

TOWN PLANS AND THEIR IMPACT ON THE
SETTLEMENT PROCESS IN AUSTRALIA
1788-1849

Volume I

TEXT

(Volume II - FIGURES - separately bound)

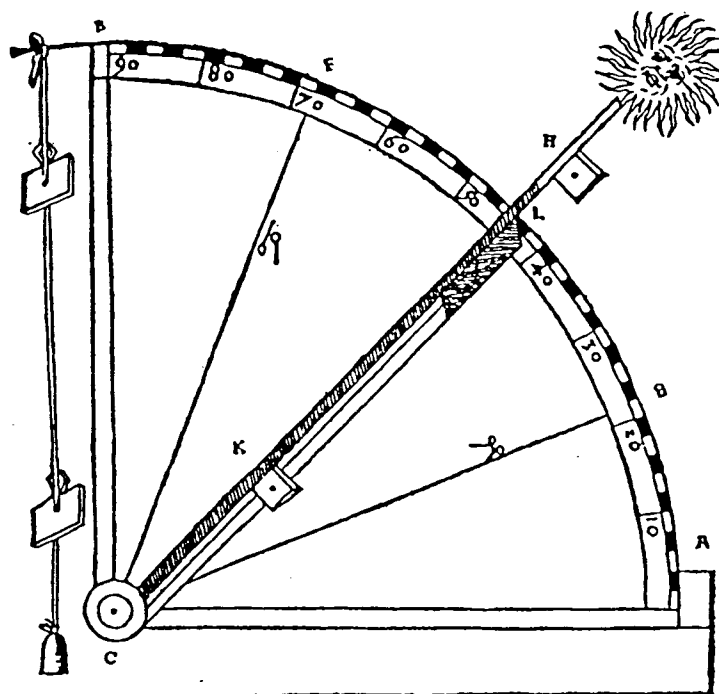
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by

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PREFACE

I undertook the writing and compiling of this thesis after a career which started in the research and planning section of the Cumberland County Council, which was then metamorphosed into the New South Wales Planning Authority, and then subsequently had a name change regularly with each change of State Government. I then specialised in the Heritage field, as a consultant. My working background, therefore, has been in association with planning offices, where I was continually amazed at the ignorance of planners when it came to the background of their own profession and their lack of curiosity about the way the Australian urban environment has been constructed since white settlement. This ignorance was reflected in the popular perception that there was no planning to speak of in the early decades of the colony.

So this has been a task long thought about, and the thesis has been planned to help fill a gap in our understanding of how the towns and cities arose in a continent where previous to 1788 there were no urban places. The mesh of towns and cities was not a fortuitous affair, undertaken without forethought. Far from it; it was a process which was carefully set in place, modified and adapted, to make a momentous emigration movement of British and Northern European people to Australia possible.

Central to this study is the assembling of a quantity of maps and plans which were constructed and drawn over the years 1788 to 1849. These, contained in Volume 2, should be read in conjunction with the text, chapter by chapter. It should be noted that the maps have been adapted for presentation in this particular document, and therefore, any reader wishing to examine them fully, should consult the original sources as cited. The quality of the maps is variable; some are clear and easily legible, some are more difficult to decipher, especially where they have been unavoidably re-copied two or three times. In some cases I have included a map which, in itself, seems less than satisfactory, but it has been put in to draw a comparison, or make a particular point. In many cases the originals are available as negatives only, the maps being too flimsy now to handle except in special circumstances. I was fortunate however to be able to see some of the early maps themselves in the original at the Archives Office of NSW, that great repository of Australian maps, or in the documents held in the Mitchell Library.

Many of the maps used, particularly in Chapter 7, are from print-outs from the negatives held at the Archives Office at a standard size of 90 x 60cms, though the map itself may have been larger. If so, it had to be reduced to fit the A4 format so it could be easily handled in the thesis.

In some cases the maps were reduced in size, and in some cases they had to be trimmed and a new framing line used to enclose them, and it was not possible to include the usual scale and north point. Some interesting handwritten notations might have to be excluded also. Some of the maps, in the original, like those of Appin and Wollongong, had been working copies used in the Surveyor-General's Office, and they were still the best ones available now, and had been marked, corrected and changed along the way.

In some cases where it was possible, I ordered coloured photographic copies, e.g. for Camden, Melbourne and Geelong (costing \$50 each), but the cost of doing this for the majority of cases would have been too prohibitive, so I had to be content with print-outs. A second xerox print inevitably meant loss of definition. Some maps were culled from published books, and then the secondary source is usually acknowledged as well as the primary one.

