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Thesis submitted for the Ph.D. Degree in Geography in the Australian National University

"The Urban Hierarchy of the Southern Tablelands of New South Wales"

by

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INTRODUCTION

This thesis is an inquiry into the geography of a group of urban settlements on the Southern Tablelands of New South Wales. I have endeavoured to investigate significant factors which have influenced the general location and the particular siting of the settlements; examine the urban aspect, evolution, morphology and function of some representative centres; provisionally determine their hierarchical ranking; and discuss the interrelations between neighbouring towns in the area. Empirically, I have attempted to throw some light on the character of the Australian town, which, though it plays a most important part in the life of the continent, is as yet an almost unknown quantity: few attempts have been made to examine it geographically, and in particular, the study of the interrelations between neighbouring towns has been almost wholly neglected in Australia (Appendix 1).

Part I provides a framework of reference for the more detailed urban studies which form the body of the thesis. It is, so to speak, a framework on which they hang. Chapter I describes the environmental setting of the urban centres on the Southern Tablelands; Chapter II traces the evolution of the existing settlement pattern in the area; and in Chapter III the existing rural and urban scene on the Tablelands is examined, with the pattern of urban settlement being viewed against the wider background of rural settlement and activities, and the changes which are taking place in the characters of some of the towns being observed. Since these chapters are descriptive, maps have been used in place of text.
when possible.

Part II, the body of the thesis, contains detailed studies of the centres in the urban hierarchy. Chapter IV, which outlines the methods used for determining the hierarchical ranking of centres on the Southern Tablelands, is concerned primarily with the problem of defining urban status, which has become extraordinarily confused in Australia; in consequence it relates to urban centres as a whole in the area. Chapters V to X investigate the geography of individual centres, or, where appropriate, small groups of related centres. In the latter, particular emphasis is placed on the study of the factors of urban location and site, evolution, morphology and aspect, and special attention is given to the consideration of the sizes and shapes of urban fields, and to the nature of inter-urban relations.

Chapters V and VIII contain studies of independently functioning centres which do not fit comfortably in the hierarchy but they are included here for convenience and on the grounds of their sizes; Canberra being placed first in the series because it is the largest centre on the Tablelands; also because it is nationally important as the federal capital, even though it holds only a very minor ranking in the hierarchy.

Goulburn, the undisputed primate of the hierarchy, is studied in Chapter VI as an example of a major regional centre. Except Canberra, it is the only city on the Southern Tablelands but it is antithetical to the national capital in everything save
(iii)

size.

The geography of the rural service towns (Yass, Queanbeyan, Cooma, Braidwood, and Crookwell) is discussed in Chapter VII; that of large villages (Gunning, Bungendore, and Taralga) in the outer urban fields of Goulburn and the service towns is considered in Chapter IX; and in Chapter X a study is made of some of the smaller centres and settlements as representative examples of decadent staging-post and gold-mining centres.

The thesis concludes (Chapter XI) by reviewing briefly a few of the wider aspects of Australian urbanism and some of the problems its study presents for the geographer; by stressing the need for more detailed investigations of urban centres in varied kinds of Australian local environments along lines that have been successfully followed by urban geographers elsewhere; and by attempting a synthesis of the character of the Australian town, to the extent that it has been revealed from the evidence in the study area. While it is hoped that some kind of a general picture of the Australian town will emerge from the study, and that this will contribute to the understanding of its geographical character, it needs to be emphasised from the outset that there are obvious limitations to anything but a partial understanding, because:

1/ the studies examine only a small part of the whole pattern of urbanism in Australia, and they do not take any account of the metropolitan cities which contain more than 50% of the Australian population and so are a dominant influence in the life of the nation;

2/ urbanism is considered in only one kind of regional socio-economic environment in Australia, and the
distribution and characteristics of towns there will differ in many details at least from those of towns elsewhere, as for instance, in intensively farmed irrigation districts, on the level lands of the wheat belts, or in the coastal dairying belts; and

2/ being an empirical inquiry, the thesis uses indexes for measuring urban phenomena that have been devised specifically to suit the region, and these might not apply validly in another kind of region.

Terminology and Definitions

Terminology

Because urbanism in Australia has a few peculiarly Australian characteristics some of the terms used to describe its urban geography do not mean the same as they do elsewhere: for example, the Australian village bears few resemblances to the English village even though the 19th century English village served as the prototype for many early colonial villages in Australia; the Australian township is something quite different from either the English township or the American township; and even in the several States of Australia the legal interpretation of towns and cities is most varied. Legal, popular, and thesis usage of these terms is expounded in Chapter IV.

Throughout the thesis the simple but precise terminology advocated by Smailes, and used by him and some other British

geographers, has been preferred to the jargon of Continental 
European and American geographers and sociologists; thus, urban 
field takes the place of sphere of influence, hinterland, umland, 
influenzahed and the like.

For convenience, however, small quasi-urban centres 
tributary to larger and more truly urban centres are described as 
infra-urban rather than as sub-urban centres to distinguish them 
clearly from the suburban areas of metropolitan cities, and areas 
in which the urban fields of two or more centres overlap are cal-
led urban marchlands.

Definitions
Southern Tablelands

In popular usage Southern Tablelands is a term of con-
venience which may describe all or only parts, often unspecified, 
of a broad belt of high country in southeastern New South Wales 
stretching for about 200 miles from the Abercrombie River (north) 
to the Victorian border (south) with an average width of about 50 
miles. The name has been used more specifically in some quarters 
during recent years to describe a region delineated in 1943 by the 
Regional Boundaries Committee of New South Wales; this (Fig.1) 
embraces roughly the northern half of the above area.

For example, R. E. Dickinson, H. E. Eracey and H. Carter (cf. 
Bibliography - General).
Fig. 1

Southern Tablelands ('thesis' region)

Boundaries of 'official' regions
(delineated by N.S.W. Regional Boundaries Committee, 1943)

REGIONAL BOUNDARIES SOUTHEASTERN N.S.W.
(vi)

For the purposes of the thesis, Southern Tablelands means the whole of the larger area, not the "official" region, and unless otherwise qualified, where the Tablelands appears the term stands for the Southern Tablelands.

The Study Area

The field survey area of this study (Fig. 2) is represented as a quadrilateral figure, at the four corners of which are the urban centres of Goulburn and Yass in the north, and Braidwood and Cooma in the south. It is a purely arbitrary unit-area of study whose boundaries transect administrative boundaries, and do not coincide in any way with clearly definable physical or economic geographical boundaries. Such a purely arbitrary study unit was deliberately selected for three reasons: first, because as part of a wider research programme it offered a study field which was small and accessible enough to permit comprehensive field investigation of all representative types of urban centres, secondly, because the arbitrary choice in effect provides random samples, and hence, thirdly, the study will be less likely to be biased by preconceived ideas about the settlement pattern, such as would be likely to exist if a generally accepted "region" had been chosen.

Since all four towns at the corners of the quadrilateral are either regional or district service centres, consideration of their urban fields made necessary extensions of irregular sizes in the study area around them, thus:
THE FIELD SURVEY QUADRILATERAL AND EXTENSIONS IN RELATION TO LOCAL GOVERNMENT AREAS IN SOUTH-EASTERN N.S.W.
around Goulburn (A) the field survey area was extended to embrace the Crookwell, Taralga and Marulan districts;

near Yass (B) the Bowning and Binalong districts were included;

the sector around Cooma (C) was extended to take in the field of operations of the Snowy Mountains Hydro-Electricity Authority, since North Cooma serves as the supply base, and contains the administrative headquarters of the Authority; and

the urban field of Braidwood (D), which extends into the contiguous districts of Merriga, Araluen, Major's Creek and Jembaiicumbene, was included.
PART I  THE SETTING IN SPACE AND TIME
CHAPTER I

THE ENVIRONMENTAL SETTING

The Southern Tablelands comprise a large part of southeastern New South Wales, extending for a maximum distance of 230 miles from the Abercrombie River (north) to the Victorian border (south), with a maximum width of 90 miles in the neighbourhood of Burranjuck Dam and Lakes George and Bathurst. Their boundaries enclose an area of about 14,000 square miles - equal to about 4.5% of the total area of the State - and they include the territories of 9 shires and 5 municipalities in New South Wales, and the Australian Capital Territory (Fig.3).

Uniformly lower land flanks them on the east and on the west, but in the north they are linked by a broad and open saddle with the high and rugged southern parts of the Central Tablelands, and in the south they merge with the high country of northeastern Victoria to form the so-called Australian Alps. Their height increases generally from north to south, ranging from an average of about 2,000 feet above sea level over most of their northern end to more than 7,000 feet in the Kosciusko Plateau (Fig.4).

Under the provisions of the Local Government Acts of 1905 and 1906, New South Wales, except for the Western Division of the State, is divided into Shires (areas of rural settlement) and Municipalities (areas of urban settlement) for purposes of local administration. Their councils elected by ratepayers and residents have equivalent powers as local authorities.
Fig. 3

AREAS
N.S.W. (including A.C.T.) 310,372 Sq. miles
SOUTHERN TABLELANDS 14,389

SHIRES (with included municipalities)
Crockwell, 1,328 Sq. miles
Yarrowilma, 1,167 Sq. miles
Monaro, 1,185
Cunning, 849
Bibbensluke, 1,123

Goodradigbee, 1,318
Snowy River, 2,330
Tallaganda, 1,294

MUNICIPALITIES
Goulburn, 8,000 acres
Yass, 7,389
Queanbeyan, 6,560
Cooma, 3,600
Bombala, 1,309

SOUTHERN TABLELANDS OF N.S.W.
LOCATION, AREA AND INCLUDED TERRITORIES
Though people living away from the Southern Tablelands often consider them to be physically homogeneous to a large extent, and to have a large measure of economic unity because land use is dominated there by pasturing, such unity in either sense is more apparent than real; the illusion of physical homogeneity being created because there are only minor differences in relative relief over comparatively large areas, and because there is a general similarity in the appearance of much of the natural vegetation. Much of the area, however, is not tableland at all, and would be better described as hill and plain topography, while large areas, particularly in the south, are fundamentally tracts of ridge and mountain topography. People on the Tablelands are more fully aware of these differences in topography, as is indicated by the use of local names, like Goulburn Plains, Breadalbane Plains, Tinderry Mountains, Kiandra High Plains and Kosciusko Plateau, for describing large areas.

Quite apart from the varied topography, the geology of the Tablelands is complex, the local climates are varied, and there are some major differences in soil types and natural plant formations. Naturally, all these are reflected to some extent in the life of the area.

**Topography**

The eastern margin of the Southern Tablelands is defined clearly by a narrow belt of dissected country along the Turpentine, Currockbilly and South Coast Ranges, and several smaller ranges.
TABLELANDS
SHOWING RELIEF OF THE SOUTHERN SOUTHEASTERN N.S.W.
Here, many of the coastal streams, especially the Shoalhaven River and Bungonia Creek in the northeast, have incised deep gorges in steep scarps which overlook the low ridges and small river basins of the adjacent coastal plain.

To the northwest and west, the Tablelands descend more gradually through a series of foothills to the South Western Slopes and Riverina districts, but in the southwest, where they are surmounted by high ranges around the Kiandra High Plains and across the Kosciusko Plateau, their western slopes are often steep to precipitous, as around the headwaters of the Tumut River and its tributaries.

In the Crookwell district, the land surface (about 2,000 feet above sea level) is undulating with some isolated hills rising a few hundred feet, but between Goulburn and Yass and extending south to the Lake George and Canberra Plains the country opens out into broad and flat basins, separated from each other by low residual ridges. Thence southwards, the surface rises to general levels between 2,000 and 3,000 feet, and because the Tablelands are crossed here by several sets of high ridges, their tableland character is not so apparent. Near Cooma, the ridge and valley topography gives place to the Monaro Plateau which extends for many miles to the south and west, rising in a series of steps from 2,500 to 4,500 feet above sea level to the Kiandra and Yarrangobilly High Plains beyond Adaminaby, and to levels between 4,500 and 7,000+
feet in the Kosciusko Plateau beyond Jindabyne, culminating in Mount Kosciusko, a little over 7,000 feet.¹

Much of the Tablelands, especially in the centre and south, consists of the remnants of an old plateau of mature topography which has been dissected. Despite the resulting uniform physical aspect over large areas, there is also much scenic variety on the Tablelands, produced in some instances by lithological differences: thus, granite, with its characteristic landscapes, outcrops extensively throughout the Kosciusko and surrounding districts, and on a smaller scale in places like the western boundary ranges of the Australian Capital Territory, the Tinderry Ranges and in the upper Shoalhaven districts; the tabular landforms of Tertiary basalts are widespread on the lower parts of the Monaro Plateau, and occur less extensively in areas to the northeast of Lake Bathurst; and limestones and other sedimentary rocks distributed widely over the Tablelands are each associated with distinctive landforms.

In several localities on the Tablelands, too, the scenery has been influenced by tectonic structures: for example, there is evidence of faulting in many places, and in some of them this has had a strong guiding influence on the direction and pattern of drainage, as on the course of the Murrumbidgee near its junction with the Cotter River; elsewhere, folding movements are reflected in distinctive landscapes, as, for instance, the many synclines and

¹ For long, the summit of Mount Kosciusko was generally accepted as being 7,328 feet above sea level, but in the first edition of the one-inch Kosciusko Military Survey Sheet (Sheet No. 795 Zone 7, produced by the Royal Australian Survey Corps, 1952) the height is given as 7,316 feet. A new value of 7,313 feet is claimed by the Snowy Mountains Authority as a result of its recent survey work in the area.
anticlines which are etched out quite conspicuously in the Murrumbidgee Valley near Taemas in the Yass district.

**Topographical Divisions (Fig. 5)**

While it is not possible to give a wholly reliable picture of the topography of the Southern Tablelands because the relief and geology of much of the area have not been mapped at all adequately, and because many of the maps are only of a low order of reliability, some generalisations can be made. For convenience, topographical areas on the Southern Tablelands are grouped in three classes as:

1/ the fringing lands,
2/ hills, plains and plateaux of the north, and
3/ plateaux, high plains and ranges of the south.

**The Fringing Lands** These areas extend around the north and north-east of the Tablelands as the rugged ridge and valley country around the Abercrombie and Cookbundoon Rivers, the Marulan causeway, and as the coastal ridges and valleys in the east.

_Abercrombie-Cookbundoon valleys and ridges_ Alternating deep valleys and high ridges around these two rivers and their tributaries comprise rugged and mountainous terrain, which grades northwards into the very broken country of the Blue Mountains on the Central Tablelands. Except for small pockets

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1 Fig. 5 and its accompanying descriptions are based on field reconnaissance, and a study of all available literature and maps (Cf. Bibliography - Physical and Maps).

2 Though the name "Blue Mountains" is currently as popular as ever for describing the middle part of the Central Tablelands, it has long been claimed more correctly by Griffith Taylor that the area should be called the "Blue Plateau".
Fig. 5

THE FRINGING LANDS
1. Abercrombie-Cookbundoon Valleys
2. Marulan Causeway
3. Coastal Ridges & Valleys

THE BELT OF LOWER UPLANDS
4. Lachlan-Wollondilly Valleys
5. Yass-Canberra Hills and Plains
6. Lake-basins & low Ridges
7. Shoalhaven Valley

THE BELT OF HIGHER UPLANDS
8. Central Ranges & Valleys
9. Bredbo-Cooma Transitional Zone
10. Yarrangobilly-Kiandra High Plains
11. Monaro Plateau
12. Kosciusko Plateau
13. Dissected Snowy River Plateau

TOPOGRAPHICAL DIVISIONS OF THE SOUTHERN TABLELANDS OF NSW

SCALE
4 8 12 16 MILES
are included here because they contain the urban fields of Yass and Crookwell.

Lachlan-Wollondilly saddle  The undulating country to the north and west of Goulburn is in effect a broad and open saddle between the slightly higher hill and plain country to the south and the rugged Abercrombie-Cookbundoon ridges and valleys farther north. It is drained by a network of small streams, principally creeks, flowing north to the Abercrombie and northwest to the Fish and Lachlan Rivers, but it has few extensive river flats similar to those lying further south on the Tablelands. Except for several lines of low residual hills in the southwest, its only eminences are some isolated knolls rising a few hundred feet.

Boorowa-Yass-Canberra plains  The topography of the Boorowa, Yass and Canberra districts consists primarily of level and gently rolling plains, 2,000 feet and a little more above the sea, which are interrupted in many places by lines of low residual hills a few hundred feet high. The latter generally stand out as alternating cone-shaped knolls and saddles, as along the northeastern boundary of the Australian Capital Territory, but in some localities - for example, at Bowning, near Yass, and around Canberra - some of the residuals rise out of the surrounding plains as isolated cones.

Lake George and Lake Bathurst basins and ridges  Immediately south of Goulburn there is another large area of relatively level country, also about 2,000 feet above sea level, divided into several small basins by low ridges. The basins comprise the three Breadalbane Plains and the Goulburn and Gundary Plains (north); the endoreic Lake George and Lake Bathurst Plains which contain several small lagoons as well as the two lakes (centre); and the Foxlow-Carwoola Plain (south). On the west the area is bounded by the scarp of the Cullarin Range which drops in height, northwards, to a low range of hills west of the Breadalbane Plains, but, except in one place a short way southeast of Lake Bathurst, there is no clear-cut separation between the basins and the Shoalhaven Valley because the water divide east and northeast of the lake consists of no more than a thin strip of low plain.

Upper Shoalhaven Valley  Except near Lake Bathurst the upper Shoalhaven Valley is bounded by high interfluves which
distinguish it from the surrounding topographic areas. Rising in the Gourock Range, whose highest points reach nearly 5,000 feet above the sea, the Shoalhaven winds northwards, in many places through deep deposits of sand. Similar, though smaller, sandy flats exist along many of its tributaries which are separated from it by north-south ridges with a poor forest cover.

The Southern Plateaux, High Plains and Ranges The central and southern districts of the Tablelands, ranging from about 2,500 feet to more than 7,000 feet above the sea, show greater topographical diversity than the northern districts described above—as is indicated by significant contrasts in the scenery of the central ranges and valleys, the transitional topography of the Bredbo-Cooma districts, the Monaro Plateau, the dissected plateau south of the Snowy River, the Kiandra and Yarrangobilly High Plains, and the Kosciusko Plateau.

Central ranges and valleys Between the areas described above and the Monaro Plateau (south) the Southern Tablelands really consist of a broad belt of high ranges and deep valleys with a dominantly north-south "grain", though the simple pattern of relief is complicated in some places where the main ranges throw lateral spurs to the northeast or to the northwest. All the main ranges are important water divides: the Gourock and Kybeyan Ranges (both 3,000 to 4,000+ feet) are the main divide between the coastal (Shoalhaven) and inland (Murrumbidgee) watersheds on this part of the Tablelands, while the central ranges (Tinderry, Clear, Tidbinbilla) and the western ranges (Bimberi-Franklin-Brindabella) - all between 4,000 and 6,000+ feet high - are interfluves between the Murrumbidgee and its tributaries (Molonglo, Queanbeyan, Cotter, Goodradigbee). Most of the valleys between them are young, but along the Murrumbidgee, and in the south of the Australian Capital Territory, some of the valleys have wide floors bounded by steep walls.

Transitional topography of the Bredbo-Cooma districts South from Bredbo, in a small area around the Murrumbidgee, Bredbo and Umaralla Rivers, wide valleys and low ridges give
rise to a topography transitional between that of the above areas and that of the Monaro Plateau. Here, from north to south, the landscapes change markedly as boldly sculptured granite is replaced by Tertiary basalts weathered into terraces and tabular hills of gentler relief; the ridges being entirely replaced near Cooma by the broad undulations of the Monaro Plateau.

Monaro Plateau The Monaro Plateau is often called the Monaro Plains because of the subdued relief of large areas around Cooma. It extends for many miles to the south and west of Cooma, to a distance of more than 60 miles in places, principally at levels between 2,500 and 3,500 feet above the sea. Much of the surface is composed of granite or Tertiary basalts, both with characteristic landscapes, but between Berridale and Jindabyne the plateau is crossed by a ridge (Barney's Ridge) of cherts and shales which is believed to be a horst. Near Jindabyne the plateau is bounded by a deep trough in which the Snowy River flows - a supposed graben that separates the Monaro and Kosciusko Plateaux. Near Adaminaby (west) the surface of the plateau steps up to levels of 3,500 to 4,500 feet above the sea, to reach slightly higher levels on the Kiandra and Yarrangobilly High Plains beyond Adaminaby.

Dissected Snowy River plateau A few miles south from Dalgety, the Monaro Plateau is replaced by a higher plateau which extends over a large area west of Delegate before grading upwards to the Kosciusko Plateau. It is crossed by several ranges (Byadbo, Marambago, Black Jack) with maximum heights of more than 4,000 feet above the sea, and it has been deeply incised in many places by the Snowy River and its tributaries.

Kosciusko Plateau The Kosciusko Plateau stands out as a high block, 4,500 to 7,000+ feet above the sea, in the southwest of the Tablelands. It trends south-southwest from the Kiandra High Plains with an average width of about 20 miles, and culminates in a group of high points around Mount Kosciusko. The higher part of the plateau - an area of about 400 square miles, over 4,500 feet high - is the only part of the Australian mainland that was glaciated in Pleistocene times.

Kiandra and Yarrangobilly High Plains Though both areas are lower than the Kosciusko Plateau, they have a similar mature topography containing much granitic scenery. In some places on the Kiandra High Plains flat-topped ridges have been produced by the weathering of Tertiary basalt flows which cap
Based on records of stations covering a period of 15 years and over.

S.E. N.S.W. AVERAGE ANNUAL ISOHYETS
unconsolidated sands and clays, and similar ridges and small mesas exist on the Yarrangobilly High Plains where there are gently folded and interbedded tuffs and lavas. They are separated by a fairly distinct scarp or warp, and both have been deeply incised on the west by the Tumut and Yarrangobilly Rivers and their tributaries.

Climate

The climate of the Southern Tablelands as a whole is strongly influenced by their elevation and their proximity to the Pacific Ocean, but they have varied local climates because of local differences in height and aspect.

Five principal air masses affect the climate of the area, and its weather conditions throughout the year are influenced by alternating depressions and anticyclones, passing generally from west to east; the latter, fairly common in winter, often bring long periods of calm weather with sunny days and frosty nights, while the cyclones - usually appearing on weather maps as inverted V-shaped lows between successive highs - may occur in any month of the year, being most common and vigorous in winter and spring when they often bring rain and snow.

In common with the rest of eastern Australia, the Southern Tablelands experience periodic droughts, which, on occasions, may be long and severe. Usually, however, the rainfall is moderately reliable, and since the average annual amount exceeds 20 inches

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1 These are: a continental air mass of dry and warm air in the northwest, a westerly maritime air mass in winter which is often cool and moist, a cool maritime air mass from far south in the Pacific, an easterly maritime air mass from the Pacific Ocean, and occasionally a warm and moist maritime air mass to the north.
Average monthly rainfall graphs for selected stations on the Southern Tablelands

S.E. N.S.W. RELATIVE SUMMER & WINTER RAINFALL

0-16-32
MILES

WINTER RAINFALL

EXCEEDS SUMMER

Young

Boorowa

Crookwell

Laggan

Moss Vale

Gunning

24-65° (57 YEARS)

Kissing

Kiandra

62-6° (68 YEARS)

Adaminaby

27-53° (65 YEARS)

Kosciusko

40-22° (61 YEARS)

Adaminaby

WINTER

RAINFALL

Queanbeyan

Braidwood

RAN

Goulburn

Nowra

Cooma

Hotel Kosciusko

Nimmitabel

Dalgety

Bega

Bombala

RAN

24-69° (79 YEARS)

Canberra

23-05° (96 YEARS)

Queanbeyan

22-61° (72 YEARS)

Cooma

18-92° (77 YEARS)

Nimmitabel

32°

20°

40°

0°

0° 16° 32°

MILES

Denotes 1" of rainfall

Length of record shown in brackets
on practically all parts of the Tablelands the established farming activities can be practised normally in most years. Flood rains are experienced at times, but though they may cause some stock losses in a few valleys, and may disrupt a few transport services, their effects are not great, because most of the area has a well-developed drainage system and flood waters subside quickly. Normally, precipitation (rain and snow) on the Tablelands assures a stable water supply in the catchments from which the urban settlements draw their needs, though, on occasions, some towns experience water shortages in summer — usually because of inadequate pumping facilities rather than an insufficiency of water in the storages.

Low temperatures resulting in the incidence of frosts and heavy snowfalls are, on the whole, a more critical though less fundamental factor than rainfall in the life of the Tablelands. Severe frosts restrict the length of the growing season for most crops to a few months in each year, and even during the late spring and early autumn months cold snaps on some parts of the Tablelands are accompanied by killing frosts. As its name implies, the snow lease grazing country in the higher southwestern districts is snow-bound and unproductive for several months each year, and in some winters heavy snowfalls cause serious stock losses on the Monaro Plateau, and late frosts and snowfalls result in the deaths of many sheep and lambs after the shearing and lambing seasons in some years. Over the northern parts of the Tablelands where conditions are milder these hazards are not common, and there is no need for
SOUTHERN TABLELANDS FROST INCIDENCE AT SELECTED CENTRES

- Crookwell, 2910', 32°F, 89 Days
- Goulburn, 2093', 36°F, 189 Days
- Yass, 1660', 32°F, 165 Days
- Queanbeyan, 1901', 32°F, 140 Days
- Canberra (Action), 1857', 36°F, 143 Days
- Canley Vale, 1857', 32°F, 140 Days
- Cooma, 2662', 32°F, 108 Days
- Charlotte Pass, 5800', 32°F, 16 Days
- Bombala, 2135', 32°F, 104 Days

Scale
- 0 8 16 24 Miles

Legend:
- Light Frosts (36°F-32°F)
- Severe Frosts (10°F & under)

First Date
- Average Dates
- Last Date

Days

Remark:
- Fig. 7: Light Frosts (26°F-32°F)
- Fig. 8: Severe Frosts (10°F & under)

Legend:
- First Date
- Average Dates
- Last Date

Days

Remarks:
- First, last and average dates of light and severe frosts.

1901-Height of station in feet
1915-Length of record in years

40 Days-average no of frost free days per year
SOUTHERN TABLELANDS FROST FREQUENCY AT SELECTED CENTRES

- Frosts 32°F or under
- Frosts 32°F - 36°F
- Omitting months when average number of days below 32°F was three or more.
- Average number of days per month of minimum screen temperatures (based on ten years records)
- (55.3) Average number of severe frosts (32°F or under) per year
- * Length of record less than 10 years

SELECTED CENTRES

- CROOKWELL (72.7)
- GOULBURN (24.7)
- YASS (40.0)
- BURRINJUCK DAM (15.2)
- CANBERRA (ACON) (55.3)
- QUEANBEYAN (56.3)
- BRAINTWOOD (10.5)
- KIANDRA (59.0)
- HOTEL KOSCIUSKO (15.5)
- COOMA (81.6)
- NIMMITABEL (62.3)
- THE CHALET (CHARLOTTE PASS) (215.3)
- BOMBALA (72.4)
farmers to house and handfeed their stock during the winter. Apart from occasional discomfort in cold winter spells, and the minor nuisance of burst water pipes in homes and gardens, townspeople generally are not much inconvenienced by low temperatures, though there are some exceptions, such as at Nimmitabel where during the cold and dry winter of 1954 many domestic water tanks burst as a result of freezing conditions, leaving some homes without water.

As might be expected, variations in local and microclimates are significant: thus, precipitation is often much heavier on the ranges than on lower land nearby (Fig.6) and small rain shadows exist in several places, even where the sheltering ridges are comparatively low; depending on the location of the ranges near the eastern or western edges of the Tablelands their sides are wet and dry in alternating seasons (Fig.7); frost incidence and intensity vary appreciably (Figs.8 and 9), and frost drainage is very pronounced even on fairly homogeneous surfaces like the city area of Canberra; and temperature regimes differ in the higher and lower districts (Appendix 2).

Drainage (Fig.10)

Except for many small streams draining east to the coast and the headwaters of the upper Murray in the southwest, the principal drainage systems of the Southern Tablelands are; the upper Shoalhaven (east), the Wollondilly (northeast), the Lachlan (northwest), the Murrumbidgee (west) and the Snowy (south), with small endoreic drainage areas around Lakes George and Bathurst.
Fig. 10

Drainage catchments of the Southern Tablelands of N.S.W.

KEY
1. Lachlan
2. Nepean - Wollondilly
3. Murrumbidgee
4. Lake George-Lake Bathurst (bordering areas)
5. Shoalhaven
6. Coastal streams
7. Murray
8. Snowy
The Murrumbidgee system is the largest and most important on the Tablelands. At Burrinjuk, southwest from Yass, it has been dammed to provide water for the Murrumbidgee Irrigation Area in southwestern New South Wales, and to generate hydro-electric power which is fed into the Southern Electricity Supply System serving most parts of the Southern Tablelands and many adjacent areas and centres (Fig.11). Water is drawn from its upper course to provide town supplies for Cooma and North Cooma; some of its headwaters are to be linked up with the Tumut River as a part of the Snowy Mountains hydro-electric undertaking; several tributaries provide town water supplies for Yass (Yass River), Canberra and Queanbeyan (Cotter River) and Captain's Flat (Molonglo River); and the whole system provides farm water supplies for many riparian landholders.

Completion of the Snowy Mountains hydro-electric scheme (Fig.12) will result in the water resources of the Southern Tablelands being used to a far greater extent than at present, since it provides for the building of 7 major dams and storages with an estimated capacity of 4,680,000 acre feet, on the Snowy, Murray and Murrumbidgee Rivers and some of their tributaries.

Apart from the above uses, the rivers do not enter largely into the life of the Southern Tablelands, because most of them are steeply graded, and none is large enough to be considered useful for any kind of navigation. In some respects, however, this is an advantage because most can be forded easily, except
SOUTHERN TABLELANDS—ELECTRICITY SUPPLY
(Power Stations, Bulk Supply Depots and Transmission Lines)
in wet weather, and even the largest do not require particularly large and expensive bridges over them.

**Natural Vegetation**

Only now, after many years of research, botanists are beginning to obtain anything like a clear picture of the pattern of distribution and the composition of the original plant communities on the Southern Tablelands, because many of them have been greatly altered by over a century of grazing, and in some instances they have been entirely replaced by later growths.

Of the several plant formations on the Southern Tablelands which have been identified by ecologists only the five major communities are relevant here. They are savannas, savanna woodlands, sclerophyll forests, alpine woodlands, and an alpine complex consisting primarily of tall alpine herbfields (Fig. 13). Their characteristic plant alliances and species are listed in Appendix 3.

Among them, the savannas and savanna woodlands are the most useful economically because their natural grasses, like *Themeda australis* and *Stipa* and *Danthonia* species, provide the major source of pasturage on the Tablelands, though quite valuable supplies of natural feed, primarily for summer grazing, are provided by the tussocks of *Poa caespitosa* common in the alpine woodlands and alpine herbfields. Sawn timber and large quantities of firewood for the towns are obtained from the sclerophyll forests, the latter often being secured when open stands of thin and
SOUTHERN TABLELANDS—GENERALISED DISTRIBUTION OF NATURAL PLANT FORMATIONS

[Climax Communities:
- Grassland
- Savanna Woodland
- Sclerophyll Forest
- Alpine Woodland
- Alpine Complex (Primarily Tall Alpine Herbfield)]

[Based partly on A.B. Costin's Vegetation Map of the Monaro Region (1936) and L.D. Prior's Vegetation Map of the A.C.T. (1945)]

Compiled with the assistance of L.D. Prior's Parks and Gardens Section, Dept of Interior Canberra; C.W.E. Moore, Division of Plant Industry CSIRO, Canberra]
straggly trees are being cleared from the so-called dry sclero-
phyll forests to make way for grazing.

Soils

As is the case with regard to the geology and botany of
the Southern Tablelands, pedological knowledge of the area is as
yet far from complete, and in consequence only a generalised dis-
tribution of the major soil groups can be shown (Fig. 14).

The major soils of the area (whose characteristics are
described briefly in Appendix 4) are:

Alpine humus soils that have developed in the higher
mountainous areas having a continuous snow cover for
more than one month in each year. Though the whole
profile is at or near the point of water saturation
for most of the year, the soils give rise to snow
grasses and herbage which may provide useful summer
grazing for sheep and cattle driven up from lower
levels.

Transitional alpine humus soils developed normally
on silts in slightly lower altitudes than those
embracing the alpine humus soils, that is, in areas
which have a shorter period of snow cover. The soils
are used extensively for summer grazing, but they
erode quickly when overstocked or when their tree
cover is removed indiscriminately.

Brown podsolic soils are found adjacent to but below
transitional alpine humus soils, normally on light to
medium textured and porous parent material. Because
of their relative freedom from snow, brown podsolics
can be used for grazing for most of the year, and it
is also worth noting that the better forests of mountain
ash and mountain gum are on brown podsolics on the
Southern Tablelands.

Grey-brown, red and yellow podsolics are usually
developed on fairly steep slopes at somewhat higher
altitudes than the red and yellow podsolics. In their
natural state these podsolics are not highly fertile,
but because they develop under temperate conditions of
climate and under gentler conditions of relief (relative
to other mountain soils) they are grazed extensively under natural pasture. They also respond favourably to pasture improvement.

Red loams and chocolate soils are developed on those parts of the Southern Tablelands where the parent material consists of basic igneous rock. As a group they are the richest soils of the region for they grow good natural pastures and respond excellently to pasture improvement. Generally speaking, too, they are useful agricultural soils, though in several places their value in this regard is reduced because the surface layers are skeletal.
CHAPTER II

THE HISTORICAL SETTING

Several successive but in some instances overlapping phases may be distinguished in the evolution of the existing settlement pattern on the Southern Tablelands.

The Prelude to Occupation - Exploration (1798-1823)

Exploration of the area was effected in three stages:

a/ intermittent, and only partial, penetration of the "Brush" country lying northeast of the Tablelands,¹
b/ effective penetration of the "Brush" country,² and
c/ the subsequent opening up of the Southern Tablelands.³

The second stage also marked the initial phase of the occupation of the Tablelands, because once the difficult "Brush" country had been crossed settlement was established in the

¹ "Brush" country is a common local name in Australia for describing tracts of rugged and heavily wooded land, and often, incorrectly, for describing dense rain forests. Large areas of the former type, like the Bargo Brush and Wombat Brush, between the Goulburn Plains and the Sydney lowlands, were partly penetrated on two occasions (January and February) in 1798 by a party consisting of Hacking, Barracks and Wilson, and in 1802 by Ensign Francis Barrallier.

² Effective penetration of the "Brush" gave immediate access to the Southern Tablelands as far south as Lake George. During 1814-20, the "Brush" was traversed, and a series of explorations were made in the hill and plain areas between it and the Goulburn Plains and the Lake Bathurst and Lake George districts by James Meehan and Charles Throsby.

³ The opening up of the Southern Tablelands included the discovery and exploration of the country to the west and south of Lake George, extending beyond the Yass Plains and the Murrumbidgee River to the west, and to the Monaro districts to the south. The principal explorers of this period (1820-23) were Hume, Throsby, Wild, Vaughan, Throsby Smith, Currie and Ovens.
northeast of the Tablelands, after which it expanded contemporaneously with the further exploration of the southern parts of the Colony, which Governor Macquarie named the "New Country".

Pastoral Penetration (1820-40)

Settlers followed closely behind the later explorers, so that even in the early 1820's farmers and pastoralists had taken up land grants, dispersed sporadically over the more favourable parts of the Goulburn, Gundary, Breadalbane, Lake George (Wellington), Lake Bathurst, and Limestone Plains. As well, a few more venturesome settlers holding tickets of occupation had journeyed further afield to the more southerly Murrumbidgee and Monaro districts, which after 1829 became known as areas beyond the "limits of location" because they were beyond the boundaries

1 Figs. 15-21, showing the distribution and sizes of urban settlements and the transport routes developed at successive dates to 1947, illustrate this and subsequent phases in the evolution of the existing settlement pattern on the Southern Tablelands. The population chronographs (Fig.22) graphically illustrate the fluctuations in the growth of the urban settlements over the same period.

2 A ticket of occupation was a permit issued by the Governor which allowed the holder to graze cattle within two miles of a certain place (named on the ticket).
SETTLEMENT AND ROAD PATTERNS IN THE COUNTIES OF ARGYLE, MURRAY AND ST. VINCENT — 1830'S
of the "settled areas" of the Nineteen Counties proclaimed by Governor Darling.¹

The Tablelands were settled in the manner which became conventional throughout the Colony, for the first grantees naturally selected the better farming lands around the streams on the plains, leaving only the tracts of hilly and heavily wooded country for the later settlers.

During the 1830's (Fig.15) broad zones on the plains at the northern end of the Tablelands were occupied, but the holdings of the settlers in the Murrumbidgee and Monaro districts were few and isolated. Within the limits of location the individual holdings ranged in size from a few hundred to several thousand acres, the majority being between 2,000 and 5,000 acres, though there were a few larger estates, such as the 12,100 acre Duntroon grant at Pialligo of Robert Campbell, who also held adjacent

¹ The Nineteen Counties extended from the Manning River (north) to the Deua River (south) for about 200 miles inland from the coast, their boundaries marking what were defined as the "limits of location", beyond which the land was stated to be unfit for settlement, thus not available for sale or occupation. On the Southern Tablelands, however, as elsewhere in the Colony, settlers were soon attracted to lands beyond the boundaries - in this instance to the Murrumbidgee and Monaro districts outside the counties of Argyle, King, Murray, and St. Vincent. To control such unauthorised occupation, Commissioners were appointed and stationed in them, after which they became known as Commissioners' Districts, later, as Squatting and Pastoral Districts.
grants of nearly 5,000 acres; and a large school and church estate of more than 42,000 acres along the eastern bank of the Shoalhaven River, west and north of the existing town of Braidwood. In this decade, too, a few small village reserves, each about a square mile, had been set aside, and the colonial government provided for several other places in County Argyle to be kept for use by small settlers.

The holdings were commonly occupied by overseers and tenant farmers, at least until the late 1830's when a few owners

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1 By the terms of the Royal Charter of George IV one-seventh of the lands in New South Wales were to be set aside for supporting religion and education under the direction of the Established Church. This grant of 42,467 acres, made on the 3rd February, 1829, was the first of such grants. In the early 1830's, however, the Church and School Corporation Charter was revoked under Governor Bourke, and all lands so granted were resumed by the Crown. Moreover, it is of interest to note that there is still no Established Church in Australia.

2 R. Howe's *Australian Almanack*, 1831, p.114, lists these localities as follows:
1. the township of Goulburn Plains, adjoining Bradley's farm on the east,
2. on the Wollondilly River,
3. on the Uringalla [or Paddy's River] below Wangillo near the new line of road,
4. on the west of Barber's land [i.e. the existing Tallong district] on the creek forming his south boundary,
5. on the new line of road on the creek forming his north boundary,
6. on the north shore of Lake George west of Kenny's, and
7. on the reserve, at the south angle of Lake Bathurst.
began to reside on the land which had been granted to them. Land use was dominantly agricultural and pastoral in character, and, if anything, the emphasis on food production was more marked than in most settled districts of the Colony because of the extreme isolation of an area served only by an indifferent road from Sydney, a road that frequently became impassable for weeks on end during and after wet weather. Nor was its condition improved for some time, for as D. Waugh, a settler at Gatton Park, near Goulburn, wrote in July, 1836:

"This has been a very wet winter, and as most of the roads are still in a state of nature, almost all intercourse by carriages has been stopped between this and Sydney. There are about 150 drays bogged along the road up to the axles, and the men have run up huts at the road side, and there they remain quite contented till the dry weather comes, which will be in about six weeks."\(^1\)

The earliest line of road to the south had followed the track blazed by Meehan's party in 1818, well to the east of the existing road and railway. It followed a direct line over the Mittagong Range, passing through Bong Bong, keeping close to the gullies of the Shoalhaven River until it reached Barber's Creek at the existing settlement of Tallong. From this point it traced a very circuitous course to Bungonia and Inverary, whence a track led off to the Murrumbidgee River, 40 miles away. Its poorness as a major transport route for the early settlers is emphasised.

\(^1\) D. Waugh, *Three Years' Practical Experience of a Settler in N.S.W.*, Edinburgh, 1838, p. 41.
by Surgeon Cunningham’s description of it in 1828 as a *made bush road*, from the Cowpasture River (at Camden) to Lake Bathurst, and as a *natural bush road*, from Lake Bathurst to the Murrumbidgee River. Of these, he wrote:

"A made bush road is one where the brushes have been cleared, banks of rivers and gullies levelled, and trees notched, on the route, and cuts made on the faces, or tops of hills where necessary, the remainder all being left in a natural state. A natural bush road signifies one to which nothing has been done except the notching of trees, the carts simply following each other’s track."

In 1820, Governor Macquarie had a road constructed from Bong Bong across the Cookbundoon Range near Tarlo Gap to the neighbourhood of the site of Goulburn, but it was a difficult route involving several crossings of the Wollondilly River, and was superseded two years later by another road which ran to the east of the Cookbundoon Range, avoiding four crossings of the Wollondilly and shortening the distance from Sydney to the Goulburn Plains by 12 miles: neither, however, materially lessened the isolation of the early settlers in Argyle County.

Improvements in road links to the rest of the Colony came slowly. In 1830, Surveyor-General Sir Thomas Mitchell marked the route for a new line of road to the south, to run from Berrima to Marulan, thence southwards through Bungonia to the southern parts of the Colony: its course between Berrima and Marulan differed little from that of the existing Hume Highway between those

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centres. Mitchell also surveyed a branch road from Marulan over flat and undulating country to the Wollondilly River at Towrang, thence over the open country of the Goulburn Plains to the Yass Plains and the Murrumbidgee River. In 1836, however, Mitchell reported that the South Road had only been completed in piecemeal fashion, and that for 14 miles it was still only in a half-finished state.

The inhabitants felt their isolation from Sydney very keenly, and there is little doubt that, as they claimed, it was responsible for the slow progress of the early settlements.

Under the terms on which land was granted to many owners they were obliged to provide stipulated amounts of grain for government use, but the urgent food need of the people actually

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1 Paragraph 5 of an address of welcome from landholders, residents and other free inhabitants of Argyle to Governor Bourke on the occasion of his visit to Goulburn Plains, 8th June, 1832 reads: "Your Excellency may possibly have felt disappointed at finding so few resident land-holders in these districts, and in perceiving the absence of those substantial dwellings and agricultural improvements, which require much outlay and expense; but we may venture to predict that, so soon as the difficulties which now exist in finding a market for our produce shall have been removed, by the formation of a good and direct road from these districts to Sydney, the effects will soon become apparent in the increase of inhabitants, and in the rapid extension of agricultural improvements". N.S.W. Government Gazette, 27th June, 1832.

resident on the land also contributed much to arable farming being practised as widely as pasturing in the early stages of settlement on the Tablelands. In consequence, farm production in the districts first settled tended originally to be more varied than it was during the later phases of their development.

With some exceptions, however, the outturn of farms in the early settlements was small, largely because the many small settlers employed a "slovenly system" of farming in which no improvements were effected for many years.

Although the early-settled parts of the Southern Tablelands now bear the imprint of more than a century of human occupation, the original parkland aspect has been by and large retained. In the account of his journey from Sydney to Queanbeyan around 1840, Demarr described the country between the Goulburn Plains and Queanbeyan in these terms:

"The road we travelled was a good one, till we arrived at Goulburn Plains. Afterwards it was a bush track with no bridges over the water-courses. The country now began to assume the parkified appearance so characteristic of the highlands of Australia. The country would have the appearance of a park in some places; in others what the settlers call 'open forest', with trees thinly scattered, sufficiently so that a horseman could canter between them with

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1 The phrase is Waugh's (*op.cit.* pp.54-5), cf. also footnote, p.23.
comfort, and of course the natural grasses every­where." ¹

This, and similar descriptions by other writers of this period, could also hold true to a large extent for the scenery of much of the area around the Hume and Federal Highways to-day.

Bungonia, Larbert and Krawarree, which developed as staging posts on the original main line of road to the south, in the upper Shoalhaven Valley to the south of the existing village of Marulan, were the first settlements on the Southern Tablelands to show signs of incipient town growth, but their importance was short-lived because they declined when the southern

¹ J. Demarr, Adventures in Australia Fifty Years Ago [Wanderings in New South Wales, Queensland and Victoria 1839-44], London, 1893, p.47.

(Although published fifty years after his stay in Australia, Demarr's descriptions have proved fairly reliable, because unlike most narratives of early Australian travels his writings were based on observations made over a period of several years' residence and work in the Colony; for example he worked for several months during the early 1840's at a store in Queanbeyan.)

road was re-directed from Marulan across the Goulburn Plains in the 1830's.¹

After a false start, Goulburn became the first urban centre on the Tablelands. Placed as it was in a broad and open saddle at the northern end of the Tablelands, near the only easy route from Sydney leading along the Marulan causeway, the town developed logically as the gateway centre to the whole of the Southern Tablelands, and its rapid growth was assured from the beginning.

Two years later Old Marulan, the pre-railway village one mile south of the existing village, was proclaimed; the first sale of town lots in Yass was held in 1837; sites were selected

¹ Advertisements from Bungonia in The Sydney Herald in 1837 suggest, however, that these centres did not decline immediately: for

9th Jan. N. Mandleson begged to inform the inhabitants of the town and surroundings that he had taken over a house lately occupied by Mr. Shields, and intended opening a store about 10th January next with a complete assortment of goods, for which he would take all kinds of Colonial Produce and allow the highest prices.

9th July Barnett's Hope Inn welcomed travellers to stay and partake of all the best kinds of spirituous liquors, and also

9th July N. Mandleson informed his customers that he had disposed of his store to S. Emanuel because he was about to open the Hit or Miss Inn for which supplies had been selected with the best judgment, and since "a good desideratum to Travellers up and down to Menaroo is to have good stabling and feed for horses" he would supply both at moderate prices. He notified, also, that he had divided 400 acres of rich land, well watered in dry seasons, into paddocks well secured for cattle. (This, of course, implied that it was being developed as a stock-staging centre - an important function of many centres in early colonial days).
for the villages of Gunning and Bungendore in 1837 and 1838, respectively; and in 1838 the village of Queanbeyan was proclaimed, and began to function as an administrative outpost near the frontier between the Counties and the "unsettled districts".

Goulburn, Gunning and Yass made strong urban progress from the start, principally because of their commercial contacts with the growing number of travellers passing along the road between Sydney and the newly-discovered southwestern parts of the Colony, which, with the rapid development of Port Phillip after 1837, became the most important internal highway of the country. But Marulan, over-shadowed by its larger and more progressive neighbour, Goulburn, remained a small and unpretentious hamlet.

Steady Pastoral Expansion and Development (c. 1840-1850)

Until gold rushes to various parts of the Colony and Victoria began in 1851 there was a steady increase and diffusion of the population of the Southern Tablelands as new settlers moved in to occupy the less attractive farming lands, not alienated earlier, and contemporaneously with these developments the established urban centres generally increased in size, and a few new ones arose as staging posts along new tracks and as small service towns and villages.

At the beginning of the decade, farming on the Tablelands had received temporary setbacks during one of the most severe droughts on record in the Colony (1838-42), and in the depression
of 1839-43, but, on the whole, farm production moved steadily upwards, and also remained quite varied until the early 1850's, as the following list (1853) of products in several districts shows:

"Marulan - wheat, barley, maize, oats, potatoes, cheese, butter
Bungonia - wheat, barley, maize, oats, hay, potatoes, cheese, butter
Goulbourn [sic] - wheat, maize, barley, oats, potatoes
Cooma - wheat, barley, potatoes, oats, hay
Queanbeyan - wheat, barley, maize, potatoes, hay
Yass - wheat, maize, oats, barley, hay, potatoes, fruits, vegetables"

Though the drought was widespread in the Colony, press and correspondence items in The Sydney Herald suggest that some parts of the Southern Tablelands escaped more lightly than others. The full effects were apparently felt in the centre and northwest, but the drought was not so acute or prolonged in the Braidwood and Monaro districts: thus

9th Nov., 1838 - favourable appearance of grass and wheat on the Monaro.
6th Mar., 1840 - Braidwood "pasturage very fine".
5th Apr., 1839 - only some old grass in Crookwell, Wheeo and Narrawa districts; conditions very bad along the Lachlan River.
3rd June, 1839 - Yass "a centre of wretchedness"; sheep dying in thousands as far down as Breadalbane.
19th June, 1840 - "late drought a severe calamity for Queanbeyan".

R.M. Martin, *Australia, [comprising N.S.W.; Victoria or Port Phillip; South Australia and Western Australia; etc.]*, London, 1853, p.151.
Despite this, however, a shift in the emphasis of farming from crop growing to pasturing had begun, and it became more pronounced during the gold rushes of the 1850's and 1860's. After the transport facilities on the Tablelands and elsewhere in the Colony had improved slowly during the 1840's, arable farming was no longer necessary as a general practice because settlers who wished to specialize in pasturing could now obtain foodstuffs, and feedstuffs to supplement natural pastures when necessary, from the areas better suited for cropping in which grains, fodder crops, vegetables and fruits continued to be grown. This, perhaps, applied more particularly to grain than to other crops, because at this time the grain growing areas of Tasmania and South Australia (and later the Bathurst area) were coming into export production: thus the decline of cropping relative to pasturing on the Southern Tablelands may not have resulted mainly from local causes (though they undoubtedly contributed), but may rather have been associated with the beginnings towards regional specialisation of production which henceforth became more general in the Colony. The drought and the depression at the beginning of the period were other important factors influencing the change in emphasis from crop-growing to pasturing; naturally, the cultivators suffered most, since the few crops which were sown failed completely. But the pastoralists were also hit hard by heavy stock losses, by the financial drain caused by the need for importing grain for feed, and by a fall in the value of wool (reduced in
1841 to about half its value in 1833), though the stock raising industry was able to recover more quickly in consequence of the boiling-down process having been introduced in 1843 by Henry D. O'Brien, at Douro, near Yass. This was soon in general use on the Tablelands for converting almost unsaleable livestock into products like tallow (then in great demand on the English market), skins, and mutton hams, permitting a return of fourteen shillings from the boiling-down of a full grown sheep (previously worth only a couple of shillings as a carcase).

Soon after the main South Road was built westwards from Marulan, the original line of road running south through Bungonia, Larbert and Krawarree dried up as a trade channel, and fell into disuse, so preventing those settlements from fulfilling their early promise of developing as towns. The virtual closing of the road also imposed difficulties on settlers in the upper Shoalhaven Valley by shutting them off from direct communication with Sydney, which they could now reach only by travelling on poor and round-about roads to join the main Sydney road at Goulburn - a circumstance which caused the agitation leading to Surveyor Larmer's tracing of the Wool Road (a line of road from Braidwood to
Huskisson on Jervis Bay) in 1840, and was responsible for a few enterprising settlers making other rough tracks to the small ports of Ulladulla and Broulee (near Moruya), soon after they had been developed. Braidwood, which was proclaimed as a village in 1839 but was listed as a new town in the Census of 1846, owed its early development as a service centre for the upper Shoalhaven Valley to the fact that it was at the focus of tracks from this part of the Tablelands to the South Coast.

**Development of the Southern Goldfields (c. 1850-1870)**

The gold rushes to different parts of New South Wales and Victoria which began in 1851 slowed down the rate of agricultural and pastoral development on the Southern Tablelands, and the discovery of goldfields within the area itself gave rise to some important changes in the local settlement pattern.

Early in the 1850's a succession of heavy floods in

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1 Under the heading Country News, The Sydney Herald (13th July, 1840) reported "Information has just been received in town that Mr. Larmer, a Government Surveyor, has discovered an excellent line of road from Braidwood to Jervis Bay which may be rendered passable for Drays, very speedily and at little expense." In an extract of a letter from Goulburn (dated 30th June) the paper added "About £100 has been subscribed in the neighbourhood of Braidwood, Queanbeyan and Goulburn for the first person who takes ½ ton of goods by Dray from the coast, and carries a ton by any bush road - settlers are now on the qui vive about this since Mr. Larmer's discovery."

2 Ulladulla and Broulee were proclaimed as "townships" on 6th September, 1837, and Huskisson on 16th December, 1840, but they did not develop as ports until the early 1840's; Broulee not greatly so then.
Population scale identical for Figs. 17-21.

Settlement Pattern—Southern Tablelands
N.S.W. — 1851.
many localities on the Tablelands checked the steady rate of progress of farming that had been maintained during the second half of the 1840's, but this was of minor significance compared with the disruption caused by the gold rushes, because here, as in other parts of the colonies, the supply of farm labourers diminished almost to vanishing point within a few months after gold had been discovered near Bathurst and elsewhere. As in the crises of 1838-43, the pastoralists were affected less severely than the cultivators because they could manage to carry on with a smaller labour force. This helped the pastoral industry to consolidate its ascendancy over arable farming on the Tablelands, and when conditions returned to normal after the gold rushes, pasturing continued to make headway and arable farming never succeeded in gaining the ground which it had lost.

Largely as a result of the rise of the mining centres, the transport net of the Tablelands was drawn more closely during this period, as roads were steadily pushed out in place of tracks, and as new tracks were formed to the goldfields. Meanwhile the railway was extended from Sutton Forest to Goulburn in 1869.

Goulburn, in a key position on the Sydney-Melbourne road, now reaped great commercial advantages from the large volume of traffic passing to and from the Victorian goldfields, and it grew rapidly in size and functional importance. Its status was also

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1 In some instances, however, as around what is now the A.C.T., herds and flocks had to be allowed to run wild in the ranges when stockmen were unobtainable.
improved when it was granted the honorific title of "city" under Royal Letters Patent, on becoming the seat of an Anglican Bishop in 1865.

The most striking changes in the settlement pattern took place, however, on the Southern Goldfields themselves, where several new towns mushroomed. Some idea of how rapidly they grew may be gauged from the following Gazetteer entries:

<table>
<thead>
<tr>
<th>Wells (1851)</th>
<th>Bailliére (1866)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Araluen - a remarkable deep gully in County St. Vincent.</td>
<td>a postal mining township with a population of about 3,500 - &quot;one long street, there being about seven miles of residences, more or less scattered, in which there are 28 hotels and public houses.&quot;</td>
</tr>
<tr>
<td>Braidwood - a town, 41 houses, 206 inhabitants.</td>
<td>important postal town with a population of about 1,000 persons.</td>
</tr>
<tr>
<td>Jembaicumbene - a swamp.</td>
<td>postal township laid out but not yet proclaimed, population about 400 (200 Chinese).</td>
</tr>
<tr>
<td>Major's Creek - no mention.</td>
<td>small postal digging town, population about 200.</td>
</tr>
</tbody>
</table>


Similarly, Kiandra, where gold was discovered in 1859, had an estimated population of about 15,000 prospectors during February and March, 1860, reduced to about 200 in 1866, and no more than a score of inhabitants to-day.

Cooma, which had been proclaimed as a village in 1849, was also established in this period after the first sales of village land were held in 1850. It originated as the Commissioner's seat for the Monaro Squatting District, after which it soon became the junction point of tracks radiating to surrounding pastoral settlements, gradually replacing an older settlement at Bunyan (6 miles north) as the service centre for the Monaro. Gold rushes to Kiandra and other parts of the Eucumbene Valley, which contained more than 40,000 prospectors in the early 1860's, gave the first impetus to really strong growth by Cooma, and they were also responsible for Adaminaby being established to provide administrative and commercial services for the goldfields.

Many small villages, like Collector, Gundaroo, Sutton, Bredbo and Michelago, most of which had developed earlier as stopping places beside horse and bullock dray tracks, gained a new significance during this period as coach staging-posts, and as such they played an important part in the life of the Tablelands.

Gold discoveries along the Crookwell and Abercrombie Rivers in the early 1850's were also responsible for some important changes in the pattern of settlement in the northern districts of the Southern Tablelands, not because large quantities of gold were found but because they led to the opening up of useful farming
lands and the establishment of several small village settlements. In fact, except for Tuena, near the Abercrombie River, and Trunkey Creek, north of the Abercrombie River, gold discoveries were very limited in the area. Closer settlement and more intensive farming in the districts led to the growth of Binda "township", proclaimed in 1851 to serve as an administrative centre, and to the rise of Kiama (on the site of Crookwell), Bigga, Taralga, and the private village of Laggan.

Pastoral Stabilisation (c. 1870 to date)

As gold production fell off in one field after another, their population centres dwindled rapidly in size and importance. Some of the labourers forced to abandon mining found their way into rural industries on the Tablelands, and as a result farming generally became more stable than it had been, and in most districts farm productivity reached higher levels than ever before. Except during the Australia-wide depression in the early 1890's, steady agricultural progress continued, though the emphasis on pasturing was now dominant over most of the Tablelands.

Contemporaneously with these events, roads and railways were developed still further, the latter having strong effects on the settlement pattern, and also on the functions and growth of Goulburn and Cooma. In 1875-76, the railway was extended from Goulburn to Yass, Bowning and beyond, and between 1884 and 1889 a line was built from Goulburn to Cooma. These caused Goulburn to become a more important transport node, and when large railway workshops and yards were built there it became the main southern railway depot of the state: similarly, when Cooma became a
SETTLEMENT PATTERN - SOUTHERN TABLELANDS
N.S.W. - 1871.
railhead its importance as a service centre for the Monaro districts increased greatly.

During the last quarter of the 19th century, mining activities were revived in a few places on the Southern Goldfields around Araluen and in the Kiandra district when some companies operated dredges intermittently, and soon after gold-bearing copper ores had been discovered on Foxlow station in 1884 Captain's Flat grew up as a gold-mining town. It continued to thrive during the 1890's when silver, lead and copper were mined, but mining ceased early in this century because its easily won ores containing valuable metals had been exhausted, and because low prices prevailed for the base metals present in its complex and deeper-seated ores, the mine starting up again in 1939.

Yass, whose early growth had been vigorous, failed to make the urban progress that its townspeople expected of it. In the late 1860's and early 1870's, large public buildings (court house, post office, banks) considerably in excess of the town's needs for many years, had been erected in the hope that Yass might develop as the regional centre for the settlements in areas west of the Southern Tablelands, but it was superseded in this role, first by Gundagai, then by Wagga Wagga, as the centre of gravity of settlement moved south and west. Binalong, established north-west of Yass in 1850 to serve as the Commissioner's seat for the Lachlan Squatting District, also retrogressed similarly after the large squatting runs to the west were subdivided for closer settlement.
SETTLEMENT PATTERN - SOUTHERN TABLELANDS N.S.W. - 1891.
The Alien Intrusion of Canberra and the Australian Capital Territory (1911-1927)

Following legislative action by the governments of New South Wales and the Commonwealth, the 940 square miles of the Australian Capital Territory, containing a site for the nation's capital, were vested in the Commonwealth on January 1st, 1911.

The superimposing of its arbitrary boundaries on the map of New South Wales, and the subsequent building of Canberra within them, represented an alien intrusion into the developing pattern of settlement on the Southern Tablelands, but except for the purely local effects of Canberra's specially rapid growth since 1939, the general features of that pattern have not been much disturbed.

There were, of course, some evolutionary changes during this period, mainly in the further development of communications, and in the processes of urban growth and decay, though except for a slightly more intensive use of the land there were few changes in the rural areas.

