at Bolong, to survey the village of Gunning, and lay new sections in the town of Yass, marking them with strong 12 foot high posts. In 1838 he was instructed to locate a township at the river crossing, which became

Albury. He was instructed to relieve Hoddle in Melbourne in 1839, and then was sent to assist C.J. Tyers in his survey across Portland Bay, ascertaining the median of 141 degrees east longitude, the boundary line of South Australia. He surveyed at the Corner Inlet. He was then sent by Mitchell to conduct an extensive survey from the southern coast to the Monaro, 1842 to 1844, with assistant surveyors Francis Peter MacCabe, William Henry Wright, and draughtsman Hugh Roland Labatt. He was back there in 1848, surveying the Snowy Mountains. He married Emmy Gordon of Queanbeyan on 27 April 1853, twenty years younger than himself; unfortunately he suffered from delusions that his wife was unfaithful, and they parted company when his son was born; he prepared a separation deed in 1854, and went back to England, where he died in August 1869. Alan E.J. Andrews, JRAHS, vol 79, December 1993.

White, H.F., assistant surveyor, associated with the 1827 plan of Windsor. Also surveyed Appin in April 1834, and Wollongong in the same year. His plans are distinguished by his fancy pen-work decorating the titles.

White, George B.(1802-). Born in Ireland, father reputedly a cousin of the Earl of Bantry. Joined the Survey Office in Sydney. He re-surveyed Richmond in 1827, made a joint survey with Dangar of the Liverpool Range country, and went with Mitchell on his first expedition 1831-32; surveyed the village of Dubbo on the Macquarie River, 1849. Manuscript journal in Mitchell Library; D.W.A Baker, JRAHS, 80, 1, June 1994.

Other Surveyors on 1832 list, no details known:

Bulter, Henry, assistant surveyor
Edwards, John, assistant surveyor
Jaques, William, assistant surveyor
Ogilvie, Peter, assistant surveyor
Ralfe, James, surveyor
Rogers, John, assistant surveyor

SELECT LIST OF OTHER SURVEYORS AFTER 1832, NSW AND OTHER STATES:

Blackburn, James (1803-1854), born in Upton, West Ham, Essex, transported in 1835 to Van Diemen's Land. Joined the Department of Roads and Bridges, and then Works, and directed a large part of the island's road-making, surveying, and engineering works from 1833 to 1839. He is considered Tasmania's most important architect of the time, building a series of fine churches, public buildings, and schools especially in the 1840s. He sailed to Melbourne in 1849, was appointed city surveyor, and planned the water supply for the city. He was injured in a fall from a horse in 1852, and died in 1854. His son,

also James, followed him in his profession. Harley Preston, ADB.

Busby, John (1765-1857) born at Alnwick, Northumberland, mineral surveyor and engineer in Scotland, worked on the Botanical Gardens, Edinburgh. He came to Australia armed with testimonials from Stevenson, Telford and Rennie, and recommended by Commissioner J.T. Bigge. His most important work was the planning and supervising of the Busby Bore, bringing a water supply for Sydney from the Lachlan Swamps by tunnel. Started in 1827, progress was very slow, and it was not completed until 1837. He retired to his property in the Hunter Valley, Kirkton, and died there in 1837. G.P. Walsh, ADB.

Calder, James Erskine (1808-1882), born at Great Marlowe, Buckinghamshire, educated at the Royal Military College, Sandhurst. Joined the Ordinance Survey in England. Was offered an appointment under Edward Dumaresq at Hobart, and sailed in 1829. Explored with Alexander McKay in the Huon Valley. He measured town and sub-lots, and did field work over a wide area. He was appointed Surveyor-General in 1859. His careful regulations and his appointment of reliable surveyors accountable to him, was the basis of the present survey systen in Tasmania. He wrote many valuable reports, published accounts of the Aborigines, and of the woodlands of the island. J.B. Thwaites, ADB.