I made a point to going back to the original maps where at all possible, and resisted tidying them up graphically, or making my own corrections for the sake of appearance, though I trimmed some, as I say. The maps as documents have their own integrity, however old, faint, or defaced, and this adds to their provenance and interest. Where there was a good accessible coloured map, however, I had have it reproduced, for the pleasure of including it. The technology is available now, though in some cases, the colour is a little fugitive, especially yellow. A complicated map like Dixon's map of the Colony, 1837, lost definition, but was worth including to give a idea of its style and appearance.

I should mention that the reason for underlining titles and names instead of italicising, is purely personal and physical, as using only one hand, I was not able to press down the appropriate keys at the one time on my particular word-processor. Also, footnotes were a problem, solved by using the more old-fashioned way of bracketing the numbers. I have used the older historical footnoting method, instead of the more recent Havard system.

Helen Proudfoot,
Roseville, 1995.

Abbreviations:

<u>ADB</u>	<u>Australian Dictionary of Biography</u>
AONSW	Archives Office of New South Wales
BM	British Museum
<u>HRA</u>	<u>Historical Records of Australia</u>
<u>HRNSW</u>	<u>Historical Records of New South Wales</u>
Kerr	J. Kerr, <u>Dictionary of Australian Artists to 1860</u>
ML	Mitchell Library
<u>RAHSJ</u>	<u>Royal Australian Historical Society Journal</u>

ABSTRACT

TOWN PLANS AND THEIR IMPACT ON THE SETTLEMENT PROCESS IN AUSTRALIA - 1788-1849

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 plan making had become codified and predictable and able to be applied to the drawing up and marking out of villages, towns and cities in the other eastern states. It 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 nowhere have the plans as a body of work been considered in the Australian context.

There has been a curious emphasis in Australian historiography in the past on the 'bush mystique'. The question of the marking out of land has tended to be seen as a political issue between contending ideologies in the context of rural land. The role of the towns has not been regarded as crucial to the shaping of the colony in spatial terms. In this thesis I have tried to demonstrate that within the larger county units the town 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 physical and topographical terms.

The thesis is a study of the plans and their provenance: how they were made, who was responsible for them, what happened to them. The plans are treated as the most direct evidence of both intentions and results. It is also a study of the design principles which were devised to accommodate changing ideas about more abstracted intentions. The balance of public compared with private land as important modifiers of the stability implicit in urban form, is traced from the beginning, from Phillip's plans through the years to 1810, and then on to its embodiment in the plans of the thirties. The useful role of urban open space in the morphology of Australian towns is discussed.

A brief look at the roots of some common fallacies about town plans and town planners and surveyors is introduced to try to account for the widely held perceptions about the 'failure' of early town planning. Drawn into the study, is the consideration of the way rural areas were distributed around the towns, and how provision was made for town expansion. In chapter 7 in particular there is particular attention paid to the spatial distribution of towns, where they were founded and the reasons for this.

After the Introduction, the first four chapters serve as a prelude to the Town Planning Regulations introduced by Governor Darling in 1829. The founding of Sydney is

contrasted with the founding rites of other, ancient cities, and parallels noted. The settlement of Norfolk Island as Sydney's outrider, is studied; its development under Lieut King and its significance to Sydney in the early decades. The re-ordering of the town plan of Sydney by Governor Bligh, and the consequences perceived by the townsfolk, are seen to have added to the antagonism felt towards him by Macarthur and the Military, and contributed to the popular support of the Rebellion of 1808.

The concept of 'public virtue', endorsed by John Wood of Bath and the Edinburgh political theorists, and expressed as buildings placed in a planned, ordered environment, is found in the work of Macquarie and Greenway. It was a potent factor in the process of transforming the colony from a prison to a free, settled society, and was used to provide a rhetoric which could disregard the tainted convict beginnings of the colony, and focus instead on the promised destiny of a young nation.

The dominant role of Sydney starts to emerge, despite the difficulties of its site on the sea coast with little fertile soil around it. Its satellites were established early: Parramatta, Windsor and the Hawkesbury towns, and Newcastle. The vast mountain ranges which locked it into the coast, were not officially traversed until 1813, and even then settlement in the transalpine regions beyond Sydney was slow. The geographical context of the continent as it unfolded with the discoveries by explorers has to be understood both in physical and cartographic terms.

The device of defining and surveying the 'Limits of Location' to contain settlement is considered as a way of spatial organisation. Was it an effective method in a situation where there were no local maps constructed before white settlement? I argue here that it achieved remarkably coherent results in a limited space of time, given that surveying parties and individual surveyors were stretched over vast distances. Special reserves were set aside for villages and towns within the County structure. A Township Reserve capable of fulfilling special site requirements, like availability of water, access to rudimentary roads, containment within a defined space, a gently sloping site, avoidance of marshy land, was designated. All these conditions were known by ancient Vitruvian precept, but were adapted to colonial conditions. These towns were predictable in shape and measurement, creating a framework within which the buildings and town functions could be placed. After 1831, the system of free grants from the Crown ended, and town allotments were put up for sale.