Pasture improvement practices had been attempted in some parts of the Colony as early as the 1820's, but with the possible exception of the Yass district the earliest attempts on the Southern Tablelands were made around Crookwell. There, from the 1870's onwards, John Broderick and other graziers had experimented with the planting of artificial grasses in place of natural grasses, but the first significant step in the more intensive use of land on the Tablelands came after the pasture improvement practices of Charles E. Prell were extended. Prell had introduced these on his Gundowringa property, near Crookwell, after he had acquired it in 1902.
SETTLEMENT PATTERN - SOUTHERN TABLELANDS
N.S.W. - 1911.
By far the most fundamental change of this period, for the whole of Australia as well as for the Southern Tablelands, is that associated with the rise of motor transport. For this change the whole period (1911-1927) may be taken as a stage of transition between an era in which, on the whole, the life of the towns still had very much the tone of that of the surrounding countryside, and a succeeding era in which urban influences of the cities and larger towns began to have very pronounced effects on the life of rural areas.

As in the earlier phases of settlement evolution Goulburn grew more vigorously than all the other centres on the Tablelands, its growth being sustained and fostered by new transport developments which included the extension of the Goulburn-Crockwell branch railway to Taralga; railway construction from Cooma to Nimmitabel in 1912, and on to Bombala in 1921, and the building of the Federal Highway from Yarra, near Goulburn, to Canberra in 1926.

By now, however, the wheel of fortune had turned full circle for the once-prosperous gold mining centres: though some, like Kiandra and Araluen, had reverted to being small rural hamlets. Captain's Flat, too, still continued to stagnate because of its mining difficulties and the low prices obtainable for base metals.

With the opening of Federal Parliament House in May, 1927, Canberra became the de facto as well as the de jure seat of
government of the Commonwealth, but it was a capital without a
city, and its population consisted almost solely of a labour force
engaged in city building, and a small nucleus of public servants
carrying out the work of the few government departments that had
been transferred from Melbourne. From the outset, Canberra, as a
planned city, was dependent to a large degree for many services
on its urban neighbour Queanbeyan, seven miles away. Out of this
parasitism on the part of Canberra, a symbiotic relationship has
grown between the two centres - the bonds of interdependence be­
tween them are still very strong, though they are beginning to
hold less firmly as Canberra continues to outstrip Queanbeyan
greatly in growth.

Industrial Invasion (1930 to date)

Except for the effects of the economic depression of
the early 1930's and man-power shortages during World War II, the
pattern of rural settlement during this period has remained sub­
stantially as it was in the earlier years of this century, but
some urban changes have been caused by the growth of industry in
some centres, and particularly by the substitution of motor traf­
lic for horse-drawn traffic throughout the area. In addition,

Though the use of biological terms (particularly by some American
sociologists) for describing the facts and phenomena of urban
geography is considered unnecessary and not desirable as a general
practice, the uniqueness of the relationship existing between
Canberra and Queanbeyan is taken to be sufficient grounds justi­
ifying the borrowing of terminology in this instance.
SETTLEMENT PATTERN — SOUTHERN TABLELANDS
N.S.W. — 1933
there has been a general overall increase in the size of urban centres and a corresponding decline in the population of rural areas, as is shown by the evidence of population changes in the enumerations of the Censuses of 1921, 1933 and 1947 (Fig. 20); field counts (figures subject to revision) of the 1954 Census suggest that the populations of rural shires have increased generally since 1947, but that they have been more than balanced by population increases in the towns.

Industry of a minor order based principally on the use of raw materials provided by local rural districts, such as flour-milling at Goulburn, Yass and Queanbeyan, wool-washing and scouring at Queanbeyan, and tanning, bootmaking and brewing in Goulburn, had appeared in some towns on the Tablelands during the 19th century, but industrial invasion has become more marked during and since World War II. Goulburn, with several large enterprises (abattoirs and clothing, textile and boot factories) and several minor light industries, has been affected most significantly, but minor industries are also growing in importance in Canberra, Queanbeyan and Yass.

Many of the small centres, like Collector, Gundaroo, Sutton, Michelago and Bunyan, no longer possess their important function as staging posts since all have been affected adversely by the rise of motor transport. Some have been by-passed by more direct motor roads, but, more important, the daily stage of about fifteen miles between stops, a traditional feature of transport
SETTLEMENT PATTERN — SOUTHERN TABLELANDS
N.S.W. — 1947
in most countries for centuries, was completely superseded. Visible evidence of this is provided by the numerous small hamlets around a building which was obviously once a roadside tavern but is now more often a small store.

The most significant changes in the settlement pattern of the Southern Tablelands are now occurring in the area of operations of the Snowy Mountains Hydro-Electric Authority. Here, the alien growth of North Cooma has caused, and is still causing, great changes in the form and function of Cooma itself; the small village of Berridale is taking on a new lease of life as a growing number of Snowy Mountain workers take up residence there; the village of Jindabyne is in the "pre-preliminary" stages of removal to a new site above the top water level of the proposed Jindabyne dam; Adaminaby, also to be flooded by the waters of a large dam on the Eucumbene River, on which work has begun, is to be shifted to a new site a few miles away; and dam and road construction camps have been built in widely separated areas: some of them like Island Bend, Munyang and Cabramurra are of a semi-permanent nature, likely to become smaller operational centres when construction works are finished near them.

Throughout most of the Southern Tablelands a climax agricultural situation has been reached: though many changes in the types of farming in them have occurred in the past, the districts capable of being used for farming appear now to have stable forms of rural industry in which few changes, except perhaps more intensive forms of existing usage, can be expected in the future.
The habitats of many small Procyonidae species are unknown, and their populations are difficult to study in natural settings. However, various methods such as trapping, mark-recapture, and fecal analysis can provide valuable data on their population sizes and dynamics. This information can be crucial for conservation efforts and understanding the ecological impacts of these species. Further research is needed to better understand the behavior and ecology of these small Procyonidae species.
of rural settlement and land-use against which they have developed, because these have had important, even if at times only indirect, effects on the growth and character of the towns of the area. As we have seen in Chapter II, the existing pattern of rural settlement and land-use has evolved steadily on the whole, except during the gold rushes of the 1850's and 1860's; moreover the pattern of urban settlement has been superimposed on the rural pattern in such a way that its main features were not much disturbed. But, though most of the towns on the Southern Tablelands have had undistinguished and comparatively uneventful histories, the urban scene is now a very dynamic one.

Because land-use on the Tablelands is so markedly pastoral, with wool sheep raising the dominant activity (Fig. 23), it follows naturally that the rural areas as a whole have a generally similar aspect, except, of course, in the places where high relief causes the normal pattern of grazing to be modified, and in the few localities where sheep raising is replaced by or is subordinated to cropping and cattle raising.

Extensive grazing methods are usual, with the sizes of individual holdings ranging from a few hundred acres each in the better farming lands to several thousand acres each elsewhere, and in consequence the clusters of farm buildings (farm homesteads, shearing sheds, wool store sheds, garages and other outbuildings) on neighbouring properties may be up to a few miles apart, especially in the south and southwest where the pastures are on the whole rougher and poorer. In some instances the
Fig. 23

SOUTHERN TABLELANDS - LAND USE 1954

KEY

- Reserves (Forest, Water, Recreation etc.)
- Forested Land (used in part for light grazing & lumbering)
- Some cultivation (vegetables, fodder crops, fruit, cereals)
- Sheep raising for meat with some wool production
- Sheep raising for wool with some meat production (cattle & sheep)
- Dairying
- Cattle raising with some wool sheep

Functions (Qualitative only) of urban centres and selected localities:
- Service
- Administration
- Industry
- Mining

MILES

0 8 16 24

Major roads (minor roads omitted)
cluster of settlement around the station homestead on prosperous properties, like Carwoola in the Foxlow basin or Springfield between Tarago and Goulburn, might almost be regarded as a kind of miniature urbs in rure; the function of such settlements is hardly urban, yet as well as the main homesteads and their usual outbuildings they contain the cottages and gardens of several station hands, and often a store, a small school, and a church, provided for their convenience by the station owners. Thus, though they are by no means comparable with the old feudal estates, they could be regarded in some respects as a modern Australian version of the English Manor.

In the sheep grazing lands, extending over nearly all the Tablelands except the densely forested and rough mountain country, the flocks are primarily dry-sheep (Merino wethers) grown for their wool, but in a few places the grazing specialty is different. For example, some of the finest Merino studs of Australia are found on the good natural pastures near Yass, which have now been further improved to a high standard of productivity; lamb and mutton production is locally important on some small areas of improved pastures around Crookwell and Taralga and between Nimmitabel and Bombala; and in several other places there are many sheep stations with dual purpose (wool-meat) and lamb and mutton breeds.

Over much of the Tablelands cattle are raised in association with sheep, usually occupying the timbered lands of primarily
sheep-grazing properties, but in some districts, as in the rugged country around the upper Murrumbidgee or on the snow leases of the southwest, and in a few other places where pastures are likewise too rough or too wet for sheep, beef cattle raising is the major and often the sole grazing activity. In a few isolated instances stud cattle are bred in small numbers, typical breeds being Shorthorn Herefords, as at Foxlow about ten miles north of Captain's Flat, and Black Poll Angus, in the Murrumbateman and Taemas districts near Yass. Dairying is not an important activity on the Southern Tablelands, and, in fact, is only practised on a few river flats near some of the larger towns, such as those along the Molonglo River and Jerrabombera Creek near Canberra, where the influence of the local market is clear.

Except for intensive potato culture in parts of the Crookwell and Taralga districts, vegetable growing on the river flats near some of the larger towns and orcharding on a small scale (principally near Goulburn and Canberra), cropping consists almost wholly of the growing of cereals for fodder - oats, lucerne, barley and rye, in that order - though, because pasture improvement practices have been extended widely in the centre and north of the Tablelands during the last few years, the acreage under sown grasses, like Phalaris species and subterranean clover, has increased greatly.

Lumbering, ranking next to grazing in the rural economy of the Tablelands, is naturally most important in the wetter districts containing dense sclerophyll forests, such as the coastal
ranges near Braidwood and the high country near the western boundary of the Australian Capital Territory, though many smaller areas with light stands of timber provide logs for milling in most of the larger towns.

In some parts of the Tablelands tourist activities are becoming increasingly important, based on such attractions as winter snow-fields near Kosciusko and Kiandra, limestone caves at Yarrangobilly, the operations of the Snowy Mountains Authority, or trout fishing in mountain streams. But, apart from providing some of the transport services and the incidental shopping needs of the tourists, local people do not participate much in the tourist business which is a city-directed enterprise, controlled largely by a governmental agency (N.S.W. Government Tourist Bureau) and private organisations (Pioneer Coaches, Allen's Tours) with headquarters outside the region.

Several miscellaneous activities of a very minor kind give employment to small numbers of people on the Tablelands, but apart from a side glance at the interesting forms of bee-keeping
and rabbit-trapping practised, we need only mention small-scale mining and quarrying, and the distilling of eucalyptus oil which is mostly confined to the Braidwood district.

**Urban Settlement**

The urban settlements that have grown in this rural setting (Figs. 24 and 25) comprise centres which are provisionally ranked as: cities, towns, large villages, small villages and hamlets, the nomenclature having a strictly geographical connotation.

Bee-keeping is confined almost solely to the districts containing stands of trees like Yellow Box (*E. melliodora*), Red Gum (*E. blakelyi*) and Red Stringybark (*E. macrorrhyncha*), usually by a small band of itinerant apiarists who wander over the Tablelands, and sometimes as far north as the Bathurst and Mudgee districts, transporting their hives in horse-vans or motor trucks. In some instances, however, some of the small graziers keep a few swarms of bees in their own localities in order to supplement their farm incomes by the sale of honey (and often firewood, too) in the nearby towns.

Rabbit-trapping for pelts and carcases once gave lucrative employment to a small force of rural workers, but it has now almost disappeared since graziers have been forced, under the provisions of the State Pastures' Protection Act, to eliminate rabbits on their properties, and because of the introduction of the virus disease, myxomatosis, as a combative measure. A few trappers still operate in hilly and rugged country around the Abercrombie River (north) and the Fish River (northwest). They usually work from a large but portable freezing chamber, refrigerated by diesel engines, set up in a convenient road-side location near the centre of their field of trapping. Travelling to and from this in horse-drawn vans, and generally accompanied by a pack of nondescript dogs, they trap over several square miles of the surrounding country until the chamber is filled, ready to be moved by a semi-trailer to the city market or the point of export. (A typically 'Australian' mixture of means and methods!)
Fig. 24

SOUTHERN TABLELANDS
POPULATION DISTRIBUTION AT 1947 CENSUS
for the reasons given in the next chapter, which also explains how the grading was determined. Representative examples are:

- **Goulburn city** - a regional service centre,
- **Yass, Queanbeyan, Cooma, Braidwood** - rural towns providing commercial and other services on a district basis,
- **Gunning, Bungendore, Adaminaby** - large villages with smaller urban fields,
- **Collector, Binalong, Bowning, Taralga, Bredbo, Michelago** - small villages, and
- **Tharwa, Bellmount Forest, Jerrawa, Lake Bathurst** - hamlets.

Canberra, Captain's Flat, and Marulan South illustrate the few centres on the Tablelands with specialised functions which do not fit comfortably in the hierarchy. Canberra, a city with a population of about 30,000, is the largest centre on the Tablelands, but though it is nationally important as the seat of federal government, its local influence is small, and, in fact, in many respects it lies within the urban field of Queanbeyan — a town less than one-fourth its size. Captain's Flat, a large village, almost qualifying as a town, is a metal-mining centre in the upper Molonglo Valley, a comparatively isolated part of the Southern Tablelands. It has only minor urban affiliations with

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1 It is worth noting that for Western Europe, Britain and much of the United States most of the centres would go down one place: for example, Collector, Bredbo and Michelago would be hamlets in the United Kingdom.
SOUTHERN TABLELANDS POPULATION OF CITIES, TOWNS, VILLAGES AND LOCALITIES WITH A POPULATION OF 100 OR MORE AT THE 1947 CENSUS
its nearest neighbours (Queanbeyan, Bungendore, and Braidwood) and with Goulburn through Bungendore: *per contra*, it has much stronger commercial ties with Sydney, and it has developed an important trade relation with Port Kembla which consumes pyrite from its mine. Marulan South is a small village and limestone quarrying centre near Bungonia Gorge; like Captain's Flat it leads an existence relatively independent from that of the other centres of the hierarchy, with its contacts oriented northwards to the small commercial centre of Picton and the nearby cement works at Maldon, to the small cement works centre of Berrima, or northeastward to the iron and steel manufacturing centre of Port Kembla, rather than to Goulburn and other centres closer at hand.

Though Goulburn is smaller by 9,000 people than Canberra (1954 Census), it greatly transcends the federal city in local importance, for by providing many and varied services throughout the Tablelands for urban and rural settlers alike, its urban influence is widespread to such an extent that its primacy in the hierarchy is indisputable. So, while Canberra's population may serve satisfactorily as a yardstick against which the sizes of the centres on the Tablelands may be measured, their relative ranking in the hierarchy can be determined only if, in addition to the factor of size, the functional attributes of each are compared with those of a more actively participating member of the hierarchy, and logically this can hardly be other than Goulburn.

In that they possess many common elements of urban form
and function, the service towns ranking below Canberra and Goulburn in size, and Goulburn in hierarchical importance, are in many respects homologues of each other, but they also differ significantly, as may be seen from the exposition in later chapters of the evolution of Queanbeyan, Yass, Cooma, and Braidwood.

A further example is provided by the contrast between Bombala (southeast) and Crookwell (northwest), the remaining service towns on the Tablelands. Both are essentially the towns of their shires, but they differ from each other in one important respect, for while Crookwell has been pulled into the life of the Tablelands as a whole through the influences of its powerful neighbour Goulburn (30 miles away), Bombala is located in a comparatively isolated corner of the Southern Tablelands and has few contacts with other centres there: indeed, except for an interest in its pastoral shire (Bibbenluke), the town and its people have less in common with other parts of the Tablelands than with the Far South Coast of New South Wales and a contiguous part of Victoria.

The remaining centres of the hierarchy are tributary either directly to Goulburn or to Goulburn via the service towns. In some instances, notably in the case of Gunning, small villages and hamlets are contained within the urban fields of the larger villages, though the latter themselves may also lie within what might be termed the urban "marchlands" formed by the overlapping of their primary urban fields with the outer fields of Goulburn.
or a service town.

The smaller villages on the Tablelands comprise many small places, like Tarago, Bowning, and Collector, whose functions as minor service centres and points of assembly (hall, school, church) are more urban than rural; but they also include several small centres like Bungonia, Larbert, Araluen, and Major's Creek which may now be regarded as decadent, having retrogressed from the urban status and condition that they attained in earlier times, or as examples of arrested development, having failed to make the urban progress that might reasonably have been expected in their initial phases. As noted in Chapter II, Bungonia and Larbert were staging posts in early colonial days along the original main line of road to the south, running south from Marulan; Araluen and Major's Creek were ephemeral towns on the Southern Goldfields.

Hamlets, with the lowest possible ranking in the hierarchy, are thinly scattered through the urban fields of the larger centres, but, though they provide minor services for the localities immediately surrounding them, most are infra-urban rather than urban.

1 "Marchlands" is suggested as a concise and apposite term to describe the border lands of urban competition. They are, in effect, the marginal areas of competition between neighbouring towns to which A.E. Smailes has drawn attention in Britain ("The Urban Mesh of England and Wales", Publ. Inst. Brit. Geogr., 1947, p.101, and 'The Analysis and Delimitation of Urban Fields', Geography, Vol. XXXII, 1947, p.159).

The area around Gunning stands out clearly as such an urban marchland, because nearly all its primary urban field, which envelopes those of the villages of Dalton, Bellmount Forest and Gundaroo, is overlapped in places by the outer urban fields of Goulburn, Yass and Queanbeyan.
than urban settlements.

One other, and by no means uncommon, type of settlement on the Southern Tablelands needs to be described. It is a small settlement of a dispersed type - such as Wheeo near Crockwell, Bronti near Lake Bathurst, or Rocky Plains between Jindabyne and Adaminaby - which may consist merely of a farm house (serving also as a post and telephone office), a church, a school, and perhaps a showground hall. In some instances the individual buildings in this kind of grouping may be half a mile or more apart, but since, in all cases, each constitutes a local habitation with a name, and because each provides postal facilities and serves as a place of assembly for the rural inhabitants of its surroundings, this kind of settlement has a clearly defined functional role in the life of the area. Patently, its function is not urban, neither is it truly rural in the usual sense, but to recognise this kind of grouping as one of the forms of settlement characteristic of the Southern Tablelands, and to give it a class name, we call each a "service locality". We do so because the term "centre" will not apply, and because "locality" seems to express the idea of the indefinite extent and the irregular form of this kind of settlement better than "place" would.

Generalising for the Southern Tablelands as a whole, the average distances by road between centres of descending order of ranking are about:

50 to 60 miles between major centres,
20 to 30 miles between major centres and their larger satellites, and 10 to 20 miles between small centres along the highways and other main roads.

These are, of course, only rough averages, because centres within the above groups are by no means uniformly spaced; thus, if we ignore Queanbeyan's special relation to Canberra, we find that it is 46 miles from Yass, 50 miles from Braidwood, 60 miles from Goulburn and 50 miles from Cooma. (Appendix 5).

The irregular distribution of centres is a feature of urbanism on the Southern Tablelands; even in the north where relief differences are small the urban fields of the towns do not even remotely resemble Christaller's theoretical hexagons in shape, though in the urban marchlands around Gundaroo the overlapping of the outer fields of Goulburn, Yass and Queanbeyan suggests a likeness to the interlocking circles found in some planning reports.

Since the Southern Tablelands do not have, except locally, the deep dissection of such highlands as those of Wales and Scotland, there are no close correlations between strong relief, on the one hand, and the shapes of urban fields, on the other, such as Smailes has described for Wales and Fleming and

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Green for Scotland. This is because the really rugged parts of the Southern Tablelands - in the far north, the east and the southwest - are areas of very sparse settlement with few or no urban centres in them; the urbanised parts are confined on the whole to those districts where the differences in relative relief between the high land and the low land are not great. As might be suggested by comparing Figs. 4 and 25, a line drawn on a map of the Southern Tablelands enclosing all the principal urban centres would outline the shape of a dumb-bell with one knob in the north, around Goulburn, Crookwell and Yass, and another in the south across the Monaro Plateau, linked by a narrow strip of urbanised territory through the valleys between the central ranges on the Tablelands the whole tied together by a network of routeways (Fig. 26).

Except in the Canberra anomaly, the extent of the individual urban fields is, on the whole, closely equated to the size and the functional importance of the town which each serves, though, of course, on the more sparsely settled Monaro Cooma's influence extends more widely through its surroundings than is the case with comparable centres in the areas of closer settlement at the northern end of the Tablelands.

HIGHWAYS

TRUNK ROADS

ORDINARY MAIN ROADS

DEVELOPMENTAL ROADS

RAILWAYS

S.E. N.S.W. RAILWAYS AND MAJOR ROADS
Generalising about the urban fields on the Southern Tablelands, we might say that those on the fairly level saddle lands and basins in the north and on the Monaro Plateau in the south tend to be circular in shape (though Cooma's is slightly less so since it has a longer east-west axis influenced by the layout of the Monaro Plateau), while those of the small centres in the middle districts of the Tablelands are roughly ellipses, with their longer axes trending along the major transport routes in the wide valleys between the main north-south ranges.

Though the relief of the Southern Tablelands is not a coercive factor of urban location, except in the siting of a few minor centres, the influence of topography on the general location of some of the towns is quite clear. Thus, Goulburn, as noted in Chapter I, occupies the logical position at the southern end of the Marulan causeway for a main gateway town to the region; Canberra owes its choice as a capital site largely to the topographical advantages of its surroundings for city building; Bungendore was "located" by surveyors because it was on a slight rise on the original marshy plains south of Lake George and Adaminaby, though several miles from the goldfield it had to administer, was placed where it is, on the side of a hill above the swampy plains of the Eucumbene Valley, because the higher land between it and Kiandra lies within the zone of heavy winter snowfall.

Except for the demise of the small staging posts and
mining centres (described in Chapter II), the rise of Canberra, and the urban growths and shifts attendant upon the development of the Snowy Mountains Scheme, few changes have occurred in the distribution of urban centres on the Southern Tablelands, since the general pattern was established about 1870-1900. Against this, however, the characters of some of the towns are altering appreciably: in rapidly growing centres such as Canberra, Goulburn, or Queanbeyan, the internal landscapes of the towns are metamorphosing greatly. Despite being outstripped in numbers by Canberra, Goulburn continues to consolidate its position as the primate of the hierarchy in consequence of internal expansion, both physical and functional, and the unremitting efforts of its business houses not only to maintain but also to strengthen the city's commercial suzerainty throughout its urban field. In some respects the city is more than a regional service centre, though it could hardly yet be regarded as a provincial capital, equivalent to, either, Tamworth on the New England Tablelands or Wagga Wagga on the South-West Slopes. Side by side with the rapid population growths of Canberra and Queanbeyan the two centres are growing together physically, and though the territorial boundary remains a firm line of administrative division between them, the unique form of urban mutualism that once existed between them is being replaced by more reciprocal inter-urban links.

In the light of this evidence of the continuing processes of urban growth and decay and of the sweeping changes which
are taking place in some of the towns, it may well be said that the urban scene on the Southern Tablelands is a dynamic one, but, on the other hand, the rural scene is static, with few changes in it except, perhaps, a slightly more intensive use of the land.
PART II  THE URBAN HIERARCHY OF THE SOUTHERN TABLELANDS
CHAPTER IV

THE HIERARCHICAL RANKING OF CENTRES
ON THE SOUTHERN TABLELANDS

Before discussing the criteria used for determining the grading of the urban centres on the Southern Tablelands and the ways in which they were applied, some explanation is needed of the terms (cities, towns, villages and hamlets) that have been used to describe them, since in this thesis they stand for strictly geographical concepts and so have meanings quite different from those of current legal and popular usage.

Such an explanation is all the more necessary because the problem of urban status in Australia has become extraordinarily confused as a consequence of the different interpretations given to city, town and village in governmental circles and in the ordinary conversation of everyday people. For the geographer the confusion is particularly vexing because he must use these terms in an explicit sense: they represent concrete facts of his discipline, so that he must, therefore, define them precisely. Unless they are so defined:

"It is not practicable to make a classification according to urban status that will be valid for all urban centres throughout Australia, because different States employ different agencies and adopt different procedures for establishing units of urban settlement, and they use different criteria for determining the
status of a city, a town and a village. Moreover, the official status of many centres is obscured as a result of the practice common to most Australians of exaggerating the importance of their cities, large towns and villages - by speaking of them as metropolises, cities and towns, respectively. 'Village' is completely discredited in everyday conversation, so that urban centres smaller than cities are generally referred to - in descending order of size - as 'large towns', 'medium-sized towns', 'small towns or townships' and even as 'little bits of towns'.

This strong antipathy to the term 'village' is inexplicable; particularly so, because many of the small urban settlements in the continent had the 19th century English village as their prototype - at least in theory, and with intent in the minds of the Governors who established them, even though they have not conformed in physical structure.²

Moreover, "township" is also used commonly now in Australia to describe the area of a town as well as a small town; it is not used in this thesis, in order to avoid possible confusion.

1 Appendix 6 sets out the precedent conditions for determining the legal status of urban settlements in the Australian States.

with English and American "townships". Some Australian and overseas usages of the term are outlined in Appendix 7.

The hierarchical ranking of urban centres on the Southern Tablelands has been determined empirically, so that no claim is made that the criteria used will be of absolute validity for classifying urban settlements other than those of the study area. Nevertheless it conforms to the general principles of modern urban geographical studies as represented by the works of Smailes, Bracey, Brush, Carol, Keuning and others (see Bibliography - General).

Criteria applied to the urban centres of the Southern Tablelands for the purpose of determining their grading relate to the form of the individual settlements, the sizes of their populations and the indices of their degree of centrality, assessed both quantitatively and qualitatively. They are applied in the following ways:

Form

To be clearly distinguishable from the dispersed forms

It seems probable, however, that if metropolitan cities and provincial capitals were to be added at the head of this scale it might well serve to give a general indication of the grading of Australian centres, though, of course, the values of the criteria applied to centres on the Southern Tablelands would need to be much revised to suit other local environments. Random sampling of a few urban centres in the wool-wheat districts of the Northern Riverina, and in the pastoral New England districts, suggests that the criteria might apply there, but a similar sampling of centres in the dairying districts of the North Coast of N.S.W. indicates clearly that they will not suffice in that area.
LAKE BATHURST VILLAGE 1953
Size of Population (Fig. 25)

In any scheme aimed at a grading of urban centres the sizes of their populations must necessarily be taken into account because of the conditioning effects of the numbers of inhabitants on the forms and functions of the settlements.

To satisfy the special needs of the study area the following scale is put forward as being suitable for a size grading of its urban centres:

<table>
<thead>
<tr>
<th>Type</th>
<th>Population Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamlet</td>
<td>less than 100 inhabitants</td>
</tr>
<tr>
<td>Small village</td>
<td>100-500</td>
</tr>
<tr>
<td>Large village</td>
<td>500-1,000</td>
</tr>
<tr>
<td>Town</td>
<td>1,000-15,000</td>
</tr>
<tr>
<td>City</td>
<td>over 15,000</td>
</tr>
</tbody>
</table>

and for further refinement, small towns (1,000-2,500), medium-sized towns (2,500-5,000) and large towns (5,000-15,000) may be distinguished.

Indices of Centrality

For the purpose of estimating the degrees of centrality of the urban centres on the Southern Tablelands, their functional institutions and services are assessed quantitatively and qualitatively.

In the quantitative assessment a single point is allotted

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1 In the absence of a Business Directory adequately covering all the urban settlements of the area, the local Telephone Directory (January, 1953) was used for this purpose. It enables a fairly reliable cross-sectional view to be obtained of the business life of the area, because 80-85% of the business premises in the larger centres, and 90-95% in the smaller centres, have telephones installed (estimate by District Telephone Officer, Post Master-General's Department, Canberra, in a personal communication, 4th March, 1954).
for each functional service or institution, irrespective of its nature, which the centre contains, and the lowest score for each type of centre is set at:

<table>
<thead>
<tr>
<th>Type of Centre</th>
<th>Minimum Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamlet</td>
<td>a minimum of 3 points</td>
</tr>
<tr>
<td>Small village</td>
<td>&quot; &quot; 10 &quot;</td>
</tr>
<tr>
<td>Large village</td>
<td>&quot; &quot; 25 &quot;</td>
</tr>
<tr>
<td>Town</td>
<td>&quot; &quot; 75 &quot;</td>
</tr>
<tr>
<td>City</td>
<td>no definite number is set but a full suite of services and institutions is required.</td>
</tr>
</tbody>
</table>

The services and institutions include:

**Public utilities** - water-, electricity-, gas-supply; sewerage.

**Administrative and Protective** - local government (Municipal or Shire), State governmental agencies, court, police, fire station, ambulance service, hospital (public or private).

**Educational and Social** - school, church, hall, literary institute, school of arts, clubs, theatre, local newspaper.

**Professional** - doctor, dentist, nurse, accountant, solicitor, surveyor.

**Commercial and Transport** - general stores and shops of all classes, banks, agents, hotels, guest houses, carriers, bus and taxi or hire car services, railway station, garages, oil depots, and the like.

**Manufacturing** - one point for each unit irrespective of its size or type.

**Building and Constructional** - sawmillers, builders, bricklayers, plasterers, plumbers, electricians, joiners, and the like.

**Farming** - stock agents and brokers, drovers, shearers, pastoral and agricultural societies and organisations, boring and drilling contractors, dam excavators, and wool, skin, and hide merchants.

Critical points on this scale are those at which an
attempt is made to distinguish large villages from towns, also
towns from cities, but difficulties here may be ironed out if fur-
ther reference is made to the qualitative characters of the ser-
vices and institutions provided by the centres.

Considered _per se_, a qualitative appraisal of the
indices of centrality is the least reliable method of applying
the criteria used for grading the centres, but, as noted above,
the method is a useful supplement when some of the distinctions
still remain blurred after the other three criteria have been
applied. When trying to differentiate large villages from towns,
for example, we may consider the index value of:

**Schools**

Towns usually have a high school (up to a grade of 17 years) or an intermediate high school (up to a grade of 15 years) with a full secondary curriculum, while large villages rarely possess schools ranking higher than central schools (dominantly for primary education with limited provision for secondary education for two, and sometimes more, years).

School status is, however, more an approximate point-
er than a wholly reliable index because variable fac-
tors affect the grading of schools: for instance, the
average attendance of pupils and the numbers of staff
members (Appendix 8). Also, the low grading of the
school in a particular centre may be the result purely
of a lag in school building - as is commonly the case
with many of the schools in the large and rapidly grow-
ing towns on the Tablelands.

**Courts**

In general, large villages have courts of summary juris-
duction, such as courts of petty sessions and small
debts and fair rents courts, and towns have courts of
quarter sessions and district courts for criminal and
civil cases, respectively.

Court status, like school status, is, however, not a
particularly reliable index of centrality, because
courts are not necessarily established on a population
basis or according to the importance of the court centre,
though they usually are, but sometimes for juridical convenience or other reasons: for example courts have been established in some centres in the past through the political influence of the local member of parliament, and on other occasions courts of particular types have grown up when a demand was created for them, such as courts to deal principally with traffic offences in centres on a highway, criminal courts in centres where law and order is more prone to be disturbed, and Wardens' courts in mining centres and districts.

Considered in conjunction with the other criteria in the qualitative type of assessment, each of the following services and institutions is a much more reliable index of the centrality of a place than either schools or courts, and (except for cinemas, banks and specialty stores in the instances of Gunning and Captain's Flat) they serve to indicate a sharp line of distinction between towns and large villages on the Southern Tablelands:

**Local newspapers** In most towns it is customary for a local newspaper to be published at least once a week, and there seems to be a fairly constant relation between the sizes of the towns and the number of times each week that their papers are published; for example, Goulburn and Canberra, the two cities, have daily local newspapers, but the service towns only have two issues (some only one) per week, and in no instance does any centre on the Tablelands ranked lower than a town have a local paper published in it! Moreover there is also a close relation between the number of times per week that a paper is published and its field of circulation, the larger centres with more issues each week circulating

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1 Though there are no examples on the Southern Tablelands, Australian villages, and urbanised settlements that do not have a separate existence as towns, do give their names to local papers, as on the Central Coast of N.S.W. where weekly papers bear the names of resort villages (The Entrance News at Tuggerah Lakes) or settlements, (Woy Woy Herald serving several areas on Brisbane Water), though they are not published there but in the towns of Wyong and Gosford, respectively, both of which are several miles away from the settlements concerned.
their papers more widely through their surroundings than do the smaller towns with fewer issues.

**Cinemas**

Throughout the Southern Tablelands, regular cinema screenings are made only in the service towns, equipped with modern theatres, and in the large villages of Gunning and Captain's Flat, where the seating accommodation and theatre appointments generally are not so elaborate. In the villages, on the other hand, if there are any screenings of films at all they are usually made by itinerant showmen, almost invariably in the local hall, but sometimes in some other make-shift building.

**Banks**

Separate bank buildings containing the offices of the large trading banks are found on the Southern Tablelands only in the cities, the service towns and the large villages of Gunning and Captain's Flat. In all other centres where banking facilities exist, the banking agencies occupy parts of shops or premises used primarily for purposes other than banking.

**Department stores**

The possession of at least one department store seems to be another feature worth noting which helps to distinguish a town from a village on the Southern Tablelands and indicates that the town is sufficiently important to justify the establishment of this kind of commercial unit, which, from the evidence of the usual practice on the Tablelands, generally requires to spread its trading activities up to a radius of 25-30 miles over the surrounding country in addition to those in the town area in which it is set. Provided only that it fulfills this requirement of service for rural areas as well as for the town, the department store need not be particularly large, though it will of course have much of the variety that characterises similar but larger stores in the cities.

**Specialty stores**

Specialty stores, such as butcheries, bakeries, cafes, delicatessens, and those specialising in the sale of fruit and vegetables, groceries, softgoods, footwear, hardware, electrical goods, fancy goods and other commodities, are more numerous in the towns than in the large villages. To indicate the degree of centrality that might
reasonably be expected of a town on the Southern Tablelands, it is estimated (somewhat arbitrarily) that it should possess the variety of such establishments which would be found in a grouping of at least a dozen of them in the one centre - normally about 8 to 10 different kinds of shops. In this connection, Gunning would qualify as a town, but it does not measure up satisfactorily to some of the other criteria, and Captain's Flat would almost do so, though all the other centres ranking lower than towns, contain much fewer than 12 shops.

Public utilities Since some of the villages on the Southern Tablelands, especially those near a few of the towns, are provided with both water and electricity supplies, the minimum requirements of a town in the matter of public utilities are set at three (water, electricity, or gas and sewerage) and the proviso is added that the central town area, at least, should be sewered. Evidence from the Tablelands shows that the provision of these amenities has caused small but significant centripetal movements of population, as in the cases of Yass and Crookwell in which many rural land-holders have bought town residences. This invasion by the squatters, as it is called by the townspeople, has become so pronounced in Crookwell during recent years that normal town housing has been greatly handicapped.

Health and fire protection services In the case of the Southern Tablelands, the minimum requirements of a town are a public hospital and an ambulance centre (equipped with a vehicle or vehicles) for conveying patients to and from hospital, not merely a first-aid post, and a fire station. Captain's Flat has all three, simply because of the

1 Though it measures up satisfactorily to all the other criteria, Braidwood is the only service town which does not possess three public utilities. It has an electricity supply, and a water supply line is now being connected, but it is not sewered and has no gas supply. Sewerage of the central area may be expected to follow closely after the water pipe-line is laid.
hazardous nature of the mining activities on which it depends, not because it is in any sense a service centre for the surrounding districts, as the towns are.

In order to be distinguished from a town, a city needs to have more, larger, and more varied functional institutions and services. Moreover it should be more varied morphologically than a town, with clearly articulated functional parts, including unmistakably residential suburbs. Together with considerations of the sizes of the centres, these factors have been borne in mind in distinguishing Canberra and Goulburn as the only cities on the Southern Tablelands, though the following characteristics are also suggested as serving a useful purpose when an attempt is being made to identify an Australian urban centre as a city: a multiplicity of retail and wholesale trading establishments, with at least several department stores; a daily local newspaper circulation; several churches of each denomination represented in it, and sometimes one or more cathedrals; a full range of educational facilities up to and including tertiary education, such as diploma courses in a technical college, degree courses in a university or a university college or their equivalent in a special training college or institute (teachers', agricultural and the like); a full medical service, as represented by a modern and well-equipped hospital and specialist doctors in practice in the centre; and the regional headquarters of several State governmental agencies, quite distinct from the centre's own local administrative
CHAPTER V

1 CANBERRA - A CIVIC ANOMALY

The federal city of Canberra may well be termed a civic anomaly for it is at one and the same time the national capital of Australia and the largest city on the Southern Tablelands, yet in the local hierarchy a centre of humble rank with a small and insignificant field of local influence. Except for very strong affiliations with Queanbeyan, it has few links, and those minor, with other centres on the Tablelands. Moreover, among them it has a very distinctive identity, contrasting absolutely with all the other centres in urban evolution, morphology, aspect and function; even its form of local administration is unique in the area.

Planned and developed since Federation with a preconceived function as the seat of government for the Commonwealth, Canberra is often described as an artificial capital, in contrast, for instance, to a natural capital, such as Melbourne, in which a governmental function was acquired normally by an established and important centre; but on the other hand it has been claimed that it

"is as natural as any other town in Australia. Just as Goulburn, for example, is the natural response to the need for a market and service centre in an area of primary production, so is Canberra the natural response to the need for a neutral centre of government - a need felt (though not always met) in all federal states". ¹

As the national capital, the city occupies an eccentric position relative to the territory it administers, though it is not far from the centre of gravity of population in Australia, since most of the continent's people live south and east of a line drawn from Adelaide to Brisbane.

Theoretically, as a city planned in toto in advance of any building, it was intended that in all stages of its construction even the minutest details of its form were to be blue-printed by planners before being translated into urban realities. Though the city's growth accords fairly closely on the whole with the original plan there still remain a few "temporary" spots in it, some of which - such as former construction camps at Causeway beside the railway station and Westlake adjoining the Legation Area of the city - are all too plainly urban realities.

In that its growth has been specially rapid and that planning has been continued in all stages of its development, Canberra is completely unlike all other centres on the Southern Tablelands except the much smaller but new and planned town of

North Cooma, which, like the federal city, might be regarded as a product more of urban revolution than of urban evolution.

The city has supplanted a small but natural village growth on a part of its site, and in the course of its building during the last four decades all traces of that village, except a small church and school and a few farm houses, have been obliterated. In other ways, too, changes in the landscapes on the city site have been both sweeping and rapid; for example, even in the central area (the least urbanised part of the city) pasture paddocks on either side of the Molonglo River have been transformed into recreation fields, and parklands with spacious gardens and lawns set amid a network of avenues lined with exotic and indigenous trees and shrubs. Nor have the changes ended yet, for coincident with the city's particularly rapid growth since 1945 - at a rate much greater than any other centre on the Tablelands, including Goulburn - its suburban growth is causing the built-up limits to be extended widely in the north, the southeast and the southwest.

Canberra's origin is rooted in the political and commercial rivalries that troubled the relations of colonial Victoria and New South Wales, and in consequence political factors were involved equally as much in the selection of its general location as landscape values were in the selection of its specific site.

Some aspects of the growth of Canberra as expressed by the changes in its population are considered in Appendix 9.
The city is where it is principally because Victoria insisted, as one of the terms on which it would enter into a federation, that the national capital should be built no nearer than 100 miles from Sydney, though under pressure from New South Wales it agreed grudgingly that the city should be in the latter State: on aesthetic grounds and for practical considerations, the particular site was selected because of the physical advantages which it and its surroundings offered for the building of a large and dignified city.

The Physical Setting and the Site Factor

The limits of the city enclose about 12 square miles of land around the Molonglo River in the northeast of the Australian Capital Territory, an area of 940 square miles ceded to the Commonwealth by New South Wales and vested in it on and from January 1st, 1911.

The site, which may be described as a lake-plain in a maturely-dissected topography, consists of a plain interspersed with low knolls lying about 1,900 feet above sea level, but inside and outside the city boundaries there are many rounded residual hills rising a few hundred feet above the general level: near the city they stand out as isolated cones, but to the north and east they form ridges in which rounded hills alternate with saddles.

At about 20 miles to the east and west, respectively, of the city, the hill-and-plain topography is replaced by higher country composed of several sets of north-south ranges: those lying east from the city rise from 3,000-4,000 feet above the sea,
but along the western boundary of the Australian Capital Territory the ranges are somewhat higher, such as the Tidbinbilla (to 5,000+ feet) and Bimberi (6,000+ feet).

Except for a few, but generally slight, modifications, Canberra's development is proceeding along the lines indicated by the city plan (Fig. 28), gazetted in 1925 by the Federal Capital Commission, a statutory body entrusted with the early stages of city building: essentially, this plan retains the form in which it was finally modified by its author, Walter Burley Griffin.

Griffin's plan for developing the city was devised to gain the maximum advantage from the topography of the site, and wherever possible he used the western boundary ranges of the Territory as a scenic background. The rounded residual hills en-circling the natural amphitheatre of the city site were planned to be the end points of vistas from within the city, and many of the lower knolls in the city area served Griffin as sites for public buildings; because all are gently sloping he was also able to use them as terminal points for major city roads. The competition for a city design required that a major water feature be

1 In its original form, Griffin's plan had won first prize (£A 1750) in a competition conducted by the Commonwealth Government. The competition was international, but not world-wide, because the Royal Institute of British Architects, supported by the Institution of Engineers, advised their affiliated associations throughout the British Empire not to participate in it; exception was taken to a clause in the conditions which provided for the winning design to be selected by a political and technical instead of a wholly technical panel of judges.
PLAN AS GAZETTED BY FEDERAL CAPITAL COMMISSION 1925
included, as an ornamentation to the city, and Griffin planned that this should take the form of a chain of lakes and water-basins in the open Molonglo valley in the centre of the city site.

Long before Griffin had minutely examined the details of its topography so that he could draw up his plan, the city site had been the scene of two pre-city phases of settlement - the initial pastoral occupation of the area, followed later, by the growth of a small rural hamlet, both of which conformed in most respects with contemporary settlements of a similar type in colonial Australia.

Settlement Evolution on the Canberra Site (Figs. 29-32)

Soon after the Canberra Plains (originally called the Limestone Plains) were discovered in 1820, they were settled by pastoralists, and by the 1830's nearly all the land for many miles around that was suitable in any way for farming had been alienated from the Crown. Most of the earliest settlers, however, were tenant farmers or overseer managers, for, until the late 1830's, few of the owners were actually resident on the land, principally acquired by grant and occasionally by purchase.

The pastoral settlement, which soon became known as \(^1\)Canberry, consisted of a handful of dispersed farm houses, whose few inhabitants were beset by many difficulties, including raids

\(^1\) "Canberra" was adopted as the official name after it had been proclaimed by Lady Denman at a ceremony on the city site on 12th March, 1913.
GROWTH OF CANBERRA TO 1953
Fig. 30

Canberra Built-up Area 1933

KEY

- Industrial
- Public and semi-public buildings
- Houses, hostels, boarding houses, flats
- Single house residences
- Shops, offices & garages
- Railway
- Hospital
- Schools, universities etc.
- Church
- Recreation & parks

SCALE

MILES
For key see Fig. 30

CANBERRA BUILT-UP AREA 1945
Fig. 32

For key see Fig. 30

CANBERRA BUILT-UP AREA 1953
on their homes and stock from time to time by bushrangers inhabiting the mountains west of the Murrumbidgee River, and a series of floods and minor droughts which culminated in the severe general drought between 1838-42 responsible for the colony wide depression of 1841-43.

During the 1840's, an Anglican church and a church school and library were built at Limestone Plains, and with the church serving as a nucleating force the outlines of a small hamlet began to take shape. In the 1860's it contained a store and a post office (opened 1863), but like the rest of the Southern Tablelands its inhabitants were harassed in many ways: for example, by shortages of rural labour caused by the gold rushes of the 1850's and 1860's, by a recrudescence of bushranging following the rushes to the Southern Goldfields, by severe droughts in the 1860's and again in the 1880's and 1890's, by major floods during the 1860's, and by the continuing isolation of the settlement from the mainsprings of colonial life and activity in Sydney. Some idea of this isolation may be gauged from the fact that the time of transit for mails going to Sydney was 54 hours, reduced to 38 hours in 1866; at present the best time by rail is 4½ hours by Diesel train, by air one hour, and there are 7 flights in and 8 flights out per day.

But for the historical accident of the inter-colonial rivalry of Victoria and New South Wales which led to the building of Canberra, there are few grounds to suppose that the status
and the form of the original hamlet of Canberry would have been much altered during the present century.

After Federation the inter-colonial rivalries persisted as inter-State rivalries, and even now, more than fifty years after Federation, the embers of that feud glow fitfully on occasions. It is not surprising, therefore, that every stage in the development of Canberra - from the conceiving of the city, to the selection of its site, and to the actual building of the city - has been accompanied by discord of some kind.

Compromise clauses in the Commonwealth Constitution Act (1900), provided for a capital city to be established in New South Wales, in a Commonwealth Territory to be handed over by that State, at a distance of not less than 100 miles from Sydney, but until the new seat of government was made ready Parliament was to continue sitting in Melbourne. Differences then arose concerning the site, and later the plan, to be selected. As many as 37 different sites were suggested for the capital city, but when the Federal Parliament passed the Seat of Government Act (1908), the Yass-Canberra site was chosen in place of one at Dalgety which had been selected under a similar Act in 1904.

That the Government of New South Wales should compel the Federal Government to abandon its choice of the Dalgety site, already on the statute, demonstrated the extraordinary lengths to which the politicians of the day permitted their feelings of
inter-State rivalry to carry them. Before the Act naming Dalgety as the site for a capital was passed in 1904, some politicians in New South Wales were strongly opposed to it on the grounds that it was too far beyond the statutory distance from Sydney, and because it was so inaccessible that the cost of building a railway to it from Sydney would be prohibitive (to-day the nearest point on the Sydney-Bombala railway is less than 20 miles from Dalgety!). After the Act was passed the State Government objected to the measure on the grounds that the Federal Parliament had not restricted its choice to one of the three sites offered to it, at Tumut, Lyndhurst and Yass, and also because an area of 900 square miles was being claimed for a territory containing the seat of government when the State was not prepared to hand over more than 200 square miles. It refused to cede land around the Dalgety site, and obstructed the Federal Government's idea of developing a capital there, by invoking the Commonwealth constitution and claiming that section 125, relating to the location of the capital and the extent of its territory, had been broken by the 1904 Act, which was therefore unconstitutional.

Canberra's selection was confirmed by the passing of the Seat of Government Acceptance Act (1911), by which time the

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Commonwealth Government had succeeded in securing a larger area for the Federal Territory than New South Wales was prepared to give originally.

Many different designs were then proposed for the city, but ultimately in 1913 Griffin's plan was selected, and after he had modified it on the ground in 1916, city building began, only to be suspended from 1917 to 1920 on account of World War I. Building operations were resumed 1921-26, and a skeleton city was built ready for occupation by the first parliament to assemble there in 1927: during this stage of its life, Canberra, apart from the buildings under construction, consisted of several large "canvas towns" disposed through the city area; the principal of these were the "White City" (a large camp on the Australian National University site at Acton), another large camp at Westlake, a horse-pugs' camp (at Riverside, near Barton) and camps beside the power-house at Kingston, near the brickworks at Yarralumla, and on the northern side of the river.

Except during the depression years of the early 1930's, city building has continued since 1927, though its growth has been most marked since 1945 (Figs.29-32). To some extent, however, the city's rapid growth in recent years has been unbalanced, for, though many new blocks of government offices and residences and some large hostels have been built, little leeway has been made in reducing the long list of people waiting to obtain accommodation,

1 The term is equivalent to 'horse-lines' used in describing military camps.
commercial premises have not been erected in anything like the numbers needed for the expanding population, and the inhabitants are feeling the pinch in other directions because of a big lag in the building of service institutions - such as schools which fall below present needs and much below what will be required in the near future, even discounting the large influx of public servants which will follow the transfer of several departments from Melbourne.

To a considerable extent the city has grown up by the building of a section (or sections) particularly in one piece as it were. This raises the question "How does the actual layout of the city differ from its planned layout?" Its answer demands a further investigation of the plan.

**The Morphology of the City (Figs. 28, 33-34)**

Griffin chose Mount Ainslie, Red Hill, Capital Hill, Black Mountain and Mount Pleasant as the key points in his plan. From Red Hill he projected his Land Axis (which served as the major city axis) northeast to Mount Ainslie, passing through 1 Capital Hill (near the site of the permanent Parliament House, and, therefore, the focal point of the city). Across this he projected two minor city axes - a Water Axis, projected southeast from Black Mountain to intersect the major axis at a point about

1 The existing Parliament House is a provisional one which will be used as government offices when the future permanent House is built.
CONVENTIONALIZED DIAGRAM SHOWING THE
FUNCTIONAL PATTERN OF CANBERRA - 1952
(Burlay Griffin's three major planning axes are superimposed)

Not drawn to scale
81.

halfway between Red Hill and Mount Ainslie, and a parallel Municipal Axis, projected northwest from Mount Pleasant to pass through the civic centre (Fig.28). Both form right angles at their points of intersection with the land axis. Capital Hill was planned to be the point of convergence of the city's main traffic arteries, each 200 feet wide.

Around the three central axes Griffin planned for a balanced concentration of urban cells in which the streets formed the blocks into varied geometrical shapes, these were to be articulated according to the respective function of each, but the whole was to be integrated by a largely radial system of throughways. There were to be a national and a civic centre in the heart of the city, around which the residential suburbs, each with its own local shops, were to be built. Provision was also made for an industrial area and for railway marshalling yards north of the civic centre, in what is the present division of Dickson. The national centre - the administrative section of the city - was to contain the public buildings, placed symmetrically across the major city axis, south of the river. These buildings were to be in a parkland setting in front of the permanent Parliament House, but their height was to be restricted so that none could obstruct the view from Parliament House of the Australian War Memorial on the lower slopes of Mount Ainslie, which Griffin intended as the site of a National Memorial. The civic centre, the principal commercial area and the seat of municipal government, was to be located
on a low knoll (Vernon) on the northern side of the river, opposite the national centre. The central water basins between them, to be crossed by a broad highway passing over a high-level bridge, were to be large enough to separate these two functional parts of the city into distinct urban groupings. The design of the residential sections of the city allowed for indefinite suburban expansion, with no major engineering problems to be overcome in the laying of pipe-lines for water-supply and drainage and sewerage services.

Griffin's plan has been varied most significantly by the abandoning of his proposals for a city railway and for railway marshalling yards and an industrial area at Dickson; also, by changes that have been made in his projected lake system, by the re-designing of the layout of some of the newer residential suburbs, and by reductions in the widths of some streets, such as Majura Avenue reduced from 200 feet to 100 feet. Though these changes strongly affect some parts of the city, they do not depart radically from the main features and principles of Griffin's plan except perhaps for the proposed major changes in the water features of the central area; the differences between the planned and actual layouts result mainly from the way in which city building has progressed to date, and from several urban developments which might be regarded as natural in that they were corollaries of certain phases of Canberra's growth.

As yet, the building intended to serve as the permanent home of the legislature has not been built between the existing
Parliament House and Capital Hill, and in consequence the latter has failed to become the focal point of the city. Indeed, the geographical centre of the city as developed is a tract of alluvial land along the Molonglo River in front of Parliament House, and about halfway between Red Hill and the existing Civic Centre (itself just north of Griffin's civic focus on Vernon). This strip of riverside land - used in part for growing fodder crops and for some market gardening - and its encompassing belts of parks and gardens constitute the city's "open heart", a strange contrast to the built-up core of closely agglomerated shops, offices and warehouses usually found in a city. Around this inner zone of open spaces there is a zone of public buildings (Parliament House, the National Library, Albert Hall, the Community Hospital and government offices), with the buildings dispersed in the suburbs of Barton and Acton and in Civic Centre; also an outer residential zone containing some small commercial cells and a few minor industries, mostly of a service type except at Kingston and Causeway where there are some industries of a heavier type. Pasturing and some minor farming activities are practised near the city's margins, inside and outside it boundaries (Fig. 34).

In actual fact, though Griffin's major axes are clear on the map and even on the ground, their only significance is that they provide, on paper, the framework for the design and, on the ground, vistas. The true axis of the city's life is, and will probably always remain, the north-south road between Civic
Centre and the governmental centre. To the north this is continued by Northbourne Avenue, which by leading to the Federal Highway and the Yass-Melbourne road is the land entry from all State capitals; to the south it is continued with a southeast-erly slant, towards Queanbeyan, and through the commercial centre of Kingston and the industrial centre near the railway station at Causeway, where development has been rapid during recent years. This pull of the north-south axis of the city's business life and activities towards the southeast is likely to become more marked in the future, because most of the industries at Kingston and Causeway are to be transferred to Molonglo, about halfway between Canberra and Queanbeyan. To date, Griffin's water and municipal axes have no significance except for planning purposes; gazetted modifications of the city lake scheme (principally, the dropping of West Lake) do not ostensibly interfere in any way with a series of central water basins projected for future development between an East Lake and a West Lake originally planned, but no moves have been made yet for their construction. The municipal axis is even less realistically related to city life, for, Canberra, administered as it is by the Department of the Interior with its headquarters at Acton, may be said to have no municipal existence. The Civic Centre that has developed is an administrative-commercial cell, built north of the open spaces on Vernon on Griffin's municipal axis.

Though Griffin planned for an industrial area and railway
marshalling yards at Dickson, on what was to be the Canberra City section of a Yass-Queanbeyan railway, industry has not developed on his planned site because the city railway scheme has been abandoned. Instead, a small industrial area, containing many services rather than industries, has been established just north of Civic Centre in the residential suburb of Braddon, and a more important industrial concentration has grown at Kingston and Causeway beside the existing railway terminus. There was no provision for this in Griffin's plan, but it is a normal building development that is a natural response to the railway transport arrangements of the city. The city's planning authorities have recognised the need for an industrial area of its type in Canberra, and the projected transfer of the Kingston and Causeway industries to Molonglo is intended to prevent it from interfering unduly with the planned development of the administrative and residential areas.

Because Canberra's plan departs so radically from the standard grid characterising the layout of most Australian towns, its aspect is in many respects unique in the continent and calls for special comment.

**The Urban Aspect of Canberra**

The conceiving of Canberra as a gardened city, distinct from a garden city, and the resulting provision on a lavish scale of parks, gardens and recreational fields, and broad tree- and shrub-lined verges along nearly all its roads, gives the city an
air of unusual expansiveness. This has been accentuated still further by the way in which city building has progressed to date, for, in opposition to departmental officials who strove for an initial concentration of building on the south side of the Molonglo River, Griffin made an early start on the building of Civic Centre as well; from these original urban nuclei, three miles apart, settlement has spread outwards, but with little infilling of the land between them. Moreover, land in the early-developed residential areas was generously subdivided to provide large building lots, many half an acre or more, thus causing these suburbs to have low densities of population which contrast sharply from the high densities now found in some of the outer suburbs (Fig.35) where the sizes of the building lots have been deliberately made smaller.

1 Residential densities shown in Fig.35 are defined as:
Net Residential Density is the average number of persons per acre, comprising the land within the curtilage of the dwellings, access or internal roads together with half the fronting area of main roads where the latter are contiguous to the residential property. (In cases where the boundary avenues are not devoted to internal circulation alone, only 50 feet width of the fronting area is included.)
Gross Residential Density is the average number of persons per acre of a neighbourhood, that is, it covers both residential areas and amenity reservations providing for a degree of self-containment dependent on the number of people served.
GROSS & NET POPULATION DENSITIES OF RESIDENTIAL SUBURBS (March 1955)
This measure has been introduced in order to help remove some of the many difficulties created for the city's inhabitants by its spaciousness. Dispersion of the three main business centres often results in long and protracted shopping excursions, in some instances amounting to several miles. Moreover, distances between suburbs on opposite sides of the city often seem to be greater than they really are because so much of the central area still consists of open spaces, for, in addition to the permanent parklands, there are also large tracts of vacant land earmarked for future public buildings. Nor is the factor of distance becoming less significant in the life of the city as it grows, for, since Australians generally dislike living in communal type buildings, the residential suburbs are being rapidly expanded to the

1 These are Kingston and Manuka about a mile apart on the south side of the Molonglo River and Civic Centre, about three miles away from both, on the northern side. Because the individual shopping centres lack the variety of facilities that are afforded by one large and central shopping area, a shopper may in some cases be forced to visit all three in order to satisfy his shopping needs. This entails loss of time and money (bus fares or petrol).

Current commercial building expansion will help to alleviate this problem and expansions to existing shopping blocks at Civic Centre, Kingston and Manuka will shift the proportion of shopping facilities between the two sides of the city. At present 36% of the city's shopping facilities are at Civic, 46% at Kingston-Manuka, and 18% in suburban shopping areas. When current expansion programmes are completed Civic will have 49% of all shopping facilities, Kingston-Manuka 37%, and suburban centres 14%.
city's outer limits as large numbers of villas spring up, almost overnight, on whole sections of newly-subdivided land: this feature of the city's growth has been responsible for the sizes of the individual building allotments in the new suburbs being reduced, in consequence of the greater costs involved in providing water and electricity supplies and sewerage services through constantly widening circles of built-up areas well away from the city's centre.

For visitors to Canberra, and even for many residents of the city the inconveniences caused by space do not end there, because:

"The situation is not helped by the extraordinary difficulty of finding one's way about, especially after dark; this is most acute in the 'circles' area of Forrest, where the numerous flat intersections of curves of wide radius must have been responsible for the loss of thousands of gallons of petrol, not to mention time, and temper, spent in going round in small circles."¹

The planned development of the city's landscapes, characterised by the planting of many exotic trees and shrubs of deciduous habit in addition to indigenous evergreen species, has contributed much to the individuality of Canberra's aspect. The growth cycles of the deciduous trees are particularly important in this respect because of the striking and colourful contrasts which they produce in the city's landscapes throughout the year, in consequence of which, too, the residents are perhaps more sensible of a distinctly seasonal rhythm than is the case at any

other place in Australia, even though Canberra's climate is less varied seasonally than that of many other localities in the continent. The more significant seasonal changes in the weather and the landscapes of the city may be summarised briefly as follow:

In Spring, the city is blazoned with surges of colour as almond, prunus, peach, hawthorn and other deciduous trees burst into blossom in turn, and as willows, elms, poplars, planes and other trees take on their spring foliage; air and ground temperatures rise slightly, though cold, and often constant, winds from the west may keep them low; and frosts usually abate in frequency and in severity.

In Summer, temperatures are usually moderate to high; the Canberra "sea breeze" blows with fair constancy after most hot days; summer drought conditions manifest themselves in the dying off of natural grasses in the city's open spaces, and, when the droughts are severe, in the wilting even of large exotic trees; the city and surrounding districts are enveloped at times by dust hazes from inland dust storms, and more often by thick smoke hazes from bushfires in the nearby ranges; and, on occasions, the risk of bush and grass fires in the city area becomes high.

In Autumn, Canberra often experiences bright and sunny days with remarkably clear air; colour changes (brilliant golds and crimsons) occur in some deciduous trees in early autumn; "fall" becomes more than an American peculiarity of speech (as it is to most Australians) when leaf litter begins to accumulate in the streets and gardens; temperature readings drop appreciably, and there are usually heavy morning dews, with occasional frosts; and just before the onset of the cold winter many native birds, such as currawongs, lowries and parrakeets migrate from the high ranges in the west, either to the city or through the city on their way to the lower coastal lands.