Clarke, Andrew,(1824-1902) Born and raised in India, graduated from the Royal Military Academy at Woolwich, second lieutenant of Royal Engineers, at Chathman and then in Ireland, Superintendent of Convicts in Hobart, road builder in New Zealand, private secretary to Governor of Tasmania. He 1853 he was appointed Surveyor Gerneral of Victoria and remained there until 1858. He influenced the land management at a crucial period and had a great personal impact on Victoria's economic landscape. He entered the Legislative Council of Victoria in 1853 as an official representative, and was responsible for the drafting and inauguration in December 1854 of the Municipal Instititions Act, an act that 'did more to establish order and good government and to create a healthy conservative feeling' than he had anticipated. Much of the colony's scientific, artistic, and material development stemmed from Clarke's efforts. He was a scientist, a humanitarian, and an idealist. After some years in colonial service, and in India directing public works he returned to England in 1881 to became Commandant of Military Engineering at Chatham. He was, according to Reginald Wright, 'the consummate imperialist', a traveller of the Empire circuit. He had however, a abiding interest in Australian affairs. ADB, R. Wright.

Dangar, Henry, (1796-1861), born at St Neot, Cornwall, arrived in NSW IN 1821, appointed assistant in the Survey Dept, sent to Newcastle to make a detailed and immediate survey of the Hunter River districts. He marked the road to Maitland, explored the sites of the present

Muswellbrook and Scone, and explored the river system of the valley. He was involved in locating land for eager settlers, but was dismissed from office for using his position for private gain. Appealed in England, and while there wrote Index and Directory to Map of the Country bordering upon the River Hunter, 1828. Offered a position as surveyor of the Australian Agricultural Company. Explored the Liverpool Plains, and selected extensive areas for the Company. Lived at Neotsfield near Scone, sponsored many emigrant families. He acquired many town allotments in the valley, and established inns and stores, and industry connected with his pastoral pursuits. His employees called themselves 'Dangar men' and he was a major influence on the development of the Hunter District. Nancy Gray, ADB.

Dumaresq, Edward, (1802-1906), born in Swansea, Wales, studied at the Royal Military College, Sandhurst, sent to India, where he was part of a Topographical Survey Dept. He then came to New South Wales, with his sister, Eliza Darling, who had married General Ralph Darling, who was appointed Governor. He stayed, however, in Hobart, and was appointed Surveyor-General in 1825, but worked only until 1828. He then entered different civil occupations, and settled near Longford. Roger Page. ADB.

Darke, William, one of the group of three surveyors sent from Sydney in 1836 to Melbourne to survey the town. Liardet watercolour of his camp at Sandridge, out from Melbourne. Liardet.

Fernyhough, worked on plan of Berrima, 1838, and Murrurundi, 1840.

Frome, Edward Charles,(1802-1890), born at Gibralta, educated at the Royal Military Academy Woolwich. Served on the construction of the Rideau Canal in Canada, 1827-33. Wrote a treatise on surveying, Outline of a method of conducting a trigonometrical survey, (London 1840). Taught at Chatham when approached by the South Australian colonization commissioners to be surveyor-general, and came with his family and a party of sappers to Adelaide in 1839. He was industrious and efficient, and land for the incoming settlers was made available by 1841, roads and secindary towns were marked, and a trigonmetrical survey of the limits of settlement was completed. He took part in many colonial boards and committees, but returned to England in 1849. B.C. Newland, ADB.

Frankland, George, (1800-1838), born at Wells Somerset. After a stint in India, he was appointed surveyor-general of Van Diemen's Land in 1828. He was crticised for the slowness of his survey work, despite the production of maps based on his official surveys. Lady Franklin thought him 'more accompished than efficient'. P.R. Eldershaw, ADB.

Hodgkinson, Clement, Born at Southampton 1818, qualified as an engineer in France, and had surveying experience in England. Came to Australia to take up land in 1839, bought into a place on the Macleay River. Between 1840 and 1843 worked as a contract surveyor in the Macleay district. His wife died and he returned to England, published Australia, from Port Macquarie to Moreton Bay, London, 1845. He came back to Australia in 1851, to Melbourne, intending to take up grazing, but joined the Surveyor-General's Office in 1852, working on the Yan Yean water supply. He was promoted District Surveyor, and was engineer for Melbourne suburbs. Read papers on geology and the construction of railways to the Philosophical Institute of Victoria. In 1860 he became assistant commissioner and secretary to the new Board of Crown Lands and Survey, helped draft ammendents to the Lands Act, and served on many committees on land matters. He was vitally interested in Victorian forests, and moved to protect many of them, far-sightedly reserving many from sale or exploitation. He became a commissioner for the westward extension of Melbourne in 1887. Raymond Wright, The Bureaucrats' Domain, Oxford University Press, Melbourne, 1988; H.W. Nunn, ADB.