The Town Planning Regulations of 1829, framed to suit Australian conditions and circumstances, are considered in detail. Despite the regular grid shape of the town sections, which was the basic unit of the plan, they were

not derived purely from military examples; influences from the planned extensions of European cities are more likely as progenitors, and variations of the grid are found in other colonial cities. These regulations were very timely, they were the hinge of the door which opened onto the next phase of steady immigration and development. Examples of these plans are selected and some studied in detail.

The founding of the other state capitals after 1829 provides interesting parallels with the evolving management of urban places under the control of New South Wales, both in their design and in their urban goals. Adelaide's plan, derived from a different source and with rectangular blocks articulated within a defined belt of parkland, has some elements which were in use already. Its professed aim was set out by urban theorist Edward Gibbon Wakefield, who argued that opportunities for each settler should be according to the capital invested. Perth in Western Australia was also settled in this context.

It is in the plan of Melbourne, however, that we can see the proof of the work carried out already by the Surveyor General and his staff in Sydney. The amazing growth of this planned city, even before gold was discovered, is a remarkable testament to the efficacy of the plan itself in shaping development. The orderly marking out of the land and its sale ensured that occupation and development could be independent of government and still have the protection of the law supported by the power of the state.

The question of the dominant role of the state arises when we come to look at the cooperation between state and private citizens. Was the dominance of the state itself so powerful? Did it serve to exclude private endeavour in the early years of town formation? We can see the most fruitful participation in the rise and growth of antipodean towns and cities, in the years following 1831, and the sale of town lands after survey. The balance struck between state and private citizens was not always appropriate, but the system had its virtues. It has to be acknowledged that impinging political factors, as well as the influence and direction of government expenditure in administration, subsidised by Britain, which produced a standard of wealth in the colony unachievable by any other means, was also important. Nevertheless, the fact emerges that the cities, once established, provided in themselves an impulse for growth and production of wealth, fuelled by the selling and improvement of land. Ideas engendered by democratic ideals, by utilitarian goals, and by the belief in the transforming role of the planned and ordered built environments, were paradoxically contained within the form of the plan.

Helen Proudfoot.

ACKNOWLEDGEMENTS

I would like to acknowledge the help and patience of my supervisor Richard Cardew of the Graduate School of the Environment at Macquarie University, Sydney. Also the careful reading and criticism gladly given by my husband, Peter Proudfoot, and my daughters Ann and Emma. Emma's help, and also that of my friend Claire Daggett, which allowed me to get the maps into consistent order and arrangement, was much appreciated.

The Archives Office of New South Wales has been the major source of maps, and the staff has been unfailingly helpful over the years; the staff of the Mitchell Library in the State Library of New South Wales has my grateful thanks also. The Librarian at Greenwich Observatory, Herstmonceux Castle, Sussex, who most kindly showed me the William Dawes letters and sent me copies back to Australia, has my grateful thanks. The Victorian Survey and Mapping Department is thanked for copies of maps of Melbourne and Geelong.

FIGURES

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Frontispiece - Quadrant, from T.M. Perry, The Discovery of Australia, Thomas Nelson, Melbourne, 1982.

Appendix I, Volume I: Portrait of an Australian Surveyor, c.1830, by B. Clayton, Mitchell Library, State Library of NSW.

Volume II

Fig.0.1 (a) Fragment of a large plan of the city of Rome executed on stone. British Library, London.

(b) The Roman agrimensor at work, drawing by P.Figerio, from Joseph Rykwert, The Idea of a Town, p.51.

(c) The stele of the agrimensor Lucius Aebutius from Ivrea, Italy, Rykwert, p.51.

(d) Marble relief with depiction of surveyor Nicostratus Popidius's instruments, found at Pompeii 1956, dated to the first decades of the first century A.D. Exhibit no.62 at the exhibition 'Rediscovering Pompeii', Australian Museum, Sydney, January 1995.

(e) Silvio Belli, Libra del misurar con la vista, Venice, 1565. Diagram from D. Cosgrove, op cit.

Fig.0.2 Woodcut bird's-eye view of Norwich, detail. From William Cunningham, The Cosmographical Glasse, London, 1559, cited in James Elliot, The City In Maps, British Library, 1987, p.40-41.

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, 1734, British Library, reproduced in Elliot, op.cit, p.57.

Fig.0.5 Plan of the City, Castle, and Suburbs of Edinburgh, being an inset in Armstrong's map of the Lothians, 1773. Register House Plans No.1772, S.R.O., Edinburgh.

Fig.0.6 Plan of the Town of Bathurst, 19 June 1833, extract. Signed by T.L. Mitchell. Facsimile, Archives Office of NSW by Central Mapping Authority of NSW by permission from the Archives Office of NSW, 1985.