In Winter, the deciduous vegetation within the city presents a gaunt and naked aspect; low temperatures are general and heavy frosts occur frequently; on some days dense and frosty fogs may persist well into the
afternoon; snow is usually visible on the western boundary ranges of the Australian Capital Territory, 30 miles away, for several months; cold and biting winds blow fairly regularly from the snow-capped ranges making conditions unpleasant in the city; snow-flakes usually fall in the city on at least several occasions each winter, and in some years falls are sufficiently heavy to form a complete ground cover.

Though the urban aspect of Canberra as a whole is "different", its public and private buildings nevertheless conform fairly closely with the pattern generally found in other Australian cities and towns, except also perhaps that it contains more "temporary" and "provisional" buildings; the standards of many of these buildings fall below those originally intended for Canberra, certainly far below those in keeping with its dignity as a planned national capital.

Concerning the public architecture of Canberra, it has been said, that it

"... reflects current Australian artistic attitudes a little too faithfully: one has the impression of a desire to be modern but not to take any risks. There are thus few, if any, really bad buildings; but on the other hand there are few that are really impressive. Typical also is the emphasis on horizontal lines, which fit well enough into the setting but need a little more relief than they get." 2

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1 These affect the city's transport arrangements to some extent by causing the Canberra airport to be closed for varying periods, on the average of about 3 or 4 days in each of the winter months.

2 O.H.K. Spate, ibid. p.236.
and concerning the domestic buildings, that

"The private houses of Canberra also conform to the general Australian pattern in that there is practically no residential street architecture of the European type; instead there are detached houses in a broad mesh of suburban roads. Except in the raw new areas there are only a few streets in which houses are more conspicuous than vegetation: for example, Bougainville Street behind Manuka shopping centre, or the parts of Canberra and Ainslie avenues bordered by two storey blocks of flats. Elsewhere trees and shrubs are dominant."¹

The face of Canberra is changing rapidly, and even greater changes may be expected in the future, if only as a result of the momentum gained in the city's present rate of growth, but, though the existing pattern of residential expansion is likely to be repeated in the outer suburbs as yet undeveloped, the most significant changes for the life of the city as a whole will perhaps result when large tracts of land now lying vacant in the central area are used for projected public buildings. The construction of these buildings and the general development of the inner part of the city will depend to a large extent, of course, on the steps taken to give Canberra a stronger identity as the national capital - an identity that will become complete only when all the executive branches of the federal administration are concentrated in the city. This, naturally, raises the question "How does Canberra function now as an urban centre?"

**The City's Functions**

As the political capital of Australia Canberra is primarily an administrative city; it has also a much less important

function as a resort centre for tourists attracted by its national institutions and gardened landscapes.

During recent years it has gained popularity as a meeting place for governmental, academic and other conferences, and this function is becoming increasingly important; to a minor degree also, small-scale industry (internally-directed and serving purely local needs) and an unusual form of local administration are additional functions of Canberra: all are ancillary to government, and, except tourism, comparatively insignificant.

Quite apart from its specialised function and the other ways in which its urban geography differs from that of neighbouring centres, Canberra stands out clearly an anomaly as a local service centre on the Southern Tablelands, for unlike the service towns it has but a small urban field, and except for a couple of minor services its influence is insignificant outside the city's boundaries. The special circumstances surrounding its establishment and the way in which it has developed up to the present time have doubtless been responsible for its inability to impose commercial and administrative suzerainty over neighbouring areas and centres and so acquire an urban field for itself, commensurate with its size, in the way that Goulburn and all the service towns have done.

To explain this, we may consider: first, that Canberra is not a natural urban growth, in that it did not grow up in response to the needs of the local environment, and from the
beginning has been developed primarily as a centre of government, with little regard being given to the promoting of any function other than federal administration; secondly, that the city's field of local administration has been narrowly circumscribed from the outset by the boundaries of the Australian Capital Territory, which run close to Canberra and cut it off from the relatively closely settled Yass-Gunning area; thirdly, that in the initial stages of its growth the city was forced to depend absolutely on Queanbeyan for its existence, and fourthly, that in consequence of its specialised function and because of severe "growing pains" (expressed, for instance, in an inadequacy of commercial facilities and other services for its own rapidly-growing population) the city has not been able to compete effectively against the other towns as a local service centre.

On the reverse side, however, evidence that Canberra's governmental and auxiliary functions are growing more important seems to suggest that the city is slowly evolving as a political capital along the lines that were originally intended for its development, though, as yet, it still remains a very immature capital city, if judged by generally accepted standards. Quite apart from the big discrepancy in the size of Canberra compared with the sizes of other capitals, much of its executive authority still remains delegated away from it in Melbourne where some important government departments, such as Defence, Civil Aviation, Supply and Shipping, and National Development, still have their
headquarters; moreover, far from being the main centre of cultural leadership in Australia, the city plays a most insignificant role in this respect especially so compared with the older State capitals like Sydney and Melbourne which continue to be the major repositories and channelling houses of external cultural influences.

The progressive transfers of more branches of the federal administration from Melbourne into a large block of buildings near the existing Parliament House, scheduled for completion in several stages within the next few years, are a practical step towards giving Canberra stronger identity as a centre of government (cf. p.91).

Signs that the city was beginning to mature as a political capital first became evident during World War II largely because of the interest that came to be focussed on the federal legislature during that national emergency, when the people of Australia felt impelled to take a greater interest in the actions of their parliament than they had ever done previously: apart from the momentous issues involved in the central direction of Australia's war effort from Canberra, this interest was still more concentrated on the capital after emergency regulations affecting the daily lives of all Australians, such as rationing

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and price control, began to be formulated in and applied from the city.

In the later war years, and since then, Canberra has also gained some political prestige in consequence of an increase in the number of ambassadorial and diplomatic links with other countries, while further evidence that the city is maturing as a capital in the political sense is to be found in the setting up there of central secretariats of bodies like the Associated Chambers of Commerce, the Associated Chambers of Manufacture and industrial unions and organisations.

The lack of balance, produced in large measure by the high degree of specialisation of its governmental function, is not without many disadvantages for Canberra and its people, and not the least of these is the absence of diversified forms of employment for the city's rising generations, since, at present, there is little scope for jobs except in the public service or the building trades.

In 1955, a general inquiry into the development of Canberra was made by a Senate Select Committee, and among other things much publicity was given to the problems caused by the city's lack of functional balance, and to the considering of ways...

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1 The Committee (seven Senators) was appointed, 11th November, 1954, "to inquire into and report upon the development of Canberra in relation to the original plan and subsequent modifications, and matters incidental thereto." It reported to the Senate on 1st October, 1955.
and means of overcoming them. As represented in the evidence given before the Committee, there was a general consensus of opinion, in both official circles (for example, the Town Planning Section of the Department of the Interior, and the Canberra Branch of the Department of National Development) and in non-official, that the city urgently needs more diverse functions than it now possesses, and to achieve this, possible ways and means of developing Canberra in the future as a more important national service centre and as a regional service centre are being scouted.

In order to broaden the scope and the basis of Canberra's functions as a national centre it was suggested that this will be achieved principally through the enlarged federal administration which will obtain when the existing government departments in Melbourne are transferred to Canberra, though post-graduate education at the Australian National University, greatly expanded tourist activities, and the development of Canberra as a national centre by non-governmental organisations (educational, religious, and business) were also suggested as supplementary functions likely to achieve this end.

For the purpose of trying to promote Canberra's development as a regional service centre, the following were put forward as possible avenues of development suitable for further investigation: the fostering of selected industries in the Australian Capital Territory, the development of an efficient transport web
for the Southern Tablelands centred on Canberra, the encouragement of commercial enterprise to promote Canberra's development as a retail trading centre, the enlargement of Canberra's field of educational and health services, the more effective use of the land and the natural resources of the Australian Capital Territory, the furthering of the city's social and cultural development with an eye to attracting additional tourist business, and the deliberate encouragement of a regional consciousness with a focus on Canberra among the people of southeastern New South Wales by means of propaganda through the city's broadcasting stations which now provide regional programmes.

Each of these measures, if followed, would no doubt cause some benefits at least to accrue to Canberra, though it seems improbable that the desired result could be achieved; after all, towns normally grow up as regional service centres to fulfil the needs of their local environments, and are by no means necessarily transformed into such after starting life with an entirely different purpose. Moreover, this problem of Canberra's possible development as a regional centre is made all the more complex by difficulties of other sorts, such as the leeway it would have to make up and the opposition it would have to surmount in establishing itself as a commercial centre in competition with Goulburn, now firmly entrenched as the major retailing centre for much of the Southern Tablelands, and not likely to yield any part of its urban field without a stern struggle; also, the conflicts that
would inevitably arise between Federal and State political interests if any expansion of Canberra's field of local administration outside the Australian Capital Territory was mooted - conflicts that are now prevented from breaking out only by the firmness of the territorial boundary as a line of administrative division. Further, it seems certain that if any such expansion was attempted the Commonwealth Government would be brought into conflict with the State Governments by spending in this way federal money (contributed by the States indirectly).

In some ways, Canberra's functions may well become more varied. If the city's present rate of growth is continued it should have a population of about 70-75,000 in about 15 years, and probably about 100,000 by the end of the century, and it is reasonable to assume that such concentrations of people would be sufficient to provide a market for, and stimulate the natural growth of miscellaneous minor industries. Almost certainly Canberra is likely to develop as a much more important tourist centre than it is now, since tourism is, to a large extent, an ancillary function of all national capitals: as yet this is the only minor urban function to be grafted successfully on Canberra's central and major function of government all the others have been

1 The Director of the Canberra Tourist Bureau, in evidence submitted to the Senate Select Committee on Canberra, estimated that tourists to the city increased from about 100,000 in 1938/39 to about 250,000 in 1954/55, and that their business was worth about £1½ million in the last fiscal year. In the Director's words, however, the estimate is only an "informed guess".
indifferent "buddings".

To promote the city's development as a health service centre, plans have been prepared providing for an increase in accommodation at Canberra Community Hospital from the existing 200 beds to a maximum of 650 beds, which will also involve extension of the existing hospital buildings. An earlier proposal for three new suburban hospitals in Canberra, and a sanatorium in nearby hills, was rejected by federal health and administrative officials as impracticable and uneconomic.

Industries likely to be suggested for future development in Canberra are expected to be minor ones of a light nature, and in this connection it is of interest to note that the Commonwealth Government has paramount rights over the States for electricity generated in the Snowy Mountains power scheme; the first "block" of power became available from the Guthega-Munyang project in the upper Snowy Valley in February, 1955, but power is not likely to be cheaper than that supplied at present by the Southern Electricity Supply System of New South Wales.

Local administration in Canberra is as yet a function of the Commonwealth Department of the Interior, which may or may not heed the advice of a partly-elected body, the Australian Capital Territory Advisory Council, containing five members elected by adult suffrage, and four members appointed by the Government. In this, the city contrasts with Goulburn, Yass, Cooma, and Queanbeyan, which have democratically elected
aldermanic councils with at least some measure of local autonomy.

In many ways Queanbeyan plays an important part in the life and the functioning of Canberra, but since this chapter is concerned primarily in considering Canberra as an extra-hierarchical centre on the Southern Tablelands, the symbiotic relationship between these centres is examined in the study of Queanbeyan.
CHAPTER VI

GOULBURN - THE URBAN PRIMATE

Though now displaced as the largest population centre on the Southern Tablelands as a result of Canberra's particularly rapid growth since 1947, Goulburn still stands out undisputedly as the primate of the local urban hierarchy, with its regional importance and influence clearly transcending those of the federal city and all the other centres.

As a commercial and service centre, it assumed urban leadership at an early stage in the development of the Southern Tablelands, partly because of adventitious, though perhaps inevitable, circumstances, such as the re-directing of the Great South Road in the 1830's (Chapter II), but primarily because of the advantages of its location: besides occupying the logical site for a main gateway centre on the Tablelands and being near the centre of a broad and open saddle of productive agricultural land between the Central and Southern Tablelands, Goulburn had the good fortune to grow up on the major routeway of the continent, that followed by the main road and railway from Sydney to Melbourne. All this helps to account for the city's development into the major transport node on the Tablelands and the principal commercial and service centre.

Except where the dissected topography of the Shoalhaven gorges cuts it off abruptly near Bungonia, about 20 miles east of the city, Goulburn's urban field extends widely in all directions,
the city's influence being heavily stamped on the surrounding countryside for more than 60 miles in some directions, indeed, in some respects, such as regional administration by Goulburn agencies of the State Government, the city's influence penetrates beyond the Southern Tablelands, into the southern end of the Central Tablelands, and even into districts on the South West Slopes and the South Coast.

Besides providing all the major urban services for most of the rural districts of the Tablelands, either directly or indirectly through the service towns, Goulburn exacts some tribute from Canberra and all the service towns (though its influence on Bombala is almost negligible), and its primary urban field contains many minor centres, ranging from small but sizeable villages like Taralga and Tarago down to tiny hamlets like Pomeroy, Windellama and Boro.

Judged by Australian standards, Goulburn is a large and important city, for with a population of 19,187 (provisional) at the 1954 census it ranks fourth in size after Broken Hill, Maitland, and Wagga Wagga as an inland city in New South Wales, and tenth as an inland city in Australia (Appendix 8); moreover, in addition to providing the standard services of a regional centre, it is one of the handful of wool-selling centres in the Commonwealth, the major Australian store-stock market, and a stock-killing centre operating on an interstate basis. It is also the principal railway depot (with large workshops and sheds)
for the southern part of the State; and as well as being the seat of Anglican and Roman Catholic dioceses, it contains large State institutions, like Goulburn Gaol and Kenmore Mental Hospital.

As the city continues to grow its functional importance is steadily increasing, for, unlike Canberra which has been expanding more rapidly during recent years, its growth has been more normal and better balanced in that it has been accompanied by a general development of all its established functions: the federal city on the other hand, though its future growth seems certain, depends so heavily on its governmental function for its progress and prosperity that it represents an abnormal and alien form of urban development. In effect, too, this means that Goulburn by reason of its greater degree of functional balance is more viable as a city than Canberra.

Though Goulburn ranks clearly as the head centre of the local hierarchy, it is by no means a dignified primate; its conventional and strictly utilitarian street grid does not distinguish its layout in any way from that of countless other towns in Australia; also, its general urban aspect is very ordinary since all but a few of its public and domestic buildings lack architectural elegance or distinction. Nor can it be said that the face of the city has been improved by the recent urban sprawl on its outskirts.

Except for a few small outlying growths, like Eastgrove (east) and the so-called "twin villages", Bradfordville and
Kenmore (north), city buildings in Goulburn are compactly agglomerated around a central business core, as in most other urban centres in Australia; its layout contrasts sharply, therefore, with Canberra's even though it is territorially nearly twice as large, since its municipal boundaries enclose an area of 13,303 acres (including nearly 5,000 acres in Bradfordville and Kenmore, acquired from Mulwaree Shire Council in 1952) as against the 7,680 acres in the national capital. This factor of area, however, has little or no relevance to the contrasting morphologies of the two centres, and to explain the differences we must look to things such as the "normal" development of Goulburn vis à vis the "planned" development of Canberra, and, perhaps also, to a lesser extent, to the local topographical differences of their surroundings.

The Physical Setting

Goulburn, 2,074 feet above sea level, is situated on level and gently sloping land beside Mulwaree Creek, near its junction with the Wollondilly River, with the northern part of the city occupying the peninsula between them near their junction, Bradfordville and Kenmore spreading over flat land north of the Wollondilly River.

For many miles around the city, the Tablelands lie between 2,000 and 3,000 feet above the sea. Goulburn itself is situated on the Goulburn Plains which are adjoined by similar but more extensive plains on the south (Gundary) and southwest
(Breadalbane), but to the northeast, north and west the country becomes undulating to hilly a short way from the city; in places, this hilly country is crossed by ridges, such as the Tarlo Range, a few miles north of Goulburn on the road to Taralga, and the Cullarin Range to the west, near Gunning.

The city occupies flat land along the floor of the broad mature valley of Mulwaree Creek and the lower slopes of its bounding ridges, which have a north-south trend. The gentler relief has been developed mainly on Upper Palaeozoic shales and slates, though the residual ridge of Rocky Hill, rising 800 feet above the city on the east, contains a large outcrop of massive quartzite, and there is a narrow strip of alluvium along Mulwaree Creek. A small flow of Tertiary basalt just outside the city's northwestern boundary is the City Council's major source of supply of road-metal.

Thus it may be readily appreciated that Goulburn's local environment has not impeded city building in any way; in consequence of the city's growth during the last few years, the newer residential suburbs of South Goulburn, West Goulburn, and Garfield have been forced to expand over comparatively hilly land, but even here the standard street grid has been rigidly followed with no inconvenience, except short but relatively steep pinches on a few roads. Since Goulburn's urban territory now embraces a large area

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1 The term "pinch" is still currently used widely in Australia for what is more commonly described as "pitch" in parts of England and the United States. (See also, footnote p. 223).
of low relief in Bradfordville and Kenmore, near the city's water supply and sewerage treatment works, the need for further residential expansion in the hilly land to the south and west no longer exists, and the City Council proposes to zone undeveloped areas there as a green belt in a town plan, which it will submit to the State Department of Local Government. (Fig. 36).

Eastgrove, the city's least attractive residential suburb, on flat land east of Mulwaree Creek and below Rocky Hill, is handicapped by the local environment more than any other part of Goulburn. The suburb has a westerly aspect, and is exposed to strong and biting winds in winter, without any protection from the low western ridge which gives some shelter to the city proper. Occasionally, floods in the Mulwaree Creek flats shut its residents off from the business area, forcing them to reach the city from the north by a roundabout journey of 3 to 4 miles over Rocky Hill, as against a normal route of a few hundred yards. These flats were proclaimed as unfit for building by a Public Health Ordinance in 1953, hence Eastgrove cannot be fully integrated with the city proper, though the flats themselves now serve as a "lung" for the city.

With few exceptions, the districts immediately surrounding Goulburn comprise productive agricultural lands of fair to very good value, used primarily for grazing; though fodder cropping is also a major activity on many parts of the plains south and southwest from the city, orcharding is practised in a few
small areas east and west from Goulburn, and market-gardening on a small scale is carried on over some of the alluvial flats at the northern and southern ends of the city. Initially, Goulburn's growth as a town was closely linked with, and depended to a large extent on, the development and the progress of farming in these districts.

Evolution of the City

Originating as a small residential settlement for ex-soldiers, but surviving for only a short while as such, Goulburn successively became a small and thriving commercial centre for its surrounding districts, an episcopal city, an important railhead which later changed into the main southern railway depot of the State, and the major regional service centre for the Southern Tablelands: now, as we have seen (p.56), it ranks somewhat higher than usual as a regional service centre but fails to make the grade of a provincial capital.

The initial settlement, officially proclaimed as "the township of Goulburn Plains" by Governor Darling on the 1st October, 1829, was established on a part of the site of the existing suburb of North Goulburn (Fig.37) the "township" occupying an alluvial flat (known for long after as Veterans' Flat) inside a bend of the Wollondilly River, just above the confluence of Mulwaree Creek: the settlement formed part of a scheme for the

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1 It was thus a "government town", as distinct from a "private town" (Appendix 10).
packing and rolling of stone to form the road from Marulan to Goulburn. The building of this road and its extension across the Yass Plains and the southwestern districts and ultimately to Melbourne, in consequence of which it became the major internal land link of the Colony, and the development of trafficable routes to the rural settlements around the town greatly stimulated Goulburn's growth as a business centre. But, as we have seen in Chapter II, it grew partly at the expense of Bungonia and other staging posts along the original line of road to the south.

Census figures of the mid-19th century supported by contemporary descriptions of the town show clearly that Goulburn expanded rapidly and that this expansion was matched by increasing commercial stability and prosperity. Listed in a census for the first time in 1841 as a "new town" with 655 inhabitants, Goulburn was credited at subsequent censuses with a population of 1518 in 1851, 3241 in 1861, and 4453 in 1871 - figures that are given added meaning when compared with the accounts of contemporary observers, such as Backhouse's description of old and new Goulburn of the late 1830's and Jevons' comments on the varied enterprises and the prosperous condition of the town in 1858 for example: in the late 1830's - "The old town of Goulburn consisted of a court house of slabs, covered with bark, a lock up house, a few huts occupied by the mounted police and constables, a cottage of roughly cut timber, and a small inn, affording tolerable accommodation for such a place, as well as a better house or two at a short distance . . . . . . the new township, about a mile distant, where a few scattered buildings, of brick, and others of wood, had been erected. One
Fig. 39

GOULBURN LAND USE 1859
(Based on Stanley Jevons' Social Map of Goulburn Feb., 1859)
been made the centre for a Police District, in 1859 it was proclaimed as a Municipality, and when the Anglican diocese of Goulburn was created by the granting of Royal Letters Patent in 1865 it was elevated to the rank of an episcopal city. Moreover, when the Sydney railway had been built from Sutton Forest to Marulan in 1868, and extended to Goulburn in 1869, it became an important railway centre, with large workshops and housing sheds, and the principal depot of southern inland trade - a position it was able to maintain even though it served for only a short while as a rail-head.

Naturally, as the city grew bigger and functionally more important, its urban influence in the surrounding districts became stronger, and its urban field stretched out to embrace a region extending over most of the Southern Tablelands, not only a district as formerly. General improvements in the means of communication and extensions of the road and railway systems on the Southern Tablelands resulted in a clearer emphasis on main improved routes, and hence a strengthening of the lines of the transport mesh centred on Goulburn, at the expense of smaller centres served by the preceding less systematic communication pattern.

By 1881 (census), the city had 6839 inhabitants (5881 of whom lived inside the municipal boundaries), and in the 1891

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1 R. Wyatt, History of Goulburn, Municipality of Goulburn, 1941, p.126, claims that it was the last city in the British Empire to be elevated in this way, also, that its proclamation as a city under the Crown Lands Act, 1885, was redundant.
census the population had increased to 10,916, dropping slightly to 10,612 at the 1901 census, partly as an effect of the general depression during the 1890's.

Entries in The Australian Handbook (from 1870 to 1906) show that Goulburn's progress till the 1890's was reflected by many physical changes in the city caused by the rise of new and more varied functional institutions and by big increases in the numbers and sizes of the public and private buildings being erected in it. In 1874 the city was described as being well laid out with broad thoroughfares crossing each other at right angles, and possessing buildings of a substantial character, some of which compared favourably with those of Sydney, but by 1891 the numbers of its public buildings and built-up streets had much increased. New buildings added to the city during this period included:

Anglican and Roman Catholic cathedrals, large churches of several denominations, a new hospital (built at a cost of £5,000), a town hall, a new gaol costing more than £72,000, a post office (more than £16,000), a Mechanics' Institute housing a library of about 4,000 volumes, three public schools, several private schools, a convent, and new public offices (£5,000). Its business area contained many shops providing for a variety of needs, branches of nearly all the leading insurance companies in the Colony, branches

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of the five leading colonial banks (some in new and large buildings) and several large hotels. In addition, a large railway station and yards (cost, over £12,000) and large engine sheds (£10,000) had been built, and the city also contained several important industrial units, including two tanneries, three flour mills and three breweries.

By 1891, also, Goulburn was connected by railway to Sydney (north), Cooma (south) and Albury, Junee and other towns (southwest); coaches ran regularly to all the major towns on the Southern Tablelands and to smaller centres, like Laggan, Crookwell, Wheeo and Mount Costigan, in its surrounding districts; and three local newspapers (all printed thrice weekly) circulated in the city and the areas it served.

At the opening of this century the city's population fell slightly to 10,187 at the 1911 census, but rose sharply to 12,715 in 1921, increasing further at later censuses to 14,849 in 1933, 15,991 in 1947, and still more steeply to 19,817 (provisional) in 1954.

After the population increases which have, of course, produced some changes in the city's layout, the strengthening of the drop in population was not so appreciable as the figure seems to suggest, because at and from the 1911 census the practice was adopted of recording the population of a city or town as that of the area inside the municipal boundaries only, the populations of external but integumental areas were excluded. Compilations for the 1921 and later censuses list the populations of extra-municipal parts of cities and towns separately from the cities and towns.
Goulburn's industrial function has been, perhaps, the most interesting feature of its evolution over the last two or three decades. As we have seen, some industries of a purely local character based on the use of local raw materials, such as flour-milling and brewing, had been developed during the early phases of town growth, and more were established in the latter half of the 19th century; but most of Goulburn's existing industries, comprising more than a score of miscellaneous enterprises, are primarily creations of the last twenty years. During World War II the Commonwealth Government set up a small munitions factory in Goulburn as a step in its plan for decentralising minor industries of a strategic nature by dispersing them among the inland cities and towns, but most of the industrial developments have occurred since 1945, having been attracted by the city's convenient location relative to existing transport routes, its advantages as the principal supply centre for the Southern Tablelands, its public utilities and labour force and its intrinsic value as a small local market.

Now, however, this trend towards the developing of an industrial function as one of the important features of the city's life has not only been arrested, but is actually in reverse, as is illustrated, for example, by the closing down of a tannery in August, 1953, and a large clothing factory (housed in the wartime munitions building) in December, 1954, resulting in the
dismissing of 140 employees.

As is normal, Goulburn's major industrial enterprises have been attracted to its main railway station or to sidings a short way from the city, but consideration of their distribution raises the wider issue of Goulburn's urban morphology in general. 

City Layout and Urban Aspect (Fig. 40)

Except for its three partly-detached suburbs, Goulburn (as noted, pp. 103-104) is on the whole a compactly agglomerated city, strongly nucleated in a central business core, extending one block wide on either side of the main street (Auburn Street) over a length of five city blocks (Fig. 40) - that is, extending back to Bourke Street (west) and Sloan Street (east) for about 1

1 In the latter instance, as in other Australian inland towns, the pull of the large central cities has proved too strong and industries, other than those of a purely local nature, have gravitated to them. The company which operated the Goulburn clothing factory intends to specialise in manufacturing one class of garments only, and is concentrating all its activities in one factory at Blacktown, 22 miles west of Sydney, with electric railway connection from February, 1955.

The restrictive measures on the marketing of hides imposed by a central Hide Board seem to be responsible for the closing of the tannery. Despite the fact that hides were available locally, the Goulburn tanners (who also owned the boot and shoe factory) were unable to obtain them there because they had to be sent to Sydney for appraisal, after which they were pooled, then allocated to tanneries without regard to their needs. Apart from having no choice in selecting the hides which they required, the carriage of hides to and from Sydney made the operation of the tannery uneconomic for the Goulburn footwear manufacturers. Now, they are forced to purchase selected suitable treated hides in Sydney thus obviating the need for a tannery in Goulburn.
three-quarters of a mile from Bradley Street (north) to Clinton Street (south). Except for administrative buildings comprising the court house, post office, town hall and police station, covering half a block facing Belmore Gardens in the centre, most of the buildings in the business core are used for commercial or professional purposes. They comprise shops of all kinds along both sides of Auburn Street, large wool stores and several service stations in Sloan Street, a group of professional offices in Montague Street, a clinic shared by several medical practitioners in Clifford Street, and some professional clubs in Market Street. Along both sides of Auburn Street the facades of most shops, hotels and offices have been modernised, but almost without exception this modernity is only a thin veneer hiding the architecture of an older Goulburn at the rear, but considering the generally poor architectural quality of the older parts of many of the premises the "face-lifting" has, on the whole, been of benefit to the city.

As is frequently the case in Australian towns, one side of Goulburn's main street (in this instance the western side) is more important for business than the other. This is reflected by variations of as much as £300 per foot in the rateable value (the

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This practice has also been adopted in many other Australian towns, but sometimes with less pleasing effects, as for example in the towns of Windsor and Richmond along the Hawkesbury River, about 30 miles west of Sydney, where some fine examples of Georgian architecture have been modernised - some more than once - with wholly unsatisfying results.
unimproved capital value) of land on either side of Auburn Street in the centre of the city; the fact has also been recognised by at least one merchant whose shop awning bears the inscription "the right man on the wrong side". The maximum rateable value of business land at the city's centre was assessed at £600 per foot at the last valuation (1953), but values drop to between £100 and £60 per foot at the northern and southern ends of the business section in Auburn Street: the changes in value are a fairly reliable guide to the relative business worth of the different parts of the main street.

Auburn Street, a broad thoroughfare (200 feet wide), is by far the busiest section of road on the Southern Tablelands, for, in addition to being the main commercial row of the city, it forms part of the busy Hume Highway (Sydney-Melbourne), and at all times during business hours it is filled with vehicles angle-parked to the kerbs or flowing north and south.

Except along the alluvial flats of Mulwaree Creek beside the railway on the east, the business core is enveloped by residential suburbs, through which two arcs of public buildings may be distinguished: the inner arc, centred principally along Church Street, just west of Auburn Street, contains the city's two cathedrals, many churches, several public and a few church schools and a couple of hospitals, scattered through residences; and the outer arc, containing fewer public buildings, along the outskirts of the residential suburbs of North Goulburn, Ifield, and Garfield.
Within the residential sheath flanking the central town area on the north, west and south, and in the residential outliers the streets are lined with domestic buildings in motley array, for in addition to a close and haphazard inter-mingling of dwellings (good and bad, old and new, large and small), well-preserved homes often stand cheek by jowl with others that are not much more than decrepit hovels - a very "Australian" urban characteristic.

In consequence, Goulburn's residential areas, unlike those of the Australian metropolitan cities, cannot be clearly graded as high-class, middle-class and poor-class, except, perhaps, in the case of Eastgrove which is recognised generally as the city's poorest quality residential area; here, most of the houses are old and built of timber or brick (many without damp courses) though there are also a few newer houses built principally of fibro cement sheeting or cement blocks; rated land values range only from a few shillings to £3 per foot! A random sampling of the qualities of houses and land values reveals, however, that there are a few pockets of fair to good quality homes in Goulburn's miscellany of residential buildings (Fig.40), thus:

1 Unless otherwise stated, all land values quoted for Goulburn are in terms of unimproved capital value (U.C.V.), as assessed in the 1953 valuations by the N.S.W. Valuer-General's Department, supplied by officers of that department in Goulburn. Values are expressed in terms of the per foot value of the street frontages of the blocks.
Cowper Street, two blocks west of the main street, contains some large houses (15-20 building squares) solidly built and of a quite good type, also a few blocks of modern flats; the value of land averages from £6 to £10 per foot.

In a pocket of higher-rated land (£15-£17 per foot) along Church Street, behind the Anglican cathedral, there are a few large residences of good quality, owned and occupied by the city's "big business" men.

Faithfull, Coromandel and Deccan Streets, west of Cowper Street, contain smaller houses (averaging from 9 to 12 squares), which are older and mostly poorer types than the above; land values range from £3 to £6 per foot.

Verner Street, beside Victoria Park, which has developed principally since 1938 as a residential street, contains the modern brick residences of some of the city's medical and other professional men; houses average about 12 to 14 squares and land values range from £5 to £10 per foot.

In the northwestern suburb of Ifield there is another pocket of good quality houses on the old "Lawrenny" Estate, bounded by Kinghorne Street (north) and Citizen and Hurst Streets (south). Here, most of the houses, old but in good condition, average about 15 squares, though a couple of larger ones are about 30 squares; the land value averages about £10 per foot.

Bradley Street in the same area, containing some houses of a similar type, is faced by land averaging from about £9 to £10 per foot.

As these examples suggest, however, the "face" of residential Goulburn is nowhere really impressive, a fact which is made all the more obvious by the unpretentious homes built on cheaper land (£3 to £4 per foot) in the newly-developed areas.

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In Australia a "building square" means that part of a completed building contained under a roof area ten feet square.
along the city's northern, western and southern margins, consisting primarily of rows of brick houses or whole blocks of mass-produced prefabs, all practically unvaried from a standardised box-like plan; and elsewhere by older residential developments with houses only a little more prepossessing, like a group of War Service homes, built 1926-30, along the eastern end of Kinghorne Street in North Goulburn. To some extent though, the drabness of the urban aspect in the latter area is relieved a little by a few small, but attractive and modern cottages in nearby Chantry Street, occupied by the managerial staff of the adjacent textile factory.

Though it is one of the least inviting places of residence, the section of the city lying between the central business area and North Goulburn is of special morphological interest because it embraces the site on which the city originated and still contains many buildings belonging to the initial phases of its growth: many of them, particularly in Joshua, Bishop, Reynolds, Grafton and Mulwaree Streets, have become very dilapidated, to such an extent in some instances that they are now sub-standard houses, and others have been structurally altered. But, though the lineaments of the old town have thus been altered greatly, sufficient evidence remains to indicate the architectural styles which prevailed, and in some cases the original functions of buildings have not been obscured, for example, despite alterations many of the buildings still stand out unmistakably as old coaching inns, especially when the remains of large stables still
exist behind them.

Except Belmore Park, a small square in the centre of the city, Goulburn's parks and recreation areas are scattered through the city, but mainly near its outskirts, though a large area of flat land immediately east of Mulwaree Creek is used as a golf course. Prior to 1952, when the additional 5,000 acres of urban territory was acquired from Mulwaree Shire Council, 15% of the city area was non-rateable, but parks and recreation areas accounted for only a small part of this, for much of the 8,000 acres involved was church land or land occupied by local or State authorities.

Miscellaneous industries of a minor nature are distributed in and close to the central business area, but the major industrial concentration is in Sloan Street, beside the railway station, where there are a large boot and shoe factory, a flour mill and some large skin and wool stores: a large building just southeast from the station which formerly operated as a brewery is now used by a Sydney brewery as a storage depot for supplying the southern parts of the State. The city's only other large industrial units are a textile factory at Bradfordville on the branch railway to Taralga, near the clothing factory in North

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1 In Australia, all church-owned land, whether occupied by church buildings or vacant, is exempt from land rates. As an episcopal city, Goulburn has an inordinately large amount of land which is non-rateable, for, in addition to its two cathedrals and many churches, several orphanages, church schools and church hospitals spread over large areas.
Goulburn which closed down in 1954 but re-opened for chenille manufacturing in 1955, and large abattoirs at a railway siding about a mile south from the city.

As yet, the functional parts of the central city area have not become articulated to anything like the degree that is usual in the really large cities, like the State capitals, but as Goulburn grows the trend that way is becoming more pronounced: for example, large establishments like skin and wool stores and the major industrial undertakings, both with special transport needs, continue to be attracted normally to the railway station or to sidings just outside the city; the middle part of Auburn Street is becoming more firmly established as the business hub of the city, and the tendency is growing for administrative offices to be grouped at the southern end of Auburn Street, for professional offices to concentrate just west of the business hub, and for minor industries to grow up at the northern and southern ends of the business area.

**Goulburn as a Regional Centre**

Side by side with its internal growth and the clearer defining of its functional parts, Goulburn's grip on its urban field is, if anything, growing stronger.

Though Canberra provides only slightly fewer urban
services than Goulburn (Fig. 41), the latter town exerts a much stronger influence on the life of the Southern Tablelands because its services are primarily regional in character, whereas those of Canberra, other than federal administration, are purely local. This applies particularly to the commercial services which account for more than half the total in each of the two centres.

Goulburn is in every sense the commercial entrepôt of the Southern Tablelands, for in addition to providing all the retail shopping needs of nearly all the population within a radius of about 30 to 35 miles and many of those of shoppers throughout a much wider area, it is a wholesale selling centre and a distributing base for several metropolitan firms from which many kinds of merchandise are forwarded to all parts of the Tablelands, and,

Two important facts concerning the urban service roses in Fig. 41 need to be borne in mind: first, they are compiled from the Regional Telephone Directory of January, 1953, hence do not take account of the changes which are occurring in the centres (though except in Canberra and possibly in Cooma the relative proportions of the different services remain much the same); and secondly, the services are plotted quantitatively only in a general way, with each institution being considered to provide one service. This means, that Canberra's administrative function does not show up so prominently as it is in fact, since each Commonwealth Department is regarded as a single service institution, whereas some perform a multiplicity of functions - as the Department of the Interior which has about 30 major functions. Neither limitation detracts seriously from the value of the roses as a means of comparing the service functions of the centres as members of the local hierarchy.
CITIES

GOULBURN 605
Services

CANBERRA 770
Services

TOWNS

COOMA 318
Services

QUANBEBAN 315
Services

YASS 221
Services

CROOKWELL 170
Services

BOMBALA 106
Services

BRAIDWOOD 78
Services

VILLAGES

GUNNING 52
Services

CAPTAIN'S FLAT 51
Services

TARALGA 47
Services

ADAMINABY 34
Services

NIMMITABEL 27
Services

JINDABYNE 26
Services

DELEGATE 25
Services

BUNGENDORE 23
Services

MARULAN 22
Services

BINALONG 21
Services

SOUTHERN TABLELANDS — URBAN SERVICE ROSES
(CENTRES PROVIDING MORE THAN 20 URBAN SERVICES)
in some instances, beyond them.

Apart from being more widespread, the pattern of deliveries from Goulburn's retail stores is much the same as those around the service towns, but the city's storekeepers have not confined their business activities to the rural districts only. They are now attempting to secure some of the retail trade in Canberra and the service towns: this is particularly true for Canberra, where, for example, Rogers and Sons Pty Ltd (Goulburn's largest retail firm) and some Goulburn furnishers have acquired new leases and are building large shops in Civic Centre. The commercial invasion has also taken other forms. Advertisements in the local press and commercial radio programmes emphasise the lower prices available in Goulburn, where the wider ranges of stores and greater competition result in greater availability of goods at prices which offset the cost of the journey to Goulburn or of delivery to Canberra by Goulburn firms. Representatives of Goulburn firms periodically visit Canberra.

In addition to being a local and regional business centre, Goulburn functions on a broader commercial basis as one of the few wool-selling centres in Australia, drawing wool supplies from the whole of southern New South Wales and attracting

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For example, the proprietress of one of Goulburn's leading salons, specialising in exclusive frocks, stages displays and holds sales at regular intervals in a lounge room of one of Canberra's leading hotels because she is unable to secure business premises in the city.
buyers from overseas. It is also Australia's major store-stock market - an interstate exchange at which beef cattle from Queensland are often bought and sold - the trade of which helps to account for the city's large municipal abattoirs.

As an administrative centre Goulburn plays a dual role: in local government as a municipality and the seat of a shire, in Commonwealth and State administration as a regional centre. In the federal sphere, Goulburn's agencies are mostly branches of the Postmaster General's Department, concerned principally with the provision and maintenance of postal and telephonic facilities over the northern part of the Tablelands (Figs. 45 and 46), and these are greatly outnumbered by agencies of the State.

Goulburn City Council has all the usual powers of local authorities in New South Wales, covering such things as roads,
parks, recreation areas, public utilities, public health measures, the enforcement of building regulations and the like, and Mulwaree Shire Council (seated in the city) exercises similar jurisdiction over the adjoining rural districts, embracing an area of about 1,950 square miles (Fig. 42a - local government areas).

For some of its regional administrative functions, Goulburn's field differs little from its rural field of local government: thus its Police and Court Districts (Fig. 42b), Pastures' Protection District (Fig. 42d) and School Inspectoral District (Figs. 43 and 44) are roughly comparable in size and shape with Mulwaree Shire; the Goulburn Land District (Fig. 42c) is slightly smaller; its Postal Inspectoral District (Figs. 45 and 46) a little larger, and its Land Board District (Fig. 42c) is much larger.

1 Prior to 1886 Goulburn depended on tanks, water holes and wells for its water supply, but in that year the nucleus of the present supply was completed. In 1915 further construction on Sooley Creek (northwest) increased the water storage capacity to its present limit of 550 million gallons. Coinciding with the increase in water storage, a sewerage scheme was undertaken in 1915; it was subsequently extended to service most of the built-up area of the city.

Gas became available in Goulburn in 1879, when the first street lamp was lit. A private company has continued to produce gas since that date; the present yearly output of the City of Goulburn Gas and Coke Company is 65 million cubic feet.

Electric light and power became available in 1914 when the City Council's power station was completed, and the plant continued to operate until 1938, when it was purchased by the N.S.W. Public Works Department, and closed down. At that time it supplied 5,130 consumers and was generating 5,277,863 units per annum. Since 1938 Goulburn has purchased electricity in bulk, reticulated from the grid system of the N.S.W. Electricity Commission. In 1953 the Council distributed 25,000,000 units within the city and to consumers connected to about 120 miles of rural mains in Mulwaree Shire.
KEY

School Inspectorate Boundary

○ Primary Schooling, up to 10 mile radius

● Secondary

○ Primary Schooling, 10-20 mile radius

● Secondary

△ Secondary Schooling, more than 20 mile radius

SCALE

20 Miles

GOULBURN

CROOKWELL

BIGGA

MOSS VALE

TARALGA

BEVENDALE

GUNNIN

MOONALUP

BALLALABA

CAPTAIN'S FLAT

SUTTON

NAROOMA

BERRIE

BUNNELL

NIMMITABEL

ISLAND BEND

MOONBAK

NIMBA

DELEGATE

BEGA

BEGA

GOUIN

GOOLDR

GOULDBURN

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GOULBURN, CANBERRA & BEGA SCHOOL INSPECTORATES LEVEL OF SCHOOLING
Fig. 44

KEY
SCHOOL ENROLMENT (JAN. 1954)
O 0-50 One teacher schools
O 50-100
O 100-250
O 250-500
O 500-1000

(3) No. of teachers on staff
X Staff of church and private schools not included

SCALE
100 Miles

GOULBURN, CANBERRA & BEGA SCHOOL INSPECTORATES
SCHOOL ENROLMENT AND STAFFING - JANUARY 1954
POSTAL FACILITIES IN THE GOULBURN & CANBERRA INSPECTORATES
ROAD MAIL SERVICES AND PORTERAGES IN THE GOULBURN AND CANBERRA POSTAL INSPECTORATES
During 1955 Goulburn also became the centre of a new Agricultural Region embracing most of southeastern New South Wales.

In addition to such universal administrative activities as police, justice, and education, these agencies are concerned with such important matters as land registration and valuation, the investigating and promotion of closer settlement schemes in rural areas and the enforcing of the State Pastures' Protection Act.

1 This is one of four such Regions set up by the N.S.W. Department of Agriculture in 1955 for the purpose of decentralising administration and agricultural extension services. The other Regions are the Southern (headquarters Wagga Wagga), and Far North Coast (Lismore) and the Western (Orange).

The new region with headquarters at Goulburn comprises 20 shires in an area extending from the Great Dividing Range to the coast and bounded on the north by a line from Wollongong to Bigga; it includes 7,300 agricultural holdings.

Before it was set up agricultural administration and extension work were carried out by the following officers in Goulburn: an agronomist (operating in Mulwaree, Goodradigbee, Gunning and Crookwell Shires); a veterinary officer (operating in Yass, Cooma, Goulburn and Braidwood Pastures' Protection Districts) and a livestock (wool and sheep) officer, operating in Picton P.P. District as far north as Mittagong, in Yass P.P. District and as far as Thalaba and Binda (northwest) and Delegate (south).

2 The District Pastures' Protection Board, an agency of the N.S.W. Department of Agriculture, administers regionally the Pastures' Protection Act, 1934–43 (with amendments to 1951), whose provisions relate primarily to the extermination of rabbits and noxious weeds, the provision, maintenance and policing of travelling stock routes, reserves and watering places, and the registration of sheep brands and ear marks.
Nor does Goulburn's regional administration end there. It serves as the headquarters of the Divisional Engineer of the Department of Main Roads for the Southern Division and of the District Superintendent of the Department of Railways, administering all railway affairs in a similar area. Both the Anglican and Roman Catholic dioceses of Goulburn extend, in places, well beyond the Southern Tablelands. Goulburn also contains the district headquarters of several large insurance companies and mercantile organisations, including large wool and stock brokerage firms and skin and hide companies.

Quite apart from the special regional significance of these administrative functions and its strong business links with the surrounding districts, Goulburn is brought into close contact with many rural parts of the Tablelands by several of its industrial services, like flour-milling, meat-killing and cold storage and refrigeration. Though some of its factories (woollens, footwear, chenille) must naturally seek a wider market than that provided by the local region, this in itself helps to increase the city's standing at the head of the hierarchy. In a very different way the large Goulburn Gaol (with 62 warders and 300 prisoners) and Kenmore Mental Hospital (with a staff of 221 and 1,075 inmates) have helped, if not to enlarge the city's stature, at least to spread its fame. Moreover, now aware of the business possibilities of Goulburn as a developed tourist centre, the local Chamber of Commerce (assisted by the City Council) has launched
out on a long range plan to entice large numbers of visitors from inside and outside the region to the city.

From the cumulative evidence of Goulburn's strong and sustained growth from the outset of its existence, the degree of functional balance which it possesses and the dominant part it has played and continues to play in the general life of the Southern Tablelands, it is safe to assert, that its hegemony in the urban hierarchy of the region is established beyond all doubt. This, if only because the city is so strongly entrenched as a going concern.

To achieve this end the natural attractions of Wombeyan Caves (51 miles north) and Bungonia Caves and Gorges (23 miles east) have been publicised, with an emphasis on the suitability of Goulburn as an accommodation centre from which they can be visited. More important in this connection, however, is the holding of an annual gala week (the Lilac Festival), each October. Having selected the lilac as the city's floral emblem, the festival committee encouraged residents to cultivate the plant extensively, and the first Lilac Time Festival was held in 1952. This is on the model of similar festivals which have become popular in other Australian towns, like the Vintage Festival at Barossa in South Australia, the Jacaranda Festival at Grafton on the north coast of New South Wales, and the Begonia Festival at Ballarat in Victoria.
CHAPTER VII

THE SERVICE TOWNS OF THE SOUTHERN TABLELANDS

I QUEANREYAN

An Urban Paradox
Its Growth
Morphology and Aspect
Function
Urban Field and Minor Centres
The Oaks Estate
Sutton and Michelago
Tharwa

II YASS

A Standard "Australian" Rural Service Town
Evolution
Morphology and Aspect
Function
Urban Field and Minor Centres
Bowling
Murrumbateman
Jerrawa
Burrijniguck and Upper Burrijniguck
Binalong

III COOMA

A Town in Transition
Position and Site Factors
Evolution
Morphology and Aspect
Function
Urban Field and Minor Centres
Bredbo
Nimmitabel
Berridale
Dalgety
Jindabyne
Adaminaby
Eaglehawk
Kiandra
Cabramurra
IV CROOKWELL

The Town of a Shire
Location and Site
Evolution, Form and Aspect
Function and Urban Field

V BRAIDWOOD

A Town of Chaquered Growth
Location and Site
Evolution
Morphology and Aspect
Function, Urban Field and Minor Centres
Nerriga
Mongarlow
Monga
Reidsdale
Tarago
THE SERVICE TOWNS OF THE SOUTHERN TABLELANDS

Whereas Goulburn is the regional service centre for the Southern Tablelands, the rural commercial towns (Queanbeyan, Yass, Cooma, Braidwood, Crookwell, Bombala), providing similar but fewer services for smaller urban fields, are the service centres of the several districts of the region. All lie, in part at least, in Goulburn's urban field, and are influenced by it in varying degrees according to their locations relative to it.

Apart from their intrinsic significance as district service centres, all five are of interest because of the different ways in which they have reacted to the changing human activities in their local environments at different times, and Queanbeyan and Cooma are of special interest to the urban geographer because their town characters and functions are changing rapidly as a result respectively of Canberra's growth and the development of the Snowy Mountains hydro-electric scheme.

I QUEANBEYAN

An Urban Paradox

Queanbeyan may well be termed an urban paradox, for,

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1 Except for occasional reference to it, the urban geography of Bombala is not studied in this thesis because the town lies well outside the defined limits of the study area and participates little in the life of the Southern Tablelands (cf. p.50).

though it is only one-fourth the size of its near neighbour, Canberra, it is not a tributary of that city as could be expected. Instead, the larger town in many respects lies in the urban field of the smaller, and Queanbeyan as well as having contributed largely to make the growth of the capital city possible still plays an important part in its life. The original site of settlement in the Queanbeyan area, now The Oaks Estate in the Australian Capital Territory, no longer comes under its municipal administration, though it is still physically a part of the town.

Queanbeyan and Canberra lie seven miles apart on the same lake-plain in an area of maturely dissected topography so that climate and general environment, except for variation consequential upon their own existence, are practically identical for both centres. They are, however, completely unlike urban entities, which have evolved differently, contrast absolutely in urban form, and have entirely dissimilar functions. Moreover, the two centres are direct antitheses as the territories of local authorities, because Queanbeyan is administered by an aldermanic council, democratically elected, and Canberra, as we have seen (p.99), is governed - by a federal department, benignly - but nevertheless bureaucratically. The arbitrary but deeply impressed line of territorial division between them (the Federal-State boundary) thus further accentuates the differences of urban identity of the two centres, the origins of which must be sought in their divergent lines of evolution.
Its Growth

Like Canberra, Queanbeyan has had three main phases, but there the similarity in urban evolution ends. The settlement served, in turn, as a ford-side halting place for coach and dray travellers bound for the southern parts of the colony; an administrative outpost at a bridge-head and road focus near the frontier of colonial settlement; and a rural commercial and service centre.

The original settlement in The Oaks Estate at the junction of the Queanbeyan and Molonglo Rivers was an ephemeral one, consisting merely of a couple of service buildings (an inn and a store)¹ that served as a resting place and supply depot for travellers bound for the newly-developing Monaro and Murrumbidgee Squatting districts to the south and southwest. Soon after it was established, however, a better line of approach was formed to the Queanbeyan Plains from the east, and the village of Queanbeyan began to grow up on the eastern bank of the river where the new track crossed it, about a mile above the Molonglo junction.

In 1836, a post office was established in the new settlement, providing for regular mail services with Sydney by way

¹ Apparently it persisted for some time after the town of Queanbeyan had begun to develop in the late 1830's, for Demarr, who worked for several months at the store, wrote: "Our store joined an Inn, both being under the same management and about a mile from the township. The Inn was a substantial stone built residence, formerly the house of a well-to-do settler [a relative of Robert Campbell of Dunroon]. The store as was customary in the bush, was built of timber slabs and roofed with sheets of bark." J. Demarr, Adventures in Australia Fifty Years Ago...1839-44, London, 1893, p.48.
of Bungendore and Goulburn, and on the 28th September, 1838, Queanbeyan was officially proclaimed as a village. Its initial growth was slow, for, as Demarr (op. cit. p.49) indicates, it contained (about 1840) only three or four wooden houses and a store similar to that in which he worked. Moreover, at that time, the surrounding districts contained only a few scattered farms, and the southern boundary of the settled districts of the Colony lay only a short way from the village (p.19).

During the 1840's, and after, the village expanded more rapidly, largely as a result of farming having been developed more generally throughout the Southern Tablelands, the surrounding districts having become more closely settled and the track through Queanbeyan to the Monaro having been firmly established as an important traffic way. Centrally located relative to newly-developed farming districts around Bungendore and in the upper Shoalhaven Valley (east) and at Ginninderra, Gundaroo and Sutton (north), as well as to the Monaro and Murrumbidgee Squatting Districts, and at the point of intersection of comparatively easy tracks leading to them, Queanbeyan soon became a major stopping place for bullock drays and a staging post for coaches, and began to function as a commercial and service centre providing shopping, banking, postal and other facilities for settlers in the surrounding districts. But perhaps more important than all these was the fact that in this stage of its life Queanbeyan was the last administrative outpost on the road to Monaro.
At successive censuses in the middle years of the 19th century, its population grew from 72 in 1841, to 372 in 1851, and 526 in 1861: it seems probable that the rate of increase was still greater in the early 1860's when the town's business growth, like that of Cooma, received a strong impetus from the Kiandra gold rush; Queanbeyan benefited in this phase because it was the last place at which stores could be obtained on the most direct track to the Eucumbene Valley, leading southwest through Tharwa. The complete collapse of the Kiandra field by 1866 inevitably caused a temporary slump in Queanbeyan's fortunes, so that by the 1871 census, its population had risen only a little over the 1861 figure to 682 persons.

In the next two decades the town expanded steadily, its numbers increasing to 939 in 1881 and 1262 in 1891, thereafter dropping slightly to 1219 at the 1901 census. Contemporaneously with this expansion, Queanbeyan developed gradually into a commercial and service centre, with new functions such as municipal administration, the holding of daily courts, a local newspaper circulation, and industry (in the form of three flour mills and a wool-washing establishment). Business facilities were increased and improved, catering for a now clearly-defined urban field containing several small centres like Bungendore, Gundaroo, Sutton, and Michelago.

Since 1901, intercensal growth has been consistent, population increasing to 1408 in 1911, 1825 in 1921, then more
sharply to 4019 in 1933, 5033 in 1947 and 7560 at a "pilot" census in 1953 (reduced to the provisional figure of 7307 at the 1954 census). The big increases during the last thirty years may be attributed directly to the strengthening of the urban bonds between Queanbeyan and Canberra, which, in turn, has been largely responsible for a large influx of "New Australian" immigrants into the town in the post-war years: both have had strong effects on Queanbeyan's physical growth and many of the details of its existing layout.

Morphology and Aspect

The early town was laid out in the form of a one-mile square placed almost symmetrically across the Queanbeyan River (Fig. 47). Except for some slight, and almost insignificant, variation around its periphery, the town's plan was basically chequer-board, with the streets gridded diagonally to the outline of the square: only the newest extensions of the town in the south and southwest depart much from the standard grid, ostensibly as a concession to hilly relief, but more probably in imitation of some features of Canberra's design. (Figs. 28 and 47)

Queanbeyan's pattern of functional parts (Fig. 47) has evolved along lines which may be regarded as conventional for most rural towns in Australia: for example, it has a central business core in a broad residential belt containing a few public buildings and some parks and recreation fields, a main thoroughfare (Monaro Street) which serves as the principal commercial
row, and from which a secondary business row (Crawford Street) leads to the town's railway station, and miscellaneous industrial enterprises (such as abattoirs, sawmills, concrete pipe and cement and terrazzo sheet factories) scattered around its outskirts.

In addition to its miscellany of shops and its banks, hotels and garages, the business area contains several public buildings (post office, police station, halls, churches, administrative offices), two cinemas, and a few minor industrial establishments, such as a printery, a cordial factory and tyre remoulding works. Nearby, on one town block facing Crawford Street, but principally on alluvial land along the Queanbeyan River there are market gardens which provide Queanbeyan with fresh vegetables, with some surpluses for sale in Canberra.

Except for some urban sprawl on its outskirts produced by residential growth during recent years, Queanbeyan is, on the whole, a compact urban settlement, and its urban face, like Goulburn's, is very commonplace. Its only large buildings are five hotels (three of which are modern premises) and a few public buildings of less imposing proportions; its two shopping streets contain a mixed assortment of old and new shops of stereotyped designs; and its domestic buildings command no attention at all:

1 Possible exceptions are a group of old buildings on the original village site, just east of Queanbeyan Bridge, whose humble styles are of antiquarian interest, and some neat cottages in an attractive riverside setting, opposite the golf links, in the southeast of the town.
the hotels are to a large extent a legacy from the boom trading
days of the late 1920's when liquor sales were prohibited in the
federal city, though they are currently prosperous as "overflow"
accommodation houses for visitors to Canberra (with limited
"casual" accommodation facilities, particularly when Parliament
is sitting). There is about one hotel bed for every 20 persons
in Queanbeyan - a high figure for a centre which is not itself a
resort.

Many small dwellings, often only a single room, have been erected by newcomers in the newly-developed residential
parts of the town; this is a post-war development common in many
Australian towns, caused in most instances by the desire of the
immigrant to get a roof of his own over his head as soon as possi­ble; for many new settlers the single room marks the first
stage in the building of a larger home to be finished when they
have gained economic security, as well as providing an immediate
means of escape from barrack life. Homes of this type are now
common along Uriarra Road, the main road to Canberra, where they
mingle with some older residences and some new shops, garages,
and other commercial establishments of miscellaneous types; the
growth of this part of Queanbeyan, and its increasing importance
as a business section of the town, are effects of that centre's
close liaison with Canberra.

Function

More than anything else, Queanbeyan's urban function has been affected by the creating of the Australian Capital Territory and the subsequent building of Canberra. Before those events, the town was primarily a commercial and service centre for an urban field with a radius of about 25-30 miles, but since the capital was established with powers of administration over a part of its original territory, Queanbeyan has developed a new set of functional relations with the newcomer. Despite the territorial partitioning, which meant that Queanbeyan had to relinquish its control of land and its authority to provide such things as roads, public utilities, police supervision and health services in a part of its former urban field, it is of interest to note that people in the central east of the Australian Capital Territory still maintain their old commercial links with Queanbeyan: thus, the inhabitants of the Tuggeranong, Tharwa, Williamsdale, and Royalla districts invariably imply Queanbeyan, not Canberra, when they speak of "going into town" for shopping or other business reasons.

The functional relations between Queanbeyan and Canberra

Commercial development in this part of Queanbeyan, however, has proved to be a mixed blessing for its own inhabitants and shoppers from Canberra, because as an old coach route Uriarra Road is both winding and narrow, hence a source of traffic congestion to-day. To remove its traffic hazards, Queanbeyan Municipal Council is now considering the planning of a wider and more direct road to the central shopping area from the A.C.T. border.
call for special comment, because out of the capital city's one-sided dependence on the rural town in the formative period of its growth, there has grown a close urban mutualism - a symbiosis, so to speak, in which the bonds of interdependence are very strong.

In Canberra's early days the small concentrations of city builders on different parts of its site were victualled with goods brought directly by rail through Queanbeyan from Sydney or from Queanbeyan's shops, and until the Federal Highway was built in 1926, to provide a direct road link between Goulburn and Canberra, all road traffic to the city also came through Queanbeyan; this represented another important inter-urban contact, similar to the one still maintained along Canberra's "life-line" - the six-mile stretch of Commonwealth-owned railway to Queanbeyan: since 1927, of course, the flow of goods along this line has been greatly augmented.

More recently, many of Queanbeyan's business firms have invaded Canberra on a large scale, either through branches which they have established there or by operating from a Queanbeyan base: aside from the chain grocery stores of large Sydney merchants, more than a dozen Queanbeyan firms have branches in Canberra, in all of which the average volume of business is about twice that of the headquarters unit. The enterprises are most varied, ranging from general stores to garages, estate and stock agencies, furniture stores, funeral parlours, motor coaching services and cement pipe factories. Commercial entrepreneurs and
building and household services operating solely from a Queanbeyan base are still more numerous and varied, for they include whole-
sale food suppliers, cordial manufacturers, pastrycooks, fruiters and bakers, as well as launderers and dry cleaners, sawmillers,
builders, plasterers, shop-fitters and floor-sanders: some, like builders and suppliers of building materials, food-suppliers of
Government-owned hostels and contract carriers working for the Federal Government, depend entirely on their turn-over in the
capital, others claim that the volume of business transacted in Canberra and Queanbeyan, respectively, is in the ratio of 3:1; the
average appears to be 2:1.

Queanbeyan also functions as a dormitory for many work-
ers in Canberra, including civil servants, shop assistants and
workmen maintaining public utilities - an estimated total of be-
tween 1200 and 1300, about 600 of whom travel on buses operated
from Queanbeyan.

The counter-current of contact and dependence between
the urban symbionts is exemplified by the bulk supply of water to
Queanbeyan's reservoirs from the Canberra storage and pumping
station on the Cotter and Murrumbidgee Rivers, and by regular
Saturday morning excursions to Queanbeyan of large numbers of
Canberra shoppers.

In connection with this trade the paucity and dispersion
of Canberra's shops have, of course, been of special benefit to
Queanbeyan, whose more numerous, varied and compactly agglomerated shops offered greater convenience for Canberra residents, even
though they were further away. To some extent the commercial advantages possessed by the town are being dissipated as the lag in commercial building in Canberra is being overtaken. In the latter, the building of small business nuclei in the suburbs and new commercial developments in Manuka, Kingston, and particularly in Civic Centre and Braddon, are gradually making shopping conditions more tolerable for the city's residents, with the result that many are now less inclined to make the longer trip to Queanbeyan.