Labatt, Hugh Rowland, surveyed the southern coast of NSW to the Monaro with Townsend 1842.

Lewis, Frederick George (1858-1931), public servant, Sydney. Born at Newcastle. NSW, 1858, son of Mortimer Lewis. Served in NSW Lands Dept to 1916, cricket enthusiast, amateur oil painter, step-brother to Thomas Harvey Lewis. Died Sydney, June 1931. ADB Biog Regr, 1987. Kerr, DAA.

Lewis, Thomas Harvey, (1828-1901), surveyor and cricketer, born England, 1828, son of Mortimer Lewis, died Sydney, 1 July 1901. Arrived Sydney 1829, joined NSW Survey Dept 1849, prominent cricketer when young, member of volunteer corps, step-brother of Frederick George. ABD Biog Regr; Kerr, DAA, p.468, drawing of cricket match in Hyde Park.

Ligar, Surveyor-General of Victoria. With Francis Peter MacCabe surveyed on the south coast and Monaro, 1842.

Light, William, (1786-1839) born at Kuala Kedah, Malaya, son of Captain Francis Light, who extended and planned Penang for the East India Company. Educated in England and joined the navy and became a midshipman. Became a junior staff officer at Wellington's headquarters in the Peninsular campaign, employed on mapping and reconnaisance. After his marriage to Mary Bennett he travelled in Europe, sketched in Sicily and Pompeii, and recruited for the Pasha of Egypt. Was appointed Surveyor-general of South Australia in 1836, charged with selecting the site for the initial settlement. He chose the Adelaide site, but a good harbour eluded him, and he was under great pressure, as the settlers were arriving

within weeks. His colleagues were less than helpful, and his duties unrealistic. He devised and laid out the plan of Adelaide, with its squares and belt of parkland, and had a clear idea of what should be done, amidst the chaos of conflicting opinion. He was dogged by sickness, and died only three years after landfall in South Australia. David E. Elder, ADB.

Mitchell, Murray, (1828-1846) son of T.L. Mitchell. Died in winter in the Snowy Mountains at 18. His father wrote of him:'He died on 16th July, at the age of eighteen, from want of medical aid, when surveying, in winter, in the Australian Alps. His grave, trodden by cattle hoofs, is in a desolate unconsecrated spot. He had served the public, gratis, upwards of two years, as draughtsman and surveyor.' A.Andrews, JRAHS, vol.79.

Mitchell, Roderick, (1824-1852), Born Sandhurst, England, 26 Jan 1824, son of T.L. Mitchell. Educated by W.T.Cape and Bowles at Sydney, went back to England to the University of Durham 1838, qualified as surveyor, worked in New England NSW, magistrate and commissioner of crown lands at the Liverpool Plains, given command of the expedition searching for Leichhardt. Died at sea off Newcastle, 28 Aug 1852, accidentally drowned. ADB Biographical Regr, 1987.

Piguenit, William Charles, (1836-1914), born Hobart Town. Joined the Tasmanian Lands and Survey Department in 1859 as assistant draughtsman, prepared maps of Tasmania, for lithographers Vaughan Hood, Alfred Randall, and Frank Dunnett. Joined James D. Scott's expedition to Arthur Plains and Port Davey in March 1871. He resigned in 1872 to devote himself to landscape painting, and his interest developed in the area of depicting 'tremendities of nature': misty craggy mountains in Tasmania, the vast chasms of the Blue Mountains, the Garden Palace in Sydney destroyed by fire, the flood on the Darling, and other 'sublime' subjects. Illustrated for the Picturesque Atlas of Australasia, 1886, and in the Illustrated Sydney News. Bill Gaskins, DAA.

Roe, John Septimus (1797-1878), born in Newsbury, England, son of Rev James and Sophia Roe. Entered the navy as a midshipman, passed his examinations in mathematics and navigation in 1817, appointed master's mate to Phillip Parker King in his survey voyages around Australia in the 'Mermaid'. In 1821 he had a serious fall from the masthead, but recovered. Kept a journal. and sketched. In 1824 he sailed in the 'Tamar' to Port Essington with Captain J.G. Bremer. Returned to London and worked at the Hydrographic Office preparing sailing directions for the Australian Directory. In 1829 he was appointed Surveyor-General to the settlement at Swan River, arrived in the 'Parmelia' in June with his new wife, Matilda. He surveyed the sites of Fremantle and Perth, and marked out the town lots. He made short exploring trips in the south-east between 1830 and 1835;

rescued three of George Grey's party in 1839, and explored the Russell Range east of Esperance. Kerr, DAA.