Fig.0.7 P. Standby, Surveying in Scotland, 1747. British Museum.

Fig.0.8 R. Dixon, Surveyors NSW, 1835. Mitchell Library.

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

(b) Page 2 of Dawes' letter.

(c) Quadrant used by William Dawes, by Rod Bashford, Macquarie University. Now held at Powerhouse Museum.

(d) Observatory built by William Dawes on Point Maskelyne, Robert Bashford for Robert J. McAfee, Dawes's Meteorological Journal, Australia's 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. Garrahan (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. Hearsh, sculp. From David Collins, An Account of the English Colony in New South Wales, Cadell and Davies, London, 1804.

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.

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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.

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.

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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.

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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.

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 Decouvertes 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.

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.

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

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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,

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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.

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.

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 Colony 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, October 1829, approved by Governor Darling. Archives Office of NSW, Map No.2781.

Fig.7.10(b) Plan of the Town of Goulburn, 19 June 1833, under Governor Bourke. Archives Office of NSW, Map No.2798. Facsimile.

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 ubiquitous use by the 1829 Town Planning Regulations. From D.N. Jeans, 'Town Planning in New South Wales 1829-1842', 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.

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.7.20 Plan of the Village of Camden, the Glebe, and adjoining Farms, August 1842. Macarthur Papers, A4217, Mitchell Library, State Library of NSW.

Fig.7.21 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.

Fig.8.1 (a) Plan of Brisbane Town, Moreton Bay, 1839. Dixson Library, State Library of NSW.

Fig.8.1 (b) Brisbane Town, Map by Robert Dixon, c.1845. Mitchell Library, State Library of NSW.

Fig.8.2 The position of Lilliput, Jonathan Swift, Gulliver's Travels, vol.I, p.1, London, 1727.

Fig.8.3 South Australia, The Port and Town of Adelaide, from a drawing by Colonel W. Light, Surveyor General, 1837. Mitchell Library, State Library of NSW.

Fig.8.4 The City of Adelaide, surveyed by Col. Light. Mitchell Library, State Library of NSW.

Fig.8.5 G.W. Goyder's sketch for a Parkland Country Town. c.1865. From J.M. Powell (ed), The Making of Rural Australia, Melbourne, 1974.

Fig.8.6 Examples of South Australian Country Towns, from Michael Williams, 'Early Town Plans in South Australia', Australian Planning Institute Journal, April 1966.

Fig.8.7 (a) King George's Sound, Western Australia, 1827. From the Colonial Secretary's papers, Archives Office of NSW. Redrawn for D. Garden, Albany, 1977.

(b) Ground Plan of King George's Sound, c.1831. From the original in the Battye Library Perth.

Fig.8.8 (a) Albany, King George's Sound, July 1834. Anonymous sketch, Dixson Galleries, State Library of NSW.

(b) Site of Albany, c.1836. From a map, 1831, by Raphael Clint, and one, 1836 by Alfred Hillman in the Public Record Office, London. Redrawn for D. Garden.

Fig.8.9 Lieut Robert Dale, Panoramic View of King George's Sound, Part of the Colony of Swan River. Aquatint engraved by R. Havell, London, 1834. Nan Kivell Collection, National Library, Canberra.

Fig.8.10 Perth Township, 1832. Redrawn from deteriorating originals by Margaret Pitt Morrison, Dept of Architecture, University of Western Australia. In G. Bolton, 'Perth: a foundling city', in P. Statham, Origins of Australia's Capital Cities, Cambridge University Press, Melbourne, 1988.

Fig.8.11 Alfred Hillman, Map of Perth, 1838. Department of Lands Administration, Perth.

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.

Fig.8.13 The New Town of Edinburgh, as it developed between 1765 and 1822. From P. Abercrombie and D. Plumstead, Civic Survey, Edinburgh, 1947.

Fig.8.14 Plan of the Town of Australind on the Leschenault Inlet, Western Australia. Smith Elder & Co, Cornhill, London, 1840.

Fig.8.15 T.L. Maslen, Plan of a Town for Australia, from The Friend of Australia, London, 1830.

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

Library of Victoria. This copy from Liardet's watercolours of early Melbourne, Melbourne, 1972.

Fig.8.18 Robert Hoddle, Town of Melbourne, 1837. Original held in the Central Plan Office, Division of Survey and Mapping, Melbourne, Sydney M8. Vic Image, Melbourne,

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.

Fig.8.24 Town Plans in Victoria: Mitchellstown, Alberton, Hamilton, Portarlington. From R. Wright, The Bureaucrats' Domain, Oxford, Melbourne, 1989.

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 Williamsburg, 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, Pennsylvania, 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.