Moreover, as we have seen, in their Canberra market the businesses of Queanbeyan are now meeting competition from business firms in Goulburn and Sydney, and as Canberra grows this must be expected to become much stronger.

The volume and the flow of traffic between Canberra and Queanbeyan - as revealed in the vehicle count carried out by the Department of the Interior on a five-day check in January, 1951 (Fig.48) - suggest a movement which is more intra-urban than inter-urban; this all the more so now because the volume and two-way flow of traffic have increased much since 1951.

Building developments at Narrabundah (residential), Molonglo (industrial) and Harman (naval wireless station) in the Australian Capital Territory and in northwest Queanbeyan (residential, commercial) are bringing the two centres much closer in a physical sense, though it seems likely that the line of administrative division between them (cf. p.131) will remain a firm.
FIG. 48

ROAD TRAFFIC FLOW MAP—INWARDS AND OUTWARDS FROM CANBERRA

(From results of a 5-day traffic count in January, 1951.)
one. If the existing kind of residential expansion in Canberra is continued, the city in sprawling more widely must inevitably move closer to Queanbeyan: even if it does not, the distance between them is only a little more than that now existing between the northern and southern parts of the city. In this respect the town bears at least a suburban relationship to the city, one which will become more marked as the latter outstrips it greatly in growth.

As an important consequence of the close contacts which Queanbeyan has made and continues to make with the capital its functional relationship with that centre is becoming more significant in its life than the function it developed much earlier as a district service centre.

As a commercial and service centre, Queanbeyan provides all the customary facilities for town and country people in its urban field; in the governmental sphere, it has a separate

\[1\] For example: a modern District Hospital (40 beds), a District Ambulance, a Baby Health Centre and a Fire Station provide protective services, and educational and allied services are supplied by its Intermediate High School (up to a grade of 15 years, after which pupils may transfer to Canberra's High Schools for two more years of schooling), a convent school, churches of several denominations, a local newspaper (twice weekly), two cinemas, a municipal band and several clubs. Professional people in the town comprise six doctors, two nurses, three solicitors and two accountants in practice. A strong rural flavour is preserved by the town's several stock and farm agents, its Pastoral and Agricultural Association, and some wool and skin buyers and dam excavators — all this is very "Australian".
existence as a municipality and contains the administrative head­
quarters of Yarrowlumla Shire (Fig.49) and several State agencies
(court house, police station, motor registry office, district
agriculture and forestry office).

Naturally, the town's role as a district service centre
has been modified in consequence of the loss of a part of its
original urban field, but, on the whole, it has gained more urban
prestige and influence than it lost because of the rise of
Canberra: administration of what is now a large part of the
Australian Capital Territory, necessitating the provision from
Queanbeyan of essential services for sparsely settled lands was
in many respects more a liability than an asset for the town, and,
as we have seen (p.138), Queanbeyan still maintains its old trade
relations with some parts of the Territory. It is true, however,
that the town lost some business, transferred to Canberra from
the small settlements of Hall, Ginninderra and Weetangerra (north­
west), though this has been compensated many times over by the
increased trade from Canberra itself.

Quite apart from the effects of the "alien" growth of
Canberra, Queanbeyan's urban field and its relations with some of
the minor centres in it have been influenced by what are more
truly "natural" processes.

Urban Field and Minor Centres

Of all the centres on the Southern Tablelands,
Queanbeyan's urban field is the most unusual, both in shape and
Fig. 49

QUEANBEYAN'S TWIN URBAN FIELDS

SCALE IN MILES:

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BOUNDARY OF YARROWMILLA SHIRE
ADMINISTRATIVE FIELD
COMMERCIAL AND SERVICE FIELD

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size; indeed, it may even be said to have two urban fields - a field of dominant influence (administration and commerce) of irregular shape, which has been cut across, and so reduced, by the Australian Capital Territory, and a smaller field of partial influence (commerce only) with more regular outlines (Fig. 49).

In addition to the major alteration caused by the territorial adjustment of 1911, the northern end of Queanbeyan's urban field has tended to shrink to a minor degree because of vigorous but normal growth by the village of Gunning, as is illustrated by Queanbeyan's altered relations with the small village of Gundaroo, 26 miles north of it. In coaching days, regular services passed through Gundaroo to Queanbeyan, and the villagers depended on the town for all their urban services; they still do for many of them, but, as time progresses, the "pull" from Gunning, 19 miles north, on the main southern road and railway, is becoming stronger. As before, the inhabitants look mostly to Queanbeyan for the commercial needs which cannot be supplied by the village store, though Gunning is beginning to compete for this trade, and more strongly in providing banking and medical services for the village. Yass, 30 miles west, supplies the village with bulk petrol and provides secondary schooling facilities for its children, and mail services through the village come
alternately from Gunning and Queanbeyan: thus Gundaroo once wholly in Queanbeyan's urban field, may now be regarded as lying in an urban marchland over which Queanbeyan, Yass and Gunning are each trying to consolidate a hold.

Bungendore, 17 miles northeast of Queanbeyan, is, like Gundaroo, only partly in Queanbeyan's urban field, since it is also influenced to some extent by Goulburn. Other small settlements strongly related to Queanbeyan are The Oaks Estate, its small but interesting residential outlier, minor centres like Sutton, Tharwa and Michelago, and dispersed hamlets such as Williamsdale, Royalla and Burra — of which we briefly consider a few.

The Oaks Estate  This residential settlement on about 80 acres of hilly land just north of Queanbeyan (Fig. 47) is a natural part of the town but administratively a part of Canberra. Though it is contiguous, its people are shut off from Queanbeyan's life by its

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Gundaroo formerly received mail services from Canberra, but consequent upon a recent re-distribution of the boundaries of Postal Inspectorates on the Southern Tablelands the village was transferred from the Canberra to the Goulburn Inspectorate. Inward mails arrive daily from Gunning and Queanbeyan but all outward mail from the village goes through Gunning only; in consequence air mail posted in the village passes by land through Gunning to Sydney (about 200 miles) before being air-borne, even though Gundaroo is only about 20 miles from Canberra's air-port.
railway station and yards, and since it is on a tongue of land in the broad sweep of a meander at the confluence of the Molonglo and Queanbeyan rivers, it is also cut off by those streams from the rest of the Australian Capital Territory: it is, therefore, virtually a No Man's Land, poorly provided with urban services and public utilities; neglected by Federal authorities who regard it as a "natural" part of Queanbeyan and similarly ignored by the latter's municipal council because its administration is Canberra's responsibility.

It was the forerunner of Queanbeyan (p.132) but it stagnated for a long time when the new village grew up, until the last 50 years, during which about 50 homes have been built, most of them now obsolescent. Now the estate contains a loose grouping of houses near the railway station, an historic stone house (p.132), a few industrial premises (oil depot, joinery works, cement product works and tile works) also on high land near the

The effectiveness of railway stations and yards as internal barriers in towns and as impediments of urban life is also illustrated elsewhere in Australia; for example Wyong on the central coast of N.S.W. is almost bisected by the main northern railway with the result that railway station yards in the town's centre practically shut East Wyong off from town life and activities in the business centre of West Wyong. (cf. p.300).

Still more strikingly, perhaps, the railway division of a town is illustrated in the railway junction centre of Junee on the South-West Slopes of New South Wales where the railway station and marshalling yards cut even the business section of the town into two parts. Largely as a result of this there has been a marked lag in Junee's growth as a business centre compared with that of its once-smaller trade rival, Cootamundra (32 miles away (cf. p.299)).
railway, several backyard industries; and about 30 acres of land along the rivers are farmed.

The population (about 260) is comprised primarily of minor tradesmen and unskilled workers, employed in Canberra, and their families, who recognise Queanbeyan as their shopping centre since the area contains no shops or formal trading facilities. Local children attend Queanbeyan school, but pre-school activities for about 20 children are provided by a mobile pre-school unit from Canberra.

No transport services have been provided for the residents, who must contact public transport at peak hours at Queanbeyan railway station; the road system is inefficient and poorly developed, and the public utilities (water and electricity supply, and sanitary and garbage services, provided from Queanbeyan by arrangement with Commonwealth authorities) are all uneconomic because of the low density of population.

Unlike the rest of the Australian Capital Territory the land tenure system on the estate is freehold, not leasehold, and it is divided mainly into one-quarter acre lots, most of which are unused and some of which are held by a few owners as an investment.

1 The only other exceptions are a few rural holdings with freehold titles, occupying land not likely to be required for governmental purposes.
Sutton and Michelago

Of the remaining minor centres listed (p.145) only Sutton, Michelago and Burra lie entirely in Queanbeyan's urban field, for Royalla, Williamsdale, and Tharwa are in the Australian Capital Territory.

Sutton, a small dispersed village just outside the north-eastern boundary of the Australian Capital Territory, 11 miles north of Queanbeyan, grew originally as a staging post on the coaching run from Goulburn to Queanbeyan via Gundaroo, but is now by-passed by the Federal Highway, about a mile away.

It contains a general store, a school, a church, a hall, and about a dozen cottages, nearly all built of timber or corrugated iron sheeting (as so many village dwellings are in Australia). From 59 at the 1891 census, its population rose to a peak figure of 156 in 1911, falling to 73 in 1947, with 104 others in surrounding rural areas. Provisional figures (1954 census) give the village's population as 61, with 124 others nearby.

While Sutton is about equi-distant from Queanbeyan and Canberra, and is linked to the latter by a far better road, the villagers staunchly prefer Queanbeyan as their "town".

Michelago, 207 at the 1947 census, is a small line-village on Micaligo Plains, a corridor of low land between the Tinderry Range (east) and the eastern wall of the Murrumbidgee Valley (west). It originated as a staging post on the road to Monaro, on F. N. Rossi's holding with the same name, and by 1866 (Baillière's Gazetteer) contained a post office, two stores, a
police barrack and lock-up, a public pound, a hotel which was also a coaching office, and a Roman Catholic school. In 1887 it became the State's southern rail-head, and until the railway was completed to Cooma in 1889 it housed many railway workers and their families, though, except for a few house foundations, no sign of their occupation now exists. Subsequently, the village functioned again as a staging post for the local coaching service between Queanbeyan and Cooma, but through being by-passed by the main Queanbeyan–Cooma road, it is now only a very minor local service centre (with a railway station, store, police station and school) dependent on Queanbeyan for all its major urban services.

Tharwa, on the western bank of the Murrumbidgee River 15 miles southwest of Queanbeyan and 20 miles southsouthwest of Canberra, is a small loosely agglomerated hamlet, nucleated to some extent around a central store and post office. It is in low foothills, near the break of slope between the rugged southwestern districts of the Australian Capital Territory and the broad Murrumbidgee Valley and adjacent hilly lands in the north; thus it lies between two contrasting activity zones - beef cattle grazing, on the one hand, and sheep grazing and fodder crop growing, on the other.

The settlement is a dry-point bridge-head, sufficiently high above the river to be safe even from major floods. Its store and post office provide facilities for rural settlers at Tidbinbilla (16 miles west), Naas (6 miles south) and Gundgenby (20 miles south), and its school supplies primary educational facilities for 30 pupils (1954) in these areas; but for all other needs, except
services provided by the Federal administration in Canberra, the
hamlet and its district look to Queanbeyan.

Census tables credit Thurwa with 183 inhabitants in
1911, 36 in 1921, 73 in 1933, and 80 (with 13 others in nearby
localities) in 1947, but it is obvious that rural population out-
side the hamlet was recorded in some censuses.

II YASS

A Standard "Australian" Rural Service Town

Yass, which has evolved principally along lines that
are conventional for most rural towns in the continent and is
generally similar to them in its urban function and morphology,
is fundamentally a service centre of a standard "Australian" type.

With 3656 inhabitants (provisional) at the 1954 census,
an increase of 402 from the 1947 census, Yass ranks fifth after
Canberra, Goulburn, Queanbeyan and Cooma as an urban centre on
the Southern Tablelands, and third as a service town after the
last two, having been displaced one place downwards on both scales
by Cooma's growth from 2249 in 1947 to 6503 in 1954.

The town is in the northwest of the Tablelands on un-
dulating and largely treeless country, 1500 to 2000 feet above the
sea. It is sited on the Yass River, a few miles above its junction
with the Murrumbidgee. It has grown up around both banks of the
river, but the main town area lies south of the stream in a broad,
and almost north-south, depression formed by the weathering of
soft rocks, such as interbedded shales, grits, limestones and
tuffs (the so-called Yass Series) between more resistant porphyry and tuffs and fine and coarse tuffs and lavas - all Silurian - on the eastern limb of the Yass-Bowning syncline (Fig. 50).

In consequence of the gentle local relief Yass has easy lines of access from all directions: Hume Highway (the main southern highway of the State) runs through it as the town's main street (Comur Street) in the central business area, leading from Goulburn (54 miles northeast) to Gundagai (67 miles southwest); another first-class road runs to Canberra (38 miles southeast); other major roads lead off to Cootamundra (67 miles west), Young (65 miles northwest) and centres beyond; lesser roads radiate in several directions to minor centres in its surroundings; and a short branch railway (3 miles) links the town with Yass Junction on the main southern railway.

The rural surroundings contain some of the finest pastures in the continent, noted particularly for their sustained production of the highest grades of Australian wool and their Merino sheep and Black Poll Angus cattle studs; moreover, the excellence of the pastures is a long-established fact, for even in 1833 N.S.W. Calendar and Post Office Directory recorded that "the very extensive Yass Plains" constituted remarkably good pasture land which required no clearing, and already contained many grazing establishments.

Initially, however, the farming emphasis was on cropping, with a large and varied outturn annually of wheat, maize, barley,
hay, potatoes, fruit and vegetables: cultivation reached its peak about 1874 when nearly 20,000 acres around the town were under crops of different kinds, but by 1901 the acreage had dropped to about 10,000, falling since then to almost negligible proportions because of the rise of pasturing as the dominant activity in the district. Some arable farming, principally fodder cropping in conjunction with pasturing, is, of course, still practised, but it is much less significant for the life of Yass than was the case in the initial phases of the town's growth.

Evolution

Pastoral occupation of the Yass Plains began soon after they were discovered by Hume in 1821, and it was greatly intensified after Sturt had reported favourably on the country he had seen on his journey from the Yass Plains to the Murrumbidgee in 1829, so that by the early 1830's the district contained many stations, on some of which reasonably large areas were soon given over to cropping.

In 1832, a site beside the Yass River was reserved for a village, intended to meet the growing service needs of the district, but it did not materialise. Three years later, however, a post office was established there to provide a weekly mail service to Goulburn, and in 1837 a design plan was prepared for Yass Town on the same site: the buildings then existing beside the Yass River (Fig.51) were, on the south side, an inn, a police hut, a store, a hut serving as a court house, a gaol, and a stock-
Plan
for the
Town of Yass
1837

Scale of Chains

Fig. 51
keeper's hut beside a stock-yard, and on the north side, one residence; tracks led northeast to Goulburn, northwest to Bowning, south to Co-mur station and southeast to Hardwick (C. O'Brien's station near Yass) and the Yass River was crossed by two fords — one near the existing "tram" bridge, and the other (O'Dare's Ford), privately owned, at the bottom of present-day Hume Street. On gazettal of the plan, the minimum price of town land was fixed at £2 sterling per acre, the first six blocks being sold at public auction in 1837.

The town's initial growth, as twin ford-side settlements, was slow, with the settlement on the southern and lower bank developing as the larger and more important. But when the trickle of settlers passing through the town to the newly opened lands along the lower Murrumbidgee and Murray Rivers became a full flood, Yass naturally expanded rapidly: by 1840 its growth was so great that there was an acute shortage of building lots for the clamouring and land-hungry townspeople — a shortage that

1 The so-called "tram" is a train consisting of a light engine and one passenger coach, and sometimes one goods van, which plies between Yass Town and Yass Junction, on the main southern railway — a single track connection, three miles long.

2 Miss M.E.J. Yeo in 'The Early Days of Yass', Yass Evening Tribune, 1st July, 1920, recorded that there were no fewer than 20,000 head of stock on the road south of Yass in 1840: though Yass benefited enormously in this way from the re-directing of the south road southwestwards from Marulan, Goulburn gained greater and more enduring benefits from the road diversion.
was relieved only when Henry O'Brien created O'Connell Town, containing many half-acre building lots and a few cultivation lots about 4-6 acres each (Appendix 10).

At the 1841 census Yass had 173 inhabitants, and in 1848, 55 houses and 274 inhabitants (Wells' Gazetteer), but at the next four censuses it expanded more rapidly with its population rising to 653 in 1851, 1123 in 1861, 1479 in 1871 and 1804 in 1881: contemporaneously, Yass functioned primarily as a commercial and administrative centre for its surroundings. In the 1860's and 1870's it also had two steam flour mills and two tanneries; moreover, it was a major coaching and express van staging-post on the Sydney-Melbourne run, and three local newspapers were printed in the town.

After 1881, the town's vigorous growth was not maintained and its population fell to 1771 at the 1891 census and 1479 in 1901: like Goulburn, it had served for a time as the major commercial and administrative outpost near the frontier of settlement and soon ceased to be the urban centre of gravity when the margins of settlement expanded quickly and far beyond the town - in this case because the subdued relief of the areas west of the Southern Tablelands permitted settlers to move freely through them. It lacked, however, the compensating advantages of a favourable general location and a particular location relative to the developed parts of the Southern Tablelands, such as those possessed by Goulburn, which enabled the latter to grow unchecked.
Despite its loss early in its life of function and standing as the frontier town of the region.

Yass had gained some importance as the seat of a local authority when its District Council was formed in 1843, but when it was incorporated as a municipality in 1873 high hopes were held by its townspeople that it would become the regional service centre for all the "new" districts west of the Southern Tablelands: their hopes were bolstered when several large public buildings were erected in the town during the 1870's, all of which proved, with the turn of events, to be much beyond the town's real needs for many years. Despite all this, Yass failed to develop to the proportions anticipated for it as a commercial and administrative centre, and as settlement spread farther inland it was superseded in the key functional role first by Gundagai, later by Wagga Wagga. As indicated by the decreases in its population (p.154), the town's fortunes languished till the end of the century, but since the 1901 census it has progressed again, with its population expanding to 2243 in 1911, 2502 in 1921, 2866 in 1933, 3254 in 1947 and 3656 (provisional) in 1954. These are normal increases gained while the town has gradually become functionally stable as a commercial and service centre for a small but prosperous

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The buildings included a large court house (cost £12,000) opened in 1879, described in The Australian Handbook 1881 as "the most handsome edifice of its time outside Sydney", commodious police quarters (cost £5,000), much-enlarged gaol buildings and a large school with a teacher's residence (cost £5,000). In addition, Parliament voted money in 1879 for the building of a new and large post and telegraph office.
rural district. Naturally, all these phases in the evolution of Yass have left their marks on the "face" of the town.

*Morphology and Aspect* (Fig. 52)

Though it is only a small stream, the Yass River has a comparatively deep valley which cuts the town into two parts (Fig. 52), namely, the small and scattered residential North Yass, and Yass Town, extending well beyond the limits of the original ford-side settlement on the south bank, which now embraces O'Connell Town (east) and a newly-developing subdivision at Marchmont (west). Hume bridge (a road bridge built in 1854) and the "tram" bridge (built 1892) are the only links between them; the former produces an hour-glass effect in the internal traffic circulation of the town by constricting its flow beside the central business area.

North Yass, principally on hilly and unsewered land and served only by poorly developed roads, has the lowest rated value in the town, the U.C.V. (1951) of most blocks being only a few shillings per foot; most of its relatively few residences are loosely grouped on the less hilly land near the Intermediate High School and Victoria Park which face each other at the northern end of Hume Bridge; except in the northwest where the town's water-works occupy hilly land fronting the river the rest of North Yass is largely undeveloped.

The central business area lies just south of Hume Bridge, extending for about half a mile along both sides of Comur
Fig. 52

YASS LAND USE - 1952

KEY

[Legend with various symbols and categories for land use]

YASS TOWN
MARCHMONT
NORTH YASS

SCALE: [Legend for map scale]

GOLF COURSE

[Map with various geographical features and symbols]
Street, with most of the shops concentrated on the eastern side and banks, public buildings (court house, post office, municipal chambers) and a cinema occupying much of the western street frontages: as in Goulburn (pp. 116-7), this kind of functional grouping has produced anomalies in land values on opposite sides of the main street.

Several churches and public buildings (ambulance station, Goodradigbee Shire chambers, police station, fire station) and a few commercial premises are scattered around the business core, usually in cross streets but not more than one block away from Comur Street, and Yass Town railway station is in Dutton Street, the next street parallel to Comur Street on the west, close to the town's heart.

Except for a couple of small parks and the municipal

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At its northern and southern ends Comur Street is lined with old and decadent buildings so that land values there are uniformly low, but in the main business area the assessed values (U.G.V. 1951) are as follow:

<table>
<thead>
<tr>
<th>Part of Comur Street</th>
<th>Western Side</th>
<th>Eastern Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>River (northern) end</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central town area</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Court house</td>
<td>Garage</td>
</tr>
<tr>
<td></td>
<td>£8/10/- per ft.</td>
<td>£21 per ft.</td>
</tr>
<tr>
<td></td>
<td>Post Office</td>
<td>Bakery</td>
</tr>
<tr>
<td></td>
<td>£30 per ft.</td>
<td>£35 per ft.</td>
</tr>
<tr>
<td></td>
<td>Bank</td>
<td>Store</td>
</tr>
<tr>
<td></td>
<td>£32/6/- per ft.</td>
<td>£56 per ft.</td>
</tr>
<tr>
<td></td>
<td>Cinema</td>
<td>Newsagency</td>
</tr>
<tr>
<td></td>
<td>£32 per ft.</td>
<td>£50 per ft.</td>
</tr>
<tr>
<td>Southern end end</td>
<td></td>
<td></td>
</tr>
<tr>
<td>town approach (with</td>
<td></td>
<td></td>
</tr>
<tr>
<td>many old buildings)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Council Chambers</td>
<td>Bakery</td>
</tr>
<tr>
<td></td>
<td>£4 per ft.</td>
<td>£2/10/- per ft.</td>
</tr>
<tr>
<td></td>
<td>Garage</td>
<td>Garage</td>
</tr>
<tr>
<td></td>
<td>£3 per ft.</td>
<td>£2/10/- per ft.</td>
</tr>
</tbody>
</table>
baths, the small area of flat and gently sloping land around the business core is occupied by residences, which during the last few years have also spread over hilly land beside the Yass District Hospital in the new western residential subdivision of Marchmont and on to the steep slopes in some newly-subdivided parts of O'Connell Town (east) where outcrops of resistant porphyry make building difficult and expensive; for rating purposes building allotments in Marchmont average about £3 per foot as against values of £1 to £2 per foot in O'Connell Town.

The town's Court House (p. 155) is its most imposing building, but apart from it and a few lesser buildings like its post office, banks, a couple of old churches and a handful of old homes, all of which faithfully reproduce architectural styles which were current in the 19th century, Yass contains little to distinguish it from countless other rural towns in Australia. Though a few homes with pleasing lines are being built in Marchmont, building developments in the town generally do not conduct to an attractive urban aspect: this, because most new homes (a few brick, but principally asbestos sheeting) conform to a few kinds of domestic building design, conceived in the first instance with little originality or imagination by draughtsmen employed by the manufacturers of building materials in the big cities, then used by the latter for a kind of mass production of medium-priced homes throughout the country. Moreover, as in most other Australian towns, the main street contains the usual sprinkling of modernised
buildings of a stereotyped kind between the older shops with balconies supported by kerb-side posts. Here and there, of course, old Yass proclaims itself in different ways, as for example in the few hitching-posts which still exist along the main street, and the spacious balconies with ornate fences of cast iron around three of the town's four hotels.

On the town's western outskirts, at about a mile from its centre, some 150 aborigines of very mixed descent live on a reserve of 30-40 acres in a dozen or so crude humpies - rough dwellings built of iron sheets on high piers. Quite apart from the fact that they have no natural bent for farming, the reserve on which they live is comprised of a rocky volcanic outcrop, so they must obtain employment in the town - the males as labourers and the females in domestic service. In an endeavour to have them assimilated in the urban community of Yass the Aborigines' Welfare Board of New South Wales has acquired some land in North Yass on which it has built a few better dwellings for them, but, as yet, they have not inclined toward a sedentary habit of life and there are frequent movements of the natives between this "camp" and a similar one at Cowra in the Lachlan Valley. The presence in this

1 The long and wide balcony was a specially significant feature of 19th century hotel architecture in Australia, one which is completely out of favour in modern country hotel design. In the absence of air-conditioning, however, the balcony was of special merit because it often provided the only comfortable living quarters on hot nights in many inland towns. It often served also as a "drying area" (and it still does in some towns, including Yass, where it is not uncommon for lines of washing to be seen hanging out on clothes lines on the hotel balconies).
way of a small group of aborigines on the urban fringe of Yass is by no means unique in Australia, though it is rare in the three States of the southeast.

In addition to sharing many common lines of urban evolution with other rural towns, and having many similar characteristics of urban form, Yass has general urban functions which may be regarded as "standard" for centres of its type.

**Function**

Yass provides all the customary administrative and commercial services for an urban field, extending fairly uniformly for about 25-30 miles in all directions from the town (Fig. 53),

1 In addition to the standard service institutions, such as its post office, police station, court, district hospital, ambulance, school and the like, and its commercial buildings (shops, banks, garages, bulk oil depots) it contains several district agencies of the State Government, like branch offices of the Soil Conservation Service, the Water Conservation and Irrigation Commission, the Department of Main Roads, and the State Electricity Department as well as a Pastures' Protection Board. Other services are provided by a Baby Health Centre, a War Veterans' Home in North Yass, churches of several denominations, a memorial hall and library, nursery and convent schools, a local newspaper (Tribune-Courier), a cinema, a municipal band, several clubs and cultural societies and a few minor industrial establishments.

The town's commercial enterprises are varied. It has about 60 stores and miscellaneous shops, nearly a score of garages or motor repair works and 8 bulk oil depots, about 30 carriers and wood merchants, 15 stock, estate and insurance agents, 5 large banks, 4 hotels, 8 taxi and hire car services and one bus service: essential building services are provided by 13 builders, plumbers and house decorators and 2 large timber and building material suppliers; and its professional men comprise 4 doctors in practice, 4 accountants and 3 solicitors. As in Queanbeyan (p. 142), a rural tone is given to the town's activities by its 10 shearing contractors, 5 agricultural machine and stock agents, 2 large wool and skin buying agencies, several nurserymen and poultry breeders, and a veterinarian and a water-boring contractor.
Fig. 53

YASS REGIONAL SERVICES

KEY

- Mail and School runs from Yass
- Sub Post Offices (Yass)
- Tribune—Courier circulation area
- Commercial Bank of Sydney 'Territory'
- Bank of Australia and N.Z.
- Bank of N.S.W. 'Territory'
- Meaghers general store delivery area
and it is the seat of its own municipal administration and of Goodradigbee Shire.

Industries in Yass are of a very minor order. They include a freezing works, a cordial factory and three dry-cleaning establishments as well as a few miscellaneous factories: in 1952, a large flour mill which had operated from the early days of Yass closed down, and in December, 1954, a chenille factory, with 40 employees, also closed down; this, like the clothing factory in Goulburn (p.115), as a consequence of the practice being adopted by manufacturers of concentrating all their activities in one place. In this instance, the chenille manufacturers with headquarters in Goulburn have transferred their Yass unit into the recently-vacated clothing factory near their headquarters unit in that city, and the Yass factory is being used as temporary classrooms for an overflow of pupils from the town's Intermediate High School.

At the 1947 census there were 1156 gainfully employed workers in Yass, and (indicative of the town's truly service functions) there was a reasonable degree of balance between the numbers of workers engaged in various kinds of employment (Fig.101).

Urban Field and Minor Centres

Because of the subdued relief of the town's surroundings the urban field of Yass is nearly circular and more regular than that of any other service town on the Southern Tablelands (p.160 and Fig.53), and next to Goulburn it is perhaps better
served with a radial network of roads than any other centre (p.151).

More than a score of small centres lie wholly within this urban field, and a few others which are also influenced by centres other than Yass may be regarded as being partly so: though they differ in size and occasionally in form, most of them have a similar general function as minor service centres. Exceptions are Burrinjuck and Upper Burrinjuck associated with the hydro-electric plant at Burrinjuck Dam, and Good Hope, a picnic and camping resort near the head of Burrinjuck reservoir. As representative examples we briefly consider the characteristics of Bowning, Murrumbateman, Jerrawa and Burrinjuck lying wholly within the urban field of Yass, and Binalong, which lies near the divide between the urban fields of Yass and Harden-Murrumburrah.

Bowning is a small village with an irregular street pattern sited in a narrow valley, 9 miles from Yass, on Bowning Creek and the main southern railway and Hume Highway-Harden road junction. It consists basically of a small core of commercial and public buildings (2 small stores, a butchery, a garage, a hotel, a cafe, a police station, a hall, a railway station and 2 churches) set in a loose group of about 20 residences: originally the village core was more strongly nucleated around a cross-roads site beside the railway station, but some of the businesses have been attracted towards the Hume Highway and they are now strung out along Leake Street, leading from the station to the highway (Fig.54).
The village provides limited shopping facilities primarily for the families of railway settlers and road workers living in it, and for a few graziers in nearby areas, but all their major shopping needs are obtained from Yass.

In the conventional Australian manner it grew first as a staging post on the Yass-Jugiong road, taking its name from nearby Bowning station on Derringullen Creek: though design plans for the village were prepared as early as 1840, it was not established until 1848 because it lay beyond the "limits of location", a few miles west of the western boundary of County Murray (Appendix 10). Bailliére's Gazetteer, 1866, described it as a "roadside village", and in 1876, when the railway was built from Yass to Bowning and on to Binalong, it received a small influx of railway workers and its population grew soon after to 183 at the 1881 census, fluctuating thereafter to 193 in 1891, 126 in 1901, 414 in 1911, 323 (with 45 others nearby) in 1921, 297 (with 197 others nearby) in 1933, 277 (with 77 others nearby) in 1947 and provisional figures of 352 (with 89 nearby) in 1954: the increases during the present century have resulted principally from the coming of road and railway workers and their families. Murrumbateman, officially proclaimed as a village on the 20th March, 1885, lies 15 miles from Yass on the Canberra road, and contains a store, post office, church, school, petrol station, hall and 18 cottages. It originated as a stopping-place for horse-drawn traffic between Yass and Queanbeyan; then for a time
served as a supply centre for a handful of prospectors on the not very productive Nanima Goldfield (proclaimed 1872) a few miles north; and now it provides postal, minor commercial, and primary schooling facilities for the adjacent grazing districts, though, like Bowning, it depends on Yass for all major urban services. Like Bowning, too, its population has fluctuated - from 81 in 1891 to 59 in 1901, 133 in 1911, 94 in 1921, 147 in 1933, 128 in 1947, and 213 (provisional) in 1954 - but unlike the former, it has a regular grid layout since it is on a level part of the Yass Plains, with its buildings dispersed on the western side of the Canberra road.

Jerrawa, a tiny hamlet grouped around Jerrawa railway station on the main southern line, 13 miles east of Yass, contains only a store-post office, a church, a hall and a few cottages. It exists simply as a railway outlet for farm produce from surrounding districts served by roads leading west to Yass, east to Oolong, Berrebangalo and Gunning, northeast to Dalton and northwest to Pudman Creek. Most of its 157 inhabitants at the 1947 census were railway workers, though it also had a few farm workers: all regard Yass as their "town".

Burrinjuck and Upper Burrinjuck, two line-settlements, strung out along the road beside Burrinjuck reservoir on steep slopes which offer few opportunities for building, lie about 30 miles southwest of Yass and depend wholly on it for all urban services except electricity supply, which is supplied to the town from the dam.
BURRINJUCK VILLAGE 1954

SCALE IN FEET

BURRINJUCK RESERVOIR

WATER SUPPLY TANK

Houses, sheds, garages

High and steeply sloping land
Burrinjuck, half a mile above the dam, is a permanent settlement containing the administrative offices of the engineering staff at the dam, about 30 cottages, a few barracks for single officers and a small group of service buildings (post office, store, bakery, police station, two churches, a primary school, a large recreation hall and a medical surgery) (Fig. 55). Upper Burrinjuck, 4 miles further upstream, is a temporary settlement whose layout is less hampered by relief. It contains a rock-crushing plant and the living quarters of workmen engaged in remedying defects in the wall of the dam. The aggregate population of the two settlements is about 700.

Binalong village, 528 at the 1947 census, is centrally placed relative to the larger centres of Yass (22 miles east), Harden-Murrumburrah (19 miles west) and Boorowa (20 miles north).

In the second quarter of the 19th century it originated as a staging post on the road from the Yass Plains to the newly-settled Lachlan Valley, and it soon became important as the Crown Commissioner's seat for the Lachlan Squatting District and as a petty sessions court centre, but when the large holdings of the Lachlan Valley were broken up for closer settlement Binalong soon lost its administrative function though it remained an important assize centre for some years. During the 1860's, when its population was only about 200, it functioned as a quite important commercial centre for a district with about 3,000 people, and when the railway was built from Yass in 1876 it became a rail-head for about a year, till the line was extended to Harden.
Binalong is laid out in the form of a Y (Fig. 56), with regularly gridded streets on gentle hills around Balgalal Creek in the stem of the Y. Here are most of its buildings – detached a little way from the village core (comprised of a post office, two stores, a bakery, a bank, a hotel, a garage and a mechanics' institute and hall), located at cross roads in the north, where the arms meet the stem of the Y. One or two commercial buildings, a police station, a large court house, two churches and a State and a church school are also scattered through the residences in the south, where, in pre-railway days, village life was focussed on the court house and two nearby inns (now used as residences). Though a second railway station has been built a little to the north of the village, the core still remains beside the old station, which is now used as a house.

The village is primarily a minor service centre for its own railway workers and the nearby rural districts: most of the village workers were employed at a quarry at Illalong Creek, 4 miles east, but when it closed down in 1953 they were given other railway duties.

Once dependent solely on Yass for all its urban services, Binalong now looks principally to the twin towns of Harden-Murrumburrah for them, largely because they are three miles closer by a better road. Some villagers, of course, still patronise the large shops in Yass, but more go to Harden; bulk petrol is supplied by both centres; Yass (Tribune-Courier) and Boorowa
THE INVASION OF COOMA BY S.M.A.
Cooma may well be termed a town in transition. Till now it evolved along lines that were normal for a rural town in a pastoral environment in Australia, except that it was also located near an important winter tourist area, but at the present time it is passing through a very vigorous phase of growth with consequential changes of a major order in its form and function. The responsible factor, the Snowy Mountains Scheme, is abnormal in that it is a vast and costly undertaking fully out of character with any previous developmental activities in the area, and because it is affecting a large part of the Southern Tablelands primarily to serve national, not local or regional, needs. As the main gateway to the Monaro Plateau and the higher land around it, the town was the logical choice for the headquarters of the Authority.

**Position and Site Factors**

Lying on the northern approaches to Monaro rather than on the Plateau itself, Cooma occupies an important cross-roads location from which major roads branch north to Queanbeyan and Canberra, west to Adaminaby, Kiandra and Tumut, southwest to Berridale, Jindabyne and Mount Kosciusko, and southeast to Nimmitabel, Bemboka, Bega, Bombala and Delegate. A few minor roads which serve surrounding pastoral districts also converge on the town.

Its growth as an important transport node and as the principal gateway town of the Monaro seems to suggest that local
Fig. 58

LITHOLOGY OF COOMA TOWN AREA
(After G. Joplin)
topography was a significant factor of Cooma's general location, for the town lies at a point on the northern fringe of the basalt flows of the Monaro where the plateau is joined by its main approach, the broad corridor leading north along the Murrumbidgee Valley.

The town, 2662 feet above sea level, is sited at the junction of two north-flowing streams, Cooma Creek and Cooma Back Creek, which follow more or less parallel courses to a point about five miles south of the town; where they begin to converge before joining in the town to flow through a deep valley incised in gneiss and schists. In consequence, the amount of flat land on the site suitable for town building is very limited, so that Cooma has been forced to spread from the valley floors over the ridge separating the two streams and on to hilly slopes north and east of Cooma Creek. East and west from the large outcrop of gneiss and the narrow belt of schists and quartzite on which the town has been built there are large flows of Tertiary basalts (Fig. 58) weathered into tabular terraces which stand out conspicuously in many town vistas.

Cooma's site, surveyed for a village in 1849 (Fig. 59), was selected principally because of the personal influence of the Commissioner for the Monaro Squatting District on the grounds that it was conveniently near his headquarters (in Lambie Street on Cooma Back Creek), but it is much poorer than one on higher and level ground east of the existing town which was advocated in some
quarters at the time of the survey: apart from the disadvantages of the hilly terrain for town building, much of the central town area is flooded periodically when water banks up through being constricted at the confluence of Cooma and Cooma Back Creeks.

**Evolution**

Soon after Surveyor Townsend had prepared the design plan for the village of Cooma (Fig. 59) it was gazetted, and the first sale of village allotments was held in the following year.

At that time the Monaro Squatting District was only thinly peopled by pastoralists on large runs, ranging from 2000 to 84,000 acres, but mostly from 10,000 to 30,000 acres and on the site of Cooma there were only two small settlements - the Commissioner's house and office with a nearby lock-up, at the southern end of Lambie Street, and Kirwan's "Improvements" (an inn, a stone store, a smithy, a stable and some stockyards) along Cooma Creek, just below the Cooma Back Creek confluence.

Initially, the village functioned as a Commissioner's seat, and to a lesser extent as a minor commercial centre, but its early growth was slow because it was linked only by long and poor lines of communication with the "settled districts" of the Colony: for some years after it was established, Cooma had only an intermittent mail service to and from Queanbeyan, and all heavy goods passing to and from the village had to be transported by bullock drays on the very poor tracks leading to Sydney or to the coast; regular coaching services between Cooma and other
centres were not established until the 1860's.

Cooma's growth received its first real impetus when gold was discovered at Kiandra, 52 miles southwest, in 1859. In the rush which followed, the goldfield's population expanded quickly (it was estimated at 15,000 in March, 1860), thus greatly stimulating the business life of the village which served as its principal supply centre. Though the Kiandra rush was short-lived, Cooma's urban gains were permanent, because its new and large stores were well-stocked and attracted more business from the surrounding rural districts than they had done previously: moreover, the gold discoveries at Kiandra and elsewhere in the Eucumbene Valley were followed by the discovery of other minerals in the districts around Cooma, and though many of these were only of minor importance, they attracted groups of miners who regarded the village as their business centre. The minerals included coal found on Myalla Creek, a few miles south of Cooma, which was worked during the 1860's; gold on the Cooma field near Murrumbidgee Bend, also worked in the 1860's; copper found at Kyloe, two miles from Adaminaby, in 1860; tin at Gegedzerick, 17 miles westsouthwest of Cooma, in 1872; copper at Middle Flat, 6 miles east, in 1880; tungsten at Berridale in 1891; copper at Dartmoor, 4 miles southeast, in 1897; and gold at Bushy Hill, 2 miles east, in 1897.

Though not officially proclaimed as a town until 1885, Cooma was listed as a "new town" with 369 inhabitants at the 1861 census, and five years later Baillièrè's Gazetteer described it
as a "postal town" with a hospital and benevolent asylum combined, a postal, money order and telegraph office, quarter sessions, dis­trict and police courts, a literary institute with 60 members, a cattle stealing prevention society, branches of two banks and two insurance companies, a local newspaper (Monaro Mercury) and six hotels.

Despite the strong influence of the Kiandra rush on the business life of Cooma, the village's population did not expand much until the 1870's, for at the 1871 census it had only 492 in­habitants: thereafter, however, it grew more quickly and was incor­porated as a municipality in 1879, continuing to expand to 1042 at the 1881 census, 1729 in 1891, 1938 in 1901, and 2330 in 1911 — normal increases reflecting its steady growth as a commercial and service centre for the Monaro, a development which was fostered in part by its function as a rail-head from 1889 to 1912 and its rise during the present century as a point of access for tourists to the winter snow-fields near Mount Kosciusko.

When the railway was extended to Nimmitabel in 1912, then to Bombala in 1921, Cooma's population fell to 1334 (1921 census) but rose again in the 1920's, though, as a consequence of the depression at the end of the decade, it reached only 1969 at the 1933 census, rising to 2249 in 1947. Since 1951, however, when the building of North Cooma was begun, the town has expanded much more quickly to 6503 (provisional) in 1954, and coincident with this growth Cooma's "face" has changed markedly.
Morphology and Aspect

In spite of the unsuitability of the local relief on much of its site, Cooma's street layout is on the whole regularly gridded (Fig.60), and in consequence much of the hilly land in the south and west, originally intended for town building, remains largely undeveloped, and the town has developed principally on the small area of flat land along Cooma Creek, where northeast-southwest and northwest-southeast streets intersect each other.

As an important effect of the standard grid being applied to its local relief in this way, Cooma has a business core which is more distinctly central than those of other towns on the Southern Tablelands, for its business area extends for only a short way along its main street (Sharp Street) and two blocks back on either side (Fig.60): thus, it is in the form of a short and blocky oblong in contrast to the long and narrow oblong formed by the business areas in most towns, where shops, banks, hotels, garages and the like are strung out along the principal commercial row (Goulburn, Yass, Braidwood, Crookwell), sometimes with a secondary commercial street (Queanbeyan).

Most of the town's public buildings are in the northwest, principally on one block (Fig.60). They comprise an old gaol (now used as a Lands Office and by the Clerk of Petty Sessions), a new gaol, a court house, a police station and a post office—all solidly built, chiefly of local building stone, at an early stage in Cooma's development, well above the flood levels of Cooma Creek.
COOMA LAND USE 1953

KEY

commercial
Industrial
Public open spaces
Bunglow
School
Church
Railway

SCALE

0 1 2 3 4 5 CHAINS
The central business core is enveloped by a broad residential belt which also contains a few scattered commercial buildings (oil depots near the railway station and new stores in Sharp Street near Cooma Back Creek), offices of the Snowy Mountains Authority on Cooma Back Creek, and the town's schools and churches, though it is intercepted in the west and south by large recreation areas, such as Nijong Park on flats liable to floods at the junction of the two creeks, the showground, and parks on rocky hills (Fig. 60).

Until the last few years, Cooma retained all the aspect of the frontier town that it was in the last century, as in the large public buildings built with prison labour and the architectural styles of its commercial buildings, particularly the hotels. Now, of course, its business area contains the customary sprinkling of modern banks and shops and a re-modelled hotel, and its many new residences are heavily stamped in the current Australian mould of domestic architecture: these are fast submerging the old rural town character that Cooma possessed as late as the 1920's beneath an urban aspect which is almost identical with that of any other Australian town. The rapid growth of North Cooma (Fig. 61), contiguous to the old town, which has been achieved by the building of hundreds of prefab and pre-cut homes of uniform designs, has detracted still further from the individualistic urban aspect that Cooma once had.

In addition to its aspect, the town's life has been much changed since the Snowy Mountains Authority set up its
Fig. 61

SNOWY MOUNTAINS HYDRO-ELECTRIC AUTHORITY

COOMA HEADQUARTERS TOWNSHIP
(Under Construction)

SCALE OF FEET

KEY
- RESIDENTIAL
- CHURCH
- SCHOOL
- RECREATION
- RAILWAY
- ACTUAL RESERVOIR
- PROPOSED RESERVOIR
administrative headquarters and its main supply base in North Cooma: from a sleepy town, which only stirred into activity on the weekly shopping day when pastoralists from surrounding districts gathered in groups when their business was done to discuss farming matters and topics of mutual interest or when large groups of tourists, changing over from rail to motor transport on their way to Kosciusko, paused to shop for a while, Cooma has changed into a busy centre. Many trucks and other vehicles now pass along its main street from North Cooma to widely separated places at which work is being carried out by the Snowy Mountains Authority, and the town's business life has been stimulated much by its own growth and by the rise of North Cooma, whose residents depend wholly on Cooma for all shopping services.

Cooma's urban character has not changed smoothly, for the rapid growth of North Cooma severely taxed the town's commercial facilities, and because of the difficulties which resulted a strong undercurrent of antagonism developed against the newcomers: this is now beginning to pass, but most of Cooma's business people are conservatively minded to such an extent that they refuse to recognise that the town is passing through a new phase of life, and all but a few of them steadfastly refrain from expanding their old premises or erecting new ones. In consequence there are some anomalies in its present growth, for while its general urban function and its form as a whole are changing rapidly the business core remains little altered, but obviously this state of
affairs cannot persist.

Function

As we have seen (pp. 170-172), Cooma originated as the Commissioner's seat for the Monaro Squatting District and subsequently became a commercial centre for the Monaro, a supply centre for the Kiandra goldfield, and a place of access to the Kosciusko snowfields. Before work was begun on the Snowy Mountains Scheme, Cooma was functionally stable as a rural service centre of the usual Australian type, but because of the building of North Cooma and the many changes in its urban field (such as large influxes of workmen, the building of many new roads and the setting-up of large construction camps) the town's importance has much increased.

It provides all the customary services of a rural town of its size, and it is a municipal and shire centre and contains the district agencies of several State government departments.

1 Telephone subscribers in Cooma (Telephone Directory, January 1955) may be classified as follows: stores, shops etc. (64), garages (10), oil depots (7), hotels (6), banks (5), carriers (18), taxis and taxi trucks (7), agents (12) including 5 specifically stock and station agents, solicitors (6), doctors (5), accountants (4), builders etc. (16), drovers (3), shearsers (6) and a dam excavator. The town also has a high school, a primary school and a convent school, a local newspaper ("Monaro Express"), a broadcasting station, a hospital, ambulance station, a baby health centre, a fire station, a theatre, a court house and a prison camp (used for the detention of good conduct prisoners engaged in farm duties).

2 Such as a Pastures' Protection Board and a district agronomist (Department of Agriculture), a soil conservationist (Department of Conservation) and branches of the Department of Main Roads and the State Electricity Department.
It also contains the headquarters of the Snowy Mountains Authority and a Commonwealth District Employment Office. The town's minor industries comprise a cordial factory, a cement product works, a fibrous plaster factory, several meat and smallgoods works, a saw-mill, two laundries and a eucalyptus distillery. Thus it may be seen that its function is generally similar to that of Queanbeyan and Yass, though the shape of its urban field is somewhat different to that of either of those centres (p.55).

Urban Field and Minor Centres (Fig.62)

Except where it penetrates to Colinton (28 miles) along the corridor of low land along the Murrumbidgee River, Cooma's urban field is virtually cut off fairly abruptly in the north because the sparsely populated ranges on either side of the river are used only for light grazing. The more easterly of those ranges (the Kybeyan and other ranges south of them) form the eastern rim of the Tablelands and also mark the eastern limits of Cooma's urban field. To the south and southwest, however, Cooma's influence extends more widely so that its urban field embraces the whole of the Monaro Plateau and penetrates also into the higher land around it (Fig.62).

Naturally, because the local environment of Cooma's urban field is more dominantly pastoral than any other part of the Tablelands, most of the minor centres in it are small, though they are of interest for a variety of reasons: the more significant of them are Bunyan (5 miles north), Bredbo (21 miles north),
Nimmitabel (23 miles southeast), Dalgety (33 miles southsoutheast), Berridale (21 miles south), Jindabyne (33 miles south), Adaminaby (30 miles southwest) and Kiandra (52 miles southwest), though The Chalet near Mount Kosciusko and the Snowy Mountains construction camps (Guthega, Munyang, Island Bend, Eaglehawk, Tollbar, Cabramurra and Tumut Ponds) also depend on Cooma for all their urban services.

Except Kiandra, which mushroomed almost overnight as a gold mining boom town and disappeared nearly as quickly after a few years of turbulent existence, all came into being with route functions, either at stream crossings (Bredbo, Jindabyne, Dalgety) or as stopping places for bullock drays and horse-drawn vehicles (Bunyan, Berridale, Adaminaby): with few exceptions they are being influenced to a greater or lesser degree by the Snowy Mountains power project.

Bunyan, originally Reid's Flat after its first occupier, and later Jews' Flat, because of its many Jewish settlers, was perhaps the nearest approach to a village settlement in the early days of the Monaro: it grew up beside an alluvial flat on which crops could be grown, in a site which was more sheltered from strong and bleak winds than others further south; but when tracks were developed across the Monaro it was soon supplanted by Cooma as the principal settlement, after which it served as a staging post on the road from Queanbeyan. The building of the railway to Cooma in 1889, and later, the rise of motor transport, caused the village to
decline, and it now has all the usual features of a decadent staging post - the ruins of two inns and a few houses beside the old coaching road, and a few small buildings scattered around the railway station, about half a mile from the old road.

Bredbo, beside a former ford on the Bredbo River, is also typical of many small villages on the Southern Tablelands which came into being as coach staging posts but managed to survive in the motor era by becoming minor commercial centres for nearby farming lands. In its layout (Fig.63) and aspect it differs only in minor details from other villages of its type.

Nimmitabel (Fig.64) grew comparatively early in the history of the Monaro as a small commercial outpost at the junction of tracks leading from Cooma down the Brown Mountain to Bega on the south coast, and of roads leading south to Bombala and Delegate, thence to eastern Victoria. When a road was built down the Brown Mountain in place of the track in 1860, the village's importance as a lesser transport node was increased, and again, to some small extent, between 1912 and 1921 when it was a rail-head till the line was built to Bombala. On the whole its form and aspect are conventionally Australian, but a few of its buildings (particularly its post office, an hotel and the remains of an old flour mill) give the village the aspect of a frontier settlement, and an incongruous note has also been added to it by the building of a Tudor front on an old and bare weatherboard hotel. The old mill is of particular interest because it is a solidly built masonry
NIMMITABEL LAND USE 1954
structure unlike the flimsy wooden mills which were usual in rural villages in colonial times. Its builder originally intended that it should be a wind-driven flour mill but owing to the many protests by horse-owners in the district it became horse-powered instead: subsequently, it was used as a timber mill.

Berridale originated as a line-hamlet along the Cooma-Jindabyne road at the Dalgety road junction, but since 1947 the village has expanded to the northwest and southeast, principally in the latter direction along the Dalgety road which is now taking on the character of a service and commercial row (Fig.65). A small influx of workers (and their families) from the Snowy Mountains project have accounted in part for Berridale's strong growth during the last few years, but, more important in this connection, the village is the seat of a progressive shire (Snowy River) whose finances are in a healthy condition - a circumstance which is by no means true for local authorities generally in rural parts of New South Wales.

As a result of a recent revaluation of its rateable land and a gradual increase of general rates from 5d. in the £. to 1/- in the £. during the last ten years, the revenue of Snowy Mountains Shire has increased from about £18,000 to about £110,000, annually, thus permitting modern road-making plant and equipment to be purchased, with a substantial surplus for other shire works. Since the shire's population is dominantly rural, its pastoralists make few demands for services other than trafficable roads: these can be built at moderate cost because of the use of the shire's efficient plant, also because the topography of much of the shire is undulating and contains an abundance of suitable road-making materials. In consequence, capital has been made available for general improvement works in the shire centre (Berridale).
The village and its immediate surroundings have been proclaimed as an Urban Area under the State Local Government Act, and to encourage people to settle there the Shire Council has instituted a system of home-building loans, having invested £70,000 in mortgages on houses since 1947. It is also proceeding with plans to build new council chambers, a shire hall and a centrally-heated cinema, and has taken steps to secure a new and large post office (promised by 1957 by the Postmaster General's Department) and a new police station. In addition, private enterprise in the village is being encouraged to re-construct the old inn which has survived from coaching days into a modern hotel and to build a large store. All this contrasts strongly with the laissez-faire policy of the municipal authorities and business people of Cooma, to which town the people of Berridale still must look for many of their major urban services.

Concurrently with its vigorous growth, Berridale's pull on the surrounding countryside has obviously become much greater, and it now has an urban field providing some services which extends for about 10 miles north towards Cooma, 12 miles southeast to Dalgety, 14 miles northeast to Bobundara, 14 miles northwest to Middlingbank, and 15 miles southwest to Rocky Plains. At the 1947

Under Sections 540-555 of Act No.41, 1919. An Urban Area is a kind of sub-municipality in a Shire, in that it is an urbanised part of a shire with an elected Urban Committee, over which the Shire Council has all the powers of a municipality, including the power to levy local rates, paid into a separate fund as prescribed and used only for purposes for the benefit of the local area.
census the village had 338 inhabitants with 150 others nearby, so that it was about one-fifth the size of Cooma, and though provisional figures from the 1954 census show that the latter (including North Cooma) is now about 9 times bigger, Berridale's growth has been more balanced on the whole than that of old Cooma.

Dalgety, 169 at the 1947 census and a provisional figure of 78 with 131 others nearby in 1954, is a small village which serves as a minor service centre for nearby pastoral districts, though to use the expression of its inhabitants it is essentially a "Cooma town".

Initially it grew up as Barnes' (later Buckley's) Crossing Place beside a ford on the Snowy River at which a few local tracks met the main road leading from the Monaro to Twofold Bay, but consequent upon the failure of Benjamin Boyd's Eden-Monaro development scheme in 1849 the settlement lost any pretentions it
183.

may have had for developing as an important centre: in this connection, hopes were raised, temporarily of course, when it was selected as a site for the seat of federal government in 1904, only to be dashed when the Canberra site was selected instead in 1908 (cf. pp. 73-79).

Though it is in a picturesque setting beside an old bridge (1889) and a willow-lined reach of the Snowy River in undulating granite country containing extensive false rhododendrons, Dalgyst is unpretentious in its layout (Fig. 66) and all its comparatively few buildings lack distinction of any kind. Its service buildings, comprising two stores, a garage, an hotel, a post office, a hall, a police station, and two churches, cater for settlers around the roads to Berridale and Bombala and in the Boloko and Ingebyra districts which are linked by a road leading to the southwest.

\(^1\) Boyd was a colourful figure in the life of the Colony in the 1840's. At various times he combined the interests of a shipping magnate, merchant, banker, pastoralist and station owner (his Monaro holdings alone comprising more than half a million acres on which were run some 12,000 cattle and 18,000 sheep), member of the Legislative Council, town planner, whaler and "blackbirder" (one who secured Kusakas from South Sea islands for indentured labour in Australia.)

In 1842, he instituted a grandiose Twofold Bay-Monaro developmental scheme, aimed at a balanced commercial development of the port and hinterland of Twofold Bay by the use of the pastoral resources of the Monaro, port facilities which he established at Boydtown (containing stores and a plant for boiling down sheep tallow), and a whaling station which he established at East Boyd, near Boydtown. He also experimented unsuccessfully with Kusaka labourers on his Monaro holdings, and built a road linking the latter area with Twofold Bay. The enterprise prospered for a few years, and large quantities of wool, beer, hides, sheep, tallow and dairy produce were exported through Boydtown, but it failed completely when Boyd overreached his credit and became insolvent in 1849, despite clever manipulation on his part.
Jindabyne, a privately subdivided village, is comprised of twinned bridge-head settlements on opposite banks of the Snowy River where it is crossed by the Kosciusko road, 33 miles south of Cooma (Fig. 67). It originated as a ford-side mustering place to which cattle were drawn from the Kosciusko Plateau before the onset of winter snows, before being drafted to the lower Monaro districts or to the adjoining Gippsland districts in Victoria; subsequently it became a minor commercial centre for the pastoralists in its surroundings, and later, a stopping place for tourists going to the Hotel Kosciusko or The Chalet.

Till recently, the village's two cells - a small business cell on the north bank, and a larger but principally residential cell on the south bank - were fairly compact, but since the Snowy Mountains works have been in progress "shanty towns" (sub-standard residences) have developed on both sides of the river, downstream from the bridge: here, there are many flimsy and make-shift shacks built of assorted materials on the north bank and a small cluster of crude pise dwellings on the south - all built by migrant settlers and contravening local building regulations.

As one of the final stages in the Snowy Mountains scheme, a dam will be built across the river just below the village causing it to be flooded, and to prepare for this the Authority has begun building Jindabyne Works Township (later to become the new village of Jindabyne) on hilly land south of the dam site about 1½ miles from the existing village (see inset, Fig.68).
Fig. 68

JINDABYNE WORKS TOWNSHIP
(ULTIMATELY TO BECOME THE NEW JINDABYNE VILLAGE)

Legend:
- Residential
- Church
- School
- Open Spaces

Legend:
1. WHOOSH CENTRE
2. MED CENTRE
3. REG. OFFICE

Scale: 1000 Feet
As yet, the new village (Fig. 68) is only in the early stages of building, but as the work progresses residents of old Jindabyne may elect to move to a comparable site in the new settlement or to be compensated for their property when it is flooded.

Jindabyne is still popular as a stopping place for tourists on their way to the Kosciusko snow-fields and their passing trade is quite important for its few small businesses, but more important still is the regular week-end trade from workers at construction camps higher up in the valley at Guthega dam, Munyang power station and Island Bend shaft, since the village's hotel and shops are their nearest. Minor roads enable Jindabyne to provide some services also for pastoralists at Moonbah and Ingebyra (south), Kalkite (west) and Dry Plains and Rocky Plains (northwest), but its major road link is with Cooma, the nearest railway centre, from which it and these districts obtain all their major urban services.

Adaminaby (Fig. 69) 30 miles west of Cooma on the Monaro Highway, was established as a village in the early 1860's to serve as an administrative centre for the Kiandra and Bucumbene goldfields, occupying a site just below the zone of heavy winter snowfalls (cf. p. 55) at the junction of five roads leading to and from the fields. After the gold rush had ended in the late 1860's, the village persisted as a commercial and general service centre for the surrounding pastoral districts, though much reduced in importance. Under the Crown Lands Act of 1885 it was proclaimed as the town of Seymour, but was renamed Adaminaby in the following year, to avoid
TEMPORARY TOWN OF EAGLEHAWK
(Dept. of Public Works N.S.W., ADAMINABY DAM CONSTRUCTION CAMP)
General Layout-1954

SCALE

0  300  600  900
FEET

Fig. 70

KEY

- Commercial
- Administrative
- Public works Public Buildings
- Industrial
- School
- Residential
- Future Residential
- Recreation
the responsibility for building the Adaminaby Dam.

Though it is only a temporary town, Eaglehawk has been supplied with the amenities common to all the camps of the area, but in addition to having reticulated water and electricity supplies, being fully sewered, and having a school (enrolment about 200), a hall and shopping facilities, its residents have been provided with a nine-hole golf course - an amenity not possible near the other camp sites.

Kiandra, 22 miles west of Adaminaby, has now shrunk to insignificant proportions relative to its size during the gold rushes of the 1860's, and though it lies in Cooma's urban field its study fits best with that of the other decadent centres of the Tablelands (Chapter X).

Cabramurra, described by the Snowy Mountains Authority as its "regional township for the Upper Tumut River area", is the newest settlement of an urban character on the Southern Tablelands. It lies about 9 miles south of Kiandra, on the top of a high ridge beside the Tumut River, and since it is at an elevation of 4,890 feet above sea level (300 feet higher than Kiandra) it is said to be the highest "town" in Australia.

Following the completion of the Guthega dam and the Munyang power house in the Kosciusko area in February, 1955, many of the workmen, and some of the buildings from Island Bend, have been transferred to Cabramurra: this is one of several such shifts which will occur as the different stages of work in the scheme are
Cabramurra, population 500 (estimate March, 1955), has the general aspect and contains all the appurtenances of camps of its kind, most of its buildings (administrative offices, store sheds, cottages, barracks and messes) being arranged in rows along terraces which have been made necessary by the steep slopes of the ridge on which it is built (Fig. 71): all the buildings (made either of timber or galvanised iron sheeting) are of the type which can be dismantled readily in sections to be transported elsewhere when the need arises. The "town" is entirely an Authority settlement, since the latter is responsible for erecting all buildings, such as churches, a school, a store, a bank, a post office and a petrol station in addition to living quarters and store sheds for its own special needs, and also for providing all the essential services for the inhabitants.