Rusden, Francis Townsend, In 1831 assistant surveyor, worked in the southern highlands 1836.

Russell, Robert, (1808-1900), surveyor and architect, born London, to Robert Russell and Margaret nee Leslie. Trained under William Burn, architect, Edinburgh 1823-1828, then worked for Abraham and Drogheda in Ireland, and became intrigued with surveying; then worked in the office of John Nash in London. Migrated to Sydney in 1833, was appointed to the Survey Dept as acting assistant town surveyor of Sydney, to Felton Mathew. On 10 Sept 1836 he was sent to Melbourne. Pupil of Conrad Martens, and J.G. Austin published his lithograthic views of Sydney (unacknowledged) in 1836. Dismissed from Survey Dept, but remained at Melbourne in private practice. He is credited with the outline plan of Melbourne, which Robert Hoddle then proceded to lay out in detail. Known for his early views of Melbourne. Kerr, DAA.

Sharland, William Stanley,(1801-1877). He came as a young man with his family to Bothwell, Tasmania in 1825, and joined the Survey Department under G.W. Evans. He surveyed and planned Launceston, made the line of road across the island, and planned and extended Hobart's streets. Explored the upper Derwent, and laid out New Norfolk, Hamilton, Oatlands, Bothwell and Brighton. He was retrenched in 1839, and employed as a contract surveyor. Became a member of the Legislative Council, and the was elected to the House of Assembly. ADB.

Sprent, James, (1808-1863), born at Manchester, went to Glasgow university and then St John's College, Cambridge. He came to Hobart Town in 1830, bringing a large number of books, engravings and stationary, and opened a school, where he taught English grammar, geography, mensuration, trigonometry and languages. In 1833 he was appointed assistant surveyor in the Survey Dept; he triangulated much of south-eastern Tasmania for accurate measurement of sections in the settled districts. He explored the rough country in the mountains and the heavy forests; he surveyed the rugged west coast. In 1855 he was appointed surveyor-general. By 1859 his own map of Tasmania was completed in great detail. His son continued in his profession. ADB.

Tyers, Charles James,(1806-1870), born in London, educated Christ's Hospital, joined the navy in 1828, specialised in marine surveying. Surveyed across Portland Bay 1839, ascertained the meredian of 141 degrees east longitude which became the boundary line between NSW and South Australia. F.P.McCabe, A. Andrews.

Wade, Henry, replaced Staplyton at Moreton Bay in the 1840s.

Warner, James, sent as surveyor to Moreton Bay 1839 in company with Dixon and Staplyton.

Wright, William Henry, surveyed on the south coast of NSW and the Monaro, 1842.

Barney, George, Major and Colonial Engineer, credited with the plan of Brisbane, but Robert Dixon also has claim to this plan.

Conder, Charles, survey assistant and artist, painted his earliest works while employed in a survey camp in New South Wales.

APPENDIX II

THE 1829 TOWN PLANNING REGULATIONS

The following Minute from Governor Darling relating to the laying-out of towns, was forwarded to the Surveyor-General on March 26 1829.

No. 29/249 Colonial Secretary's Office,
March 26, 1829.

Sir,

In compliance with your letter of 2nd December, No.331, and in order not to delay your operations in laying out the Town of Maitland, I do myself the honor to forward for your information and guidance the accompanying copy of the Governor's Minute, dated 5th instant, respecting the size of town allotments, and the conditions on which they are to be granted.

I the course of a few days, I shall also take an opportunity of again addressing you on the subject of the Form of the Return of Descriptions alluded to in paragraph 18, eighteen, and such other measures as may be necessary for carrying His Excellency's instructions into effect.

I have the honor to be, Sir,
Your most obedient servant,
Alex. McLeay.

To the Surveyor-General

Minute No.34.