Naturally, because the Authority's headquarters are in Cooma, the settlement has strong links with that centre, connections being maintained by the Authority's own vehicles for official purposes and by a regular Courier Bus Service, by arrangement with Pioneer Coaches, for private purposes: in addition, however, Cabramurra has some links with Tumut, west of the Tablelands and about the same distance away as Cooma, from which some supplies (like groceries and fresh vegetables) are obtained and to which the Authority runs a subsidised bus on a fortnightly shopping trip.

Though largely dependent on Cooma for its needs, the
settlement by reason of its isolation leads a life which is more or less self-contained and characteristically its own: for example, its community in consequence of being pioneering in type leads a more corporate life than is usual in settlements of equivalent size in Australia, with the group interests being expressed in and served by several clubs and societies, a community library and a local news-sheet (Roundabout) published each Friday.

IV CROOKWELL

The Town of a Shire

Like Bombala, and Braidwood to a lesser extent, Crookwell is essentially the town of its shire, which embraces a wedge-shaped area of 1328 square miles in the north of the Tablelands, between the Abercrombie and Lachlan Rivers above their confluence. But though the whole of Crookwell Shire is nominally the town's urban field it is not entirely so in fact, largely because of the town's eccentric position relative to the territory it administers and its proximity to Goulburn (Fig. 72): the topography of the shire also contributes to some extent to the weakening of Crookwell's influence in a part of its urban field.

Location and Site

Located about 30 miles northwest of Goulburn, Crookwell lies in the southeast of its shire on the headwaters of the Crookwell River, at an elevation of about 2900 feet above the sea. Except for a few old buildings on a small flat beside the river, the town has grown up on the slopes around both banks, but principally on the south, and it is picturesquely set inside a ring of
nearby hills whose gentle outlines and grassy slopes, at appropriate times after rainy periods, strongly suggest the aspect of the English Downs. Beyond them the rolling topography extends for many miles in all directions, generally with light stands of timber interspersed between extensive grazing paddocks; but to the north near Peelwood and to the northwest near Bigga the country becomes more rugged with much thick forest cover.

As might be expected, grazing is the dominant activity in the districts around the town, primarily sheep raising for wool, mutton and lamb, with some cattle raising and dairying and some cultivation (mainly fodder crops, potatoes and fruit). Originally, the emphasis was on wheat growing, but this has now declined to insignificant proportions, being superseded by sheep raising which first became important towards the end of the 19th century. Dairying was first established around Crookwell in the 1880's and was a major activity for about three decades; fruit growing was locally significant a little later, and potato culture has been developed since 1900.

As an effect of Crookwell's eccentric position in the shire and its nearness to Goulburn, much of the business belonging to its shops goes either to Goulburn or Boorowa: for example, people living in the Golspie, Wowagin and Roslyn districts (east) and in the Kialla, Grabben Gullen and Bevendale districts (south) generally prefer to shop in Goulburn where more varied shopping facilities are available, even though they live closer to Crookwell;
similarly, some trade escapes from the western parts of the shire, as around Narrawa and Markdale, through the undulating country to Boorowa which is closer than Crookwell. In the north and northwest, however, Crookwell's influence has been more firmly established over minor centres like Peelwood, Tuena and Bigga because the rough country along the Abercrombie and Lachlan Rivers cuts them off fairly effectively from centres like Bathurst and Blayney on the Central Tablelands and Cowra on the South West Slopes (Fig. 72).

Consequent upon the building of a branch railway from Goulburn in 1901, Crookwell became the principal outlet for the rural produce of the shire, and it developed logically as the major focus of its road system, thus taking over the role originally performed by the village of Binda (13 miles northwest) and later by Laggan (5½ miles northeast): its rise in this way marked the culminating point in what had been previously a comparatively uneventful life, and led directly to the changes which have produced its existing morphological features.

Evolution, Form and Aspect

Though most of the area which now comprises the town's urban field was occupied by rural settlers during the 1820's and 1830's, Crookwell itself did not gain any prominence till much later. Apart from the small clusters of huts and cottages which grew up around a few inns and stores scattered along some of the tracks serving the district, the only important urban development
in early times was the establishment of Binda, proclaimed as a Government village in 1851 to serve as an administrative and police centre. Soon after, the private village of Laggan grew on the main road leading from Goulburn to the Tuena and Trunkey Creek goldfields and Bathurst, at a point where it was joined by tracks from several directions, and became the principal commercial and flour-milling centre for most of what is now Crookwell Shire.

In the 1850's also, a small hamlet grew up at Brooklands on a flat beside the existing business core of the town, where several tracks converged on a ford on the Crookwell River. Subsequently, many more huts were built there, and the name of the settlement was changed to Kiama (after a nearby creek), but apparently the hamlet did not expand much on to the adjacent slopes which were proclaimed as the site of the village of Crookwell on 11th December, 1860.

Crookwell's initial growth was slow, for in the first three decades of its life only a few public buildings were erected in it and its streets consisted merely of rough tracks winding between the stumps of fallen trees, and it did not really begin to progress till the 1880's and 1890's; by this time of course it was beginning to reap benefits from the new agricultural and pastoral developments in its surroundings. Its growth as a commercial and service town, however, is primarily a happening of the present century and has been brought about by such things as
the sustained productivity and prosperity of its rural environment, the coming of the railway, the setting up of Crookwell Shire (under the provisions of the Local Government Act, 1906) and a general improvement of roads throughout the area it serves. All this is reflected by the changes in Crookwell's population since the 1881 census when it contained 240 people, for at successive censuses it expanded to 925 in 1891, 1395 in 1901, 1696 in 1911, 1759 in 1921, 1867 in 1933, 1882 in 1947 to the provisional figure of 1956 in 1954; in addition, North Crookwell was credited with 97 in 1921 and 176 in 1947, but was not listed in the other enumerations.

Morphologically, the town has many counterparts in Australia, since it has the conventional gridded street layout in which one main shopping street (Goulburn Street) is set in an urban belt containing residences, public buildings, recreation areas and all the other usual urban features (Fig. 73), but on the whole it looks fresher and has a neater aspect than most towns on the Southern Tablelands: this, no doubt, is partly an effect of the attractive landscapes of the grassed slopes and gently rolling hills around it. More importantly, however, its wide and well-formed streets are lined with buildings which, if not always elegant in design, are at least tidy and well-preserved, and its built-up area is relieved by spacious recreational grounds which are obviously well-tended (a characteristic not common in Australia's rural towns) and pleasing in appearance. In this respect of general urban aspect Crookwell more closely resembles Boorowa (a
CROOKWELL LAND USE
1954

SCALE
0  8  16  24
Chains

KEY
- Commercial
- Administrative
- Public and Public Buildings
- Industrial
- Hospital
- Road
- Railway
- Residential
- Scattered Residences
- Recreation

Fig. 73
commercial competitor, a few miles away from the western boundary of the shire) than any of the towns on the Tablelands.

Though it is a prosperous business centre, Crookwell is, by and large, what is commonly called a "quiet" town, for at most times its wide streets seem to have singularly little traffic in them, and because it does not lie on an important routeway even its main street is little congested with traffic, unlike Goulburn, Cooma, Yass and Queanbeyan which have much through traffic as well as that which circulates locally. At times, however, such as the weekly shopping day of country dwellers (usually either Friday or Saturday morning) and on special occasions (Annual Show, Race Meetings and Sports Days) both sides of the main street may be lined with parked vehicles; seasonally too, of course, much traffic converges on the railway station, as after the potato harvest or when the wool clip or fat stock is being trucked to Goulburn or Sydney. All this bears strongly on Crookwell's urban function. Function and Urban Field (Fig.72)

The town performs all the commercial and service functions customarily done by the seat of a shire, and it has all the usual
institutions, though these are naturally fewer and less important than in the larger centres.

Despite the contacts which Crookwell maintains with all parts of its urban field by means of a radial network of 7 major roads with many minor branchings, its influence, as we have seen (p.190), is challenged in some parts of the shire by Goulburn and Boorowa. Within this field there is only a handful of villages (Laggan, Binda, Bigga, Tuena) and hamlets (Peelwood, Grabben Gullen) and several service localities (cf. p.52) such as Kialla (6 miles south), Hadley-Fullerton (20 miles northeast), Narrawa North (23 miles northwest) and Crooked Corner and Reeves (each about 21 miles to the north).

In a size-grading based on the 1947 census figures, Bigga (36 miles northwest of Crookwell), with 251 inhabitants, is the largest village, followed by Binda (240), Laggan (229), and

For example, apart from its court, police and railway staffs, its only agent of State administration is a Potato Inspector (Department of Agriculture), all other agricultural services being obtained from Goulburn; its school ranks only as a Central School; and while it provides a dozen rural services (7 agents, 3 wool brokers and 2 shearers) it has an aggregate of only 88 other commercial services (44 stores etc., 5 banks, 2 hotels, 7 garages, 4 oil depots, 3 agents, 21 carriers and wood merchants, and 2 taxi and bus services), 9 professional services (5 doctors, 2 accountants, 2 solicitors), about half a dozen building services and 3 minor industries (cordial factory, freezing factory, cabinet works).
Tuena (140), 38 miles north: it is also more clearly a secondary service centre to Crookwell, for its village core (2 stores, hotel, garage, school, hall, police station, 3 churches, cinema, bank, stock saleyard and sawmill), set in the centre of a regularly gridded settlement on steeply sloping land, provides essential services to a minor degree for the whole northwest of the shire, Binda and Laggan (Fig. 74) still provide normal village services for nearby areas, but both have lost ground by being near Crookwell, and Tuena, though once significant as a goldfield centre, now lives precariously as a village centre for pastoralists around the Abercrombie River.

Except to illustrate the way in which a few of the needs of rural settlers in the Fullerton-Hadley area are met, neither the hamlets nor the service localities call for special comment: Fullerton's post office, one of four cottages scattered along a road branching from the Crookwell-Bathurst road, is roughly the mid-point of a service locality which is more dispersed than usual on the Southern Tablelands, because the people who use it send their children to Hadley school (nearly 6 miles northeast), but attend an Anglican church (called Bolong church), more than 3 miles southwest, and gather for social functions in Kimpton hall.

The populations of these centres and of nearby areas (in brackets), are given as Bigga 223 (200), Binda 221 (204), Laggan 256 (68) and Tuena 98 (28) in the provisional figures of the 1954 census.
about half a mile beyond the church on the road to Crookwell.

V BRAIDWOOD

A Town of Chequered Growth

Braidwood, the smallest and least progressive town on the Southern Tablelands, is of special interest because it has recurrently shown promise of greater urban growth than it actually made. From the outset handicapped in large measure by its geographical environment, the town on several occasions seemed on the verge of serious expansion, but in each instance its growth was inhibited by circumstances brought about by changes in the history of the local area.

Location and Site

Braidwood, 2500 feet above sea level, lies about 5 miles east of the Shoalhaven River in its upper valley, at the focus of roads radiating to several centres on the Tablelands and to a few coastal centres like Nowra, Bateman's Bay and Moruya; this being a logical outcome of its position near the eastern edge of the Tablelands where the roads could converge before pitching down the coastal scarp.

In this respect Braidwood's position is analogous to the sites of the small towns along the Western Ghats on the Deccan Plateau (cf. O. H. K. Spate, India and Pakistan, A General and Regional Geography, London, 1954, pp. 637-40.)
The town is sited on a slight rise between Pound and Flood Creeks, just below the wooded slopes of Mount Gillammatong (2968 feet), in a belt of undulating granite country of fair to good grazing capacity (average one sheep to the acre) which is surrounded by sedimentary rock areas with poorer grazing capabilities (one sheep to 3-6 or more acres) and containing many forested and heath-covered ridges not suitable at all for grazing.

Though the gentle relief of the site offers no impediment to town building, Braidwood has not grown much beyond its initial proportions, and in consequence there is still much vacant land inside the urban limits shown on the original design plan: an explanation for this must be sought in the factors which have influenced its life.

Evolution

A comparison of the growth made by Braidwood and Cooma leaves little doubt that the Shoalhaven town's development has been arrested, for, though it was officially proclaimed as a village ten years before the other and was about three times its size during the 1860's and 1870's, it was less than one-half its size at the 1947 census, and now, since North Cooma has grown, is less than one-sixth its size. Moreover, in contrast from


\[1\]

Though the grazing potential of the land around Braidwood is indicated only by sheep carrying capacity, it should be observed that beef cattle and some dairy cattle are also grazed there. Stockmen on the Southern Tablelands generally equate one beast-area (the amount of land normally required for grazing one beef animal) to six sheep-areas (that is, the amount of land required for grazing six sheep).
Cooma which is expanding rapidly after a long period of steady growth, Braidwood has, except for a few minor fluctuations, retrogressed and now has about 100 fewer inhabitants than in 1871.

Soon after surveys had been carried out (in the late 1820's), much of the Upper Shoalhaven Valley was taken up by a few settlers who for contacts with the rest of the Colony depended wholly on the rough track between Larbert and Krawarree, the southern end of the original main line of road to the south. Though this passed only a few miles west of its site, Braidwood did not then exist: in fact, the village was not established until 1839 by which time the track had dried up as a trade channel, so that more than anything else, perhaps, the virtual closing of the old south road stimulated the early growth of Braidwood as a small service centre at the junction of new and rough tracks which the settlers of the Upper Shoalhaven had cut through to the coast in an attempt to end their isolation from Sydney.

In the 1840's when Surveyor Larmer marked out the line of what became the Wool Road from Braidwood to Huskisson on Jervis Bay, and routes were discovered for what promised to become better tracks to Bateman's Bay and the new port of Broulee near Ulladulla, hopes were raised that Braidwood would develop as a really important route centre, but it did not do so because all the coastal routes were difficult ones which did not become trafficable for some years, and even then only after much money and labour had been spent on them: for example, "Fair Play", a correspondent of
Braidwood Dispatch (9th April, 1859) stated that the building of 6½ miles of the Nelligen-Braidwood road over 8 months had cost £1591/15/-, "which road is only one dray wide, with the stumps standing a foot high on it": moreover, Braidwood was unable to expand much as a service centre because most of its surroundings was only sparsely populated and could not be otherwise because much land was tied up in large holdings, such as a church and school estate of more than 42,000 acres (northwest) and others nearly as large (Braidwood Wilson's, Maddrell's and Hassall's) to the south and southeast of it.

The 1846 census described Braidwood as a "new town" but did not list its population, though two years later Wells' Gazetteer recorded that it had 41 houses and 206 inhabitants; at the 1851 census it had 212 people and by 1856 the population had expanded to 506.

During the next decade and a half the town became specifically significant as the administrative seat and the principal supply centre for the Southern Goldfields, with its population rising to 959 at the 1861 census and 1197 in 1871: though no gold was found in Braidwood, the town was soon ringed with mining camps on alluvial workings which spread for more than 20 miles in all directions; the rush which began immediately after gold had been discovered initially in the Araluen Valley in 1852 was followed as quickly by others at Bell's Creek, Major's Creek and Jembaicumbene Swamp (all south of Braidwood), Mongarlowe (or Little River) and
other diggings (east), in the Nerriga district (north) and at Bombay, Oallen and other localities along the Shoalhaven River (west).

Within a few years, however, gold production fell off rapidly at the various fields in turn, and though most of the miners transferred immediately to nearby fields many left the district altogether: this naturally affected Braidwood whose population dropped a little, to 1066 at the 1881 census. After the rushes, the town recovered temporarily when dredges and sluices began to operate on the several fields, and its population expanded.

1 In the 1850's, the potential mineral wealth of the Southern Goldfields was the subject of a bitter controversy between Hargreaves, who is credited with the first discovery of gold in Australia, and the Rev. W. B. Clarke, a geologist. Clarke's gloomy prognostications of a short life for the fields around Braidwood were apparently shared to some extent in the area, as is shown by an editorial in *The Braidwood Dispatch and Mining Intelligence*, 6th August, 1859, which sounded a warning concerning the need for a comprehensive survey of the gold resources of the district, and added: "We make these observations because our impression is that the gradual exhaustion of all the surface diggings about us will shortly commence to tell heavily upon the demand for produce of every description; when not only will our tradesmen, millers and publicans suffer, our agriculturists and graziers, in fact all the established institutions of our district, but also (and that to an alarming extent) the very miners themselves."

2 Evidence placed before a N.S.W. Parliamentary Standing Committee investigating a proposal for a railway from Tarago to Braidwood on 20th February, 1901 by G. Read (a medical practitioner of Braidwood who had many mining interests in the district) contained the following list of actual and proposed dredging activities around the town: Araluen valley, 1500 acres taken up for dredging and sluicing, 5 dredges (capital cost £25,000), employing 7-10 men each; Shoalhaven River, 4 dredges (28,000), 10 men each, with 18 other dredges being built; Jembacumbene Flat and Creek, 800 acres, 3 dredges (£18,600) with 5 more (£45,000) to be built; and Little River, 1400 acres, 2 dredges and sluices (£18,000) with 7 others (£70,000) to be built.
to 1,496 in 1891 and 1,551 in 1901, dropping thereafter to 1,366 in 1911, 1,042 in 1921, 1,073 in 1933, and 1,065 in 1947, with only 1,088 (provisional) in 1954.

Contemporaneously, Braidwood retrogressed generally as a town: when mining ceased it again became a commercial and service centre with not much more than its original proportions, for though it now had dray contacts with several small coastal ports and so was less isolated than it had been, its progress was still hampered much by the generally poor roads around it; those leading to the coast were particularly bad, for example, the steep descent on the road down Araluen Mountain leading to Moruya, opened in the 1850's, was not only difficult but dangerous, and for many years goods could only be carried down it on sledges. In consequence, hopes held earlier for the town's advancement as a trade entrepôt were by no means realised; these had been expressed in a leader in The Braidwood Dispatch, 13th December, 1858, thus:

"The great drawback to this district for many years was its complete isolation. Separated from the interior by a range of barren mountains, difficult to traverse, and from the sea by steep hills and impassable ravines, it formed as it were a basin, whose inhabitants having but little intercourse with their fellow-colonists, did not feel that generous emulation, which is the natural result of the close intercourse which many other districts enjoy. The stagnation and inactivity which we may say formed the characteristic of our community a few years since, were first dissipated by the discovery of our goldfields. Population crowded till at one time we were almost pressed for room; but in a short time other fields more glittering if not more rich, drew many of our new arrivals away, and those who remained found themselves nearly as isolated as those graziers and shepherds whom they supplant. The opening of the road to the Clyde (by
putting us in direct and speedy contact with the metropolis)\(^1\) was the first step towards the destruction of that feeling of half-savage independence which we were beginning to acquire. The daily teams which now traverse our streets on their way to remoter towns and stations tell us that we no longer stand alone ....... Traffic from Queanbeyan and Bungendore is commencing and will increase, and before long we may see teams from Collector, Gunning and Yass making use of the Clyde to ship their produce to Sydney or Melbourne. Roads to these are now little better than bush tracks, and this district is badly in need of a direct road to Cooma."

Instead, the coastal ports never served as outlets for districts further inland than Tarago, 30 miles northwest of Braidwood, because they were by-passed when railways were built southwest from Goulburn and south from Tarago; the direct road to Queanbeyan fell into disuse and cannot now be used generally by motor vehicles; Braidwood’s road link with Cooma via Captain’s Flat is still not very direct, and many of the roads in the Braidwood district are indifferent as motor roads.

\(^1\) Contact with Sydney was maintained through Nelligen which grew up as a seaport on the South bank of the Clyde estuary. Following the opening of the road over the Clyde Mountain to Braidwood in 1854 the port flourished when the Illawarra Steam Navigation Company instituted regular services to Sydney twice weekly (sometimes more); they were continued up till during World War II. In the 1860’s, Nelligen contained the large stores and offices of the shipping company, many public buildings and the town was also the outlet for the products of two local bark mills, a saw mill and a coach factory, though it shrunk much in importance when the road traffic through Braidwood declined after the gold rushes.
In 1872, the large church and school estate near Braidwood was subdivided and sold to become small holdings, and about the same time some of the other large estates began to be split up, either as a result of family divisions or because economic circumstances forced some owners to dispose of parts of their holdings: this trend continued up to the 1920's with slight benefits accruing to Braidwood, but since then several large estates have been formed again as a result of a few wealthy pastoralists buying up the properties of some of their smaller neighbours. Though of minor consequence, this to some extent militates against the town's growth by reducing the local density of rural population never much more than sparse, because only a few farm-hands are needed to run the large properties.

Thus, we see that the events of local history, particularly transport developments and two phases of mining, brought Braidwood to the threshold of a more vigorous existence, but that in each instance the stimulus to its growth proved to be only short-lived: of all the factors which have influenced its life, mining in the boom period (the "alluvial digging" days of the 1850's) which caused the town to reach the peak of its growth was of course the most important, and though dredging and sluicing resulted in its partial recovery in the late 1890's, it has languished ever since.

Aside from the general decrease in its population during this century and the fact that it ceased to exist separately as a
municipality in 1936, Braidwood shows abundant evidence in its urban face of its retrograded condition.

**Morphology and Aspect**

Because of its generally lifeless "tone" and the decaying state of many of its old buildings Braidwood proclaims clearly, even to the casual observer passing through it, that it is a town which has seen better days; but beyond this, several changes in the town's internal structure, reflect a waning in the importance of its urban functions, and provide further evidence that it is a centre which has deteriorated.

The town, of course, retains its original layout (Fig. 75), a standard grid modified only a little in order to vary the shapes and sizes of a few town blocks, but because of the reverses it has suffered Braidwood has lost ground as a business centre, and several minor industries which it had in earlier times have disappeared, with the result that its urban form has been altered. Apart from the demolition of several small factories and a few other buildings which once provided urban services of some kind, some of its buildings are now used for purposes of far less general importance than those which they had originally: for example, a substantial gaol, built when Braidwood was an important Police District centre, now serves only as a small eucalyptus oil distillery, and several old hotels and banks, prosperous in the mining days, are now used as residences or contain small shops which seem barely to survive.
With about 50 establishments, 30 small shops of miscellaneous kinds and 20 transport services (operated principally from dwellings), Braidwood perhaps has numerically more business enterprises than at any other time in its life, but it is obviously less busy than it was. Its one bank (other than a Commonwealth Bank agency in the Post Office), two hotels and three small factories (cordial, dry cleaning, eucalyptus oil distillery) measure up poorly against the branches of nearly all the banks and insurance companies in the Colony, several hotels, a steam flour mill and several tanneries which it had in 1874 (The Australian Handbook), and the eight hotels, two tanneries, two coach factories, four boot factories, one flour mill and other places of business in 1901 (idem).

In addition to all this, there are other symptoms which show that the town is ailing: for example, it has fewer new homes than most other Australian centres of comparable, and even smaller, size, with practically no new building works in progress, and many of its residential and commercial buildings have a down-at-heel look because they have deteriorated badly through not having been repaired or painted for a long time. Moreover, it is on the whole a "sleepy" town whose wide streets seldom contain much traffic or have a busy air about them: even in its main street, at most times, no more than a few parked vehicles or a handful of shoppers can be seen, and because these are about the only signs that the town lives there is small cause for wonder that those
unacquainted with Braidwood often find it difficult to comprehend how and why it does.

Yet, Braidwood is not wholly unprepossessing, and the defects in its urban aspect are offset in large measure by its picturesque surroundings, such as the wooded slopes of Mount Gillamatong which serve as a backdrop to the town's setting, and the rolling grazing lands spreading all round it.

The town consists of a small central core of commercial and service buildings, principally along both sides of Wallace Street, enveloped by a narrow belt of urban land in which a few recreational areas are interspersed between what is on the whole only a thin sprinkling of residences (Fig. 75). Most of its public buildings are conveniently grouped on one block near the northern end of Wallace Street: they, and the town park facing them on the opposite side of the main street, lie just north of the business core which is comprised largely of small shops in antiquated buildings with surprisingly few modernised fronts.

Initially, when Braidwood depended wholly on the track along the Shoalhaven Valley for its contacts with the rest of the Colony, the stores which lined Ryrie Street (one block west of Wallace Street) formed the focus of village life, but after tracks has been pushed through to the coast, Mackellar Street, beside Pound Creek in the north, became the principal commercial row. Later, when Wallace Street became the centre of urban life, both became wholly residential streets. These minor shifts of the hub
of town life and activities were mainly responses to changes in Braidwood's transport arrangements, though, naturally they were bound up to some extent also with the changes of emphasis in its urban functions.

**Function, Urban Field and Minor Centres**

Serving primarily as the seat of local administration and the commercial centre for the pastoral districts of the Upper Shoalhaven Valley, Braidwood has an urban field made up principally of Tallaganda Shire (Fig. 76), which, in some places, extends for a few miles into the coastlands lying east of the Tablelands, for example, along the roads leading over the Araluen, Clyde and Sassafras Mountains into the Araluen and Deua Valleys, and to Bateman's Bay and Jervis Bay, respectively.

The town first became a seat of local government when Braidwood Municipality was established in 1891; later, when Tallaganda Shire was created in 1906, it had a dual function as a municipal and shire centre, but since 1936, when the State Department of Local Government unified the administration of the two local areas in order to reduce overhead costs, it has been the seat of a shire only: despite the fusion, shire administration has been much handicapped by insufficient finances, partly because much of the shire is comparatively poor pastoral land which cannot support a high rating, and also because the Council has had to levy rates on old assessments of land value out of harmony.
Places named outside shire have urban contacts with Braidwood.

- **Boundaries of Tallaganda Shire**
- **Roads**
- **Railway**
209.

with existing values and administration costs.

In addition to being a seat of local government, Braidwood is the centre of Postal, Court, and Police Districts, though it is naturally less important as such than when large groups of miners were gathered on the various fields around it. Its Stock Office is an agency of the State Department of Agriculture; it has the usual service facilities of towns of its size.

More minor centres have decayed around Braidwood than in the urban field of any other town on the Southern Tablelands, primarily because most of them grew up and existed solely as

1 Normally, Municipal and Shire Councils in New South Wales use valuations for rating land which have been assessed by officers of the State Valuer-General's Department, but if these are not available (sometimes because of pressure of work) they may appoint private valuers, who must be approved by the central authority. Until recently, Tallaganda Shire Council was unable to obtain the services of either, with the result that it had to depend on an income from rates on land which in some cases was assessed at values which had not been altered for 40 years.

2 Apart from the service buildings mentioned it has a District Hospital, a convent school, churches of several denominations, a local newspaper office (publishing twice weekly), a cinema and a club providing golfing and other recreational facilities (a composite type which is not unusual in centres of comparable size in Australia).

As we have seen (p. 205) the town has about 50 commercial services, provided by shops, garages, oil depots, two hotels, bank, taxi and other transport services and the like, but it has only three professional men, a doctor, a dentist and a solicitor. As might be expected, however, rural services provided by the town are relatively important, for it has several stock and station agents and other rural contractors (shearers, drovers), a couple of agencies of large wool brokerages and skin and hide buying firms, and an active Pastoral, Agricultural and Horticultural Association.
mining centres, though a few, like Larbert, Bendoura and Krawarree, developed initially as staging posts on the original Great South Road, and languished subsequently when it fell into disuse. The latter and the former mining centres of Araluen, Major's Creek and Jembaicumbene are studied in Chapter X, but of the rest only a few places like Nerriga, Mongarlowe and Monga, and perhaps the service locality of Reidsdale need brief mention, because several other former settlements such as Oallen, Jinglemoney, Bombay, and Granmeir are now not much more than names on the map. Nerriga, which originated as a mining centre, survived as a small settlement when its gold rush was over because it was a convenient resting-place, 34 miles north of Braidwood, for travellers using the Wool Road to Huskisson. It now exists as a small hamlet, population 142 (provisional 1954), with a hotel, a store and a few cottages, and depends on Braidwood or Nowra for all its urban services. Mongarlowe, a small village about 8 miles east of Braidwood, was once a flourishing centre on the Mongarlowe or Little River diggings which spread for several miles from it, both upstream and downstream. Since mining ceased, most of its few inhabitants (92 in 1954, provisional) have been employed as rural labourers, with a few also engaged in timber-cutting or gathering eucalyptus leaves for small oil distilleries, but at present (April, 1955) a company is preparing to re-open Mongarlowe's most productive gold-mine (the Alma).
Monge, on former diggings about 10 miles south of Mongarlowe, is a small timber-milling village (population 149 in 1954), containing a large sawmill, a store, a post office, a Forestry Department office, a school and about a score of small cottages. It has the usual appearance of settlements of its type, for all its buildings are of bare timber and are small, except for the large shed which houses the mill. The residents regard Braidwood, 14 miles northwest, as their town, but the hardwood produced by the mill is exported to various parts of the Tablelands, particularly to Queanbeyan and Canberra.

Reidsdale, a service locality about 8 miles southeast of Braidwood, contains a post office, a church and a cheese factory, each nearly half a mile from its neighbour. It supplies a few needs of the rural settlers scattered around it, but is not in any sense a centre.

To some extent, the paucity of minor centres around Braidwood reflects the poverty of its urban field as a physical environment, and helps to explain how local geography as well as local history has militated against the town's growth. Moreover, in addition to being retarded because much of its urban field is of low value from the standpoint of land use, Braidwood has not been able to extend its field of effective influence much beyond the boundaries of Tallaganda Shire: the Gourock Range, the shire's western boundary, cuts the town off from easy contacts with the rest of the Tablelands; the Budawang Range shuts it off similarly.
from the coastlands in the east, and the dissected country near
the Araluen Valley in the south contains few inhabitants. The
northern boundary with Mulwaree Shire lies on the low relief of
the middle Shoalhaven Valley, and is formed by a part of the river
and Boro Creek. It thus offers no physical obstacles to the ex-
pansion of Braidwood's urban influence, but here of course con-
tact is made with the primary urban field of Goulburn, against
which the town is ill-equipped to compete.

In consequence of all this, Braidwood's influence is
effective merely in an elongated strip of territory, running north-
south for about 60 miles with a maximum width of about 20 miles,
only a small middle belt of which (the granite country) is any-
thing like moderately populated. The town, however, makes slight
contacts with Captain's Flat, Queanbeyan and Cooma (west) and
Nowra, Nelligen, Bateman's Bay, Moruya and other coastal centres
(east), and slightly stronger ones with Bungendore, but beyond
its own urban field the only centres with which it has strong
links are Tarago, a break of bulk point on the Sydney-Bombala
railway, from and to which most of Braidwood's freight is trans-
ported by road, and, of course, Goulburn (53 miles northwest),
whose grip on the town is stronger than that which it holds on
the other service towns on the Southern Tablelands.
Tarago, though outside Braidwood's urban field, plays so important
a part in its life that it may be considered more appropriately
here than with Goulburn in whose territory it belongs.
It is a small twinned village (a private subdivision of the type described in Appendix 10) on the Sydney-Bombala railway, 24 miles south of Goulburn, from which roads radiate to Goulburn, Braidwood, Bungendore and several minor centres. Its two parts are about half a mile from each other, a commercial section at the main road junction beside the railway station and a residential section (containing the police station and a church) to the south (Figs. 77 and 78). Though it is wholly a rural village in appearance, its role is, perhaps, more truly urban than that of any centre of equivalent size on the Southern Tablelands, because it exists primarily as a result of its function as a break of bulk point at which goods for Braidwood are transhipped by road from the railway.

To some extent this is a relationship of the reverse kind to that which the village originally had with Braidwood, because before the railway was built Tarago and its surroundings depended wholly on goods imported through Nelligen on the Clyde River by way of Braidwood, and even after the railway had been built the flow of heavy goods continued in that way.

Naturally, the village has gained importance as a result of the service it provides for Braidwood, and in place of the two or three commercial buildings it had in the 1860's it now has more

1 This was one important reason why the Parliamentary Standing Committee investigating a proposal for a railway to Tarago (1901) recommended against it, especially since light transport requirements were also adequately provided by two coaches running daily between the two centres.
FUNCTION DIAGRAM OF TARAGO VILLAGE CORE
than a dozen, and its population has expanded (with some fluctuations) from 59 at the 1891 census to 217 in 1947, and a provisional 233 in 1954.
CHAPTER VIII

MINING CENTRES - CAPTAIN'S FLAT AND MARULAN SOUTH

Mining, once so important in the life of the Tablelands when the Southern Goldfields were being worked and then responsible for the ephemeral growths of several large and many small settlements throughout the area, is now a comparatively unimportant activity confined to a few localities, in all but two of which only a handful of miners is employed. The exceptions are Captain's Flat, with a metal mine of varied output, and Marulan South, with large limestone quarries.

Though they now rank as the principal mining centres on the Southern Tablelands, neither compares in size or in value of output with the large mining centres of Australia; despite this, however, they are of special interest in this study because each illustrates the ways in which the form, life and activities of some urban centres may be influenced strongly by their local environment and a specialised mining function.

Captain's Flat, as we have seen in Chapter IV nearly qualifies as a town but just fails to do so, and Marulan South is a small hamlet, but they do not fit comfortably in the hierarchy, because they occupy sites on the Tablelands which are relatively isolated, in surroundings which are agriculturally unproductive, with the result that they depend wholly on the mineral resources of their respective fields and make few contacts with neighbouring
centres; instead, the life of each is oriented strongly to places away from the Tablelands (cf. p. 49).

Moreover, in contrast to other centres on the Tablelands, the inhabitants of both think and speak in terms of mining and industrial, not farming, matters, so that their everyday conversation hinges more on topics like industrial trends, mineral prices, the behaviour of the lode or quarry face and the chances of success of new drilling prospects than on the state of the weather, the condition of local pastures and wool and livestock prices, as in Queanbeyan or Yass. Similarly, it may be said that, in a sense, Captain's Flat has a field of activity lying in the third dimension, the end points of which are the winder above its shaft and the deepest working level of its mine, unlike the two-dimensional urban fields of the rural service towns which spread through the grazing lands around them.

I CAPTAIN'S FLAT

Besides being the principal mining settlement on the Southern Tablelands, Captain's Flat is the only centre which depends wholly on metal mining, and the only one of the several places which originated in the 19th century with a mining function and survives solely by means of that function. Its struggle for survival, however, has not been easy, for, though its small ore bodies have a high metal content they are also complex with the result that the extraction of the minerals posed grave problems at times: moreover low prices, particularly for base metals, made
mining uneconomic on occasions, and at one stage early in this century the mine closed down for several years.

Originating as a goldfield centre, Captain's Flat subsequently became a producer of silver and copper, but at present its mineral output is mainly lead, zinc, and pyrite, though small quantities of copper, gold and silver are also won. At the 1947 census, more than 71% of the work force (437 out of 641 gainfully employed workers in a total population of 1475) was engaged in mining and associated tasks, and despite a six-month's stoppage of the mine because of a strike in 1954-5 the percentage is probably a little higher now, but though the centre lives simply by the availability of minerals in its lode, it shows some interesting urban effects of its comparative isolation from other centres on the Tablelands and the poverty of its local environment for farming purposes.

As might be expected, Captain's Flat has a different age-sex population composition from that of other centres on the Tablelands, and of the region as a whole, as is shown by the age-sex pyramids based on 1947 census data (Fig. 79). Wide inferences are not possible from the Captain's Flat pyramid because the numbers involved are so small, but the swellings of the 35-50 years and 0-15 years groups suggest that the town had an influx of young married couples a few years before the census (the mine reopened in 1939), and the undercutting of the 15-20 years group on the left side of the graph suggests a small exodus of young males
CENSUS FIGURES FOR THE TOTAL POPULATION 30TH JUNE, 1954 ARE ONLY PROVISIONAL.
(possibly those who could not be absorbed in employment at the mine).

Factors of Location and Site

Captain's Flat, in a deep part of the upper valley of the Molonglo River about four miles below its source, lies 28 miles southeast of Queanbeyan, 24 miles south of Bungendore and 31 miles southwest of Braidwood; it has road access to all three, and, since 1944, a railway link with Bungendore.

For several miles on all sides it is bounded by rough country made up of the upper valleys of the Shoalhaven, Molonglo and Queanbeyan Rivers and the high interfluves around them, and since the latter rise in places well over 2000 feet above the general level of this part of the Tablelands, mostly with only a thin and poor cover of soil, the district as a whole is not of much use for farming; except for domestic fuel, available abundantly from the dry sclerophyll forests all around the town, the local environment contributes hardly at all to the sustenance of the urban dwellers; rather, its poverty increases their dependence on mining.

The nearest farming lands lie a few miles north on the Foxlow-Carwoola plain, a former lake-bed now drained by the

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By contrast, Cooma had a similar though smaller pre-census immigration, but no subsequent emigration of young males; Canberra's pyramid shows strongly the effects of the city's great war-time expansion, accompanied by the entry of many older married people (family groups) and a large unmarried hostel population; and that for the Southern Tablelands shows the outlines which are fairly standard for large and varied occupation groups.
Molonglo River, but even here, except for a couple of small dairies which supply Captain's Flat with fresh milk, farming is quite unrelated to town life, because the natural pastures are used for raising wool sheep and stud cattle (Poll Hereford and Black Poll Angus), and at one time they were also used for stud horses (Percheron Greys). On the contrary, farming on the plain has been seriously affected by mining activities at Captain's Flat: for example, in the early 1940's mine wastes were washed down the river and destroyed tussocks of pasture grasses in a wide belt along it, and though the practice was soon discontinued none of the affected herbage has regenerated as yet.

Captain's Flat is in a local rain-shadow area on the Tablelands, but because its economy is based on mining and not on pasturing, its inhabitants are, generally speaking, not very weather conscious. On occasions, severe summer droughts may seriously hamper mining activities and town life by causing a water shortage in a nearby dam (capacity 150 million gallons) on the Molonglo River: normally, however, the rainfall in the small catchment around the head of the river (Captain's Flat receives an average of 26.75 inches annually) is adequate for maintaining a safe level in the storage. Less significantly, the residents

1 It is of interest to note in this matter that though the protests of the graziers about the destruction of their pastures went unheeded, the Government forced the mining company to halt the practice when trout fishermen at Canberra and Queanbeyan protested vigorously about mine wastes killing off fish in the river.
sometimes experience physical discomfort because of hot spells in summer and severe frosts in winter, largely in consequence of local relief: their effects on human sensibilities are all the more pronounced because most of the flimsy dwellings of weatherboards or fibro are poorly insulated.

Local topography influences the settlement and its life more strongly, because the steep slopes of the surrounding ridges give little scope for the urban boundaries to be extended in any direction, and the internal growth of Captain's Flat is similarly restricted because of the small amount of land suitable for town building in the valley where it has grown.

Confined to a narrow strip of flat land along the Molonglo River and the valley of a small connecting stream (north), Captain's Flat is hemmed in between eastern and western ridges which rise steeply for about 300 feet above the river. In consequence, the "town" is a small wedge of built-up land along its main street (Foxlow Street), consisting merely of single lines of small houses on both sides of Foxlow Street at its northern end but spreading over three town blocks near the business core in the south. In addition, a few small cottages have been built on the upper slopes of Vanderbilt Hill, just east of the business core, and they perch precariously beside the Braidwood road on sites which are obviously unsuitable for building (Fig.30).

On the mining leases (Fig.81), as may be expected, the original character of the land surface has been much changed.
Here, as a result of mining, there is a small "platform" of comparatively level land on the western ridge where the railway station, the mine buildings and the cottages of the mining staff are located. Territorially, this mining area is not a part of the "town", rather it may be said the urban centre belongs to its integument.

Axiomatically, its ore bodies, on which the life of the mine and the town depends, are the major feature of the local environment and the decisive factor of Captain's Flat's location. Up to the present, mining has been confined to the ridge west of the Molonglo River, containing two known ore bodies in its main line of lode whose surface rocks show evidences of mineralisation over a linear distance of about 9000 feet. The two lodes, which lie beside the "town", occur as thin and narrow lenses over a length of about 4200 feet; the northern (Elliott's Section) is separated from the southern (Keating's Section) by about 500 feet of ground in which prospects for commercial mining do not appear to be bright. Both originally had a surface zone of oxidised ores, about 100 feet deep, which were removed in the early days of mining, as well as the deeper-seated sulphide ores which are mined at present: the latter are usually characterised by an intimate admixture of galena, sphalerite and some chalcopyrite in a gangue of quartz, dolomite and chert, which accounts for the metal extraction difficulties which led, in turn, to setbacks for Captain's Flat.
Fig. 81

CAPTAIN'S FLAT-MINING AND TOWN AREAS 1953
BUILDINGS OWNED BY LAKE GEORGE MINES LTD.
Prospects for the future working of the field, and the life of the "town", depend largely on the way the line of lode behaves at deeper levels, for though the mining company has prospecting rights over much of the surrounding country, present indications do not suggest that valuable lead-zinc masses will be discovered: prospects for the discovery of iron pyrites of commercial value have been more encouraging. Mineralisation is also evident along Vanderbilt Hill, but ore bodies, if they exist there, are believed to be small. The history of mining at Captain's Flat is also very largely the history of the settlement itself.

Evolution

Captain's Flat originated soon after copper ores were discovered in 1884 on the existing mine site, which then formed a part of Foxlow station, the flat itself being one of the few useful parts of the generally poor grazing land at the southern end of the holding.

In the decade following the ore discovery, three separate mining interests worked the field — two on Keating's Section and one on Elliott's Section — primarily for gold, then later, for silver and smaller amounts of copper and lead from the oxidised ores near the surface.

Initially a miners' camp of crude hessian dwellings,  

Unsubstantiated though probably true, local lore has it that the settlement is named after a stud bull, named "Captain", reputed to have been fond of grazing on the flat where he was eventually found dead.
known by the aptly descriptive names of Bogtown and Bagtown, grew up south of the river on a small strip of swampy land below the diggings, and soon after a similar settlement (New Town), arose on the northern bank: both lay partly in the Molonglo Goldfield (proclaimed 27th September, 1882). They were given official status when an area of 36 square chains around the existing business core was proclaimed as the Village of Bullongong in the Government Gazette on the 31st July, 1886: another proclamation on the 23rd June, 1888, replaced the village by the larger "Town of the Captain's Flat".

Captain's Flat had 488 inhabitants at the 1891 census, but with increased mining activities in the 1890's, when about

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Apparently there was a third settlement too, for on the 23rd November, 1889 a correspondent from Captain’s Flat was reported in The Braidwood Dispatch thus:

"I have again had a run around the White Pinch, a township in itself. The population in this locality do not seem to patronise the town proper, not even the hotels, but this is hardly to be wondered at, as I am given to understand any amount of grog &c, can be obtained at the shanties, the proprietors of such establishments not being troubled with any qualms of conscience about selling on the sly to those who know the ropes."

No other reference to the White Pinch has been traced and local residents have no knowledge of it. It is possible that the name was an alternative for New Town, but it seems more likely that the settlement was somewhere on the ridges west of the mines, where the lodes pinched out and where steep pinches existed on the tracks which had been cut to the mines.
300 miners were employed, it expanded greatly, possibly to more than 4000 in the mining boom of 1897; then, coinciding with the sharp mining decline at the close of the century, its population fell to 558 at the 1901 census.

Entries in The Australian Handbook, for all years in the 1890's, indicate clearly that it flourished in that decade: each issue described it as a postal, money order, telegraph and Government Savings Bank township, with a public school, a Roman Catholic church, and regular coaching services to Bungendore and Queanbeyan; also, for a part of the time, it had four stores, four hotels and a brewery. Now, it has several small stores, one large hotel, but no brewery.

Mining ceased early in this century when the oxidised ores were exhausted, because the deeper-seated sulphide ores were more difficult and expensive to win: moreover, until new processes were evolved at Broken Hill in 1917, metallurgists were unable to separate the metals from the matrix of the ores at Captain's Flat, and low prices prevailed for base metals for some years after. In consequence, the centre languished till the existing company (Lake George Mines Pty. Ltd.) began operating, its population shrinking to 206 at the 1911 census and 146 in 1921, but rising to 276 in 1933 as a result of some fossickers being attracted to the field during the economic depression of the early 1930's.

A general increase in the demand for metals and a
firming of the prices of strategic metals, in the 1930's, led to the re-opening of the mine in 1939, which, in turn resuscitated town life. Initially, the new company engaged primarily in winning lead and zinc, but since 1943 copper has also been extracted, and large quantities of pyrite have been sent to Port Kembla to be used in the manufacture of sulphuric acid and phosphatic fertilisers. Its operations were much helped when a branch railway was built from Bungendore on the Sydney-Bombala line in 1939, and later when a 66,000 volt transmission line was installed from the hydroelectric station at Burriunjuck Dam, 70 miles northwest.

During World War II, about 500 men were employed at the mine, and the settlement's population was about 1700: this contracted slightly to 1475 at the 1947 census, then to 1289 (provisional) in 1954.

Morphology, Aspect and Function of Captain's Flat

The two components of Captain's Flat differ markedly in character, for one consists only of mine buildings (offices, processing sheds, workshops, store sheds), a few cottages and a railway station, and the other is essentially urban. So far as the relief of the valley permits, the latter (Fig. 80) has a regular street grid which is drawn out along the central axis (Foxlow Street), but the layout of buildings in the mining area does not conform to any particular pattern; most of the buildings, except a couple of rows of cottages beside the railway station, being placed conveniently, but somewhat haphazardly, near the mine
shaft, on narrow roads winding through the leases (Fig. 81).

Most shops and the few other public buildings in the town area are grouped at the southern end of Foxlow Street, principally on its eastern side, facing a small park, a swimming pool, a bowling rink and a large miners' mess, but for the rest the built-up area contains only small residences (most of them owned by the mining company), and two small schools, a hospital, a store and a wood-yard in the north. Most of the buildings are of timber, fibro or galvanised iron and have a temporary look about them, as is also true for mining centres generally, the only really substantial building being a modern brick hotel.

Along every line of approach the landscapes of Captain's Flat are dominated by the winder of the mine and the terraces of sludge and other mine wastes on the ridge west of the "town". In the course of mining and prospecting the nearby ridges have been denuded of trees, but a short way out there is a wide girdle of forested land around the settlement: trees are also conspicuously absent in the "town" itself, where an incongruous note is sounded by streets, like Wattle Avenue, Willow Road and Kurrajong Street, which belie their names by being fringed only by a few spindly conifers and some other exotics.

On these and all other counts it may well be said that mining dominates Captain's Flat in all things - its appearance, activities and even its very life, for without Lake George Mine the "town" could not survive.
Since the mine began operating on the 15th January, 1939, its mills had crushed (up to the 30th June, 1953) 2,375,625 tons of ore from which the following metal yield was obtained:

<table>
<thead>
<tr>
<th>Metal</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead concentrate</td>
<td>233,324 tons</td>
</tr>
<tr>
<td>Zinc</td>
<td>344,460 &quot;</td>
</tr>
<tr>
<td>X Copper</td>
<td>34,711 &quot;</td>
</tr>
<tr>
<td>Pyrite</td>
<td>294,155 &quot;</td>
</tr>
<tr>
<td>Gold</td>
<td>2,151 &quot;</td>
</tr>
</tbody>
</table>

(\(X\) Production of copper commenced only during the year ended the 30th June, 1943).

The income so derived has been, of course, the financial mainstay of the settlement, and, as we have seen (p. 217), the winning of the metals gives employment to nearly three-quarters of its workers: next to mining, commerce is the only other significant activity; at the 1947 census it accounted for about 11\% of the work force.

The dominantly mining function is reflected in the few relationships which Captain's Flat has developed with other centres around it. Until the branch railway was built from Bungendore in 1939, the latter served as its rail-centre, and the commercial links between them were stronger than they are now, because Captain's Flat has direct railway connections with Sydney and Port Kembla, which serve as its buying and selling centres respectively, and has little need for contact with the village.

Moreover, its inhabitants have few common interests, except in regular sporting fixtures (district football and cricket competitions), with those of its urban neighbours like
Queanbeyan and Braidwood, because the latter are the centres of pastoral districts: for similar reasons, the "town's" links with Goulburn are weaker than those between Goulburn, on the one hand, and Braidwood and Queanbeyan, on the other.

Nevertheless, it makes some contacts with them: for example, because it is in Yarrowlumla Shire Captain's Flat is administered from Queanbeyan; bus services run one day each week to Goulburn and to Queanbeyan; and three of its shops are run by a butcher from Canberra, a furniture dealer from Queanbeyan and a softgoods merchant from Braidwood. None of these ties is particularly strong, because even in matters of local administration the influence of Yarrowlumla Shire Council is overshadowed by that of the company which controls the mining settlement and the extensive leases around it and owns most of the houses and some of the commercial buildings in the "town".

We see, then, that Captain's Flat leads a life which is more or less detached from that of the areas and centres around it, also that it is bound firmly to the mine which gives it life in a small urban field whose ultimate limits seem likely to fall far short of the boundaries of the mining leases around it.

II MARULAN SOUTH

Except that it is smaller (provisionally, 212 in 1954), is in a different physical setting and depends wholly on limestone quarrying and burning, Marulan South is a centre similar in type to Captain's Flat.
It is located about 18 miles east of Goulburn, on the northern rim of Bungonia Gorge, and thus lies on one of the belts of Silurian limestones which outcrop intermittently along the eastern edge of the Southern Tablelands. Like Captain's Flat it is in a comparatively isolated situation, for it is largely shut off from the life of the Tablelands - southwards by Bungonia Gorge, and on the north and west by a broad belt of wooded country of low value - and the wide and deep Shoalhaven Valley lies just east of it.

Marulan South also resembles Captain's Flat in that all phases of its life are influenced by the activities of a mining company, but while the latter is officially a Government town the former is wholly a private hamlet belonging to an industrial concern (Australian Iron and Steel Ltd. of Port Kembla). Naturally, this shows in its face, and apart from its couple of service buildings and the homes of its workmen the landscapes are dominated by the quarry faces and several large lime-kilns.

Its isolation and specialised function as we have seen (p.49), have caused its life to be oriented more strongly to Port Kembla, Picton and Berrima than to Goulburn.
CHAPTER IX

THE LARGE VILLAGES

On 1947 census figures, Gunning (661), Adaminaby (553) and Bungendore (545) qualify on a population basis as large villages on the Southern Tablelands, and Taralga (483) almost does.

All lie to some extent in the primary urban fields of one or more larger towns, but because they function more independently of them than the small villages they are distinguished as a separate class of urban centre: this is least true, perhaps, for Adaminaby which lies wholly in Cooma's urban field, under which it is treated; conversely, Taralga, down in numbers but functionally more independent (of Goulburn and Crookwell), is considered in this chapter.

Relative to Goulburn, Taralga lies 29 miles north, Gunning 30 miles west and Bungendore 42 miles south, so that they are all in the urban marchlands where Goulburn competes with Crookwell, Yass and Queanbeyan, and Queanbeyan, respectively; but because they are primarily service and supply centres for their

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Provisional figures from the 1954 census indicate, however, that all qualify now as large villages, for example, Gunning 684 (160 others coded in the census as "near" the locality), Adaminaby 869 (346), Bungendore 562 (194), and Taralga 640 (34). It seems likely that Adaminaby's population includes many temporary dwellers, associated with the operations of the Snowy Mountains Authority in connection with the Adaminaby Dam construction, for there has been no significant change since 1947 in the number of dwellings in the village.
surroundings they have also developed small urban fields of their own for the business of which they compete with the larger centres.

In each case an important route function supplements the service function, and no doubt has been an important factor in causing it to develop: thus, Taralga as a rail-head on a branch line from Goulburn is joined by major roads to Wombeyan Caves and Mittagong, Crookwell and Goulburn, and minor roads to nearby districts and across the Blue Mountains; Gunning on the Hume Highway and Main Southern Railway is at the junction of several roads leading through its surroundings; and Bungendore is a minor railway junction at the focus of two major and several minor roads.

As well as being the largest, Gunning is functionally the most important and has the largest urban field, which is also of interest because it contains the official town of Dalton, whereas Gunning is, legally, only a village.

The three villages are unlike in form and they have completely different settings. Gunning is strung out along the Hume Highway on a small strip of flat land along Gunning (or Meadow) Creek, in hilly country just west of the Cullarin Range; Bungendore is dispersed over a regular grid on the level Lake George Plain east of that range; and Taralga consists of twin settlements on rises nearly half a mile apart in the wide valley of Taralga Creek.

In common with other Australian villages, they bear
little or no resemblance to their English namesakes, for they are essentially miniature towns, stamped in the common urban mould and having similar general functions.

I GUNNING

Gunning, whose urban field extends nearly 20 miles in all directions and contains a few minor centres, owes its superior standing as a village to the fact that it is the seat of a shire administration (proclaimed 1906), centrally placed in the shire on the Hume Highway and Main Southern Railway: these advantages enabled it to become a natural urban focus for all the grazing lands of the Shire, which extends for maximum distances of 25 miles (north-south) and 15 miles (east-west).

On the whole, it has grown in a manner similar to that of most other centres on the Tablelands. In 1829 and again in 1833 the Gunning district was surveyed by Major Mitchell, and most of the land was quickly taken up by graziers. In response to agitations in 1835 for the sale of allotments at Gunning, T. S. Townsend surveyed (1836) the village reserve and submitted a design plan (Fig. 82) to the Surveyor-General, providing for water reserves, stock resting places, sites for public buildings, and also for the low-lying flats subject to flooding to be laid out in farm allotments. The village was proclaimed on the 2nd January, 1838, and the first land sale was held eight months
later. Two years later its post office was established, and by 1843 (Wells’ Gazetteer) it contained 20 houses and 95 inhabitants, expanding thereafter to 192 at the 1861 census; by 1866 (Baillières Gazetteer) it had a steam flour mill, a court of petty sessions, four hotels and a coach office from which daily coaches ran to Goulburn and Yass, and it also maintained horse and dray connections with Dalton, 8 miles northwest.

When the railway was built from Bredalbane (east) in 1875 and extended to Bowning and Binalong (west) in the following year, Gunning lost its primary function as a staging post and began to develop steadily as a small commercial and service centre: between the censuses of 1871 and 1881, that is five years before and after the building of the railway, it expanded from 272 to 403, and when it continued to grow, the area of the village was enlarged to the existing dimensions by a proclamation on the 20th March, 1885. Subsequently, the village grew to 468 in 1891, 612 in 1901, 816 in 1911, 866 in 1921 and 1017 in 1933, but contracted to 661 in 1947.

The change of function caused by the coming of the railway produced minor changes in the form of the village, as when its four hotels became three, then two, later in the century; other

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H. Selkirk, "The Village of Gunning", J. roy. Aust. Hist. Soc., Vol.X, No.V, 1924, p.286, records that the sale was held in Sydney, and though the minimum price had been fixed at £2 per acre, the prices realised ranged from £1 to £7/6/8 per acre.
changes occurred as it grew more important as a service centre, particularly after Gunning Shire was established. Only the eastern half of the planned village has developed, for there are few buildings west of the Main Southern Railway (Fig. 83), around which there is the conventional street grid in which Yass Street, the main street and a part of the Hume Highway, swings in an arc parallel to the railway. The village focus is in Yass Street where there is a small business core (eight stores and food shops, a few miscellaneous businesses, four garages and one hotel) as well as some of the public buildings (post office, court house, mechanics' institute, shire chambers), but a short side street (Warralaw Street) leading to the railway station also contains a bank, two stores and a guest house. In the surrounding belt of residences and recreation areas, there are also a shire hall, a private hospital, churches, a convent, a masonic hall and a returned soldiers' club (Fig. 83). Business blocks in the

1 In this connection it is of interest to note that Gunning now has a strong local administrative function, as is indicated by the fact that the Shire was awarded the A. R. Bluett Local Government Trophy for 1955. The trophy, which commemorates the services to local government in New South Wales of a former president of the Local Government Association, is awarded annually to the Shire or Municipality which shows the most outstanding progress in local government development. Gunning received the award because of its achievements in road improvements, the extension of rural electrification and of public utilities to small centres, and the establishment of parks and recreational facilities in the shire.
main street (U.C.V. 1948, determined by a private valuer) are assessed at from £10 to £20 per foot, residential blocks at from £1/10/- to £2/10/- per foot, and vacant land in the west of the village area, now used for grazing, at from 15/- to £5 per acre.

In addition to its major functions of shire administration and commerce, Gunning provides various services for its urban field, such as those provided from its post office with mail-runs radiating in several directions, its police station which supervises the Gunning Police Patrol District, its court (a seat of petty sessions) and its Central and convent schools: a bus service links the former with outlying areas so that it draws its pupils from as far as Collector, Breadalbane and Jerrawa (each about 16 miles out) and Gundaroo (19 miles). Also, a depot of the State Main Roads Department in Gunning is responsible for maintaining the Yass-Goulburn section of the Hume Highway.

From this, it may be seen that the limits of Gunning's urban field are not sharply defined, for though it makes contact in this way with centres around it, Collector and Breadalbane are pulled more strongly by Goulburn, Jerrawa is almost wholly under the sway of Yass, and Gundaroo is influenced by Queanbeyan and Yass as well as by Gunning. However, as already noted (p.145) Gunning's influence on Gundaroo has become stronger during recent years. Other small centres nearer to Gunning, like Dalton (8 miles northwest) and Beilmount Forest (8 miles south), lie wholly
in its urban field, and because they and Gundaroo have some features of interest we consider them briefly as examples of minor centres related to Gunning.

Dalton originated as a small service centre for rural settlers around Oolong and Jerrawa Creeks, small western tributaries of the upper Lachlan River, soon after the first town allotments were sold on the 12th August, 1862. Initially, it grew rapidly, but though it was proclaimed as a town on the 20th March, 1885, when Gunning was re-proclaimed only as a village, it subsequently shrunk much in size and importance, principally through being bypassed by the Main Southern Railway and the Main Southern Road when it was re-formed as the Hume Highway still well away from it.

In 1866, Baillière's Gazetteer described it as a centre which "has thriven well and promises to become a place of importance", for it then contained a tannery, a boot and shoe factory, a wheelwright's shop, a coach factory and a wine manufactory producing about 400 gallons of wine per annum from local grapes, and the neighbouring lands were "well adapted for agriculture and pasturing" and several nearby creeks contained gold, but not in very payable quantities. It also had a post office, a large brick Wesleyan chapel, a national school with an average attendance of 40 pupils, a "good wooden building" used by a union benefit society and a hotel, and two other churches and a school were located nearby. Now, all the industries have disappeared,
and though most of the original buildings still remain (Fig. 84) many of them are in poor condition.

Dalton's population figures tell their own story of its inability to live up to its early promise: from 61 in 1866 (Bailliére's Gazetteer) it expanded to 176 in 1881 (census) and 342 in 1891, but had fallen to 160 in 1901, after which the numbers fluctuated but were only 228 in 1947 and 244 in 1954 - a sorry record after a flourishing start.

In its early days, Dalton had horse and dray links with Gunning, Yass (24 miles) and Boorowa (32 miles), but though it is now linked by motor roads to all those places it has developed closer links with Gunning, the smallest of the three, which provides most of its urban services since Dalton is equipped only with the commercial facilities of a small village.

Bellmount Forest is a small hamlet lining the Gundaroo road. It consists merely of a small store-post office, a hall and church and six weatherboard cottages, and it functions as a postal and shopping centre and place of assembly of a very minor order, with the lowest possible ranking in the hierarchy of the Tablelands.

Gundaroo is a small dispersed village with a regular street grid on the Gunning-Queanbeyan road. It is on an alluvial flat near the head of the Yass River, having grown up at a ford where the river was crossed by what was once the main Goulburn-Queanbeyan road.

The village reserve was surveyed by James Larmer, whose
design plan of the village (Fig. 85) was gazetted in 1847, after which it began to grow slowly. By the 1860's, it had become an important staging post with two hotels and coaching offices from which Cobb's coaches ran twice a week to Queanbeyan and three times a week to Goulburn, and it also had a court house; but its post office was then at Ester Mount, a station three miles away. Baillière's Gazetteer, 1866, credited Gundaroo with a population of 300, but this like some later census returns obviously included the surrounding farming population as well as that of the village, because it had only 108 inhabitants in 1871 and 90 in 1881: subsequent censuses showed 351 in 1891, 187 in 1901, 170 (with 72 others nearby) in 1921, 119 and a similar number nearby in 1933 and 89 (with 108 others nearby) in 1947; 89 (89) provisional in 1954.

The rise of motor transport, followed by the building of the Federal Highway from Goulburn to Canberra in 1926, resulted in Gundaroo losing its importance as a stopping-place on one of the two main roads between Goulburn and Queanbeyan, in consequence of which it is now a minor commercial and service centre for nearby farmers, dependent on Gunning, Yass and Queanbeyan for many of its own needs. The focus of village life is in Cork Street, the main street leading north to Yass and Gunning and south to Queanbeyan, which contains its service buildings (store, post office, police station, hall, literary institute, two churches, wine saloon which was once a hotel): to the east and north of it
there are only a few scattered residences, a school and another church (Fig. 35).

Though it has gone down on the urban scale, Gundaroo has retreated from its former position with more grace than other centres on the Southern Tablelands which have retrogressed similarly: most of its buildings, it is true, are old and small but they are also neat and well-preserved, and this, combined with the fact that a nearby reach of the Yass River is lined with willows and other exotic trees, the whole in an attractive rural setting, gives the village a pleasing old-world air, which accounts for it being a popular place for outdoor meetings of Art Clubs in Canberra and other centres on the Tablelands.

II BUNGENDORE

Bungendore is a little smaller and more dispersed than Gunning, but it is a disproportionately quieter centre, for while the latter is on two of the busiest land links of Australia, the former is only a minor junction on a comparatively little used railway tentacle of the State and on main roads of only secondary importance (from Canberra and Queanbeyan to Braidwood and the South Coast, and from Goulburn to Queanbeyan). Of these roads, only the former is really important for the life of the village, largely because it is the only direct road for tourists and holiday makers from Canberra and Queanbeyan bound for the coast.

It is in Yarrowlumla Shire and, therefore nominally, wholly in Queanbeyan's urban field, but in fact it is also
influenced in some ways by Goulburn, whose influence also extends over Queanbeyan (cf. p. 124). Despite this it has developed a small but ill-defined urban field itself, and this spreads around the edges of the primary fields of the two larger centres. The village owes this urban field, and its commercial function, to its nodal situation relative to the railways and main roads which have been mentioned, and minor roads leading north to Sutton and Gundaroo and south to Cooma and Captain's Flat.

After Surveyor Larmer's design plan was approved, the village was proclaimed in 1837, but like all other urban centres which then existed in the State it was re-proclaimed, as a village, under a Crown Lands Act in 1835. It was sited on a slight rise at the southern end of Lake George, at about 2300 feet above sea level, in the middle of Bungendore station, an early land grant to Captain Brooks. Its early growth was slow, and by 1843 (Wells' Gazetteer) it had only 30 people, but in 1866 Baillière's Gazetteer described it as a postal village with 135 inhabitants which had two hotels (one with a coaching office), a court house, two churches, two denominational schools, a fully-operating flour mill and a post office from which mail services were run three times a week to Goulburn, Queanbeyan, Cooma and Molonglo (10 miles south).

The village expanded a little from 197 in 1871 to 279 in 1881, then more sharply to 629 in 1891 and 731 in 1901, largely as a result of the railway being built from Tarago to Bungendore (1885) then on to Queanbeyan, Michelago and Cooma (1885-9); in this phase it housed many railway workers and their families.
In part, however, its growth in the 1880's and 1890's was stimulated by the rise of Captain's Flat for which it provided some services and supplies. Except for a temporary revival in the late 1930's when the branch railway was being built to Captain's Flat, in this century, the village has nearly stagnated as a business centre with its population fluctuating from 584 in 1911, to 667 in 1921, 665 in 1933 and 545 in 1947: the provisional figure for 1954 is 562, with 194 inhabitants nearby.

Like Gunning, its territory is bisected by a railway, but in this case the main part of the village lies west of the line and the eastern half is largely undeveloped (Fig. 86): in the former, however, buildings are no more than scattered on the blocks between its regular street grid, and even the main street (Gibraltar Street), which contains nearly all its few public and commercial buildings, lacks a distinct village core because the buildings are so dispersed. As in Braidwood and many other Government towns and villages in New South Wales several public buildings are grouped on one block, facing a park at one end of the main street: in this case the school, schoolmaster's residence, school of arts, post office, police station and court house are at the eastern end of Gibraltar Street (Fig. 86).

Except for a few stone houses, the work of one family of local builders in the 1860's, and several other stone or brick buildings, most of Bungendore's newer houses and shops are built of weatherboards or fibro and the older homes and sheds of timber
Fig. 86

BUNGENDORE LAND USE-1953
slabs or pisé (some of which have the remains of their original shingle roofs). Hence the village as a whole seems to lack architectural solidity: this, combined with the decayed state of many buildings gives it a moribund look. But for the contacts which it makes with Captain's Flat and the passing trade of motorists on the two major roads through it, particularly the Canberra-South Coast road, the village would, no doubt, have a character in keeping with its appearance, because its small urban field comprises only sparsely populated grazing land, containing a small hamlet, Hoskinstown (formerly Molonglo) and a sawmilling settlement, Rossi, both a few miles south.

III TARALGA

Taralga, 2893 feet above sea level on Taralga Creek (one of the headwaters of the Wollondilly River), lies 29 miles north of Goulburn and 25 miles east of Crookwell. It originated in the early 1850's, with a service function for agriculturists on the hilly lands in the wide valleys of Taralga and Guineacoor Creeks, and initially it developed its closest links with the private village of Laggan (19 miles west) which was then beginning to supplant Binda as the most important centre in the north of the Southern Tablelands: subsequently, when Crookwell grew and when roads were improved to Crookwell and Goulburn it made close contacts with both centres, particularly with the latter in whose shire (Mulwaree, established 1906) it was later included.

The early village was strung out for nearly half a mile
along a north-south track, on two rises and the depression between them, but Taralga now consists of two small urban settlements which have grown at both ends of the old village, as a result of the swampy ground between them (known locally as Pneumonia Flat) having been largely abandoned for settlement, though it still has a few old buildings (Fig. 37).

By 1866 (Baillière's Gazetteer), it was a thriving settlement with 110 inhabitants and many village institutions (3 stores, 3 hotels, post office, steam sawmill, tannery, police barrack, 2 churches, denominational and national schools) and it had horse and dray connections to Goulburn, which linked with Cobb's coaching services to Sydney, and to small centres at Myrtleville (6 miles south) and Bunnaby (3 miles east) as well as those to Laggan, Crookwell and Binda. By 1881 (census) it had expanded to 326, then reached its peak growth (723) in 1891, after which as a result of the economic crisis of the 1890's it contracted to 359 in 1901 and 468 in 1911: World War I and the subdivision of several large estates around it stimulated agricultural production in its district and by 1921 the village had recovered somewhat with a population of 647, but, though its branch railway was built from Goulburn in 1926, it again contracted to 468 after the depression years and the population reached only 483 in 1947.

A succession of good years for its district, now principally used for grazing, is again reviving the life of the village, as indicated by new building works (several homes and shops
and a large brick church and church school), in contrast to Bungendore with only three new buildings in the last four years. Despite this, however, its progress is hampered by the rivalry between the village twins, each of which has its own hotel and a few public buildings (Fig. 87), though the southern twin beside the railway is the more progressive and looks like becoming the focal point of Taralga's life.

Dependent mainly on Goulburn for many of its urban needs, and to a lesser extent on Crookwell, Taralga functions independently of both to some extent as the urban centre for the northern part of Mulwaree Shire, mainly because it is a minor rail-head and so a natural focus for the district, but also because it lies between Goulburn and outer parts of its shire, like Bunnaby and Richlands, and intercepts business from them.
Though the Braidwood district contains more urban centres which have decayed than elsewhere it is by no means unique in that respect, for along nearly every road on the Southern Tablelands, at intervals varying from a few miles to perhaps 20 or more, one comes upon small settlements — or often only their ruins — the remains of centres which once played an important part in the life of their surroundings. Few of them, except the mining towns which arose on the Southern, Kiandra and Abercrombie Goldfields, were large, and most functioned originally as stopping places or staging posts, sometimes at river or creek crossings but more commonly at the junctions of tracks which were then the major lines of communication on the Tablelands.

The life of the mining towns as prosperous centres was inevitably short because all were in local environments which were incapable of providing an alternative way of subsistence for their large populations when the supplies of gold were exhausted in the fields around them: in consequence, those which still exist have only a small fraction of the numbers they once had.

Wholly different causes produced the decline of the staging posts: for instance, the deterioration of Bungonia and other centres south of it is the classic example on the Southern Tablelands of the effects of road changes on the life of small
and thriving settlements; Bunya's eclipse by Coome illustrates how the life of small centres sometimes depended on the whim of local administrators; and, of course, scattered over the whole of the Tablelands are the withering remains of small but once-thriving centres which have been by-passed as a result of railway building and the rise of motor transport.

Some of the small settlements already studied as minor centres in the urban fields of the service towns and large villages belong to these categories, but as specific examples of decadent centres we consider Araluen, Jembaicumbene, Major's Creek and Kiandra as being representatives of former mining towns, and Bungonia and other centres on the Old South Road, and Collector as typical staging posts which have retrogressed.

I FORMER MINING TOWNS

Araluen grew quickly into a big mining camp soon after gold was discovered in Araluen Creek in 1852, and in the manner of other settlements of its type sprawled over the diggings (Upper, Lower, Waterfall, Crown Flat, Mudmalong and several others) which extended for about 16 miles along the creek.

Though it was a busy place, Araluen was strongly isolated because the deep valley (more than 2000 feet from the summit of Araluen Mountain to the creek bed) was bounded by steep slopes on the north, west and south, so that it could only be reached by means of a winding track along the Deua River into which the creek flowed; subsequently a track was formed to
Nelligen on the Clyde River, and still rougher and steeper ones were cut along the valley walls to reach Braidwood and Major's Creek.

By the late 1850's, Araluen had about 1000 people, and though it suffered setbacks when the gold yield fluctuated, when mining was obstructed by legal delays caused by some settlers laying claim to land on the mining leases, and as a result of water shortages on the diggings, it had expanded to about 3500 in 1866. In this year, Bailliere's Gazetteer described it as a "township" consisting of "one long street, there being about 7 miles of residences more or less scattered, in which there are 28 hotels and public houses": it also had a post office, a telegraph

These are indicated by the following press items in contemporary issues of The Braidwood Dispatch:

19/12/1858 Araluen Diggings - "many diggers have left during the past few weeks and the numbers of new arrivals are diminishing".

1/1/1859 Upper Araluen - "The diggings at the place are not progressing so satisfactorily as many would wish".

19/7/1859 Lower Araluen - "The diggings are going ahead at an amazing rate. The valley swarms with life, and the hum of busy multitudes is heard everywhere. The flats are the chief centres of attraction".

1/11/1859 Eastern side of Araluen Creek - petition of 567 miners regarding obstruction of mining by the assumed claims of Messrs. Roberts and Hassall, holding land under grant to F. M. Mundy.

12/11/1859 Editorial reference to the lack of water for the diggings. (This recurred periodically throughout the life of the Southern Goldfields, justifying the opinions expressed earlier by Rev. W. B. Clark that water supply would constitute a major problem in the development of the fields).
office, a coach office for the Molligen coach, a bank, a sawmill, a hop beer brewery, 3 lodges and a racecourse.

This seems to have been the peak of its growth, for, in 1871 (census), it had only 2900 inhabitants, a figure which contracted to 879 in 1881 (609 in Araluen and 270 in West Araluen), and only 229 in 1891 when gold had become scarcer. As a Correspondent to The Braidwood Dispatch (9th April, 1890) wrote:

"The old valley just now is in anything but a flourishing state, in fact our prospects have not been so bad for years ...... out of all the claims in the Valley there is only one of them at present working - the old Oriental in Newtown."

Dredging and sluicing by companies caused its recovery to 593 and 771 at the censuses of 1901 and 1911, respectively, but since then Araluen has contracted to two, then three, small hamlets (Araluen North, Araluen and Lower Araluen) with an aggregate population of 209 in 1947, and a similar number in 1954.

Araluen North contains a store, post office, church and a few cottages; Araluen, a hotel, post office, church, school, hall and a few cottages; and Lower Araluen only a post office and a few cottages. They are strung out along the road passing through the valley at intervals of about a mile. They contain the ruins of old buildings dating back to the mining days, and depend now for their life on vegetable and fruit-growing activities around them, the products of which are despatched to Braidwood (17 miles north) and other centres on the Tablelands.
Major's Creek, 11 miles south of Braidwood and 4 miles west of Araluen, is comparable in many ways with the latter, except that it has a different setting in a smaller valley on the Tablelands on Major's Creek (a tributary of Araluen Creek) and now serves as a small village centre for surrounding pastoral districts.

Originating soon after Araluen, Major's Creek grew quickly also, and reached the peak of its growth with a population of 1074 at the 1871 census. Like most other Australian gold-field centres, it then contained a large percentage of Chinese diggers: subsequently, however, because dredging around the town never reached the same proportions as in the Araluen Valley and along the Shoalhaven River, the population dropped from 966 in 1891 to 715 in 1901, thereafter more steeply to 337 in 1911, then slowly again to 175 in 1947: 114 (provisional) in 1954.

Like Araluen and indeed most other mining centres, Major's Creek experienced many initial service difficulties: as usual, hotels and grog shanties soon sprang up all over the diggings, but because traders were unable to obtain security of tenure on the mining leases they were loth to build stores there. To overcome this difficulty and provide adequate business facilities for the diggings, the private town of Inkley, occupying a small square inside the existing boundaries of Major's Creek (Fig.88), was established in the 1850's, but it did not fulfil its purpose, and in consequence of subsequent agitations by
residents on the goldfield the Government town of Elrington, adjoining Inkley, was proclaimed in 1860: its name was altered to Major's Creek by a proclamation in the Government Gazette on the 3rd August, 1928.

Though it is still officially a town, Major's Creek is really not more than a small village with a few service buildings (2 stores, post office, hotel, police station, 2 churches, and about a dozen residences) nearly all of which are scattered over the slopes east of the creek. All around it the hill-sides bear many mining scars, and in places where they have been badly eroded, the mined areas resemble miniature badlands.

Jembaicumbene was a smaller mining centre which grew up along the Jembaicumbene Creek and Swamp, about 8 miles south of Braidwood.

Mining apparently began there soon after operations had started at Araluen and Major's Creek, but the early output was poor. By 1859, however, the gold yield was more promising and on the 15th January of that year The Braidwood Dispatch reported under its heading of Mining Intelligence that the diggings were evidently going ahead, and though there were only one or two houses on the swamp, a new public-house had been built nearby and "further down the tents of the miners dot the bush for miles". Five months later (11th June, 1859) it reported further on Jembaicumbene that "numbers continue to be attracted to the new rush at the crossing-place of the Major's Creek road. The rest
of the swamp is being wrought here and there by small parties."

During the next few years Jembaicumbene became more clearly defined as an urban settlement in the centre of the diggings which extended for 12 miles along the creek, and in 1866 Baillière's Gazetteer described it as "a postal township, laid out but not yet proclaimed", and mentioned that it had a large flour mill, post office, 3 hotels and a carrying office (run by Chinese), but also that it was a lawless place with inadequate police protection, a place in which "the want of a proper force is often felt". By 1871 (census) Jembaicumbene (proclaimed as a village in 1867) had expanded to 837, shrinking thereafter to 337 in 1891, then progressively so to 99 in 1921 and 101 in 1933, with no population record at all in 1947. By this time only two isolated farm houses remained, with practically no traces left of the mining settlement except the crumbling walls of a few pise dwellings, and, of course, the abandoned shafts and pits.

Kiandra, while similar in general respects to the Southern Goldfield towns as a mining centre, differed from them by having been a much larger town, with a shorter and more spectacular life, which ended up even more ignominiously than either Araluen or Major's Creek.

It is situated 4600 feet above sea level on the Kiandra High Plains, known originally as Gibson's Plains (after an early settler), and lies on the Monaro Highway, about 52 miles southwest of Cooma and 22 miles west of Adaminaby: before and since the gold rush the plains have been used solely as a summer
grazing ground.

The town mushroomed into existence in December-January 1859-60, after gold had been discovered in Pollock's Gully, just south of it, in November. The Four Mile and Nine Mile Rushes near the town in January 1860 each attracted about 1000 miners, and in February and March of that year the maximum population of the field was estimated to be between 15,000 and 20,000. Owing to the severity of Kiandra's winter many of the prospectors soon withdrew, and by August 1860 there were only 200 diggers at the Four Mile and 400 at the Nine Mile, and the town of Kiandra which had houses valued at about £40,000 contained 4000 inhabitants.

Despite the optimistic belief that the rush would begin all over again in the ensuing summer, and the fact that rich finds were made from time to time, the field began to decline, though several claims near the town (Surface Hill, New Chum Hill, Township Hill) and around it (the Nine Mile, Jackass Flat, Whipstick Flat, Rocky Plain) continued to be worked for some time. By March 1861, when the cold weather had begun to set in again, the miners were in full retreat, many to the new Lambing Flat Field near Young, with not more than about 250 remaining on the Kiandra Field: those who stayed were snowbound for several months, after which they

---

On the 28th June, 1860, an editorial in The Sydney Herald stated: "We hear the goldfields at Kiandra will be visited in the ensuing Summer by at least 50,000 men. Suppose we should see at the Alpine Regions at one time 36,000 men. Of these more than 24,000 will be actually employed in mining, the rest will be required to supply their wants. The value of the gold they will raise at $6 per head per week will reach $144,000, and reckoning 30 working weeks, will be £4,320,000".
Plan of the town of Kiandra 1862.

List of buildings showing the corners of the lots together with their addresses.

Accompanying my letter of January 1862. A. B. D.
engaged in lengthy disputes with the Mining Commissioners.

At the peak of its growth in 1860, Kiandra contained 26 hotels, 25 stores and 12 bakeries, in addition to its many dwellings and few public buildings, but when it was surveyed in 1862, prior to its gazettal as a town on the 5th June, 1863, it was much shrunken and contained only 68 buildings, made up of 8 stores, 7 hotels, 5 banks, 2 butcheries, 2 jewellers' shops, a bakery, 9 other places of business, a hospital, a post office, a police barrack, a surgery, a newspaper office, 3 stables, and residences, (Fig. 89).

By 1866 (Bailliere's Gazetteer) the town's population had fallen to about 230, dwindling further to 107 at the 1891 census, but increasing slightly to 234 in 1901, in consequence of the Kiandra Gold Dredging Company having begun operations in Pollock's Gully in 1900. At subsequent censuses, its population was 328 in 1911, 339 in 1921, 308 in 1933 and 312 in 1947, but these figures obviously include winter tourists in Kiandra at the time of mid-year censuses, because the settlement consists only of three small chalets for ski-ers and five cottages, one of which serves as a post and telephone office (Fig. 90).

Kiandra's life was even briefer than that of most mining towns largely because it was in a bleak and isolated part of the Southern Tablelands, for in addition to being snowbound for several months in each year it was linked to the rest of the Tablelands only by roads on which travel was at most times
Fig. 90

KIANDRA 1955

SCALE IN CHAINS

RESIDENCES

CHURCH
CHALET
P.O.

SORRENTO
SKI CLUB

TUMUT

MONARO

YOUTH
HOSTEL

HWY.

COOMA

N
dangerous, and at the best, difficult, as is indicated clearly by press items in many issues of The Cooma Express in the 1860's and 1870's, and even in the 1880's when the life of the town was temporarily resuscitated by dredging operations.

II THE OLD STAGING CENTRES

Bungonia is the oldest of the official urban centres existing on the Southern Tablelands, because it antedated Goulburn Plains as a town by a fortnight when it was proclaimed on the 13th March, 1833.

It is located, 1920 feet above sea level, on Bungonia Creek, and lies 15 miles southeast of Goulburn in undulating and wooded country which is used only for sparse grazing, and its site (on the original Great South Road) was selected in preference to one at Inverary, 4 miles southeast, where an abortive attempt at establishing a town had been made in the 1820's.

1 In a leading article on Kiandra (12th January, 1884) the editor of The Cooma Express wrote:

"The character of the habitations along the route don't lead one to expect much on reaching Kiandra in the way of dwellings; but they are perhaps as good as it is possible to erect considering the enormous difficulties of transport which have hitherto existed in all the routes to the town....

.... It seems impossible to travel the present track from Seymour [Adaminaby] by any other means than wings with safety, so steep and rough are some of the ascents."
its growth has been irregular, for example, 285 in 1891, 109 in 1901, 223 in 1911, 88 (with 25 nearby) in 1921, 154 in 1933, 135 in 1947 and 142 (provisional) in 1954; even if these figures did not include some of the nearby rural settlers, and it seems likely that they do, Bungonia's growth falls far short of what was envisaged initially for it (Fig. 91).

A few of its houses belong to the later period of its history, and shingle and bark have been replaced by galvanised iron on the roofs of most of its old buildings, but otherwise Bungonia probably presents much the same appearance as it originally had, and among its scattered buildings of stone, faced pile or axe-dressed timber the remains of one or two shingle roofs may be seen.

Larbert, originally Kurrudusbridgee, a little more than 30 miles south of Bungonia on the old South Road, was more devastatingly affected when the road was diverted southwestwards from Marulan, and has ceased to exist long since. In fact, its proclamation as a town on the 13th January, 1843, was like that of Kiandra in 1863, simply another case of the Government facing up to facts after they had ceased to be because by then the old road no longer existed, at least as an effective stimulus to promote Larbert's growth.

It survived for some time as a small agricultural settlement, but as such it was unable to expand because the nearby part of the Shoalhaven valley is made up of arenaceous land, which apart from being of little agricultural value is held
in large estates: though Larbert was credited with 64 inhabitants at the 1891 census, 67 in 1901, 50 in 1911, 20 in 1921 and 35 in 1933, but with no record in 1947, these figures seemingly relate to rural settlers of the locality, because the centre itself does not exist; all that remains is a small church near the remains of an old coaching inn (pisé and lath walls and shingle roof), complete with flogging posts to which recalcitrant convicts were shackled.

Bendoura, Ballalaba and Krawarree, still further south in the Upper Shoalhaven valley, were similar but smaller staging centres on the old South Road, and all have suffered the same fate as Larbert. All traces of Krawarree's existence have vanished, but at Ballalaba the ruins of about a dozen pisé buildings may be seen along the Braidwood-Major's Creek road, and at Bendoura there is a single weatherboard building which originally served as a coaching inn, then as a grog shanty with an unsavoury reputation, and subsequently as a small store and post office meeting the needs of nearby pastoralists.

Ballalaba, which lies only about 7 miles from Major's Creek, and 11 miles from Araluen, revived temporarily during the gold rushes because it was situated on one of the Shoalhaven flats of agricultural value, as a result of which the settlers around it found a good market for fresh foodstuffs in the mining towns. As a centre, however, it never became much more than a small dispersed hamlet.
Collector, 36 miles from Canberra and 23 miles from Goulburn on the Federal Highway which links them, serves to illustrate villages on the Southern Tablelands which have lost importance in consequence of the rise of motor transport, even though they are still on one of the major roads.

It is on a slight rise on the Lake George Plain, beside Collector Creek at the northern end of the lake, and at a point on the Federal Highway from which minor roads branch west to Bredalbane, Gunning and Gundaroo, and east to Tarago and Currawong (9 miles), an old copper mining settlement.

The village buildings are scattered over the southwestern quarter of the official town of Collector and the small private town of Collector adjoining it on the west; the latter, on a tongue of land inside a chain of waterholes along a loop of Collector Creek, was a part of T. A. Murray's grant (centred on nearby Windereedeen station) which was subdivided in the late 1830's; the former was proclaimed as Collector Town Extension on the 6th September, 1859.

Initially Collector became important as a collecting place for all kinds of livestock travelling between Sydney and Melbourne; then, when a road was built from Goulburn and tracks

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Mrs. W. G. Andrews of Collector, "The Village of Collector" (an unpublished essay, 1952) states that this could account for the name. This is unlikely, however, for it seems rather that the name is a corruption of Caligda or Keligda (meaning unknown) used earlier by the aborigines of the area. In its early days, Collector was also known as Lake George.
were formed to settlements around it, the village became a
thriving and busy little community with 4 inns, several black-
smiths' shops, stores run in conjunction with the hotels, a
tailor's shop, a windmill for grinding corn from surrounding dis-
tricts, a court of petty sessions (once a month), postal facili-
ties and three churches: to these a police barrack and a stone
school and residence were added later.

By 1871 (census), its population had grown to 169, but
this contracted to 97 in 1881, largely as a result of the build-
ing of the railway from Goulburn to Gunning in 1875, and though
the life of the village was revived temporarily in the later
years of the 19th century in consequence of copper mining at
Currawong, and its numbers increased to 230 in 1891 and 1901, it
was further adversely affected by railway building to Tarago in
1884, and more recently by the rise of motor transport: since 1901
it has contracted steadily to 208 in 1911, 199 in 1921, 183 in
1933 and 105 in 1947: provisional figures (1954) credit it with
135 inhabitants, with 30 others nearby.

It still has its public buildings and about a score of
small residences, but in place of the many business premises
which it once had, there is now only one store, one hotel and
two tea rooms: it is managing to survive better than most other
villages of its type, however, because it is the only centre on
the Federal Highway between Canberra and Goulburn, and its hotel
has become a popular place of refreshment for travellers and its
two tea rooms are being much patronised by residents of Canberra and Goulburn, particularly at week-ends; Collector is a convenient stopping place on short round trips from both places. In an attempt to foster this week-end trade, and to encourage passing tourists to stop, the village is publicised as Historic Collector since its hotel contains a few relics of convict days, and stands beside an obelisk erected on the spot where a policeman was killed in an encounter with bushrangers.

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1 Because the average Australian is a very ardent, though unqualified, local historian this kind of thing has become a standard practice in Australian towns and villages with any landmarks thought to have any claim at all to historical distinction. In this instance, however, one of the principal historical showpieces - a blood-stained sofa formerly kept in the hotel - was claimed by the cynics to have retained its historic appeal only because of repeated applications of blood from freshly-slaughtered beasts; some go further and claim that the gallant constable did not even contribute.
Before proceeding to the conclusion of this thesis—an attempt to synthesise empirically the geographical character of the Australian town—I make a few general observations about urbanisation in Australia in some of its broader aspects and comment briefly on some of the problems which confront the geographer in its study. They are relevant here because they outline the wider background of urbanism in the continent as a whole against which I have drawn my findings about the Australian town, and throw some light on the way in which my conclusions have been reached.

**Australian Urbanisation**

Several inter-related and to some extent inter-dependent features of urbanisation in Australia heavily underline the importance of town study as a major branch of the continent's social geography.

1/ Australia is a highly urbanised, and the most completely metropolitan, continent;

2/ after the physical environment, the town is possibly the most important factor influencing the life of Australia, inasmuch as nearly eight out of every ten of its people live in towns, more than one-half of them in the State capitals;

3/ there is a marked lack of balance in the continent's urban pattern, in that the urbanised parts of Australia comprise only a small fraction of its total area, and their contained centres are irregularly distributed; and

4/ the urban-rural dichotomy of Australian society is deeply and ineradicably etched.
In the narrower field of urban geography, these are, of course, the fundamental features that give rise to many problems of content and method, as is indicated in the following discussions of the degree and manner of Australian urbanisation.

(1) The Degree of Urbanisation

A wholly valid assessment of the degree of urbanisation of a country naturally depends on the use of purely objective methods of appraisal. For many people "urbanisation" is something which is conceived subjectively only, and in consequence the term conjures up many shades of meaning which differ appreciably from one another according to the standpoint from which it is investigated. Moreover, the use of different criteria for determining the degree of urbanisation of a particular area or country will often produce completely unlike results, as for instance when urbanisation is measured in terms of the extent of urban landscapes relative to those of rural landscapes in the same area or of the urban/rural proportion of the population or of functional and occupational distinctions.

Even in countries containing areas which have been urbanised to a high degree rural landscapes naturally preponderate greatly over urban landscapes, though it is usual for some to be accepted without question as being "urbanised". Britain is a good example, and for different reasons there are reasonable grounds for the claim that Australia, also, is a highly urbanised continent.
In terms of landscapes, urban Australia comprises an area infinitesimal compared with that of rural Australia, and in terms of productivity the latter is outstandingly important as a major source of the nation's income from exports, with primary products accounting for an average of about 83.5% of the total value of Australian exports for the years 1951/52 to 1954/55. By contrast, however, though towns exist in only a comparatively small part of Australia, principally in what is not much more than a narrow peripheral belt in the eastern mainland States, and some smaller urban enclaves around Hobart, Launceston, Adelaide, and Perth, urban dwellers, as we have seen, comprise nearly 80% of the total population. Moreover, though primary production is especially important as the major source of the nation's income from exports, it represented only about 42-45% of the net value of total Australian production from 1951/52 to 1953/54. The balance came from the production of factories, mines, and quarries, which with few exceptions are dominantly urban enterprises.

But if we subtract the capital cities the degree of urbanisation is not so impressive, and in fact many regions even

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These years represent a period of normal production uninfluenced by droughts, also one in which wool values dropped to something like their usual (and stable) levels from the fantastic heights which they reached in the 1950-51 season. Summarised tables showing the value of Australian Exports (Australian Produce), 1951/52 to 1954/55, and the net value of Australian Production, 1951/52 to 1953/54 are listed in Appendix 11.
Fig. 92

AUSTRALIAN STATES AND SIX SELECTED STATES IN U.S.A.

PERCENTAGE DISTRIBUTION OF RURAL AND URBAN POPULATION

U.S.A. Figures 1950 Census
Aust. Figures 1947 Census

COLORADO GEORGIA IOWA OHIO NEW YORK WASHINGTON N.S.W. VIC. QLD. S.A. W.A. TAS.

Urban in largest City
Urban, not in largest City
Rural
## DENSITY OF URBAN POPULATION

(Density in persons per square mile for the total area of each State)

<table>
<thead>
<tr>
<th>State</th>
<th>Largest City and Population</th>
<th>Density including Largest City</th>
<th>Density excluding Largest City</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1950</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorado</td>
<td>Denver (415,786)</td>
<td>8.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Georgia</td>
<td>Atlanta (331,314)</td>
<td>26.0</td>
<td>22.6</td>
</tr>
<tr>
<td>Iowa</td>
<td>Des Moines (177,365)</td>
<td>22.3</td>
<td>19.1</td>
</tr>
<tr>
<td>Ohio</td>
<td>Cleveland (914,803)</td>
<td>136.0</td>
<td>113.6</td>
</tr>
<tr>
<td>New York</td>
<td>New York (7,891,357)</td>
<td>262.4</td>
<td>97.3</td>
</tr>
<tr>
<td>Washington</td>
<td>Seattle (467,951)</td>
<td>21.7</td>
<td>14.9</td>
</tr>
</tbody>
</table>

| **1947**    |                             |                                |                               |
| N.S.W.     | Sydney (1,863,217)          | 11.6                           | 8.2                           |
| Vic.       | Melbourne (1,524,062)       | 27.8                           | 10.5                          |
| Qld.       | Brisbane (502,030)          | 1.6                            | 1.1                           |
| S.A.       | Adelaide (382,454)          | 1.6                            | 0.6                           |
| W.A.       | Perth (272,528)             | 0.5                            | 0.2                           |
| Tas.       | Hobart (76,534)             | 9.4                            | 6.8                           |

(Sources: Commonwealth Census 1947; U.S. Census, 1950)

There were, however, some increases in the Australian figures at the 1954 census, as the following table shows.

<table>
<thead>
<tr>
<th>State</th>
<th>Largest City and Population</th>
<th>Density including Largest City</th>
<th>Density excluding Largest City</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.S.W.</td>
<td>Sydney (1,863,217)</td>
<td>11.6</td>
<td>8.2</td>
</tr>
<tr>
<td>Vic.</td>
<td>Melbourne (1,524,062)</td>
<td>27.8</td>
<td>10.5</td>
</tr>
<tr>
<td>Qld.</td>
<td>Brisbane (502,030)</td>
<td>1.9</td>
<td>1.2</td>
</tr>
<tr>
<td>S.A.</td>
<td>Adelaide (382,454)</td>
<td>2.0</td>
<td>1.0</td>
</tr>
<tr>
<td>W.A.</td>
<td>Perth (384,596)</td>
<td>0.6</td>
<td>0.2</td>
</tr>
<tr>
<td>Tas.</td>
<td>Hobart (95,223)</td>
<td>11.3</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Nevertheless, the fact remains that Australia has become urbanised to a high degree, in addition to which the manner of its urbanisation presents some unusual aspects, for apart from the very uneven spread of towns already noted, there is a marked lack of balance between the metropolitan and all other elements of the urban population, and the urban and rural elements of Australian society are sharply divided from each other in many
ways. We consider first the composition of the urban population of Australia and some features of town distribution.

(ii) The Manner of Urbanisation

As the following table shows, Australia's urban dwellers now comprise about 78.6% (metropolitan urban 53.8%, other urban 24.8%) of its total population, this being an increase of about 10% over the corresponding figure of 68.7% (metropolitan urban 50.72%, other urban 17.98%) at the 1947 census.

AUSTRALIA: URBAN AND RURAL POPULATION, 1954

<table>
<thead>
<tr>
<th></th>
<th>Metropolitan</th>
<th>Other Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>000's</td>
<td>%</td>
<td>000's</td>
<td>%</td>
</tr>
<tr>
<td>N.S.W.</td>
<td>1,862</td>
<td>54.4</td>
<td>962</td>
<td>28.1</td>
</tr>
<tr>
<td>Vic.</td>
<td>1,523</td>
<td>62.1</td>
<td>470</td>
<td>19.2</td>
</tr>
<tr>
<td>Qld.</td>
<td>502(a)</td>
<td>33.1</td>
<td>460</td>
<td>34.9</td>
</tr>
<tr>
<td>S.A.</td>
<td>484</td>
<td>60.6</td>
<td>110</td>
<td>13.8</td>
</tr>
<tr>
<td>W.A.</td>
<td>348</td>
<td>64.4</td>
<td>105</td>
<td>16.5</td>
</tr>
<tr>
<td>Tas.</td>
<td>95</td>
<td>30.7</td>
<td>105</td>
<td>35.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4,814</td>
<td>53.8</td>
<td>2,215</td>
<td>24.3</td>
</tr>
</tbody>
</table>

(a) Including c. 40,000 population really rural. Minor discrepancies in totals and percentages due to rounding off and a few thousands of migratory population.

These figures, conjointly with the pie graphs of Fig. 93, show that the highly metropolitan character of the urban population, for long a feature in most States, is becoming still more pronounced.

As equally striking as this excessively high degree of metropolitan urbanisation, and the absence of balance in the
AUSTRALIA

DEGREE OF URBAN CONCENTRATION
IN STATE CAPITAL CITIES
1861-1947 CENSUSES

TOTAL COMMONWEALTH
POPULATION (Million)

Fig. 93
pattern of town distribution in Australia already noted, are the
gaps which exist in the size/frequency scale of towns in some of
the States, particularly in the ranges from 50,000 to a million,
as is reflected in the following urban data from the 1954 census.

AUSTRALIAN STATES: CITIES AND TOWNS CLASSIFIED
ACCORDING TO SIZE, 1954

<table>
<thead>
<tr>
<th>Centres with population of</th>
<th>N.S.W.</th>
<th></th>
<th>Vic.</th>
<th></th>
<th>Qld.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>% of total</td>
<td>No.</td>
<td>% of total</td>
<td>No.</td>
<td>% of total</td>
</tr>
<tr>
<td>1 million or more</td>
<td>1</td>
<td>1.25</td>
<td>1</td>
<td>2.27</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>500,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2.8</td>
</tr>
<tr>
<td>250,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2.8</td>
</tr>
<tr>
<td>100,000</td>
<td>1</td>
<td>1.25</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>50,000</td>
<td>1</td>
<td>1.25</td>
<td>1</td>
<td>2.27</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>25,000</td>
<td>2</td>
<td>2.25</td>
<td>2</td>
<td>4.5</td>
<td>4</td>
<td>11.4</td>
</tr>
<tr>
<td>10,000</td>
<td>14</td>
<td>17.5</td>
<td>4</td>
<td>9.0</td>
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<tr>
<td>5,000</td>
<td>28</td>
<td>35.0</td>
<td>18</td>
<td>40.9</td>
<td>8</td>
<td>22.8</td>
</tr>
<tr>
<td>2,500</td>
<td>33</td>
<td>41.25</td>
<td>18</td>
<td>40.9</td>
<td>16</td>
<td>45.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Centres with population of</th>
<th>S.A.</th>
<th></th>
<th>W.A.</th>
<th></th>
<th>Tas.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>% of total</td>
<td>No.</td>
<td>% of total</td>
<td>No.</td>
<td>% of total</td>
</tr>
<tr>
<td>1 million or more</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>500,000</td>
<td>-</td>
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<td>-</td>
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</tr>
<tr>
<td>250,000</td>
<td>1</td>
<td>8.3</td>
<td>1</td>
<td>9.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>100,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>50,000</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>9.0</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td>25,000</td>
<td>2</td>
<td>16.6</td>
<td>1</td>
<td>9.0</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td>10,000</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>9.0</td>
<td>2</td>
<td>22.2</td>
</tr>
<tr>
<td>5,000</td>
<td>4</td>
<td>33.3</td>
<td>5</td>
<td>45.4</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td>2,500</td>
<td>5</td>
<td>41.6</td>
<td>3</td>
<td>27.2</td>
<td>4</td>
<td>44.4</td>
</tr>
</tbody>
</table>
With minor exceptions, the table presents an overall picture not much different from that provided by the comparable figures of the 1947 census. Including Canberra, Darwin, and Alice Springs in addition to the towns of the States there were 195 towns in the continent with a population of more than 2500 at the 1954 census: most were in the lower ranges, for example, 30 in the 2500-5000 class, 65 from 5000 to 10,000, and 29 from 10,000 to 25,000. Twelve cities ranged from 25,000 to 50,000, but, excluding the State capitals, only New South Wales with Newcastle (178,156) and Greater Wollongong (90,829), and Victoria with Geelong (72,349) had centres with more than 50,000, though Launceston (49,310), Ballarat (48,050) and Fremantle (47,273) are approaching that figure.

Except Fremantle, which is to a large extent a part of the Perth conurbation, and Launceston, the largest extra-metropolitan centre in each State ranks well below the capital city in size as the following table shows.

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1 There was, for instance, a considerable decrease in the numbers of small towns (notably in the 2000-and-over and 3000-and-over ranges), especially in New South Wales and Victoria. This is, however, not particularly significant for the urban geographer, for, as the census authorities state, the decrease was not caused by contractions or expansions of small independently existing towns but by extensions of local government boundaries in some highly urbanised areas like Sydney, Melbourne, Greater Wollongong, and Newcastle Urban Area. They were in fact merely administrative absorptions of suburban centres already absorbed physically by the larger centres.
### Metropolis and Next Largest City

<table>
<thead>
<tr>
<th></th>
<th>Population, thousands</th>
<th>Ratio to Capital:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1933</td>
<td>1947</td>
</tr>
<tr>
<td>N.S.W.: Newcastle</td>
<td>104.5</td>
<td>127.1</td>
</tr>
<tr>
<td>Vic.: Geelong</td>
<td>39.2</td>
<td>44.6</td>
</tr>
<tr>
<td>Qld.: Rockhampton (1954: Toowoomba)</td>
<td>29.4</td>
<td>35.0</td>
</tr>
<tr>
<td>S.A.: Port Pirie</td>
<td>11.7</td>
<td>12.0</td>
</tr>
<tr>
<td>W.A.: Kalgoorlie</td>
<td>17.3</td>
<td>22.4</td>
</tr>
<tr>
<td>Tas.: Launceston</td>
<td>32.8</td>
<td>40.4</td>
</tr>
</tbody>
</table>

(a) Taking 1947 population of 1954 metropolitan area, N.S.W. 1:13.0, Vic. 1:29.0

The inordinately large sizes of the big cities, particularly Sydney and Melbourne, relative to the general urban structure of the continent is perhaps one of the most distinctive features of Australian urbanism. In this connection it is of interest to note that Australia with a population of just under 9 millions and only 195 towns of 2500 and over has two cities in the million and over class, as against five in the United States of America, with a population of about 151 millions, and 4284 towns of 2500 and over.

It seems likely that the gaps in the middle ranges of the urban size/frequency scale of some of the States may be attributable to the stage of Australia's development, for the rapid growth of centres like Newcastle, Geelong, Launceston, Bendigo,
and Ballarat, among others, suggest that these gaps may disappear in time, especially so if steps are taken to curb the physical expansion of the metropolitan cities, as has been mooted in some instances. As yet, of course, the big cities still outstrip all other centres by far in rate of growth.

Because town size depends on so many variables, such as regional factors for example, it is natural to expect that the frequency of towns of particular orders of size will not be the same in all States, as the table (p. 267) illustrates. But, as we have seen, the discrepancies relate principally to the frequency of distribution of the large centres, for on the whole there is a general increase in the numbers of towns towards the lower end of the size scale in all States.

By way of example we consider the urban size/frequency in New South Wales. Here, the nearest ranking centre to the three big conurbations of Sydney, Newcastle, and Greater Wollongong is Broken Hill (31,387), with 60,000 people fewer than the smallest of them. Lower down the scale come the cities of Blue Mountains (22,834) and Maitland (21,334), the latter a convenient administrative grouping of the towns of West Maitland, East Maitland, and Morpeth, and the former a collection of detached tourist towns hardly deserving the name "city". No other town exceeds 20,000, and only a few including provincial capitals like Tamworth and Wagga Wagga, and regional service centres like Lismore, Grafton, Bathurst, Goulburn, Albury and a handful of others, have
populations of more than 10,000. Smaller centres are, however, more numerous; namely, 28 with 5000 and over, 33 with 2500 and over, 62 with 2000 and over, and nearly 400 with 1000 and over.

Beside all these quantitative considerations there are other general aspects of Australian urbanism which are of interest for the urban geographer: for convenience, they might be discussed here.

There is, as we have seen (p.263) a pronounced lack of balance in the urban pattern of Australia by reason of the fact that its towns are very unequally distributed, principally in a few constellations at widely separated places around the coast and in only a thin spread in a comparatively small part of the rest of the continent.

Naturally, the existing pattern of town distribution is the product of the inter-play of many and varied forces, but of the factors which have operated in its making the environment seems to merit special consideration.

Town growth is absolutely inhibited by the physical environment in only a few places, but against this the environment of much of the continent is of such a nature that it is not generally inviting as a milieu for towns. This is, of course, particularly true of the wide expanses of semi-arid land which permit only a sparse pastoral occupancy and naturally, therefore, the existence of only a few towns, mostly small and of specialised types: thus, except for the scattered towns of eastern and central
Queensland, the isolated inland mining centres like Broken Hill, Kalgoorlie, and Mount Isa, and several dispersed towns like Alice Springs, Darwin, and Broome, much of the semi-arid centre and west and the tropical north is virtually an urban void. Similar, though smaller, voids are a consequence of rugged relief in some parts of the populous eastern States, as in many places in the Eastern Highlands, and in the Central Highlands of Tasmania.

The relative absence of towns in these areas is reflected in a paucity of transport routes through them, so they are contrasted all the more clearly from the distinctly urbanised parts of the continent where the towns are linked for instance by railway networks with meshes which are correspondingly coarse and fine in areas of low and high urban concentration. This raises another question of interest for the geographer - how may town distribution be correlated with the transport systems, particularly the railway networks, in Australia?

Generally speaking, town growths were largely responsible for the spread of the railways, though inevitably of course some towns owed their establishment to the building of the railways. Likewise, therefore, town distribution has been a major cause of the interesting variations in the railway patterns of the Australian States (Figs. 34-99).

Queensland's railway system forms a pattern which differs somewhat from that of any other State. It consists of small but largely incomplete networks in the southeast and a northward
QUEENSLAND
DISTRIBUTION OF RAILWAYS AND PRINCIPAL TOWNS (1954 CENSUS)

Fig. 94
leading coastal corridor joined by several inland branches, the pattern of which reflects the distribution of a group of the State's larger centres in the Moreton, Downs, Maryborough, and Rockhampton Districts in the southeast, its moderate sized ports spaced at intervals along the coast from Mackay to Cairns, and its inland mining towns and cattle outlet centres (Fig. 94).

In New South Wales there is an equally striking effect of urban distribution on the railway pattern, for the middle coast with large town concentrations in the Sydney, Newcastle and Wollongong areas is served by a relatively close network of railways. From this area, railway corridors lead through the coastal districts (south, however, only to Nowra, 100 miles from Sydney) and the tablelands of the State (where towns are thinly distributed) to open networks on the inland slopes where activities like wheat-growing and irrigated crop-farming have given rise to closer settlement and a reasonably profuse sprinkling of towns of varying sizes. Beyond, in the Western Division of the State, where towns are few, railways extend out as single threads to pastoral trade outlets like Brewarrina, Bourke, and Hay, and the mining towns of Cobar and Broken Hill (Fig. 95); the line to the latter is, however, a corridor rather than a tentacle, linking the networks of eastern New South Wales and the Adelaide region by way of connections through Silverton and Cockburn.

The urban belt of Victoria, resembling in shape an hour-glass with broad and flattened bulbs (one around Melbourne in
Fig. 95

NEW SOUTH WALES
DISTRIBUTION OF RAILWAYS AND PRINCIPAL TOWNS (1954 CENSUS)

SCALE IN MILES

- 40 80

SYDNEY 1,665,217
NEWCASTLE 178,186

1,000 - 2,499
1,500 - 2,999
5,000 - 9,999
20,000 - 49,999
50,000 - 99,999

142° 145° 148° 151° 154° 167° 170° 173°
-31° -30° -29° -28° -27° -26° -25° -24°
the south, the other in the north and northwest of the State) gave rise to a railway pattern made up primarily of two networks which are drawn apart in the middle of the State where the Central Highlands have restricted railway building (Fig. 96).

In Tasmania, South Australia, and Western Australia, where towns form clusters of different density around Hobart, Launceston, Adelaide and Perth, respectively, the resulting railway patterns principally assume the form of networks (Figs. 97-99): their meshes vary, but they are mostly coarse in texture, reflecting the scattered distribution of towns in those States.

Similarly to all this, town distribution has exercised a strong influence on the layouts of the road systems of the Australian States, but, as in the case of the railways, the roads were responsible for some counter influences, as evident for instance in their effects of promoting the rapid growth of some towns and of retarding that of others which they by-passed. Indeed, it might even be said that, transport developments, by consolidating towns in a strong position in the life of many rural districts, have served to accentuate the traditionally dichotomous character of Australian society.

(iii) The Urban-Rural Dichotomy

The urban-rural dichotomy has been an important feature in Australia in practically all phases of its history, for except perhaps in the very earliest penal settlement days Australian society has been strongly and clearly separated into urban and rural elements. Initially, of course, the only areas of urban settlement in the Colony were in and around Sydney, and they did
Fig. 96

VICTORIA
DISTRIBUTION OF RAILWAYS AND PRINCIPAL TOWNS (1954 CENSUS)

SCALE IN MILES

0  40  80

1,000 - 2,499
2,500 - 4,999
5,000 - 9,999
10,000 - 19,999
20,000 - 49,999
50,000 - 99,999

MELBOURNE 1,524,062
TASMANIA
DISTRIBUTION OF RAILWAYS AND PRINCIPAL TOWNS (1954 CENSUS)

SCALE IN MILES

0    40    80

Railheads

Less than 1,000
1,000 - 2,499
2,500 - 4,999
5,000 - 9,999
10,000 - 19,999
20,000 - 49,999
50,000 - 99,999

Railheads

Queensland
Burnie
Ullverstone
Devonport
Hobart
Launceston
Queenstown
Tyenna

St Mary's
Herring
Dhapa
SOUTH AUSTRALIA
DISTRIBUTION OF RAILWAYS AND PRINCIPAL TOWNS (1954 CENSUS)

SCALE IN MILES

- 1,000 - 2,499
- 2,500 - 4,999
- 5,000 - 9,999
- 10,000 - 19,999

* Railheads

ADELAIDE 483,535
WESTERN AUSTRALIA
DISTRIBUTION OF RAILWAYS AND PRINCIPAL TOWNS (1954 CENSUS)

SCALE IN MILES

- Railheads

- 1000 - 2499
- 2500 - 4999
- 5000 - 9999
- 10000 - 19999
- 20000 - 49999

- 0 - 40 - 80
not expand greatly till some years after a general expansion of settlement had begun in the 1820's. Though the figures in some of the early population musters in the Colony are not wholly reliable, their records seem to suggest also that some kind of a balance was struck early between the numbers of urban and rural inhabitants in the Colony, and that this was maintained up to about 1821: the population returns for this year show that of about 30,000 people in New South Wales slightly more than half were recorded in Sydney and Parramatta. Allowing for some of these being the rural settlers of nearby areas, and also that there were some townspeople in the small outlying centres like Windsor, Richmond, and Liverpool, the numbers of urban and rural dwellers were about equal.

With the rapid spread of settlement from the 1820's onwards the balance was, if anything, tilted slightly in favour of rural settlement, even though new towns continued to grow up from time to time. As a result of such things as the great copper discoveries in South Australia in the 1840's and the still more important gold discoveries in New South Wales and Victoria in the 1850's, Australia, in terms of its total population, became more dominantly a land of urban dwellers.

Subsequently, the extraordinary growths of the State capitals, railway developments, and the rise of motor transport have made this a permanent condition, for all were linked closely with the centralising process by means of which the control of the economy of each State has come to be firmly vested in its
capital city; this, perhaps, has been the strongest of all the urbanising forces in Australia.

The centralising process might be said to have originated in the settlement and administrative practices which were adopted in Australia in early colonial times. Initially, the continent was colonised from Sydney, then from a few other major settlements widely dispersed around the coast; all served originally as seats of administration for large areas around them, and, except Launceston, they rose naturally as the capitals of the States. Each, with a strong administrative function from the outset, soon became also the principal centre through which the internal and external trade of its territory was channelled, this being only one step removed from its logical growth as the chief transport node of its State.

In this respect, however, the standing of either Brisbane or Hobart is not quite the same as that of the other capitals, for Hobart has always had a trade rival in Launceston, and in consequence the centralising forces have never been so

Centralisation is a complex phenomenon produced by a variety of interrelated causes and effects which do not always stand out in a clear-cut sequence. Instead in many ways the centralising process has been cyclical in character, for some of the products of its early phases, as for instance railway developments, were also strong centralising agents at later times. In other ways, too, the process has swung back on itself, as in the rapid city growths of the mid-19th century which were not only effects of early centralisation, but also causes of still stronger centralisation during the last hundred years.
strong in Tasmania as in the mainland States, and Brisbane, though firmly entrenched as a governmental seat, is less exclusively the principal focus of State trade than Sydney, Melbourne, Adelaide or Perth. Because the city is in the southeast of the State it lacks a central commanding trade position like that of either Sydney or Melbourne - a circumstance which is reflected to some extent by the comparatively large growths of the coastal ports north of it.

Each phase of colonial expansion like the rapid spread of pastoral settlement (1820's-1840's) and the gold rushes (1850's) produced important changes in the central cities, for contemporaneously with the development of the country as a whole they expanded quickly, and their administrative and commercial functions increased vastly in scope and importance. Railway building, which began in the 1850's and reached its peak in the 1880's, also hinged closely with the centralising of the life of the Colonies in the large cities, as is clearly evident, for example, in the strong links between the growth of the State-wide railway networks, on the one hand, and the rapid expansions of the capital cities, their major focuses, on the other.

Early in the railway era, of course, the capital cities were not materially affected in any way by the few short lines

1 In this connection also, it is of interest to note that the northwestern towns of Tasmania (Ulverstone, Devonport, Burnie) are being "pulled" (through their business connections) to Melbourne, to an increasingly stronger degree.
which radiated from them, but when these were extended and multiplied, then expanded by means of many branchings and interconnections into widespread networks, the railways contributed in increasingly greater degree to the rapid growths of the central cities and to the strengthening of their commercial and administrative dominance over an ever-widening area. In Queensland and Tasmania, however, where fewer lines are concentrated on Brisbane and Hobart, respectively, the railways have been less powerful in this way as agents of centralisation.

Nor did the casting of the capital cities with a strongly central functional role in the life of the States and there, for when motor vehicles came into general use the transport arrangements of the continent underwent further great changes, as in the building of the State networks of roads. In response to such developments the central cities soon became the principal focuses of the road systems, as they had earlier become the major railway nodes: this, by strengthening further their already-strong central functions, was naturally a source of added urban prestige and power for them.

Though the rapid growths of the capitals are the most striking urban phenomena of the last hundred years, many urban changes have also taken place in the predominantly rural areas of Australia, where scores of new towns have grown up in widely dispersed places. Some of these were caused directly by new transport developments, others like the towns of the irrigation areas
were established to meet the growing service needs in districts where changes from the original forms of land use had resulted in closer settlement. Moreover, apart from new urban growths of this type, there are many instances of old-established rural centres which have expanded rapidly, and conversely, of others which have stood still or lost ground, even of some which once flourished but no longer exist. Here, again, the evidence is often quite clear that the expanding influences of the big cities and railway and road transport developments were the agents responsible for urban changes.

Apart from changes of a purely physical nature, as for instance in town size or urban form, many rural centres have undergone less conspicuous but nevertheless significant changes in "tone". This is particularly true for some centres ranking as service towns and higher in the hierarchical scale. In the past, as has been indicated in the examples of the Southern Tablelands, it was not uncommon for a town to have a tone very much in keeping with that of its local environment. But, because of the rapid spread of big city influences and under the impact of speedy transport facilities such "local" traits have disappeared from some towns and they are being obliterated fast in others: as exemplars, Cooma has now lost the "pioneer" look which it had as late as the 1920's, and Yass is no longer the truly "pastoral" town which it was early in this century; but against this, Braidwood, to some extent in a backwash so far as improved transport
facilities are concerned, is still a sleepy and essentially "rural" town, reflecting in most aspects of its life the conservative tone of its pastoral surroundings. This phenomenon of the rural town with a strongly "local" character being replaced by towns which are more cosmopolitan in character, or "miniature big cities" as it were, is, however, not uniquely "Australian".

Because its own existence depends on it, this new kind of town which is growing up throughout Australia is usually in a state of functional harmony with its rural surroundings, but, at the same time it is also carrying the traditional conflict between the city and the country into the latter's territory. This is illustrated, for example, by the fact that town-dwellers everywhere tend to develop specifically urban interests, which are sometimes not to the advantage of rural dwellers or are even antipathetic to their interests: in this connection, it is of interest that complaints are often raised in shires in New South Wales that the needs of rural districts are being neglected because too much time and Shire revenue is spent on improvements and works in the Shire centre.

In the wider field, the way in which the Country Party is so strongly entrenched as an element in the Australian political system provides clear evidence that the urban-rural division of interests is very real. The party's avowed aim is to serve the interests of the man on the land, and experience in the Commonwealth and State legislatures has often shown that its
representatives are apt to consider this to be possible only by curbing the powers of vested interests in the big cities, or by denying their inhabitants privileges or concessions which they believe would be made at the expense of rural dwellers.

Though the interests of their dwellers are as divergent as ever, the urban and rural settlements seem to be less clearly distinct in character than they were in the past: indeed, it might even be said that many once-wholly rural settlements are in a phase of transition, one in which they are beginning to assume many characteristically urban features through being progressively infiltrated by urban influences.

(iv) The Need for Urban Geographical Research, and its Problems of Method

All these matters relating to urbanisation in Australia seem to make it obvious that there is a real need for a comprehensive programme of urban geographical research to be undertaken in this country. Beyond the problems of content associated with urbanism in the continent lies the fact that the study is intrinsically interesting, if only for the challenging problems of method involved in it. In many ways of course its research will result in the same kind of ground being covered as has already been traversed by urban geographers elsewhere, but, though the Australian town is a transplant from the English town, and therefore fundamentally similar to it, it has developed (in some parts of the continent more than others) some features which are distinctively
"Australian".

As an important consequence of this marked Australianism of Australia's towns, some of the methods employed by urban geographers overseas have to be adapted in order to apply under local conditions. For examining such things as the evolution, the function, and the morphology of the Australian town the usual lines of approach may be followed without difficulty, but the methods and criteria which have been used successfully elsewhere for the grading of urban centres and for delimiting the boundaries of their urban fields will not always suffice in this country. For example, as observed in Chapter IV, suitable criteria have yet to be devised which will give a satisfactory grading of Australian towns: evidence from the Southern Tablelands suggests that their grading, when determined, may be found to be comparable in many respects with similar gradings worked out by Smiles, Bracey, Carol, and Brush in various other places. It is clear, however, that their criteria of classification cannot be used in exactly the same ways that they have used them.

Moreover, the use of bus services for the purpose of marking the boundaries of an area served by a town is generally inapplicable in Australia, wholly so around most rural towns where

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1 For full reference see Bibliography-General.

2 As used for England, Wales, Scotland and the Netherlands by Green, and for Sweden by Godlund see Bibliography-General.
bus services either do not exist or are relatively insignificant as a means of local transport.

Similarly, the turnings of farm roads are of little use in most places in Australia as an index of the ways in which rural settlers travel to towns. They are completely worthless for the purpose on the Southern Tablelands where the distances between the centres are so great that the saving of a few yards is an immaterial consideration.

As a further example, the checking of the point of origin of cars parked in the main street of a town on market day or the main shopping day, as has been used in Britain for the purpose of ascertaining the extent of the area served by a town, is likewise impracticable as an urban geographical technique for use in all States but Western Australia under normal research conditions. In this case (with the one exception noted) the current Australian practice of having uniform State-wide systems of motor registration means that vehicle registration numbers cannot be recognised as belonging to a particular parish or local traffic area without reference to the central traffic office in the State capital; this procedure, at best protracted, is often fruitless of results.

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Thus we see, the urban geographer in Australia must abandon some techniques that have become standard elsewhere, and he has to modify others, but, in addition, there are some problems for him inherent in the Australian towns themselves, and in the way in which they are distributed.

Australian towns are young. They belong almost entirely to the Machine Age, and like many of its products have been made in what is more or less a common mould. They lack, therefore, the sharp distinctions of form and aspect that are characteristic for instance between towns in Europe which may have originated centuries apart and in the internal differences of towns which may be comprised of the urban accretions of perhaps Roman, Medieval and Modern Times. In consequence, though the geographer is thus readily able to form a general picture of what a particular town is like, his task of understanding it thoroughly and of making valid comparisons between neighbouring towns is made all the more difficult. To do either he must closely analyse urban layout, form, aspect, and function, seeking the delicate nuances which are often the only clues to the minute differences between towns.

Clearly, then, the geographer can not hope to see in the Australian town an urban physiognomy with clearly articulated features, as

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1 The term is used here in the sense of relating specifically to transport developments, as for example, to the age of the railway, steamship and motor car which replaced that of the bullock waggon, small sailing vessel and horse coach.
is particularly evident for instance in some French and German towns and cities.