5th March, 1829

Having brought under the consideration of the Executive Council the Report of a Board dated 18th June, 1828, appointed to consider the Regulations under which Grants should be made in the several Towns throughout the Colony, for the purposes of Building, the following General Regulations are established, pursuant to the advice of the Executive Council, - vizt:-

1st. The several Towns throughout the Colony are to be divided into four classes, with relation to the advantages of situation:

1st - Sydney
2nd - Sea Port Towns
3rd - Towns situated at the head of Navigable Waters
4th - Inland Towns

2nd. The blocks or spaces of building ground, between the main streets are to be divided into portions, each containing a front of one chain (60 ft or 18.288 metres) in length, and a depth of five chains (300 ft or 91.44 metres), the corner allotments and those fronting the cross or inferior streets shall have a front of two

chains and a half (150 ft or 45.72 metres), and a depth of two chains (120 ft or 36.575). With this in view, it will be necessary to lay out the spaces for buildings between the main streets at a depth of ten chains (600 ft or 182.88 metres).

3rd. An allotment for building is to consist of any number of the above portions, not exceeding four, according to the means and respectabilty of the Applicant.

4th. Town Allotments will be granted in fee simple, subject to a perpetual Annual Quit Rent, which shall not be redeemable at the following rates, vizt:-

1 - Sydney, 6d per Rod.
2 - Sea Port Towns, 5d per Rod.
3 - Towns at the head of Navigable Waters, 4d per Rod.
4 - Inland Towns, 2d per Rod.

5th. The Grantees of such allotments, except in the Towns of Sydney, Parramatta, and Windsor, shall not be liable to the payment of any Quit Rent until after 7 years from the date of their receiving authority to take possession.

6th. The Crown reserves to itself the right of making Drains and Sewers through any allotment, remunerating the Grantee for the damage which any building may sustain thereby.

7th. The width to be reserves for Main Streets which should always be rectilineal shall be 100 feet (30.48 metres), 80 feet (24.384 metres) of which is to be a Carriage way, with a Foot Path on each side of 10 feet (3.048 metres), and the cross or inferior streets 84 feet (25.6032 metres) in width - 66 feet (20.1168 metres) as a carriage way and 9 feet (2.7432 metres) as a foot path - the cross streets to be laid down at right angles to the Main Streets.

8th. No person shall be permitted to build at a greater or less distance from the foot-path than 14 feet (4.6272 metres), which space is to be appropriated to an open Verandah or such Plantations as may be desired. The distance between the houses will thus be 128 feet (39.0144 metres) in the Main Streets, and 112 feet (34.1376 metres) in the cross or inferior streets.

9th. With a view of preserving a general continuity of line, the space of 14 feet (4.6272 metres) in front of the Houses shall be enclosed with an open Fence, or where it may be desirable to have free ingress and egress, as to Shops, etc., there shall be posts at 10 feet (3.048 metres) apart.

10th. In order to preserve uniformity, the door sill of each Building shall be one foot above the level of the

crown of the street, immediately opposite to such door; and in no case shall any steps projecting into the streets be allowed.

11th. Grantees shall engage bonafide to complete the erection of a Dwelling House or Store within three years from the date of obtaining authority to take possession.

12th. Grantees shall bind themselves to make and to maintain in good repair a flagged footpath opposite to their allotments, when so required by the Director of Public Works or the person duly appointed for that purpose.

13th. Grantees shall be required to construct drains from any building which they may erect leading into the nearest common Public Sewer.

14th. The non-performance of the conditions required, or any of them, shall be followed by a Forfeiture on the part of the Grantee of his Allotment.

15th. In order that the above Regulations may be made applicable to Persons who have already received grants of Building Allotments, it will be necessary to enforce them by an Act of the Colonial Legislature, and with this view, let the Attorney General be instructed to prepare a Bill embodying such parts as may require the sanction of Law to give them force, as also to provide for the proper Drainage of Towns; and to impose Fines on Nuisances, as well as to oblige Builders to enclose the spaces (which must be defined) in which they deposit their Building Materials. It will, however, nevertheless be advisable to introduce the several conditions into the Body of the Title Deeds of all future Grants, so that the parties may be immediately bound to fulfil them.

16th. Let a copy of this Minute be communicated to the Surveyor General, for his information and future guidance, and desire that in preparing the Plans of Towns and Villages for my approval, agreeably to the forgoing Instructions, he will mark out such portions of ground as may be considered necessary for Churches, Markets, Squares and other Public purposes.