Though the Australian town is a comparatively recent import from Britain, with the 19th century English village as its prototype (for that was the intention of the Governors in early colonial days), we must look for its counterpart elsewhere than Europe, perhaps to North America where the general environment and the way of life are more closely akin to those of Australia. Even here, however, we cannot expect to find homologues of the Australian town: it is true that it bears some resemblances to urban centres in the Middle West of the United States, like those in southwest Wisconsin which Brush and Trewartha have described, and the towns in our grain farming and pastoral areas bear comparison in some ways with their equivalents in similar environments in Canada, but

1 For example, the absence of evidence of many phases of development in Australian towns is strongly at variance with that which A. Philipppson has described for Bonn ('Die Stadt Bonn', Bonner Geographische Abhandlungen, 1947), which was in turn: a Roman camp, a cathedral town (Verona), a market settlement outside the camp, a walled town (1243), a castle and garden residential town of Elector Clement Augustus (18th century), a cultural and residential centre (after the university was re-established in 1818), and a town which grew beyond the fortifications in 1876.


3 For example, with the pioneer settlements (towns and hamlets) along the railways of the prairie wheatlands; cf. Griffith Taylor, Urban Geography, London, 1949, pp.206-212.
the Australian town generally has little in common with the centres of New England or elsewhere east of the Appalachians and in the Southern States.

The urban mesh of Australia poses a second important problem for the urban geographer. By reason of having been laid down on a continent which is coarse-grained physically the net of urban settlement is on the whole not tightly drawn. In a few places, of course, as in central coastal New South Wales and around Melbourne, the mesh is finely woven, but elsewhere its threads (the links between neighbouring urban centres) are so stretched and tenuous that they do not seem to exist in some places.

Close field investigation in widely spaced neighbouring urban centres is often necessary for the purpose of determining what kinds of inter-urban links exist between them; in this, distance is naturally a major research handicap.

A third problem results from what may be conveniently termed mechanical hindrances to urban research, namely, the difficulties caused by the confusions of urban terminology used by the governments of the several States, and the inadequacies of statistical compilations relating to towns. In the census enumerations, for example, the population of a given centre, particularly in some rural districts, may include the inhabitants of

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surrounding areas, in some cases up to several miles away. Moreover, for the geographer there are many limitations inherent in the statistician's treatment of towns purely in terms of numbers of inhabitants: this may be inescapable from a census point of view, but it obviously conceals very important considerations within conurbations and at the other end of the urban scale.

Less seriously, the work of the urban geographer is handicapped by the extensive gaps which exist in the detailed study of Australian history, particularly in its economic and social aspects, and by the comparative neglect of historical geographical studies. The problems so created are, of course, not so great as those described above, because several historians have sketched the broad outlines of our history, and others have described certain phases in greater detail.

Moreover, it might well be argued that the urban geographer should be his own historical geographer: this is true up to a point, particularly regarding the evolution of towns and the events of local history which have influenced their form and function at different times, as illustrated for instance in the attempt in Chapter II to portray how the circumstances of local history have played a part in the working out of the regional pattern of urban settlement on the Southern Tablelands.

Despite the handicaps which confront him the geographer can make a valuable contribution to the solving of the constantly multiplying problems attendant upon the rapid growth of urbanism
in this connection it seems that geographers should pay greater attention to the detailed study of the Australian town, particularly in its regional setting (as in this thesis) so that the full play of inter-urban influences between neighbouring centres may be thoroughly appreciated. It follows naturally that many studies in this kind of piecemeal urban analysis will be needed before anything like a full picture of the Australian town can be revealed (cf. p. iii). But, if we are to understand the real nature of Australian urbanism with any degree of certainty many such regional studies - the tesserae of the urban mosaic, as it were - must be accurately conceived before being fitted together as a whole - this thesis is one only of the many contributions needed.

The Character of the Australian Town

Though it has developed some characteristics which are peculiarly its own the Australian town is broadly similar in many respects to towns in other parts of the world, excluding of course the indigenous towns in the few places where town growth has been relatively free from the impact of Western urbanising influences.

1. My findings in this section are based principally on the evidence obtained in my central field of research (the Southern Tablelands), but this has been supplemented by the results of similar research on the resort and business towns of the Central Coast of New South Wales, and the old Nepean-Hawkesbury towns on the western fringe of the Sydney lowland. Similarly, my opinions at times reflect observations made during field reconnaissance in the Murrumbidgee and Lachlan Valleys, on the Illawarra and South Coast, and elsewhere in New South Wales, and Victoria and Queensland.
Thus, as a grouped settlement with a communal life it differs no
whit from its namesake elsewhere, and as well as having some at
least of its features of layout, form, aspect, and function gene-

rally comparable with those of towns in other countries, its ori-
gin and growth have on the whole been in response to the usual
causeative factors of urban origin and growth.

Because the Australian town, like all other towns, is
compounded of several urban elements in varying proportions it
follows logically that a synthesis aimed at a close understanding
of its character must be preceded by the analysis of the various
factors which have influenced town origin, growth, function, lay-
out and the like in Australia. In some instances they are so
strongly inter-dependent in producing special effects on towns
that they cannot justifiably be considered separately. For example,
it is impossible to speak of the origin and growth of towns with-
out much detailed reference also to their functions, both initially
and at later stages in their lives; similarly, town function is
necessarily closely involved with any consideration of urban lay-
out, and particularly the relationships between neighbouring towns;
and, as exemplified by some centres on the Southern Tablelands
(Canberra on the one hand, and Braidwood and the mining towns on
the other) growth changes in towns invariably affect their layouts.
Within the scope of these limitations however, some description is
possible of the several factors which have influenced the character
of the Australian town, and of the individual parts that they have
played in that respect.
Factors of Town Origin, Growth and Function

Nearly the whole gamut of town origins is represented in Australia's cities, towns, and villages which originated in diverse ways as: commercial centres; centres of administration, industry, mining, lumbering power generation and the like; resorts; and wayside stopping-places. Most have, of course, grown up a business centres, for commerce, here as elsewhere the principal

fons at origo of town growth, gave rise to a multiplicity of towns in locations which became important cross-roads of trade, as in seaports, river ports, rail-heads and nodes, and road junctions.

Centres of ecclesiastical and military origin are about the only types not fully represented. Even here, however, it might be said that the isolated mission stations and monasteries of Western Australia and central and northern Australia are a kind of diminutive ecclesiastical centre, though except New Norcia in Western Australia perhaps hardly urban. Moreover, some at least of the early towns in Australia, such as Georgetown, Albany, and Port Essington, originated as military settlements, in other than a strictly convict garrison sense like Newcastle, Port Macquarie, and Brisbane or in the sense of outposts (Bourke, Pinjarra) fortified against hostile natives. Though not wholly comparable, these and other examples of town origin in Australia have strikingly close resemblances to equivalent urban growths in Brazil despite

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the sharp contrasts in the physical environments and cultural backgrounds of the two countries: for example, New Norcia is in some ways a counterpart of the centres of catechization like the reducciones and the aldeias, established respectively in southern Brazil and Paraguay and central Brazil and Amazonia; in their origins, Georgetown, Albany, and Port Essington are roughly paralleled by the Brazilian prazas de posseccion (Rio de Janeiro, Victoria, Florianopolis) in strategically defensible sites along the coast; and the inland defence and garrison posts (Bourke, Pinjarra) and the many police outposts which came after them bear a strong resemblance to similar posts in Brazil occupied by the captaes do matto (captains of the forest) who were responsible for suppressing banditry and the outbreaks of native violence.

Indeed, beyond these examples and the obvious parallels between the growths of mining centres, ports and business centres in the two countries, there are striking growth similarities between the Australian staging-posts and wayside hamlets, on the one hand, and the pousos (stopping-places) and cidades viajantes (travellers' towns) of Brazil, on the other. Furthermore, the towns which grew up along the Overland Routes (the cattle trails from Queensland to Victoria), at resting-points and river crossings like Dubbo, Hay, and Canowindra, and the rise of important cattle-selling centres like Deniliquin and Moama seem to have had their Brazilian equivalents in the pousos and feiras (cattle fair-towns) along the inland estradas de boiades (cattle routes).
Other than towns which rose as ports and dominantly industrial centres, nearly every Australian type of town origin is represented on the Southern Tablelands. As might be expected, most of the towns grew up as business centres, but, as we have seen, some centres like Araluen, Major's Creek, and Captain's Flat originated with a mining function, and Canberra was established as an administrative centre. Among the minor centres, many small villages grew up as wayside stopping places, and Monga and Berrinjuck are special examples of small urban settlements which grew up with a lumbering and a water-supply and power-generating function respectively. As yet, there is no tourist settlement which can be termed urban in character, but the small permanent settlements of Good Hope (on Berrinjuck reservoir, near Yass), Yarrangobilly, and Kosciusko may be expected to develop into such.

Starting with the abortive attempt to establish Old Goulburn in 1829, town growth on the Tablelands belongs to all but the two earliest phases of urbanism in New South Wales. In consequence, the towns on the Southern Tablelands have grown on the whole in response to influences felt universally throughout

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1 These relate to town establishment in the County of Cumberland in early colonial days. The first phase covers the establishment of Sydney (1788) and Parramatta (1790) by Governor Phillip, one as a repository for convicts and its garrison, the other as the centre of what he hoped would become an agricultural district capable of supporting them. The second phase covers the setting-up by Governor Macquarie of the Hawkesbury towns and Liverpool (1810), the latter as a port on George's River and the former as garrison, cultural, and service centres for the surrounding districts.
the State, but because of the special circumstances surrounding the origins of Canberra and North Cooma during recent years the rise of those centres has not been in accord with the general mode of new urban growth in the State.

All this evidence suggests that an historical approach of some sort is a fundamental pre-requisite for a proper understanding of town origin, growth, and function in Australia. The following brief review of the causes of the waves of urbanism which surged through New South Wales at different times provides an illustration of one such line of approach that may be adopted.

The Phases of Urbanism in New South Wales

There seem to have been four main phases of urbanism.

1 There are, of course, many other new or relatively new towns in Australia which are comparable with Canberra and North Cooma in the sense that they are new growths with specialised functions. Some like Griffith and Leeton in the Murrumbidgee Irrigation Area, as noted, have arisen specifically to meet the newly-created service needs of their surroundings; several are associated with power, fuel and/or water supply developments (Yallourn, Morwell, Eildon, Warragamba), and others have industrial functions (St. Mary's near Sydney, Kwinana near Perth, Maryvale in Gippsland).

Perhaps the most interesting of all, however, is Australia's newest town, Elizabeth (17 miles north of Adelaide). The town, still in its infancy, is being developed as a "satellite" of Adelaide on a site near the Salisbury weapon testing ground. Housing and other facilities are now being provided for the purpose of expanding its population from the existing few hundred to about 30,000 by 1960, and to validate its claim as "the first city of the motor age" in Australia, parking facilities for cars are being provided on a far greater scale than elsewhere, and helicopter landing grounds have also been planned.
in the Tablelands, and indeed in all the State, each of which has its own raison d'etre. In chronological order they are those associated with: the initial expansion of settlement beyond the sandstone uplands ringing the Sydney lowland, the gold discoveries, the building of railways, and the rise of motor transport.

(i) The Expansion of Colonial Settlement

By the early 1820's the way was open for settlement to expand in several directions beyond the County of Cumberland, for, by then, the restrictive policies of the early governors aimed at preventing settlement from expanding into the outlying parts of the County had been largely reversed. As a result, settlers soon began streaming out in all directions into the newly-opened lands, and as the net of colonial settlement continued to be thrown in this way over a constantly widening area, the need for urban settlements as an adjunct to rural settlement in the new areas soon came to be recognised.

In many areas towns or villages grew up as business and service centres for settlers in their surroundings, usually conveniently located at important track junctions (or at points which later became so) and at river and creek crossings. Towns

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1 The sandstone plateau west of Sydney was successfully crossed by Blaxland, Lawson, Wentworth, and party in 1813, and along a different route by Bell in 1821: a road built by William Cox in 1815 traversed the route of Blaxland's party. As we have seen (Chapter II), Meehan and Throsby effectively penetrated the southern uplands between Cumberland and Argyle Counties, 1814-20; and in 1819, Howe journeyed across the northern uplands, from the Hawkesbury to the Hunter River, tracing in a general way what later became known as the Bulga Road (Richmond to Singleton).
also grew in response to governmental needs as well as those of the rural settlers, for with the rapid expansion of settlement it became necessary to establish administrative outposts in the new areas.

Later, when the government undertook road making and public building in the rural districts, large gangs of convicts were employed, with the result that stockades and garrison posts had to be established: these, like the police posts which were also made necessary by the generally lawless conditions prevailing in some districts, developed naturally into towns or villages in some instances.

Despite such local urban developments in the rural areas Sydney still remained as the hub of all colonial life, and even the most distant settlers were forced to maintain some contacts with it. This involved long and slow travel and carriage of goods along poor tracks, making inevitable the growth of staging posts at which travellers could obtain overnight accommodation and teams could be fed and rested: as we have seen, many of these posts on the Southern Tablelands soon became the nuclei of small grouped settlements performing an urban function for their surroundings.

Moreover, the continued unauthorised occupation of lands beyond "the limits of location" after 1829 led to the setting up of Commissioners' seats in the Squatting Districts which invariably soon became urban centres, as for instance, Cooma, Tumut, and Binalong, respectively the seats of the Monaro, Murrumbidgee, and Lechlan Districts.
Side by side with the expansion of settlement into the inland, new settlements were established at various points along the coast, leading, from the 1830's, to the development of regular coastal shipping services, which, in turn, gave rise to the growth of small ports (Maclean, Nambucca, Ballina, Wollongong, Ulladulla) on coastal streams and inlets. Many depended at first on the export of cedar from their surroundings. Most were affected adversely later in the century by the increases in the sizes of ocean-going vessels, and by the spread of roads and railways. Woodpeth, in particular, is a good example in the former category. Early in the settlement history of the Hunter Valley it grew up as an important port at the head of navigation on the river, maintaining its standing for many years as the major outlet for the produce of the district. Later, however, when large vessels were unable to navigate the shoals in the Hunter estuary, Newcastle usurped its port function, and the town declined greatly in size and in importance.

Though the establishing of towns was solely a prerogative of the Governors in the Colony's first half century, the setting up of new towns and villages did not remain in the full responsibility of the administration from the late 1830's, for private towns then began to come into existence. Their raisons d'être were of course similar in most cases to those of the Government towns, but they were established differently (Appendix 10). The need for them arose simply because the small Colonial
Survey staff was utterly incapable of performing effectively all the duties demanded of it; general survey, essential for the division and valuation of the territory of the Colony, was in itself an impossible task for the handful of surveyors after settlement expanded rapidly into vast new areas.

Surveyor-General Mitchell fully recognised the importance of reserving sites for towns and villages and of laying down from the outset properly surveyed plans for them; in fact, while he was the Commissioner for the territory of New South Wales some new towns and villages were gazetted, but these were not in anything like the numbers needed; hence the rise of private towns in the districts where there were no Government towns, or where there was an insufficiency of them (Appendix 10).

(ii) The Gold Discoveries

Besides being responsible for the greatest increase in Australia's population (from 404,000 at the beginning of the gold rushes to 1,154,000 ten years later) the gold discoveries brought

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1 The duties of the survey staff were also increased considerably after 1831, as a result of the ukase issued by Secretary of State Goderich to Governor Darling in that year forbidding him and his successors from disposing of Crown land by grant or any other means except sale by public auction. This necessitated more assiduous attention being given to survey and valuation than had been customary in the past, also many more demands by individuals for the services of the surveyors.

2 This, of course, excepts the effects of the large-scale immigration which has been sponsored by the Commonwealth Government in the post-World War II years. Recently (November, 1955) the millionth migrant was publicly welcomed in Melbourne.
about the most sweeping changes ever produced by a single cause in the pattern of Australian urbanism.

The mushrooming of boom towns and sprawling mining camps as described for centres like Kiandra, Araluen, and Major's Creek on the Southern Tablelands, was repeated many times over in the 1850's on goldfields scattered throughout New South Wales and Victoria. Earlier (in the 1840's), copper discoveries in South Australia had led to similar urban growths at Burra, Moonta, and Kapunda, and comparable effects were produced also by important mineral discoveries at later times which led to events like the great gold rushes in Queensland in the 1870's and Western Australia in the 1880's and 1890's or to the rise of isolated mining centres like Cobar (1869), Broken Hill (1883), Captain's Flat (1884), and Cloncurry and Mount Isa (during this century).

With few exceptions, notably Broken Hill and Kalgoorlie with large mineral resources, the mining towns had comparatively short lives as such. Some, like Ballarat and Bendigo, still thrive, long after their mining function has ceased to be important, because they are in local environments capable of sustaining their large populations in other ways. Many, however, survive as shadows only of their former selves, such as the languishing rural villages of Araluen and Major's Creek, while others like Kiandra and Tuen already have virtually ceased to exist, or like Jembaicumbene wholly so.

(iii) The Building of Railways

Some specially strong inter-relationships have developed
between towns and railways in Australia, for apart from the close connection which has already been noted (pp. 272-4) between town distribution, on the one hand, and the railway patterns of the States, on the other, railway building has had a marked influence on town growth generally in the continent, and on the morphologies of many individual towns.

For many established towns the coming of the railway ushered in a phase of rapid growth, and occasionally it introduced a new set of economic circumstances which led ultimately to a complete reorientation of the lives of these centres. Less commonly, railway building gave rise to the growth of new towns, and sometimes it contributed to the decline of some existing centres, as for instance Berrima and Dalton, which were by-passed by the Main Southern Line of New South Wales.

Morphological changes in towns resulting from railway building have been likewise varied. In some cases where a railway has been built through an established town it has not only altered its form but perhaps divided its life in some way as well. For example, the Main Southern Line of New South Wales bisected Junee, splitting up its original business core with serious consequences for the life and progress of the town; for the business premises have had to be re-grouped in two small cores, one on either side of the railway station and marshalling yards at a comparatively busy junction, with a level crossing the only link between them. Wyong transected by the Main Northern Railway, and the busy Pacific
Highway beside it, has been affected somewhat similarly, for the railway station and goods yard separate the business area from its original residential complement (East Wyong) to the detriment of the latter; apart from causing shopping inconveniences for the residents of East Wyong, the division helped in part to promote new residential expansion on hilly land west of the business core, and contributed to a depreciation of land and property values east of the railway. Furthermore, as noted (p. 146), The Oaks Estate, a residential part of old Queanbeyan, has been virtually shut off from the life of the modern town by the latter's railway station and goods yard.

The development of a "main street" fronted by shops on one side and by the railway station on the other is a feature of urban form common in some centres beside which a railway was built, also of many towns which grew up around a railway. This morphological trait is, for instance, quite usual in Western Australia where railways preceded many towns, and the comparatively new town of Griffith in the Murrumbidgee Irrigation Area also illustrates the point. On the other hand, however, this was once, though is no longer, a feature in some old-established towns, for example, the town focus of Goulburn in an earlier phase of its life was in Sloan Street, beside the railway station, but now, because of the rise of motor transport, the city hub is along the road-axis, Auburn Street, one block away from the station.

Evidence of the links between railway building and town
growth is clearer in some places than in others. For example, there is little doubt that the rapid expansions of the ports of Rockhampton, Townsville, and Cairns since the 1880's reflect strongly the effects of the building of the feeder railways as outlets for the beef cattle and mineral products of their hinterlands; similarly, the influence of the North Coast Railway of New South Wales as an important agent of urban change is clear, as in the big expansions of established centres (Kempsey, Grafton, Lismore) and new town growths (Wauchope, Casino) along its route, and in the waning importance of the older ports near the river mouths. On the other hand, however, though the building of a small network of railways (particularly the lines through the coalfields) around Newcastle has contributed to the progressive urbanisation of the Lower Hunter Valley, the effects of railway building on town growth are not so clear, the situation being confused by the large scale mining and industrial developments contemporaneous with railway construction.

Similarly, the Southern Tablelands, with only one main railway (a part of the corridor linking the networks of Sydney and Melbourne) and a few branch lines, naturally do not illustrate the effects of railway building on town growth as clearly as for instance the wheat belt of the State, where there is a definite if broad-meshed railway net. Moreover, while many towns preceded railways on the Tablelands, railway building was more often than not a preliminary to the opening up of the lands of the wheat belt,
with the result that farmers depended heavily from the outset, on railway transport, and, because roads were few, so did the townspeople: the inference is that there were more and stronger links between railway building and town growth in the sheet belt than on the Tablelands.

Nevertheless, the coming of the railway on the Southern Tablelands greatly stimulated the growth of some established centres, particularly Goulburn and Cooma, and it led also to the growth of some small centres in the region. The latter usually originated in the camps of the railway builders, or as temporary rail-heads while new sections of the line were under construction, each taking generally two years or more to build, that is, sufficient time for the camp to become established as a small urban settlement. Most, of course, contracted appreciably when the railways pushed on beyond them, some disappeared.

In addition, several small hamlets grew up around stations or sidings placed conveniently along the railways to serve as outlet points for the district's produce. These often became the focal points of several local roads, so that the growth of the hamlets was sometimes a corollary of the building of the railway stations. On occasions, too, as for example in the case of Bungendore, the new hamlet beside the railway grew up at the expense of an older centre on a nearby road which had served previously as the main routeway of the local area.

It would be quite wrong to assume, however, that
railway building was the only important stimulus to town growth from the 1850's onwards. The existing railway pattern evolved only slowly, so that at all times there were large expanses of settled country which were not served at all by the new form of transport: for them the horse-coach and the horse- or bullock-waggon remained as important as they had been universally before the 1850's, and in this connection the operations of the large coaching and carrying companies, such as Cobb and Company and Fox and Company, were particularly significant.

The activities of Cobb and Company alone, and their effect on urban growth, serve to illustrate the point. The firm began operating in Victoria in 1853 (from Sandhurst or Bendigo to Melbourne), but in 1861 when it had secured the mail carrying monopoly in that State it extended its operations to New South Wales, establishing headquarters at Bathurst, expanding to Queensland also in 1865.

Its coaches plied regularly over large areas beyond the rail-heads, serving as feeders to them and providing the only transport services for many rural settlers, and within the railway networks they provided many cross links between the various branch railways. In 1870, "the Company harnessed 6000 horses daily in the eastern states, and its coaches travelled 28,000 miles weekly; it received mail subsidies of £95,000, and a further £185,000 from the carriage of passengers and parcels - being prior to the parcels post era - and its annual payroll exceeded £100,000."

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Apart from the marked effects of the company's activities on the growth of towns like Bendigo, Bathurst, and Brisbane where operational headquarters had been established, Dubbo and Charleville where large coachbuilding works were set up, and places like Ipswich and Roma which served as inland bases, many new towns and villages grew up around Cobb's "mail changes" - staging-posts at intervals of 20 miles or so, where fresh changes of horses were available, and where passengers could obtain meals, and often overnight accommodation.

Similarly, too, in the middle years of the 19th century, new town growth in the inland was stimulated by Francis Cadell's successful navigation of the Murray River to a point 50 miles above Swan Hill (1853), ushering in a period of river navigation which led to the growth of small river ports like Wentworth, Wilcannia, Boolca, Swan Hill, and Darlington Point on the Murray, Darling, and Murrumbidgee Rivers.

Towns also began to grow up at various points on the long routes followed by the stockmen overlanding cattle from Queensland to Victoria and from New South Wales to South Australia, at such sites as river crossings (which were also river ports in some cases) and places which soon came to be recognised as mustering points and resting grounds (Walgett, Mungindi, Hay, Euston). Some towns along these routes, like Dubbo (a major coaching centre as well as the junction of several stock routes from the north), Deniliquin, and Moama prospered exceedingly through becoming important stock-selling centres. It is of interest to note that the
functions of the towns which grew up at the stock crossings on
the rivers were often clearly implied in their names: thus Moama
was originally known as Maiden's Punt, Hay as Lang's Crossing,
Echuca as Hopwood's Ferry, and Corowa as Foord's Punt.
(iv) The Rise of Motor Transport

Like the railway, the motor car and truck have had
specially strong influences on urban centres generally throughout
Australia, but so far as new town growth is concerned their
effects have been negative rather than positive. Though we are
now beginning to get a modern version of the old-time staging
posts in the road-side halting places or semi-trailers used ex-
tensively for the interstate carriage of freight, we have as yet
no settlement of a specifically urban character which has origi-
nated solely in response to the rise of motor transport. On the
other hand, however, the Southern Tablelands and many other parts
of Australia are liberally sprinkled with small hamlets and vil-
lages which have declined in size and importance through having

1 The halting places may consist of one or more road-houses pro-
viding facilities like meals, bed accommodation, diesel and other
fuels, and off-street parking spaces; for example, Collier's
Transport depot at Kysembe on the Hume Highway, north of Holbrook.
Naturally, they are far more widely spaced than were the old
staging-posts, but they are usually well away from the large
towns on the main routeways because the municipal authorities tend
increasingly to enforce rigid parking and other restrictions on
semi-trailers in the cities and towns. It may be that this is the
incipient form not only of new urban settlements, but also of a new
type of urban settlement.
Motels and caravan parks for touring motorists are a variant of
this type of halting-place which is becoming more common: they are
usually located at or near the outskirts of the large towns.
been by-passed by motor traffic; some as a result of the deviation of routes to secure better motor roads, but most because they are spaced at intervals of only about 15 or 20 or a few more miles between larger centres along the main roads and so are less convenient stopping-places for motorists than the larger towns, which also possess much better shopping facilities for the local inhabitants, no longer forced by distance to shop at their nearest village or hamlet.

Besides all this evidence of a strong mutualism between urban function and town origin in Australia, we look now to the part which a town's function or a change in its function plays in all but the earliest phase of its life.

For the purpose of illustrating how functional changes have affected town growth in Australia we consider the examples of some selected centres on the Southern Tablelands as being representative of the rural town generally, with the proviso that this is one only of the several kinds of local socio-economic environments found in Australia. The generalised function profiles (Fig.100) which are also profiles of town growth indicate in many cases that a town in most stages of its life has a central function, which usually dominates all others.

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1 Data for the construction of the function profiles are available in Australian censuses. Occupational figures as shown on the pie graphs in Fig.101 indicate the major function of the centres at the 1947 census: similar graphs for preceding censuses provide a single major functional thread which can be traced through the life of each centre, and plotted against its changes in population.
FUNCTION PROFILES FOR SELECTED CENTRES - SOUTHERN TABLELANDS (N.S.W.)

(Precedent functions only of each centre are shown on the profiles—not all functions)
Fig. 101

OCCUPATIONAL ACTIVITIES OF POPULATION—SELECTED CENTRES—SOUTHERN TABLELANDS (NEW SOUTH WALES)
(Based on 1947 census figures.)
In addition, they illustrate that:

1/ some centres have retained their original function throughout their life, for example, Captain's Flat (mining), Crookwell (service), Tarago (route);

2/ in most centres an old function tapered off gradually as it was accompanied, and then replaced, by a newer one; and

3/ Canberra is the only centre with an abrupt change of function, when it was transformed arbitrarily from a rural village into the national capital.

Variations of shape in the profiles reflect the changes which have occurred in the function/growth relationships in the individual centres at different times. Thus, the marked "wine-glass" effects in the profiles of Canberra and Goulburn have been produced respectively by the gaining of a national administrative function, and by a progression from a district service centre to a regional service centre. Similar though less marked changes in the profiles of Queanbeyan, Yass, Cooma, and Crookwell have resulted from them having become service centres for their surrounding districts.

Profiles of quite different shapes are found in the other centres, which reflect for example the striking effects of the rise and decline of mining activities on Captain's Flat, Araluen, and Adaminaby; the importance of the gain and loss of a railway centre function in Nimmitabel and Bungendore; and the inhibiting effect on Braidwood's growth of the loss of its function as a goldfields' service centre.
The growth and decline of a town, however, cannot always be equated so simply in this way with the town's primary function. For example, Goulburn's standing as a regional service centre naturally implies that it has many co-ordinated functions, and its specially rapid growth during recent years has been conditional on a well-balanced development of all its functions such as commerce, administration, industry, and the provision of social educational, and health services, and the like.

In other instances, a town which still retains an activity which it developed originally as its primary function may have expanded rapidly because an important secondary function has been grafted on to it. This point is illustrated clearly by Gosford, traditionally (from about the 1880's) an important business centre (for a prosperous citrus orcharding district on the Central Coast of New South Wales) which has grown considerably during recent years. As a business centre, the town has grown important out of all proportion to the expansion of citrus orcharding around it, and though it is still primarily an orcharding centre its rapid growth has been much stimulated because it has become an important point of access for tourists to the nearby seaside resorts.

Woy Woy, a few miles south of Gosford, and many small resort centres around both, afford examples of centres which have always had purely resort functions, whose importance has been greatly magnified as a result of local transport developments.
From the outset of its life, Woy Woy has been a place at which tourists transferred from trains to local transport services (initially, ferries; later, buses). During recent years it and the outlying resorts have expanded greatly, largely because of the improved means of accessibility between them, resulting from the building of a network of roads in the district, and the substitution of more convenient bus services for the slower ferries which were originally the only means of transport between the railway and the coastal resorts up to a few miles from it.

The function profiles of Captain's Flat and Araluen in its wholly mining days (Fig. 100) also illustrate that urban growth and decay does not necessarily hinge on a change of urban function.

Factors of Location

In the matters of situation and site Australian towns conform on the whole to the general principles of urban location which apply universally: but, because the surface of the continent is remarkably homogeneous over great distances, its towns generally have been much more arbitrarily located than is often possible on a comparable scale elsewhere. It is true, of course, that local relief makes it mandatory for towns to occupy particular sites in some areas, as for instance the dissected plateau west of Sydney where towns like Blackheath and Katoomba occupy the ridges followed by the main western road and railway because these are the only lines of passage across the area, and the only logical areas for town growth. Similarly, as we have seen, the
small line village of Burrianjuck occupies the only site possible near the dam.

That the regular grid has become the standard street pattern for so many Australian towns, also indicates that the selecting of town sites has always been largely a matter of arbitrary choice, and that the designers of towns and villages never had to exercise much ingenuity or skill in adapting their plans to suit varied forms of local relief.

On the Southern Tablelands, except that Goulburn occupies a position in the main gateway to the region, Cooma is in a similar general position in the main gateway to the Monaro, and Braidwood and Adaminaby have their general locations influenced to some extent by local relief; urban location seems to have been a matter of chance selection and convenience rather than one of compulsion. It is even more so on the flat terrain of most of the rest of the continent.

It naturally does not follow that all Australian towns are located to the best advantage: on the contrary, many are poorly sited, as for example, Old Gundagai (on flats in the valley of the Murrumbidgee) which was swept away by a great flood in 1852 and subsequently rebuilt as two towns on higher land on both sides of the river; also, Maitland and other towns in the Hunter Valley, and Kempsey, Grafton, and other North Coast towns, which have been flooded many times, despite the fact that they are only a short way from higher ground not usually subjected to flooding.
Even Sydney through its great growth has to some extent, lost several of its initial site advantages (flat land, abundant fresh water, and deep water for shipping), and now faces multiplying difficulties in its continuing expansion, and Melbourne and Brisbane are not free from handicaps caused by periodic floodings of the Yarra and Brisbane Rivers.

Apart from some Australian towns being poorly sited, others are inconvenienced by their unimaginative grid layouts whose inflexible street pattern makes them poorly adaptable to some areas with only moderate relief on which they have been laid down: Bega, with a perfectly regular grid, on hilly land in the northwest of Crookwell Shire, is the classic example on the Southern Tablelands.

But, while topography is seldom (directly at any rate) a major determinant of urban location in Australia, the effects of environmental influences of one kind or another on the general positions of some towns and the specific sites of others are readily apparent. For example in the case of mining towns, particularly the big inland centres like Kalgoorlie, Broken Hill and Mount Isa, urban location is determined exclusively by the ore bodies and the availability of water supplies.

Similarly, the situations of power-generating towns depend primarily on factors which control the local availability of natural resources like coal (Yallourn, Morwell) or water (Tarrraleah, Waddamana). Local environmental influences are, of
course, clearly discernible in the specific siting of many centres, as for instance those which favoured the subsequent growth of many of them as ports, rail-head or railway junction towns, bridge towns, road junction centres, industrial towns, and the like.

Beyond all this there is special interest for the urban geographer in the many minor migrations of towns or parts of towns that have taken place at different times in Australia: in fact, minor shifts of whole towns and villages or their central hubs have happened so frequently and in so many different places that they might almost be regarded as a feature of the Australian town.

Such shifts may be in response to any one or more of many causes, but usually as a result of changes in local transport arrangements, as may be illustrated for example by Wollongong, Gosford, and Woy Woy.

Wollongong was established in the middle 1830's as a seaport on a small harbour on the Illawarra Coast, and subsequently became the principal outlet centre for the dairying, agricultural, and coal production of the surrounding districts. Though it was important in this way, the town was never very large and did not spread far from the harbour till the Illawarra railway developments occurred between 1887-93. In consequence of the building of the railway a new town hub arose beside the railway station, more than a mile inland from the port, and the old town site was virtually abandoned for many years. More recently, however, in response to industrial growth since the 1920's, at Port Kembla just south of
the original town site, Wollongong has expanded greatly, and Old Wollongong now forms a small part of Greater Wollongong.

Gosford illustrates a similar town shift in response to railway building. The town (a Government town originally called West Gosford to distinguish it from its business rival, the private town of East Gosford, about two miles east) was established in 1839 on a small strip of flat land and the neck of an adjoining peninsula at the head of Brisbane Water, an inlet on the Central Coast of New South Wales. It functioned principally as a small port from which timber and shells (for lime-burning) were exported to Sydney, and to a lesser extent as a service centre for a scattered farming population in the surrounding districts. After the completion of the Sydney-Newcastle railway in 1889, a new centre of town life developed beside the railway where it passed through a valley more than a mile north of the old town site - though this was only a minor migration it has had significant cramping effects on the existing morphology of the town, as is illustrated particularly by the restricted and congested nature of Gosford's central business area. This became the outlet for the many citrus orchards which were then beginning to appear in the district and the old town site was largely abandoned, though it is now integrmental again as a residential part of an enlarged town of Gosford.

In Woy Woy, which has existed since about 1900 as a place where tourists changed over from the railway to local forms of transport, the shifts in location of the centre of town life
were smaller, amounting to no more than a few hundred yards, but they are no less significant. The original town hub was sited beside the ferry jetties from which transport was available to all parts of the district, but consequent on the building of a road to Gosford (by a roundabout route) in the early 1930's, the centre of town life moved about 300 yards south to a site on the new road beside the railway station. Now, in response to the development of bus services throughout a wide area east of the railway the town core is moving away from the station along the main road to the outlying settlements.

As has been shown in this chapter and the detailed studies of the thesis, there have been many parallel urban shifts of this nature on the Southern Tablelands: thus, in consequence of changes and developments in the local transport systems, we have seen that, Banyan village migrated a short way from its original roadside position to a site beside the Sydney-Cooma railway when the latter was built (p.302), also that, the town hubs of Fraidwood (p.207) and Goulburn (p.300) and the village cores of Bowning (p.162) and Binalong (p.166) have been characterised by similar errant behaviour in the past.

The effects of the road-railway-road sequence in local transport are specially clear in the movements of the village focuses of Bowning and Binalong. Both centresoriginaged as staging-posts in the 1840's, the focal points of village life being their roadside inns, but in consequence of railway building
in the 1880's each developed a new village core around its railway station, about half a mile away from the coaching inns in both instances. More recently, the Hume Highway, which by-passed Binalong, has to a large extent "pulled" Bowering's core back to its original site. The migrations of Cooma's business core from the original village site on Cooma Back Creek to its railway station (a terminal point from 1882 to 1912), then back again to the road-axis (Sharp Street) are other examples of the same thing.

Transport changes did not, however, always produce identical effects, for as we have seen in the case of Tarago (p. 213) the coming of the railway caused the village focus to move a short way from its old position to the railway station, but because some of the original village remained behind, a twin village growth resulted. Railway building had a different result for Yass where the building of a short branch line from the town to the Main Southern Railway which by-passed it served as a compromise for an urban shift.

Governor Macquarie's re-location of the Hawkesbury settlements in the towns of Richmond and Windsor, and the building of North and South Gundagai in place of Old Gundagai provide examples of shifts of urban location which flood hazards made necessary. It seems likely that a similar change of urban location is imminent in the Hunter Valley, where the transfer of West Maitland from low-lying river flats to higher ground has been proposed in order to give protection against the frequent floods of disastrous proportions, of the kind which the city has had to face during the
last few years.

This flood factor, combined with other influences, has produced some interesting changes in the siting of Penrith, 3½ miles west of Sydney. Initially, Penrith grew up as the town of Ewen on the south bank of the Nepean River, at the ferry crossing on the main western road, but as the result of many serious floods along the river in the first half of the 19th century it was replaced by a town at Lemongrove, a hilly site nearly three miles east of the river. Subsequently, when the western road was improved, and after the railway had been built from Sydney in 1863, the town moved slowly westwards again, to the edge of the river flats, and became centred on the railway station. More recently, because the flood danger has been mitigated by the building of large dams – Avon, Cataract, Cordeaux, Nepean, and Warragamba (under construction) – on the upper reaches and tributaries of the Nepean, in connection with Sydney's water supply, the town is spreading again over the flats on which it originated.

Temora, a thriving business town serving the grain and pastoral districts on the interfluve between the middle courses of the Murrumbidgee and Lachlan Rivers, illustrates the selective process which was adopted for the siting of some Australian towns which began life as mining centres but survived as towns when mining had ceased. The town originated in the 1880's, in the last great alluvial gold rush in New South Wales; as a large mining camp it struggled for about 3½ miles along a main street. Then
like many other towns of its type, after the first burst of feverish activity and chaotic building its parts became more clearly articulated: in this instance, Temora developed into a Top Town (embracing the reefs and workings), a Middle Town (which was laid out as a business area), and a Lower Town (a shanty town containing many grog shanties, and the haven of gamblers, prostitutes, and many undesirable elements of the community). Of these, only Middle Town has survived to become the town of Temora.

Factors of Morphology and Aspect

Sameness of layout (consequently of general urban aspect) is perhaps the most outstanding quality of Australian towns generally; this, as we have seen, being largely the result of the way in which the gridded street plan has been so universally adopted, regardless of topographical considerations.

There are, however, many exceptions to this generalisation. For example, the standard grid is completely alien to the layout of Canberra as it was conceived by Griffin, though even he adopted what is not much more than a modified grid for his plan of the irrigation centre of Griffith in the Murrumbidgee valley. It is also less conspicuous as a feature in the plans of some smaller towns like the shale-oil town of Glen Davis (near Lithgow), North Cooma, Yallourn, and others which have been established in comparatively recent times.

The fact remains, however, as Spate has put it that, in settled Australia, "by and large the leading cultural features
of the aerial view are two: straight lines and tin roofs", for

"in few countries is the grid so widespread and so uncompromising as in Australia. From innumerable examples of rectilinear and rectangular patterns we may cite the splendid antecedent boundary between Victoria and South Australia; the road-net of the Mallee wheat area and of much of the Riverina; and the way in which town-grids are set down with but the slightest concession, if indeed any, to local topography - whether in large towns like Grafton, uncomfortably fitted into an often-flooded meander core, or in tiny upland hamlets where half a dozen houses are scattered haphazard in an anomalous checkerboard of hilly tracks, designed to be the streets of a town which scarcely grew beyond the embryo."1

Though the grid is the dominant theme in the layouts of many parts of the metropolitan cities, there are also many variations of that theme, with the result that these cities (in plan or from the air but not from ground level) produce an overall effect of greater variety of design than most of the other towns. For example, considering the plans of the metropolitan areas as wholes, not merely their cores which are highly regular grids in the cases of Melbourne and Perth, we find that, even in Adelaide with perhaps the simplest plan, the rectangular central hub bounded by parks and buildings concentrically arranged is partly encircled by irregularly distributed residential suburbs. Sydney's layout shows strongly the effects of the harbour with its many bays and headlands, backed by dissected sandstone uplands.

whose ridges provide the only logical lines for the city's major arterial routeways and the best sites for residential suburban expansion. Brisbane, nucleated on low land around several wide loops on the lower Brisbane River, has a plan which is criss-crossed by a rectangular grid the orientation of which changes from place to place in the city and suburbs: this is a corollary of the need for city building on the small and low swells which rise out of the Brisbane River plains, a factor which also accounts for the radial lines of Brisbane's outer suburban growth.

Though it differs morphologically in other ways, the Australian town is comparable to the Middle West town of the United States in that the grid street pattern is characteristic of both, and that the main street in this grid usually becomes the

1 To appreciate fully the essential urban characters of the capital cities, however, we must, as Spate has indicated, discriminate between the aspects of their cores and their surrounding sprawls for:

"The cores are indeed individualised to a surprising degree, considering that they are so much of an age; all but Sydney and Hobart were founded within the twelve years 1824 to 1836. But in each case the city's heart beats to its own tempo as it were, since their truly formative periods vary more than their dates of foundation. By countless subtle touches they express the geographical personalities of their States: the note of sub-tropical gaiety in Brisbane; the different airs of provincial archaism in Hobart and Perth - delightful as these cities are; the brash virility of Sydney, which yet can transform itself, here and there, into an almost feminine charm; the Victorian exuberance of Melbourne; the solid dignity of Adelaide, perhaps a little too conscious that it was founded by gentlemen for gentlemen ....... But this holds only for their nuclei: the cores after all are very small, a square mile or so at most, and around each of them stretches a vast penumbra of brick and tile, weatherboard and corrugated iron - suburbs which, with only a handful of exceptions, lack character because they have never had any autonomous history, have never been anything else but suburbs." (1955, loc. cit.)
principal commercial thoroughfare. Except in the case of Cooma with a business core more distinctly in the form of a block, and for Queanbeyan which has a secondary business street, this is, as we have seen, standard for the Southern Tablelands. It is also in many other parts of Australia.

Beside this marked uniformity of street layout, Australian towns on the whole are not much varied otherwise in form. No doubt this is largely a result of so many Australian towns being Government towns, the designing of which has always been the responsibility of a central authority. Under such circumstances it is reasonable to suppose that responsible officials in the capital cities would not be greatly concerned about varying the designs of towns and villages, often in some remote part of the territory they administered, and similarly that surveyors charged with the task of surveying town sites and preparing their design plans would adopt the methods which were most convenient, and with which they were most familiar. The early surveyors set the pattern of town and village design which seems mostly to have been slavishly followed by those who came after them; indeed, long after it was obligatory for them to observe the instructions of the Home Government regarding the form elements that were to be incorporated in towns when they were laid out, and even after the governors ceased directing the surveyor generals as to what town
planning practices they should adopt. What effects an early surveyor with original ideas about town planning might have had on the form of the Australian town are interesting grounds for conjecture.

Conventionally, in addition to its main business street, the Australian town has its zone of public buildings (often grouped on one town or village block as in the examples of Braidwood and Bungendore respectively), a central park, a residential belt which encompasses the town centre, and a common; though the latter feature has long ceased to exist in many towns. Added to these stereotyped features there is often a sprinkling of industrial buildings, either on the banks of a stream near the town's outskirts (particularly in earlier days for such activities as flour-milling, wool-washing, tanning, and brewing) or beside a railway station if the town possesses one. More recently, of course, it has been usual for some miscellaneous industries of a minor nature to be established in or near the business core of the town; the latter with standard features - a central group of shops, hotels, banks and offices along the main street, flanked at both ends by service stations.

Despite being generally similar in form, Australian towns sometimes display quite marked differences in aspect. As

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indicated for Crookwell and Braidwood, a town's aspect may be influenced partly by its environmental setting, but usually its urban face reflects the tempo of its life; for example, the condition and appearance of its shops, houses, and other buildings give a fair indication of whether a town is "alive" and thriving or not; as witness the many illustrations from centres which have been examined on the Southern Tablelands.

Though the appearance of the Australian town thus depends largely on such factors as layout and general form, space is an equally-important consideration in this respect, for on the whole Australian towns have an air of unusual expansiveness about them, as Spate has observed:

"Everywhere, or almost everywhere, will be the impression of ample space: any Australian town covers three or four times the area of an English town of similar population, perhaps six or seven times that of an equivalent town on the continent of Europe. The main streets themselves are of quite disproportionate width, by overseas standards: this may perhaps be connected with the turning circle of the dray drawn by several yokes of bullocks. It has in turn an important consequence in the virtual absence of any streets designed as architectural units, in Europe one of the key-notes of urbanism. For such design implies a proportion between width of roadway and height of the flanking buildings, and to preserve correct proportions the Australian street would have to be flanked with Renaissance palaces. In the absence of Renaissance princes, buildings of a sufficiently grand scale could only be erected by wealthy corporations, and there were simply not enough government offices, banks or even pubs to go round."

Moreover, as Spate has also pointed out in the same

context there have been some interesting consequences of this combi-
nation of much space with few people (except in Tasmania), as in
the paucity of inter-urban bus services, except for tourism, in
the rural areas because of the economic handicaps of distance.
This is reflected in turn in the bigger development of specialised
shops in the small centres than in equivalent centres in Europe,
because they must serve a wide area of dispersed population and
have no near competitors in the form of large market towns.

Furthermore, he has commented on the differences in the
organization of spaces which reflect differences in history or in
the local environment or in both, which raise essentially geo-
graphical questions:

"Why, for example, are small irrigation towns such
as Nathalia and Namurkah so much more close-built than
those of the standard grid, with the local newspaper of-
tice perhaps more prominent than the hotel? are the domi-
nants of the skyline water towers, grain elevators,
churches, factory chimneys, pithead gear?" (ibid.)

for which he provides some answers:

"The irregular layout of many mining towns is ob-
vious enough, so also the role of the waterfront in the
decayed river ports, Morgan, Raymond Terrace, Echuca.
The layout of the small towns of southwestern Australia
is unmistakably different from the standard in the east,
and yet both groups, in general, are built on a strict
rectangular grid. The variable is simply that in Western
Australia the railway preceded settlement, and the typi-
cal business area is not the road-axis through the town,
but a one-sided street facing directly on to the railway." (ibid.)

Urban aspect, too, is influenced by such things as the architectural styles of buildings belonging to different periods in the life of the towns, the materials of which they are built, and the extent to which shops and other town buildings have been kept in repair and have been "modernised". All are significant in Australia.

Allowing for some exceptions (notably in the case of Sydney in early colonial times) there seems to be a clearly defined sequence in the use of building materials in Australia, corresponding to some extent with changes in the style of architecture. Thus Robin Boyd has shown that several different styles of domestic architecture have appeared in Australia side by side with changes in the use of wall materials from wattle and daub (timber framing infilled with clay), pisé (rammed earth) and timber slabs in the early days, to local freestone and clay bricks, iron sheeting, sawn timber, fibro cement sheeting, and concrete (mortar, slabs, bricks) in later times; and roofing materials

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Initially the buildings which Governor Phillip had erected were 'wattle and daub', but these were soon superseded by local freestone and shingles for public buildings and the more expensive homes, and by clay bricks and shingles for buildings of general use. Following the discovery of excellent slate beds in South Australia in the 1840's, slates were soon used more generally as a roofing material, and their use continued long after iron sheeting came into general use as a roofing material in rural towns. Undoubtedly the presence of a wealthy mercantile class and a greater availability of skilled labour contributed much to the more rapid transition from flimsy to solid buildings in Sydney.
ranging from bark sheeting to shingles, iron sheeting, slates, and tiles.

This seems to suggest that, though Franklyn may have had some justification, more than sixty years ago, for censuring the country town of New South Wales for its lack of charm of antiquity, thus:

"There are no time-worn and weather-stained buildings; because they are appalled like Macbeth with his honours 'in their newest gloss'. There are no ancient inns with balustraded staircases and intricate corridors and passages, such as Washington Irving and Nathaniel Hawthorne loved to describe; no gabled houses, no mouldering market cross, no ruinous and ivy-grown bridges, and nothing to link the present with the past;"  

his criticism is scarcely true to-day, for the age of an Australian town is a material factor of its particular urban aspect, especially so because the scientific and social revolutions of our own generation have helped to "date" so quickly the forms in which the town was represented in the past.

While Australian towns and villages share a common architectural tradition and thus have many domestic and public buildings of similar styles (particularly, for instance, old shops and hotels with wide balconies supported by kerbside posts, new shops with cantilever awnings, tower-surmounted post offices,

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galvanised iron village halls, and the like) the proportions in
which they are present produce significant variations of urban
aspect from place to place, as we have seen for the centres on the
Southern Tablelands.

The form and aspect of Australian towns generally are
also affected strongly by their pronounced lack of group-type
dwellings such as blocks of flats, apartment houses and the like,
which are conspicuously absent in all but the large cities. Even
here, however, in each case they house only a small percentage of
the total population; thus they have had little effect in reducing
the suburban sprawl which has characterised the growth of the
metropolitan cities in recent years, and added greatly to the dif-
ficulties in the way of their effective functioning and admini-
stration.

That the town dwelling should be "a box in a garden"
is a concept which has become deeply ingrained in the minds of
most Australians, yet strangely enough the practice appears to
have been first adopted by Governor Phillip, a most English English-
man. For, in planning the town of Parramatta, on the site in
July, 1790, he instructed the Surveyor General that 50 wattle and
daub huts (each 24 feet by 12 feet, divided into two rooms) were
to be erected in a straight line along both sides of the main
street (George Street). He further instructed that only one build-
ing should be erected on each allotment, and that the land all
around each should be devoted to gardening. Canberra's recent
growth illustrates the problems of suburban expansion resulting from this cause, problems which are common to all rapidly expanding centres in Australia.

Grafton illustrates the effects of this "box in a garden" idea in a different way, for the generous subdivision of the city into large allotments has meant that householders face insu- perable odds in trying to maintain their yards and gardens in a reasonable state of order. Usually, the houses are situated near the street frontages of the lots, set behind a small area of neat and well-tended lawns and gardens, but the large backyards of the adjoining lots are frequently a wilderness of tall weeds and grasses (especially in summer) covering the whole middle of a town block.

Factors of Urban Inter-relationship

All the usual kinds of inter-urban relationships and conflicts have developed in Australia, though we have also seen that, because some "neighbouring" towns are far apart the links between them are not always readily identifiable.

Administration, trade, and transport are perhaps the most common causes of inter-urban linkage in Australia, as for example between the State capitals and the centres scattered

In the almost sub-tropical summer climate of the North Coast paspalum grass (Paspalum dilatatum) is particularly difficult to control. Introduced originally from South America as a pasture grass for dairy cattle, it is now widely distributed in the eastern coastlands, and even in parts of the cooler tablelands. In many places it has become a major and costly pest for urban authorities faced with the task of controlling its rank and prolific growth on road verges, footpaths, and open spaces.
widely through their respective territories, and between the large and small towns grouped regionally. There are, of course, many liaisons also between centres like mining and power-generating towns, on the one hand, and metal-processing and manufacturing towns, on the other, and between some of the metropolitan cities and their seaports.

In the dominantly rural districts of Australia, however, towns generally affiliate with each other because of business ties and their common interests of local administration and in the provision of public utilities and social services. Here, the head centre of a region (for instance Goulburn on the Southern Tablelands) occupies a position relative to the other towns of the local area equivalent in some respects to that of the State capital relative to the other towns of the State. Moves aimed at giving regional agencies a greater part in State administration, such as the recent establishment of Agricultural Regions in New South Wales, are tending to establish centres like Lismore, Orange, Wagga Wagga, and Goulburn more firmly in this way.

As we have seen in the examples of the towns of the Southern Tablelands, it is usual for the centres in a particular kind of local environment in Australia to develop many urban liaisons among themselves, and that less frequently we find occasional centres, such as Captain's Flat or Marulan South, largely isolated from the life of the region in which they are set, because of the circumstances of local topography or specialised function, or as
in these instances perhaps the two in combination (Fig. 102).

Though it is normal for an Australian town to have the closest urban ties with its nearest neighbour, this is not always so, as we have seen in the cases of Taralga’s links with Goulburn, and Sutton’s with Queanbeyan, despite the fact that the two villages are respectively closer to Crockwell and Canberra. Nor do the links between a particular town and its neighbours remain uniformly strong, for under the tensions of business competition some may be weakened or broken; thus, as a result of Gunning’s strong business “pull” on Gundaroo, and of the latter developing new ties with Yass, the village’s links with Queanbeyan have been weakened considerably (Fig. 102).

The inter-urban relations between Canberra and Queanbeyan are perhaps a unique example of mutualism between close urban neighbours, but some of the other twin towns in Australia also have some features of interest (Fig. 102).

Apart from the city-seaport twins, the most common urban twins in Australia are perhaps the bridge-head towns which have grown up on the opposite banks of a river. Albury on the Murray River and Wodonga, its smaller twin on the southern or Victorian bank, are towns which though only a short way apart are likely to retain their separate identities, at least administratively, because the river which separates them is also a State boundary. Likewise, however, Grafton and South Grafton, on opposite sides of the Clarence River, in New South Wales, have maintained their
Fig. 102

URBAN BONDS ON THE SOUTHERN TABLELANDS, N.S.W.

The thickness of the lines indicates the relative strength of the inter-urban bonds, and the bars the direction of the urban pull.

To determine the thickness of the bonds a matrix of 122 towns was set up. For each of the following factors (Local administration, traffic, coal, local manufacture, public, local water supply) a rating was assigned, the bar thickness being determined as a product of the ratings for the factors involved.

The urban size grading is also marked by other towns and smaller centres.
independence from each other as local government areas. Brisbane-South Brisbane, and Bundaberg-North Bundaberg are other river-divided urban twins which have now been united as single corporate entities. The change in the nature of their inter-urban relations is fairly common for Australia's relatively few twin towns.

East and West Maitland, a Government and a private town respectively, illustrate the same kind of thing, except that in this instance the two towns are not separated by a river but lie a short way from each other on the south bank of the Hunter River. Initially Maitland functioned principally as an administrative centre and West Maitland as a business centre, but as we have seen these functions have now been combined within the City of Maitland.

The original twins of West and East Gosford (also a Government town-private town twin) have relations, as suburbs of the existing town of Gosford, quite different from those which they had originally.

The Wyalong-West Wyalong twin illustrates the inter-relations of urban twins of a different category, for the latter was a goldfield camp in the 1890's, the other a Government town to serve it. But despite the government's attempt to define their functions, hence their relations with each other, West Wyalong became the business and service town of to-day, and Wyalong has remained largely undeveloped.

The Urban Synthesis

The Australian cultural environment is perhaps more
homogeneous than that of any other continent, and its physical environment, at least over large areas, lacks variety to a marked degree.

As an effect of this, Australian towns as a whole have tended to develop characteristics which are more generally uniform than those of towns in other continents, especially so because unlike the latter they are relatively young, and have not been affected by many diverse national, ethnic, and cultural influences, and other such forces.

Obviously a single town can never be "typical" for a whole continent, even one with the cultural unity of Australia. But by reason of the fact that most Australian towns have many similar features in common, we may, for convenience, speak generically of "the Australian town".

It seems that, some at least of its salient features can be plotted from the data provided by this analysis of the factors significant in the growth, form, and life of Australian towns, and the more detailed evidence from research on the towns of the Southern Tablelands. The picture which thus emerges from the study is, however, by no means complete: rather, it should be regarded as being not much more than a preliminary draft.

Fundamentally the Australian town is a phenomenon of European origin, but though its antecedents were the 19th century English town and village it is becoming progressively as "Australian" as the landscapes in which it is set, except only when it is in
the form represented by the State capitals, each of which as it grows bigger tends to assume more and more the universal character of a metropolitan and cosmopolitan city.

In matters of location, origin, growth, function, and the like the Australian town conforms in a general way to the principles which govern all urban centres, but its stereotyped form, and hence its pronounced uniformity of aspect to some extent, is largely the effect of the combined factors of the common British heritage shared by all States, the adoption from the outset in each State of a centralised system of administration, and of town establishment at all times having been largely a governmental responsibility; the last resulting in the early adoption of a conventional town design which was simple and effective, and its persistent use in later times merely because the standard had been set.

Apart from the monotony of form produced by its gridded street layout, the aspect of the Australian town shows little variety in other ways, for as we have seen it has been censured for its lack of "the charm of antiquity", its architecture on the whole consists of a few uninspired styles, and it also lacks urban distinctiveness because town buildings are almost wholly of a few kinds of building materials (with perhaps bricks, asbestos cement
and galvanised iron predominating), and large parts of the town area are usually occupied by a suburban sprawl of box-like dwellings on individual allotments; since the latter with few exceptions are invariably large the sprawl in most instances is very pronounced.

The average Australian town is a business and service centre and a place of assembly for the inhabitants of its surrounding district, with its business core consisting normally of shops along both sides of one commercial thoroughfare which is also the main street of the town. Even when it is represented by only the comparatively small village its function is usually indubitably urban, though the lineaments of an urban morphology may not always be so readily apparent.

In the spacing of its many representatives of varying sizes the Australian town seems to follow no set pattern of distribution. To some extent, of course, the spacing of large centres at intervals of from 50 to more than 100 miles apart, and of smaller centres at from about 10 to 30 or more miles apart, indicates a close connection between town location and the developed

As might be expected, however, there are many exceptions to this generalisation for which the local availability of building stone is responsible. For example, basalt is used extensively for town buildings in centres like Leura, Koroi and Colac on the lava plains of Western Victoria, calcareous dunestone in centres in the coastal districts between Warrnambool and Port Fairy, and mudstone for many town and village buildings in the Barrabool district near Geelong.
lines of transport, but, against this, large and small towns are
often spaced haphazardly relative to each other. This, in turn,
leads to some unusual forms of inter-urban association in Australia,
but on the whole, allowing for the long distances which sometimes
separate neighbouring towns in some parts of the continent, the
Australian town has developed the same kinds of links with its ur-
ban neighbours as those which towns everywhere tend to develop.

Within its various classes (metropolitan cities, and
cities, towns, and villages in rural districts) town life is
standard to a high degree, so that when an Australian moves from
one town to live in another of comparable size, he rarely experi-
ences more than a change of neighbours, and perhaps a slight change
of urban scenery, for nearly all the other elements which go into
the making of town life are common to most towns.

Future geographical research may lead to the character
of the average Australian town being interpreted differently, but
the evidence from my research seems to suggest that towns are not
likely to deviate greatly from what I have indicated as the norm.
The character of the Australian town may be regarded as being
"standard", but because it is only "middling standard" the town
itself thus symbolises the glorifying of the mediocre which
De Tocqueville and W. K. Hancock respectively claim is so charac-
teristic of Americans and Australians, and so dear to their hearts.
APPENDICES

1. The Scope and Nature of Urban Research in Australia

2. Average Monthly and Yearly Maximum and Minimum Temperatures in °F at Selected Stations on the Southern Tablelands of N.S.W.

3. Natural Plant Alliances and Species on the Southern Tablelands of N.S.W.

4. Physical Characteristics of the Major Soil Types on the Southern Tablelands of N.S.W.

5. Road Mileages between Urban Centres on the Southern Tablelands.


7. Australian and Overseas Usages of "Township".

8. The Grading of Public Schools on the Southern Tablelands.


10. Government and Private Towns and Villages in N.S.W.


   B. Net Value of Production, Australia, 1951/52 to 1953/54.
APPENDIX 4

The Scope and Nature of Urban Research in Australia

(Reprint of a paper published in

Adelaide, 1955, pp. 247-320)

Though there is a large and growing body of general literature relating to the towns and cities of Australia, urban geographical research in the continent has been much neglected compared with what has been done in Britain, Europe and the United States of America.