17th. Local circumstances may sometimes render it inexpedient to adhere strictly to the Letter of the foregoing Regulations, as they respect the laying-out of Towns and Villages, and in such cases the Surveyor General will adopt the principles which had been laid down, as nearly as may be practicable, and submit for my approval any plan he may recommend.

18th. When the plan of any Town or Village shall have been finally approved, the Surveyor General will immediately furnish the Colonial Secretary, the Director of Public Works, and the Collector of Internal Revenue,

respectively, with Authenticated Copies, divided into portions as above specified, duly Numbered, and Lists describing accurately the Boundaries of each Allotment entered into a Book in numerical order to correspond to with the Maps to facilitate which it will be necessary to determine the names of the Streets in the first instance.

19th. The Director of Public Works will be responsible that the Regulations specified under the heads of -

Size of Allotments
Width and Alignment of Streets, and
Condition

are strictly observed. As it will be the duty of the Collector of Internal Revenue to enforce the payment of the Quit Rent, which annually becomes due, it will therefore be necessary to communicate to those officers repectively the particulars of each Building Allotment which may be granted to any Individual.

(Signed) Ra Darling

Source: New South Wales, Acts and Proclamations 1829; Journal of the Royal Historical Society, vol 12, pt 4, pp 231-235, Sydney 1926.

APPENDIX III

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APPENDIX IV

The Principal Towns and their Population in 1849

NSW - Name	Founded	Houses	Population in 1848
Sydney (Town proper)	1788	7109	38,358
Melbourne, Vic.	1837	2334	10,954
Parramatta	1790	832	4,454
West Maitland	1827	558	2,409
Bathurst	1815/33	364	1,883
Windsor	1796/1810	424	1,679
Newtown*		397	1,496
Newcastle	1804	193	1,471
Hobart	1804/10		
Launceston	1824		
Geelong, Vic.	1838	257	1,370
Balmain*		296	1,337
Goulburn	1833	228	1,171
Glebe*		264	1,055
Brisbane	1826/45	197	960
East Maitland	1829	227	910
Redfern*		223	865
Paddington*		228	826
Port Macquarie	1824/31	126	819
Richmond	1810	147	746
Morpeth	1827	154	635
Liverpool	1810/19	103	601
Singleton	1820s	127	565
Campbelltown	1820	104	541
Wollongong	1834	109	515
Portland, Vic.	1839	107	510
Brighton, Vic.		105	509
Kelso	1825	96	464
Camden	1836**		
Yass	1837		
Berrima	1838		
Braidwood	1839		
Gundagai	1840		
Tamworth	1839		
Orange	1829		
Armidale	1839		
Bungonia	1833		
Appin	1834		
Murrurindi	1839		
Dubbo	1849		
Wagga Wagga	1849		

Compiled from William Henry Wells, A Geographical Dictionary the Australian Colonies, W.& T. Ford, Sydney, 1848, and Surveyor General, Select List of Maps and Plans, 1792-1886, Archives Office of NSW, Sydney, 1980.
*Suburb of Sydney
** Private Town

APPENDIX V

PANORAMAS AND EARLY TOWN VIEWS IN AUSTRALIA TO 1848

Notwithstanding the fact that panoramas have been called part of 'the Imperialist fantasy of dominance', expressed by 'the all inclusive, descriptive, disembodied gaze'; a gaze 'that celebrated progress and anticipated nostalgia,'(1) panoramas have a place in the description of urban landscapes. They can be useful supplementary additions to the town map, and can people the places in time, or add buildings as signifiers to the plan. They can, in fact, take the plan into the third dimension.

For this reason, I have listed some of the urban panoramas of the period I have been studying, as they have proved useful in my enquiry.

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(After) Major James Taylor's panorama, C. Chabot, Sidney et Port Jackson, hand coloured lithograph, 20.6 x 78.5 cm. This version was made after the Paris edition of engravings from Taylor's watercolours. c.1824. Three linked views taken from Observatory Hill. Rex Nan Kivell Collection NK 5306, National Library, Canberra.

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(1). Mary Louise Pratt, 'Scratches of the Face of the Country', Critical Inquiry, 12, Autumn, 1955; Caroline Jordan, 'No Man's Land', Art and Australia, vol.32, no.3, Autumn 1995.

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