Popular works of book length on towns vary from collections of excellent camera studies with many photographs of special interest and value to the geographer, to descriptive, anecdotal, and antiquarian historical writings; in a more serious

1. Such as Frank Hurley's studies of Sydney, Melbourne and Brisbane, for example, Sydney and its Resorts, Sydney, 1938.

2. Dr. J. Macaluso, The Picture of Sydney, London, 1939, but especially among the early writers, W. J. Davidson, A Social Survey of Australian Cities, 1939, (vellum's title), Mitchell Library MS B.366, Sydney. W. Denning's, Capital City [Canberra], Sydney, 1938, illustrates more recent works of this type.


In many books relate specifically to topics like the history of individual centres and particular facets of town and city life, and of course the detailed reports of several town planning bodies have also been published.

Incidental reference to some towns and cities is made in some geographical texts on Australia or its parts, and specifically urban geographical studies of Sydney, Adelaide, Canberra, and Urangan have been fitted by Griffith Taylor into the framework of his general survey, but only about a score of articles.

G. Forbes, History of Sydney, Sydney, 1926.
F. Watson, A Brief History of Canberra, Canberra, 1927.
C. Daley, The History of South Melbourne, Melbourne, 1940.
R. Wystt, History of Tullurn, Tullurn, 1941.


3 Such as those of Cumberland County Council for Sydney, The Metropolitan Board of Works for Melbourne and the Metropolitan Planning Committee for Hobart.

relating wholly to Australian urban geography have appeared in geographical periodicals. In a few instances also, urban matters have been discussed by economists and historians in their respective professional journals: thus, Colin Clark has concerned himself with some broad economic and statistical aspects of urbanism in the continent, and local historians have written up the history of individual towns.

Of these, we consider only the geographical writings, and Clark's theoretical approach to the question of urban location in Queensland: many are purely descriptive and need only a sidelonger because they do not contribute more than a few facts, but the minority with a more generally analytical approach have a more satisfying leavening of geographical ideas.

The descriptive studies relate principally to the evolution of individual towns or cities and to their urban morphology and function: thus, among the latter we have Zierer's studies of...


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Andrews, in his analysis of the settlement net and regional factor in New South Wales, set out to establish the reality and significance of the settlement structure or 'net' as a complementary concept to that of a settlement series, established by Ahlmann in his study of settlements in Calabria. Unlike Ahlmann, who studied settlements in terms of their evolution, Andrews was more concerned with the morphological characteristics of settlement, and by means of some brief comparative studies of the groupings and the internal structure of settlements in New South Wales (Lower Hunter Valley, Lachlan Valley, Monaro, Tweed Valley), he came to conclude, that:

1/ various types of agglomeration in the rural population can be related to regional characteristics of population, and
2/ the nature of continual adjustments of the settlement net to regional activities, is highly significant and worthy of close study.

Andrews suggested the use of form and function as suitable criteria for distinguishing different kinds of agglomerations in Australia, and to illustrate this he demonstrated the hubbed agglomeration of a town (Cowra), and four kinds of sub-urban agglomerations which are either cored or nucleated, regular or irregular in pattern, and either markedly residential or non-residential.

Clark, in his evidence presented to the Royal Commission on Pastoral Lands in Queensland (1925), theorised on the sizes and distribution of townships necessary for the effective distribution of population in rural areas. He argued that townships must play an important part in attracting the right type of permanent settlers to rural areas by providing facilities for the bringing up of families, and as a corollary, that holdings must be sufficiently small and compact so that each family can live in or be reasonably close to a township of sufficient size to give facilities for shopping, education or social life.

On assumptions, based on a study of the ratio of industrial workers in Queensland shires related to the size of the principal town in each shire, he deduced that for each community some 100 to 120 farms, each employing on the average three men, will be in equilibrium with a township of 1500 population. In his view the sizes of farms and the average distance between townships would naturally have to be equated to the quality of the land, thus:

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Wills examined the character of the rural-urban fringe of Sydney and observed changes which had taken place in its agricultural usage. From his evidence of changes in land use since 1910, he concluded that Sydney in common with other metropolitan cities provides excellent examples of a rapidly changing urban fringe, one which is being pushed out unevenly into the surrounding countryside. He claimed that the rural-urban fringe passes through a life cycle – one which has reached its penultimate phase in the industrial invasion of the Botany-Mascot district, which till recently was a flourishing centre of small market gardens.

In a paper on Sydney (1932), Holmes described the regional spread of activities in the metropolis, and drew attention to the harbour and the local environment generally as important factors affecting the life of the city and its development as a

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centralised outlet for the State. Later (1947), he studied the geographical distribution of factories in Sydney and its suburbs by mapping the distribution of twelve classes of factories in order to show how their composite pattern compares with the built-up areas and the shopping areas of the metropolis, also by examining the factors which have contributed to the existing factory distribution in the area. He concluded that though there is a grave need for the re-distribution of the factories in Sydney and its suburbs any such re-distribution should be the task of a metropolitan co-ordinating council, capable of relegating many functional details to component suburban councils.

Other aspects of the geography of Sydney have been studied in two papers by Robinson: one traces the relations between the city and its region in the early phases of its development, and the other compares the functional layout of the city proper in 1820 and 1950.

In the latter, he advanced empirically the thesis that though Sydney had unconventional beginnings it has evolved into a

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purely conventional city, also that by 1820 when this process had
hardly begun the town already possessed the ingredients for its
transformation into a metropolis.

In a paper relating primarily to some geographical
considerations of local government in New South Wales I have drawn
attention to the confusions arising from the existing use of urban
nomenclature in Australia and have discussed some legal aspects of
towns which are significant for the urban geographer as well as
the processes by means of which towns may be established in this
State. Elsewhere, I described the evolution, morphology and func-
tion of Canberra and Queanbeyan, and examined the unique kind of
urban mutualism which has been developed between them.

More recently, Scott has studied Hobart in order to
demonstrate that it is an urban centre in a phase of transition
from a town to a city, claimed earlier by Dickinson as being
characteristic of centres between the population range of about
50,000 and 100,000. After tracing the evolution of Hobart's func-
tions and functional topography, Scott surveyed the present


2 'The Canberra-Queanbeyan Symbiosis: A Study of Urban Mutualism',

3 P. Scott, 'Hobart: An Emergent City', Aust. Geogr., vol. VI,

patterns and the degree of segregation in the city's core by mapping the distribution of its functional buildings (retail shops, offices, public buildings, residences, transport buildings, warehouses and industrial buildings), both horizontally and vertically. Though he found evidence of increasing functional segregation in both directions, he concluded that Central Hobart has not yet reached the degree of functional articulation consistent with that of a metropolis, and he opined that its transition from a town to a metropolis is likely to be protracted.

From all this, it may be seen that the geographical literature on the Australian town is not extensive, and in only a comparatively few instances is based on really close and detailed investigation of urban centres. Moreover, the neglect of this important branch of the continent's social geography is demonstrated further by the fact that in more than 80 articles on Australian geography in the 41 issues of The Australian Geographer, from 1929 to date, 41 have had an economic geographical bias (relating mainly to agriculture, less often to industry), 31 relate to some aspect, or aspects, of physical geography, but only 12 (some of which are short articles not much more than notes) deal directly with towns. Furthermore, in the few urban studies which have been made, geographers have limited their field of enquiry principally to the State capitals; though several papers
have been published on Canberra and on a couple of ports and mining
centres, the geography of the rural town has been largely ignored.

Reasons for the Neglect of Urban Geographical Research

Two factors dominate all others in accounting for the
impoverished state of the knowledge of Australian urban geography:
first, the paucity of practising geographers (about 30 in all) con-
fronted with the task of studying all aspects of the geography of
the whole continent, an area of about three million square miles;
secondly, the particular nature of the Australian environment which
has had the effect of channelling geographical research primarily
into its physical and economic rather than social spheres.

In the natural order of things it was logical for ge-
ographers to begin their research on Australia by examining and
describing its physical character, if only because the earth itself
is the primary and fundamental fact in their discipline.

After this, it was equally logical for them to consider the effects

1 Specially in Canberra, A Nation's Capital (AH&AS Handbook for
Canberra), Sydney, 1954 [H. L. White ed.]. In addition to the
books and geographical papers mentioned, many parliamentary reports
and papers also relate to it, and many aspects of its history and
its plan have been discussed widely in historical and town planning
journals.

2 This number is made up largely of academic geographers in the
Australian universities though it also includes a few other profes-
sional geographers in State government departments and the Common-
wealth Scientific and Industrial Research Organisation. By contrast,
as recently as 1946 there were only 17 academic geographers in
Australia (one professor, 2 senior lecturers, 2 lecturers, 2 teaching
fellows, 2 assistants, 2 demonstrators and 6 part-time lecturers).
of that geographical environment on the Australian people and their way of life, namely by exploring the continent's economic and social geography and other branches of human geography.

On the whole it may be said that geographical enquiry in Australia has evolved along these lines, but in the second phase the study of social geography has not been developed to the extent that might reasonably have been expected, largely because the subject as a whole has progressed only slowly owing to its claims as an important discipline having been tardily recognised in the continent. In addition, however, some acute and serious problems of economic development caused by the Australian environment resulted naturally in geographers giving greater emphasis to their study of economic rather than social geography. Moreover, relative to its comparatively few enquirers the field of Australian geography is vast and almost unsurveyed with the result that many geographers still feel that the solution of national problems demands priority of study being given to the physical and economic aspects of Australia's geography.

Though the teaching emphasis in Australian Universities still is on physical, regional and economic geography, and though the workers in social geography are still few, nevertheless studies of towns and of other aspects of this latter field are becoming more numerous. These, and a growing number of papers on historical geography, suggest that the large research opportunities along these lines are about to be tapped to a far greater extent than has been the case in the past.
### 2. AVERAGE MONTHLY AND YEARLY MAXIMUM AND MINIMUM TEMPERATURES IN °F AT SELECTED STATIONS ON THE SOUTHERN TABLELANDS OF N.S.W.

[Source: Premier's Department of N.S.W. in Preliminary Resources Surveys of Southern Tablelands Region (1949) and Monaro-South Coast Region (1949)].

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<td>Bombala</td>
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<td>Braidwood</td>
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<td>Crookwell (near Yass)</td>
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<td>84.4</td>
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<td>Canberra (Acton)</td>
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<td>Kosciusko Hotel</td>
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APPENDIX 3

Natural Plant Alliances and Species on the Southern Tablelands of New South Wales


In all the natural plant formations on the Southern Tablelands containing trees as an important element, the vegetation is dominated by Eucalyptus species, while Themeda and Poa are the dominant grass species in the savannas and herbfields.

Pryor has distinguished the following as being characteristic alliances of the respective plant formations on the Tablelands:

<table>
<thead>
<tr>
<th>Alliance</th>
<th>Formation</th>
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<tr>
<td>Themeda—Poa</td>
<td>Savanna</td>
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<tr>
<td>E. melliodora—E. blanketyi</td>
<td>Savanna Woodland</td>
</tr>
<tr>
<td>E. pauciflora—E. stellulata</td>
<td>Savanna Woodland</td>
</tr>
<tr>
<td>E. macrorhyncha — E. Rossii</td>
<td>Dry Sclerophyll Forest</td>
</tr>
<tr>
<td>E. festucata—E. viminalis</td>
<td>Wet Sclerophyll Forest</td>
</tr>
<tr>
<td>E. gigantea—E. dalrympleana</td>
<td>Wet Sclerophyll Forest</td>
</tr>
</tbody>
</table>

E. niphobila (single species) — Alpine Woodland

and Costin has recognised the Poa cespitosa—Celmisia longifolia alliance as characteristic of the Alpine Herbfields.

The most important dominant species in the various formations are as follows:

Savannas
- Themeda australis
- Poa cespitosa (Snow Grass)

Savanna Woodlands
- E. stellulata (Black Selly)
- E. rubida (Candlebark)
- E. viminalis (Manna Gum)
Savanna Woodlands
E. dives (Broad-leaved Peppermint)
E. melliodora (Yellow Box)
E. polyanthemos (Red Box)
E. parvifolia (Small-leaved Gum)
E. ovata and E. camphora (Swamp Gum)
E. cordiari (Healy Bundy)
E. blakelyi (Forest Red Gum)
Acacia melanoxylon (Blackwood)

Alpine and Subalpine Woodlands
E. niphophila (Snow Gum)
E. stellulata (Black Sally)
E. ferriniana (Round-leaved Snow Gum)
Poas caespitosa (Snow Grass)

Tell Woodlands (developed only along the warm valley of the lower Snowy River system)
E. albicans (White Box)
E. leucolepis (Long-leaved Box)
E. macrophyllophora (Red Stringybark)
Callitris alba (White Cypress Pine)
Callitris columnaris (Black Cypress Pine)

Dry Sclerophyll Forests
E. dives (Broad-leaved Peppermint)
E. rubida (Candlebark)
E. maculosa (White Brittle Gum)
E. sieberi (Silvertop Ash)
E. macrophyllophora (Red Stringybark)
E. rossii (Snappy Gum)
E. polyanthemos (Red Box)
E. leucolepis (Long-leaved Box)
E. melliodora (Yellow Box)
E. brevirostris (Bastard Red Stringybark)
Callitris columnaris (Black Cypress Pine)

Wet Sclerophyll Forests
E. delegatensis (Alpine Ash)
E. Dalrympleana (Mountain Gum)
E. pauciflora (White Solly)
E. vitrea (White Top Messmate)
E. festivata (Brown Barrel)
E. viminalis (Wanda Gum)
E. rubida (Candlebark)
E. radiata (N.S.W. Messmate)
E. dives (Broad-leaved Peppermint)
E. Bridgessiana (But But)
E. fraxinoides (White Ash)
E. monticola (Mountain Grey Gum)
Wet Sclerophyll Forests

E. nitens (Shining Gum)
E. maculosa (White Brittle Gum)
E. obliqua (Messmate Stringybark)
E. sieberiana (Silvertop Ash)

Alpine Herbfields

Poa caspitor (Snow Grass)
Calamia longifolia (Mountain or Snow Daisy)
Physical Characteristics of the Major Soil Types
on the
Southern Tablelands of New South Wales

Alpine Humus Soils

Where they exist in the higher mountain areas they occur irrespective of the degree of slope, and, in the climax state, almost irrespective of the type of underlying rock. In lower altitudes, however, the underlying rocks contribute somewhat to soil formation, as in the case of the volcanic areas near Kiandra where alpine humus soils grade into red loams.

There is very little profile differentiation. The upper profile which contains a high proportion of fibrous plant material is very dark grey-brown to black, and may vary in depth from about 12 inches to 6 feet or more. Underlying this, there is characteristically a yellow-brown loam which merges into decomposing underlying rock.

Transitional Alpine Humus Soils

Owing to the warmer summer environment (compared with that of the true alpine humus areas) and to greater frost weathering in winter, when unprotected by snow, they contain a lower proportion of organic material on the one hand, and a higher proportion of weathered rock material on the other.

The dark grey-brown to black surface horizon may vary from about 4 inches to 12 inches. Underlying this is a brown to yellow-brown loam with gravel and stones, merging into decomposing rock.

Brown Podsolic Soils

In the Monaro region brown podsolic soils are developed characteristically on granite or sandstone, but in some areas, for example on the Brindabella Ranges, they may be found on shales and slates.

There is a thin and poorly developed leaf litter at the top of the profile. The A horizon, which is brown, is stained to a depth of 3 inches or more by organic matter, and merges gradually at about 12 inches into a yellow-brown to yellow B horizon, which may grade into the C horizon at from 18 to 30 inches.

Brown podsols differ from the alpine humus and
transitional alpine humus soils in that they have less organic
matter in the upper horizons, and slow slight but definite eluvi-
ation of clay and sesqui-oxides from the A horizon to the B.

**Grey-Brown, Red and Yellow Podsolics**

These soils are mainly colluvial in origin, and are some-
what immature. The A horizon may be from 6 to 18 inches deep, and
grey to grey-brown in colour; it merges gradually into a yellowish
E horizon with a higher clay content.

Both red and yellow podsolics have grey A horizons from
4 to 18 inches deep, of medium to light texture, overlying a red
or yellow clay in the B horizon.

**Red Lomos and Chocolate Soils**

The surface horizon of these soils is typically loam
of good crumb structure, merging into a more compact subsoil
which, in turn, merges into decomposing basalt.

There are no distinct horizons, and the depth of the
soils may vary from a few inches to 3 or 4 feet. As noted in
the text, the surface of these soils is often skeletal, and this
is the principal cause of some of them being of little agricultural
value.
APPENDIX 5.

Road Mileages between Urban Centres on the Southern Tablelands

(The distances indicated are along the most practicable, and usually the shortest, routes between the centres)

<table>
<thead>
<tr>
<th>Between Canberra and the Major Service Centres</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Goulburn-Crockwell</td>
<td>31 miles</td>
</tr>
<tr>
<td>Goulburn-Yass</td>
<td>55 miles</td>
</tr>
<tr>
<td>Goulburn-Canberra</td>
<td>59 miles</td>
</tr>
<tr>
<td>Goulburn-Queanbeyan</td>
<td>60 miles</td>
</tr>
<tr>
<td>Goulburn-Cooma (through Canberra)</td>
<td>129 miles</td>
</tr>
<tr>
<td>Goulburn-Braidwood</td>
<td>53 miles</td>
</tr>
<tr>
<td>Goulburn-Bombala (through Cooma)</td>
<td>183 miles</td>
</tr>
<tr>
<td>Canberra-Queanbeyan</td>
<td>7 miles</td>
</tr>
<tr>
<td>Canberra-Yass</td>
<td>33 miles</td>
</tr>
<tr>
<td>Canberra-Cooma</td>
<td>70 miles</td>
</tr>
<tr>
<td>Canberra-Crockwell</td>
<td>74 miles</td>
</tr>
<tr>
<td>Canberra-Braidwood</td>
<td>57 miles</td>
</tr>
<tr>
<td>Queanbeyan-Yass</td>
<td>46 miles</td>
</tr>
<tr>
<td>Queanbeyan-Cooma</td>
<td>67 miles</td>
</tr>
<tr>
<td>Cooma-Bombala</td>
<td>54 miles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Between the Major Service Centres and Secondary Centres</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Goulburn-Taralga</td>
<td>29 miles</td>
</tr>
<tr>
<td>Goulburn-Gunning</td>
<td>30 miles</td>
</tr>
<tr>
<td>Goulburn-Collector</td>
<td>21 miles</td>
</tr>
<tr>
<td>Yass-Gunning</td>
<td>24 miles</td>
</tr>
<tr>
<td>Yass-Bowning</td>
<td>11 miles</td>
</tr>
<tr>
<td>Queanbeyan-Bungendore</td>
<td>17 miles</td>
</tr>
<tr>
<td>Queanbeyan-Captain's Flat</td>
<td>26 miles</td>
</tr>
<tr>
<td>Queanbeyan-Gunning</td>
<td>45 miles</td>
</tr>
<tr>
<td>Braidwood-Bungendore</td>
<td>33 miles</td>
</tr>
<tr>
<td>Braidwood-Taralga</td>
<td>30 miles</td>
</tr>
<tr>
<td>Cooma-Adaminaby</td>
<td>32 miles</td>
</tr>
<tr>
<td>Cooma-Berridale</td>
<td>14 miles</td>
</tr>
<tr>
<td>Cooma-Nimmitabel</td>
<td>23 miles</td>
</tr>
<tr>
<td>Cooma-Dalgety</td>
<td>33 miles</td>
</tr>
<tr>
<td>Crockwell-Gunning</td>
<td>30 miles</td>
</tr>
<tr>
<td>Crockwell-Taralga</td>
<td>27 miles</td>
</tr>
<tr>
<td>Crockwell-Biggan</td>
<td>37 miles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Between Neighbouring Small Centres along Main Roads</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Taralga-Leggan</td>
<td>22 miles</td>
</tr>
<tr>
<td>Gunning-Broadalbene</td>
<td>15 miles</td>
</tr>
<tr>
<td>Gunning-Gunderoo</td>
<td>19 miles</td>
</tr>
<tr>
<td>Gunning-Dalton</td>
<td>8 miles</td>
</tr>
<tr>
<td>Location Pair</td>
<td>Distance</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Gunning-Collector</td>
<td>17 miles</td>
</tr>
<tr>
<td>Gundaroo-Sutton</td>
<td>12 miles</td>
</tr>
<tr>
<td>Gundaroo-Collector</td>
<td>19 miles</td>
</tr>
<tr>
<td>Sutton-Bungendore</td>
<td>21 miles</td>
</tr>
<tr>
<td>Bungendore-Tarago</td>
<td>20 miles</td>
</tr>
<tr>
<td>Adaminaby-Berridale</td>
<td>27 miles</td>
</tr>
<tr>
<td>Berridale-Dalgety</td>
<td>12 miles</td>
</tr>
<tr>
<td>Berridale-Jindabyne</td>
<td>15 miles</td>
</tr>
</tbody>
</table>
APPENDIX 6.

Precedent Conditions for Determining the Legal Status
of Centres of Urban Settlement in the Australian States

New South Wales

Under the Crown Lands Consolidation Act, 1913, the Minister for Lands is the State authority responsible for formally establishing cities, towns and villages, and unless the context of the Act requires a different meaning, a city, a town or a village is defined as so proclaimed by the Governor or the Minister in the Gazette. The Minister exercises discretionary powers regarding the size and the extent of each of these settlements, for Part III, Section 23, of the Act empowers him to declare, by notification in the Gazette, what areas may be set apart as cities, towns and villages, and to define the suburban limits of any new or existing cities, towns or villages.

The status of cities and towns is often confused, however, because under the Local Government Act, 1919, and its amendments to 1948, the Minister for Local Government is also empowered to proclaim areas as cities for purposes of local government, and Section 305 of the 1919 Act also permits him to proclaim urbanised parts of Shires as "towns", mainly to enable shire councils to enforce building regulations in them. Moreover, Sydney and Parramatta were first incorporated as cities under special Acts in 1842 and 1938, respectively, and have remained under special Acts since, while the Municipality of Broken Hill was incorporated as a city in 1907, and, earlier, several centres (Armidale, Bathurst, Goulburn, Grafton and Newcastle) had been elevated to city status when each became the see-town of an Anglican bishop: until 1897 the title of "city" could only be conferred by Royal Letters Patent, and Goulburn is claimed to have been the last city in the British Empire to have its rank raised in that way although it was also proclaimed (redundantly, it has been argued) on 20th March, 1835, under the Crown Lands Act.

The precedent conditions for the proclamation of a town as a city in New South Wales have been set down in various Local Government Acts, particularly that of 1919 and its amendment of 1948. Under these Acts, the Governor may proclaim any municipality a city, which -

(a) has, during the five years preceding such proclamation, had an average population of at least 15,000 persons (20,000 under the 1919 Act); and

(b) has during the said period an average gross income from all sources of at least £20,000; and
(c) is an independent centre of population and is not a suburb, whether residential, industrial, commercial or maritime, of any other municipality or centre of population.

**Victoria**

Except Melbourne, which was incorporated as a town under a special Act of the New South Wales Parliament in 1842 and created a city under Royal Letters Patent in 1847, and Geelong, made a city under a special incorporation Act in 1849, the areas of urban settlement in Victoria are defined primarily as local government areas under the various Acts of that State.

They are cities, towns and boroughs, and the precedent conditions for their establishment are as follow:

- **Cities** must have an annual gross revenue of not less than £20,000; no proviso is added (as in New South Wales) that a city must have a separate identity as an urban centre, and in consequence 28 of the 42 proclaimed cities of Victoria are merely populous suburbs of Melbourne.

- **Towns** must have an annual gross revenue of not less than £10,000, and

- **Boroughs**, which must be divided into Wards, must not exceed in area 9 square miles, with no point to be distant more than 5 miles from another boundary point, also, a borough must have a population of 500 people (inhabitant householders) and a minimum rate revenue of £2,000 on a rate not exceeding one shilling in the pound on the annual value.

**Queensland**

The Local Government Act, 1936, of Queensland provides for the establishment of cities, towns and shires in that State, but provision is no longer made, as it was formerly for towns and villages to be proclaimed under the Land Acts of the State.

No criteria are laid down as being necessary before towns can be proclaimed as cities, the 1936 Act leaving it to the Governor-in-Council to abolish, or amend such areas, as thought fit. Section 5 (1) (ii) also provides that "the Governor-in-Council may by proclamation constitute a Town a City, and the same shall be and remain a City until the Governor-in-Council by proclamation otherwise decides". No Town has been made a City under this Act, the last City created being Warwick which was raised to
this status in 1936, just before the expiration of the Local Government Act of 1902.

The City of Brisbane has its own City of Brisbane Acts, 1925-52, but it also has the powers and authorities of a local authority under the Local Government Act, 1936, where its own Act is silent.

Besides Brisbane, there are 21 proclaimed cities in Queensland, all originally proclaimed as municipalities under the N.S.W. Municipalities Act, 1858, the Queensland Act, 1861 (which repealed the N.S.W. Act as far as Queensland was concerned) or the Local Government Act, 1878. They were variously termed municipalities, towns or municipal boroughs according to the different Acts, but by 1900 all appear to have been called "municipal boroughs", under the 1878 Act. The Local Government Act of 1902 created the first cities, the Act specifically designating Brisbane, South Brisbane, Rockhampton and Townsville as cities from the date of its proclamation. All the other existing municipal boroughs became "towns" automatically under the Act, and these included the other municipal boroughs (Bundaberg, Cairns, Charters Towers, Gympie, Ipswich, Mackay, Maryborough, Toowoomba and Warwick) which have subsequently become "cities", as well as some that have remained "towns" ever since, and some that disappeared when the City of Greater Brisbane was formed, or by absorption into other local authorities at various times.

Under the Crown Lands Amendment Act, 1885, agricultural townships, not exceeding two square miles in extent, could be proclaimed by the Governor-in-Council and such lands or parts thereof could be subdivided into portions not exceeding in area one acre each for purposes of residence. Lands thus set apart were referred to as "villages".

Now, surveys or town sections out of Crown lands are made following recommendations by Land Commissioners in places where there are demands for home or business sites. Subdivision of freshhold land into areas of a convenient size for similar purposes is carried out at the instigation of the owner after approval of the design by the Council or the elected local governing authority.

South Australia

The following criteria are used by the Highways and Local Government Department of South Australia for determining and defining the status of urban centres:

City A City (if within the metropolitan area, that is, within a radius of about 8 miles of the General Post Office, Adelaide) is a Municipality
occupied mainly for residential, business, industrial or manufacturing purposes or any one or more of these purposes, and having at least 15,000 inhabitants when proclaimed as such. A City (if situated outside the Metropolitan area) is a Municipality having at least 10,000 inhabitants when so proclaimed.

Town A corporate Town is a portion of the State occupied mainly for residential, business, industrial or manufacturing purposes or any one or more of these purposes; with a total number of inhabitants on constitution as a Municipality of at least 10,000.

Village No legislative provision is made for the constitution of a Village, but a Township means:

(a) any Government township and any land laid out as a township, plans whereof have been deposited in the Lands Titles Registration Office, the General Registry Office, or the Surveyor-General's Office;

(b) any part of the area containing at least forty dwelling-houses, the boundaries whereof have been defined by a resolution of the council published in the Gazette.

Western Australia

The Municipal Corporations Act, 1906-51, provides for the constitution of Municipalities, which may be styled "corporate towns", and the raising in status of Municipalities to that of a "city". Section 12 (1) sets forth that the qualification of an area for constitution as a Municipality (corporate town) is rateable property capable of yielding an annual rate of £750, and Section 12 (11) provides that a Municipality having, in the year preceding, a population of 20,000 persons and a gross revenue of £20,000 may be declared a city.

Apart from 3 cities (Perth, Fremantle, Subiaco) and 16 other Municipalities at present constituted the remainder of the State is incorporated in Road Districts under the Road Districts Act, 1919-51. For the purposes of this Act a "town" or "townsite" is defined in Section 5 (Interpretations) as follows:
(a) ..... any land constituted, defined or reserved as the site of a town or village under the Land Act and Amendments.
(b) ..... any land which is or has been a Municipal District or portion thereof.
(c) ..... any land sub-divided and laid out as the site for a town, township or village in accordance with a sub-divisional plan duly registered in the Office of Titles or Department of Lands and Survey.
(d) ..... any land which the Governor may see fit to declare by proclamation to be a town or townsite.

Thus, within the function of the Road Districts Act, there are proclaimed towns (or villages) as distinct from corporate towns and cities (Municipalities). Quite a number of comparatively large and many smaller country centres situated in Road Board Districts are towns in the accepted sense, and in some instances several towns may be located within a single District.

Perth was raised to a city by the granting of Royal Letters Patent in 1656, and its city status was also confirmed by a special incorporation Act in 1871; Fremantle (1829) and Subiaco (1952) became cities under the Municipal Corporations Act, 1906-51.

Tasmania

The local government system of Tasmania consists of two separately incorporated cities (Hobart, 1842, and Launceston, 1863) and 46 municipalities, whose boundaries include the whole of Tasmania, outside the two cities. The municipalities include both urban and rural areas, the former consisting of separate towns or townships, as distinct from the surrounding countryside; they, therefore, more closely resemble Shires, District Councils and Road Districts than the Municipalities of the other States.

For statistical purposes, Commonwealth census authorities distinguish centres containing 750 or more persons as Non-municipal towns in Tasmania, but in the State there is no legislation containing a provision whereby the status of a village, town or city may be determined. It is proposed that such a clause will be included in a Local Government Bill, now in course of preparation, but no decision has been made concerning the criteria to be adopted for the purpose.
APPENDIX 7

Australian and Overseas Usages of "Township"

The following note on "township" appeared in the writer's paper "County, Shire and Town in New South Wales, Aust. Geogr., vol. VI, No. 3, May, 1954, pp. 24-5:

"English, Australian, and American usages of the word 'township', in its territorial significance, vary so much as to be a source of considerable confusion, and it seems worthwhile to track them down.

"The Oxford English Dictionary lists ten main meanings for the word, two of which have a territorial significance in England. Of these, one, found only in historical writing and perhaps best avoided, is simply a synonym for 'manor' or 'parish' as a territorial division. The more important is defined as follows: 'Each of the local divisions of, or districts comprised in, a large original parish, each containing a village or small town ... in this sense chiefly retained in the north of England for the ancient division of such original parishes as Cockermouth, Grassmere, Windermere and Kendal ... but it is applied in the Ordnance map also to the ancient division of such parishes as Cumhorn and St. Giles', Camberwell, which for most purposes are now distinct parishes and are usually so called'. In fact, the latter part of this description refers to what seems to be a mere legal fiction, more shadowy than the N.S.W. counties; the only use at all current is that in the north of England, where the original parishes in the Pennines and the Lake District were very large and sparsely populated.

"For America, Webster's Dictionary, after listing English usages, goes on: 'In the United States, a primary unit of local government of varying character in different parts of the country. In New England, where it is called town, it exists in its primitive form except as modified and partly subordinated by the later formed units, the county and the State. In the northwestern States, the county is the older unit and the township is a division of the county. In the southern States the county is generally the more important unit, and townships, where they do exist, are mere local divisions ... In Maine, New Hampshire, and Vermont, there are unorganised subdivisions of the county called townships, which are simply tracts of land laid off by the State authorities.'
"5. A geographical rather than a political division; specifically in surveys of the public land of the United States, a division of territory that is, with certain exceptions, 6 miles long on its south and east and west boundaries, which follow meridians (sic) and so slightly less than 6 miles on the north. It contains 36 sections, and has often formed the basis of a later political township.

b In Canada, a subdivision of certain provinces.

g In Australia. A townsite, also, the temporary settlement on such a site!"

"The definitions of the Australian sense in O.E.D. and in E. E. Morris, Austral English (1898) come to much the same thing as Webster's; all of them seem to over-stress somewhat the original nuance of 'prospective' or 'temporary'. Current Australian usage is definite: township = village, but this is relatively late. It will be seen that there is some slight ambiguity in Phillips' instructions cited above, and also in the first reference (1802) given in O.E.D., and Morris, the Account of New South Wales ascribed by the former to Barrington and the latter to Collins. This ambiguity gives some warrant for the evolution, which would probably have come about anyway, of the name for a site being used for the actual settlement on the site; a quotation of 1861 shows the actual course of divergence, and by 1894 the Sydney Morning Herald states the existing situation quite clearly: 'A township - the suffix denotes a state of being - seems to be a place which is not in the state of being a town. Does its pride resent the import of village that it is glad to be called by a name that is no name, or is the word loosely appropriated from America, where it signifies a division of a county?'

Further evidence that confusion existed at an early time surrounding "township" and "town" is afforded in the Historical Records of Australia: for example, in his Government and General Order of 15th December, 1810 (Series 1, vol. 7, p. 370) Macquarie proclaimed the laying out of "townships" (meaning "towns") at Windsor, Richmond, Castlereagh, Pitt Town and Wilberforce on the Hawkesbury River and at Liverpool on George's River. His continued use of the term in this manner prompted Surveyor-General Oxley to write to him, 10th March, 1817 (Series 1, vol. 10, p. 370), thus: "I respectfully beg to observe that I consider the terms Township and District as Synonymous (sic), although the latter has been commonly applied in all descriptions of Land granted here."
APPENDIX B

The Grading of Public Schools on the Southern Tablelands

(a) The N.S.W. System of Grading Schools

Under the system of grading used by the Department of Education, and in force in 1954, the following types of public (that is, government) schools are recognised in New South Wales:

<table>
<thead>
<tr>
<th>Class IV</th>
<th>schools with an effective enrolment of 35 pupils, and one teacher.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class III</td>
<td>effective enrolment between 35 and 180 pupils, and a variable number of teachers (usually in the ratio of one teacher to about 40 pupils).</td>
</tr>
<tr>
<td>Class II</td>
<td>schools with one or two departments, that is, infants' (5 or 6 - 7 years) and primary (8 - 11 years), having an effective enrolment of more than 180 pupils; staff consisting of a headmaster plus teachers in the ratio of one to about 40 pupils. Infants' departments are created when the average attendance of children in the required age group reaches 100.</td>
</tr>
<tr>
<td>Class I</td>
<td>schools with three separate departments, that is boys and girls at various levels such as, Mixed Infants' (or perhaps Infant Boys' and Infant Girls') and Primary Boys' and Primary Girls'. Separate primary departments are not created if the effective enrolment above second grade (7 years) is between 160 and 320, but if it is more than 320 separate Boys' and Girls' departments are created. Ainslie School in Canberra with a 1954 enrolment of 646 primary pupils and 380 infants, is an anomaly with only one primary department.</td>
</tr>
</tbody>
</table>

Central Schools are Primary Schools which provide secondary instruction (12 years onwards) for two or more years. As a minimum requirement they must have an average attendance of 20 or more pupils in secondary classes, including at least
8 above first year (that is, at the grade of 13 years or higher).

Primary Schools with Secondary Departments to be established in this class a school must have had an average attendance of 160 pupils in the preceding three, or more, years, and an average attendance of at least 100 pupils in the secondary classes, including at least 10 in the fourth and fifth years (16 and 17 years).

Intermediate High Schools are in all cases parts of Primary schools concentrating solely on the secondary curriculum; as their name implies they normally provide education for pupils to the Intermediate Certificate standard (15 years), but where the demand exists they often have fourth and fifth year classes.

High Schools provide secondary instruction only (12-17 years), up to Leaving Certificate or University Matriculation standard. In rural areas it is normal for these schools to follow a general academic curriculum, also to give training in technical, commercial and domestic science subjects, but in the metropolis and Newcastle the accent in high schools is on general education and there are some technical and domestic science high schools, or equivalent secondary schools, and there are also a couple of agricultural high schools in the State (for example, at Glenfield, near Sydney, and at Yanco, in the Narramundgee Irrigation Area). All high schools are now first class schools; formerly, there were two grades.
(b) Representative Examples of Classified Schools on the Southern Tablelands of New South Wales

<table>
<thead>
<tr>
<th>Name of School</th>
<th>Type and Class</th>
<th>Enrolment 1954</th>
<th>Number on Staff</th>
<th>Maximum radius of area served (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dalgety</td>
<td>Primary (IV)</td>
<td>25</td>
<td>1</td>
<td>4-5</td>
</tr>
<tr>
<td>Jindabyne</td>
<td>Primary (III)</td>
<td>103</td>
<td>3</td>
<td>4-5</td>
</tr>
<tr>
<td>Coome</td>
<td>Primary (II)</td>
<td>253</td>
<td>12</td>
<td>town area plus 1 mile</td>
</tr>
<tr>
<td></td>
<td>(infants' dept.)</td>
<td>195</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telopea Park</td>
<td>Primary (I)</td>
<td>652</td>
<td>16</td>
<td>zoned South side of Canberra (only)</td>
</tr>
<tr>
<td></td>
<td>(primary dept.)</td>
<td>257</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(infants' dept.)</td>
<td>463</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Captain's Flat</td>
<td>Central (II)</td>
<td>290</td>
<td>10</td>
<td>4-5</td>
</tr>
<tr>
<td>Yass</td>
<td>(Inter. High (I))</td>
<td>207</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>(secondary dept.)</td>
<td>271</td>
<td>8</td>
<td>4-5</td>
</tr>
<tr>
<td></td>
<td>(primary dept.)</td>
<td>216</td>
<td>5</td>
<td>4-5</td>
</tr>
<tr>
<td></td>
<td>(infants' dept.)</td>
<td>245</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goulburn High</td>
<td>High (I)</td>
<td>638</td>
<td>38</td>
<td>30</td>
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<tr>
<td>Canberra High</td>
<td>High (I)</td>
<td>506</td>
<td>34</td>
<td>25-30</td>
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</table>
Canberra's Growth and Population Changes

A small hamlet in 1913, Canberra in a little over four decades has become one of the handful of large inland towns in Australia. With a population of 15,156 at the 1947 census, the city was outranked by Broken Hill, Maitland, Goulburn, Wagga Wagga and Lismore in New South Wales, Ballarat and Bendigo in Victoria, Toowoomba and Ipswich in Queensland, and Kalgoorlie in Western Australia, but with its population almost doubled to 28,277 (provisional figures, subject to revision) at the 1954 census it is now outranked by only five of these centres. Moreover, as the following table also shows, no other inland town is expanding so rapidly as it is (86% in seven years), and in another decade the national capital may well be the largest inland town in Australia, a place held in 1954 by Ballarat with 48,050.

<table>
<thead>
<tr>
<th>Town</th>
<th>1947 census</th>
<th>1954 census</th>
<th>% increase</th>
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<tr>
<td></td>
<td>(provisional)</td>
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<td></td>
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<tr>
<td>Canberra</td>
<td>15,156</td>
<td>28,277</td>
<td>86</td>
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<tr>
<td>Broken Hill</td>
<td>27,054</td>
<td>31,387</td>
<td>16</td>
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<tr>
<td>Maitland</td>
<td>19,151</td>
<td>21,334</td>
<td>11</td>
</tr>
<tr>
<td>Goulburn</td>
<td>15,931</td>
<td>19,187</td>
<td>20</td>
</tr>
<tr>
<td>Wagga Wagga</td>
<td>15,340</td>
<td>19,243</td>
<td>25</td>
</tr>
<tr>
<td>Lismore</td>
<td>15,214</td>
<td>17,376</td>
<td>14</td>
</tr>
<tr>
<td>Lithgow</td>
<td>14,461</td>
<td>15,126</td>
<td>4</td>
</tr>
<tr>
<td>Ballarat</td>
<td>40,181</td>
<td>48,050</td>
<td>19.5</td>
</tr>
<tr>
<td>Bendigo</td>
<td>30,779</td>
<td>36,918</td>
<td>20</td>
</tr>
<tr>
<td>Toowoomba</td>
<td>33,290</td>
<td>43,152</td>
<td>29</td>
</tr>
<tr>
<td>Ipswich</td>
<td>34,109</td>
<td>38,866</td>
<td>14</td>
</tr>
<tr>
<td>Kalgoorlie</td>
<td>22,376</td>
<td>22,834</td>
<td>2</td>
</tr>
</tbody>
</table>

The 1954 population was over double that of 1945; four times that of 1927 (when Parliament first met at Canberra);
twenty five times that of 1921, when the building of the city really began; and one hundred times that of the hamlet of Canberra in 1911.

The populations of 1,150 in 1921 and 3,500 in 1925 were mainly building workers; the transfer of some Commonwealth Departments from Melbourne in 1927 brought the figure to 6,640 in the next year. The depression years (1929-33) saw some slackening, but the loss of building workers was offset by further transfers of public servants, and the 1933 total was 7,325. After 1933 building activity revived and the population increased by 37 per cent. to 9,030. During the war a peak of 13,300 was reached in 1943, when the staffing of governmental agencies was at its maximum. After the war expansion was rapid:

1946 ... 12,100
1947 ... 15,156
1948 ... 18,060
1949 ... 19,670
1950 ... 22,130
1951 ... 23,150
1952 ... 25,035
1953 ... 27,884

(Figures are from the censuses of 1911, 1921, 1933, 1947 and 1954, and estimates for all other years (as at 30th June) from the Commonwealth Bureau of Census and Statistics).

This rapid post-war expansion has been brought about primarily by a great increase in Commonwealth building activities, which has brought large numbers of Australian and "new Australian" (that is, European immigrant) workers into the city; other important factors are a great increase in the diplomatic population, the establishment of the Australian National University (academic, technical and all other personnel 50%, excluding families, in 1955) and the setting up in Canberra of central secretariats for such nation-wide organisations as the Associated Chambers of Commerce and of Manufactures.

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1 This figure is the total of all persons on the University payroll on 4th August, 1955. The break-up of the total was as follows:

Academic personnel (staff members and scholars, including 12 Research Assistants and 4 Visiting Staff members) 177

Technical Assistants 146

All other (Administrative, Clerical, Cleaning, Gardening etc. and 26 Domestic at University House) 181
APPENDIX 10

Government and Private Towns and Villages

in New South Wales

The following extract from the writer's paper 'County, Shire and Town in New South Wales' (loc.cit. pp. 48-50) illustrates the procedure that was adopted for establishing towns and villages in New South Wales in the 19th century.

"As colonial settlement expanded during and after the Macquarie regime, new towns were established in the several newly developed and newly developing districts. These were mainly Government towns, but private towns arose on occasions in some areas.

"Government towns and villages, as their names imply, were those whose establishment was proclaimed officially by the Governor in the Government Gazette. They come into being when the Governor felt that a new town or village was necessary or desirable - either to facilitate his own administration or to satisfy the growing service needs of settlers in any district. When the Governor had selected a site for a proposed town or village, he instructed the Surveyor-General to prepare a 'design plan' for the intended settlement, and to submit it to him for his consideration. If it was approved, the Governor then proclaimed the proposed town or village establishment, and the land was subsequently subdivided into town lots and sold by public auction. The Governor, at his discretion, could abandon any projected establishment of a town or village, alter any site proposed, and order the Surveyor-General to amend any plan submitted, or to prepare a completely new one. On occasions all these things happened ..."

"Private towns, on the other hand, were created (during, but mainly after, the 1830's) when private landholders subdivided all or part of their holdings into small allotments and sold them as town building-lots. O'Connell Town (now included in Yass), West Maitland, West Wyalong, East Gosford and Wyong are typical examples of towns which originated in this way. O'Connell Town was established when Henry O'Brien (a district
landholder) subdivided a part of his holding adjacent to the town of Yass, in response to numerous requests from town residents for more building lots to supplement the inadequate number in the Government town. West Wyalong, West Leitland and East Gosford developed as rivals of nearby Government towns; the first two succeeded in gaining complete ascendancy over their former rivals, but East Gosford (dependent on the financial resources and initiative of one man, a Sydney tea merchant, S. Peck) languished. . . . though it now forms part of an enlarged Gosford. The West Wyalong-Wyalong tramline provides an interesting contrast between the standard grid of the Government town and the irregular block-pattern of West Wyalong, a legacy of the haphazard gold-mining claims which became the town lots. Wyong was established as a small service centre on a crossing of the Wyong River to meet the needs of settlers in a district where no provision had been made for the setting-up of a Government town. In more recent times, some towns or townships, perhaps especially the outer suburbs of the great cities, and tourist settlements like Woy Woy, Ettalong and Terrigal, have grown after land has been bought in large parcels, and then subdivided and sold, by land speculators."

It should be remembered, however, that the proclamation of a Government town or village did not necessarily guarantee that it would be established; for example, on the Southern Tablelands there are several instances of villages being proclaimed but which did not come into existence, such as Bow Bay, a few miles west of Cooma, and Wyong, between Crackenback and Bungendore. Bowning, 11 miles west of Yass, affords another interesting example of what sometimes happened, for a design plan of the proposed village was submitted to the Executive Council in 1840, and again in 1844, and was about to be approved on both occasions when it was learned that the site lay beyond the limits of location, and was therefore not available for settlement. Despite this, Gundagai township on the Murray (Murrumbidgee) River, 54 miles west of Yass, had been proclaimed in 1838, and Albury on the Murray River was proclaimed in 1839; exceptions were apparently made in these cases because they were at important river crossings on the Sydney-Melbourne road.

Several towns and villages whose establishment had been proposed on sites reserved under the provisions of some of the later Land Acts also failed to materialise when the government
reversed its policy concerning them and revoked the reserves which had been set aside.
# Appendix 11

**Table A**

**Value of Exports (Australian Produce), 1951-52 to 1954-55**

(£'000)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Foodstuffs of Animal Origin</td>
<td>60,689</td>
<td>147,688</td>
<td>192,685</td>
<td>112,438</td>
</tr>
<tr>
<td>Foodstuffs of Vegetable Origin</td>
<td>148,700</td>
<td>180,224</td>
<td>154,887</td>
<td>152,073</td>
</tr>
<tr>
<td>Live Animals</td>
<td>692</td>
<td>793</td>
<td>661</td>
<td>953</td>
</tr>
<tr>
<td>Animal Substances</td>
<td>342,607</td>
<td>424,479</td>
<td>431,332</td>
<td>374,399</td>
</tr>
<tr>
<td>Vegetable Substances and Fibres</td>
<td>1,722</td>
<td>1,239</td>
<td>1,508</td>
<td>1,769</td>
</tr>
<tr>
<td>All other Classes</td>
<td>113,249</td>
<td>139,378</td>
<td>129,044</td>
<td>124,191</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>667,059</td>
<td>853,291</td>
<td>820,057</td>
<td>765,833</td>
</tr>
</tbody>
</table>
### APPENDIX 11

#### TABLE 8

**Net Value of Production, Australia (q), 1951-52 to 1953-54**

<table>
<thead>
<tr>
<th>Industry</th>
<th>1951-52</th>
<th>1952-53</th>
<th>1953-54</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£'000</td>
<td>£'000</td>
<td>£'000</td>
</tr>
<tr>
<td>Agriculture</td>
<td>216,685</td>
<td>276,398</td>
<td>258,460</td>
</tr>
<tr>
<td>Pastoral (b)</td>
<td>400,425</td>
<td>493,745</td>
<td>494,716</td>
</tr>
<tr>
<td>Dairying</td>
<td>103,776</td>
<td>155,745</td>
<td>136,956</td>
</tr>
<tr>
<td>Poultry</td>
<td>51,595</td>
<td>55,613</td>
<td>34,782</td>
</tr>
<tr>
<td>Bee-Farming (c)</td>
<td>774</td>
<td>1,066</td>
<td>1,426</td>
</tr>
<tr>
<td>Total, Rural</td>
<td>183,282</td>
<td>942,157</td>
<td>853,324</td>
</tr>
<tr>
<td>Trapping (c)</td>
<td>6,713</td>
<td>5,595</td>
<td>5,374</td>
</tr>
<tr>
<td>Forestry (c)</td>
<td>37,905</td>
<td>41,864</td>
<td>44,720</td>
</tr>
<tr>
<td>Fisheries (c)</td>
<td>5,729</td>
<td>6,897</td>
<td>7,441</td>
</tr>
<tr>
<td>Mines and Quaries</td>
<td>97,199</td>
<td>109,671</td>
<td>104,875</td>
</tr>
<tr>
<td>Total, Non-rural</td>
<td>247,546</td>
<td>164,927</td>
<td>159,410</td>
</tr>
<tr>
<td>Total, All</td>
<td>247,546</td>
<td>164,927</td>
<td>159,410</td>
</tr>
<tr>
<td>Primary Factors</td>
<td>930,828</td>
<td>1,106,194</td>
<td>1,092,750</td>
</tr>
<tr>
<td>Total, Primary</td>
<td>1,024,867</td>
<td>1,082,862</td>
<td>1,231,113</td>
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<td>Industries and</td>
<td>1,955,695</td>
<td>2,189,956</td>
<td>2,323,363</td>
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<tr>
<td>Factories, exc.</td>
<td>1,993,637</td>
<td>1,049,807</td>
<td>1,192,894</td>
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<tr>
<td>Heat, Light and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td></td>
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</table>

(a) Excludes Australian Capital Territory and Northern Territory, except for the net value of Mines and Quaries for the Northern Territory in 1952-53 and 1953-54 and the Australian Capital Territory in 1953-54.
(b) Profits from the 1939-45 war-time wool disposal plan have been excluded both from the years in which the wool was produced and years in which payment to wool-growers was made.
(c) Rural values, i.e. value at place of production.
SOURCE MATERIAL AND BIBLIOGRAPHY

On the grounds of space the documentation of this thesis is confined principally to the listing of selected references, exception being made for the comprehensive list of maps since these constituted fundamental sources for much of my urban research.

Many official publications (Commonwealth and State Historical Records, Year Books, Government Gazettes, Statistical Registers, Production and Census Bulletins and the like) naturally constituted standard references for a study of this nature but they have been omitted from the lists, as also has much literature relating only incidentally to my study in general and the study area in particular: where such material is quoted in the thesis, the sources are fully documented in footnotes.

Apart from published works much information was derived from official and private reports and records and for access to these I am specially indebted to bodies and individuals of which the following are representative: the staffs of local Municipal and Shire Councils, the Valuer-General's Department (Goulburn), the Lands Department (Sydney and Goulburn), the Assistant Under-Secretary for Local Government (Sydney), the Agriculture Department (Goulburn and the service towns), District School Inspectors (Goulburn, Canberra, Bega), the Snowy Mountains Authority (Canberra, Cooma), the Bureau of Mineral Resources (Canberra), the Post-Master General's Department (Canberra, Goulburn), the
Town Planning Section, Department of the Interior (Canberra), Lake George Mines Pty. Ltd. (Captain's Flat), and bankers, stock and business agents, and business proprietors in various centres on the Southern Tablelands.

For convenience, the source material is listed in two categories:

A. GENERAL
(This includes works, mainly overseas, relating to the principles and practice of urban geography, and providing examples of urban geographical methods.)

B. LOCAL (SOUTHERN TABLELANDS)
1/ Physical
2/ Maps
3/ Newspaper Files
4/ General and Historical

Abbreviations used for scientific periodicals follow those of the World List of Scientific Periodicals Published in the Years 1900-1950, (3rd edition), London, 1952.
A. GENERAL


BURGESS, E.W. (edit.) The Urban Community, Univ. of Chicago, 1926.


CHRISTALLER, W. Die zentralen Orte in Süd Deutschland, Jena, 1933.


(Contains a summary of his central place theory).
COLEY, C.C.  

DAVIES, MAURICE R.  

DAVIS, D.H.  

DEASY, G.F.  

DEFFONTAINES, P.  

"Rapports fonctionels entre les agglomérations urbaines et les campagnes : un exemple en pays de colonisation, le Brésil", Comptes Rendus Congrés internationale de Géographie, Amsterdam, 1938, Section II, pp. 139-44.

DE GEER, STEN  

DICKINSON, R.E.  


'geographers who suggest the use of the road-turning method of delimiting urban fields).


FLEMING, J. B. and GREEN, F. H. W. (see GREEN, F. H. W.)


(a sociologist who advocates use of road-turning method for delimiting urban fields).

GALPIN, C. J.  

GEDDES, SIR P.  

GEORGE, P.  
La Ville, le fait urbain à travers le monde, Presses universitaires de France, Paris, 1952.

GIST, N. P. and HALBERT, L. A.  

GLASS, D. V.  

GODLUND, Sven  

GOMME, G. L.  
The Village Community; with reference to the origin and form of its survivals in Britain, Walter Scott, London, 1890.

GREEN, F. H. W.  


GREEN, F. H. W. and FLEMING, J. E.  


HARRIS, C.D. and ULLMAN, E.L. (see ULLMAN and HARRIS)


JONES, W.  
'Settlement Patterns in the Middle Teifi Valley', Geography, vol. XXX, 1945, pp. 103-11.

KANE, E.  

KEMUNING, H.J.  

KOLB, J.H.  

KOLB, J.H. and BRUNNER, E. de S.  
A Study of Rural Society (edit. W.F. OGBURN), Boston, 1945, pp. 75-139.

LANDIS, P.H.  

MACAULAY, J.U.  

MURPHEY, E.  

McCARTY, H.H.  

MCKENZIE, R.D.  

NATIONAL COUNCIL OF SOCIAL SERVICE  

NATIONAL RESOURCES COMMITTEE  
Our Cities: Their Role in the National Economy, Govt. Prnt. Washington, 1937.

NEFF, Ernst  
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Reference</th>
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<tbody>
<tr>
<td>PARK, R.E.</td>
<td>'The Urban Community as a Special Pattern and a Moral Order', in The Urban Community, edit. E.W. Burgess, Univ. Chicago, 1925.</td>
</tr>
<tr>
<td>SANDERSON, D.</td>
<td>Rural Sociology and Rural Social Organizations, John Wiley and Sons, New York, 1942.</td>
</tr>
</tbody>
</table>
(Schöller's paper contains a very comprehensive and valuable bibliography of urban geographical literature, listing about 150 different books and papers).


TAYLOR, Griffith


THADEN, J.P.


(Thaden outlines the composite areas on the basis of six services: hardware, clothing, banking, newspaper, rural mail delivery, and high school).

THOMAS, L.F.


THOMPSON, J.G.

Urbanization, New York, 1927.

THURSTON, H.S.


TREWARTHA, G.T.


TWEDDE, A.D.


ULLMAN, E.L.


ULLMAN, E.L. and HARRIS, C.D.


B LOCAL (SOUTHERN TABLELANDS)

I MAPS

GENERAL

1 Topographical Sheets

AUSTRALIAN MILITARY SURVEY - Scale 1:253,440
- Bega, N.S.W., second edition, 1942
- Canberra, A.C.T. and N.S.W. second edition, 1942
- Goulburn, N.S.W. second edition, 1942
- Mallacoota, Vic. and N.S.W., 1942
- Ulladulla, N.S.W. second edition (revised), 1942
- Wollongong, N.S.W. second edition, 1942

AUSTRALIAN MILITARY SURVEY - Scale 1:63,360
- Braidwood, N.S.W., 1942
- Brindabella West, A.C.T. and N.S.W., 1952
- Canberra, A.C.T. and N.S.W., 1942
- Kosciusko, N.S.W. and Vic., 1952
- Lake Bathurst, N.S.W., 1942
- Lake George, N.S.W., 1944
- Michelago West, N.S.W. and A.C.T., 1952

2 Geological Sheets

BUREAU OF MINERAL RESOURCES, COMMONWEALTH OF AUSTRALIA -
Scale 1:253,440
- Canberra, 1954
- Goulburn (in preparation)

3 Land Registration, Administrative Boundaries, Distributions, etc.

AGRICULTURE DEPARTMENT (N.S.W.), N.S.W. Location of the Main Types of Rural Production, c. 1950, Scale 1" = 32 miles.

ELECTRICITY DEPARTMENT (N.S.W.), N.S.W. Electricity Supply Systems, June 1952, Scale 1" = 30 miles.

N.S.W. Map of the Interconnected System, June 1953, Scale 1" = 50 miles.
LANDES DEPARTMENT (N.S.W.),

County Maps (Scale 1" = 2 miles)

Argyle, 4th edition, 1946
Beresford, 4th edition, 1936
King, 3rd edition, 1935
Murray, 4th edition, 1935
St. Vincent, 3rd edition, 1931
Wallace, 3rd edition, 1940
Wellesley, 4th edition, 1928

Parish Maps (Scale 1" = 40 chains)

Clyde, County Wallace, 5th edition, 1935
Cowan, County Argyle, 5th edition, 1939
Goulburn, County Argyle, 7th edition, 1939
Guineen, County Argyle, 6th edition, 1939
Mylaree, County Argyle, 7th edition, 1933

Old Plans and Surveys

Moniera and Gippsland, August, 1841, Lands Department Map M1170, accompanying entry in Old Catalogue Book, Scale 1" = 5 miles. [Surveyor, J. Bailey]

Plan of the Main Southern Road from Goulburn to Marulan, 1868, Lands Department Map 68/1737, Scale 1" = 66 chains. [Surveyor, J.W. Deering]

Plan showing the Survey of the Main Southern Road from Gunning to Goulburn, 1867, Lands Department Map 69/348, Scale 1" = 66 chains. [Surveyor, J.W. Deering]

Map of the Squatting Districts in the Colony of N.S.W., showing the Stations and Places for Courts of Petty Sessions, 1847, Scale c. 1" = 50 miles.

Survey of Cooma and the Rock Flat Creeks, Monaroos Plains, 1842, Scale 1" = 40 chains.
LANDS DEPARTMENT (N.S.W.), Maps showing General Features, and Administrative and Other Boundaries

" " " N.S.W. South Eastern Tourist District, 10th edition, 1932, Scale 1" = 10 miles.

" " " N.S.W. Railways and Roads, 2nd edition, 1946, Scale 1" = 24 miles.

DEPARTMENT OF LANDS (N.S.W.), N.S.W. Boundaries of Police, Licensing and District Court Districts (4 sheets), 1951, Scale 1" = 16 miles.

" " " " Snow Leases and Permissive Occupancies, Shires of Snowy River, Monaro, Tumut, Yerrawunla, and Tumbarumba (2 sheets), 1952, Scale 1" = 4.5 miles.

" " " " N.S.W., Local Government Shires and Municipalities (4 sheets), 1952, Scale 1" = 16 miles.

" " " " N.S.W. Showing all Divisions for the Purposes of the Crown Lands Acts, 1952, Scale 1" = 64 miles.

MAIN ROADS DEPARTMENT (N.S.W.), N.S.W. Main and Developmental Roads and Local Government Areas (2 sheets), 1949, Scale 1" = 16 miles.

" " " N.S.W. Main and Developmental Road Systems, 1951, 1" = 50 miles.

MITCHELL, SIR THOMAS L., Map of the Colony of New South Wales, 1834, printed in Sydney, re-published in Edinburgh, Scale 1" = 8 miles.

DESIGN PLANS AND OLD PLANS OF TOWNS AND VILLAGES

FEDERAL CAPITAL COMMISSION, Plan Gazetteed for Canberra, 1925, Scale 1" = c. 4,800 feet.

GRiffin, W.B. Canberra, Design Plan, 1917, Scale 1" = 3,000 feet.

Jevons, W.S. A Social Map of Goulburn, 1859, Mitchell Library MS 5864.
LANDS DEPARTMENT (N.S.W.),

Plan of the Proposed Limits of a Town and Agricultural Reserve at Adaminaby to be called ...., 1860, Scale 1" = 2 miles.

Plan of Port of Araluen, 1886 [?], Scale 1" = 8 chains

(B 1469) Plan showing the position of 23 allotments in the Village of Paw Paw near Goulburn, 1851, Scale 1" = 8 chains.

Survey (intended for the laying out of a town) of part of Bowning Creek, and part of the road from Yass to Port Phillip, 1840, Scale 1" = 8 chains.

(B 1097) Plan for the Village of Bowning, 1841, Scale 1" = 8 chains.

Plan for the Village of Braidwood, 1839, Scale 1" = 8 chains.

Plan of Site and Design for the Village of Breadalbane, 1871, Scale 1" = 8 chains.

Plan of the Village of Bredbo and Suburban Portions Nos. 112 to 162, 1889, Scale 1" = 4 chains.

Plan of the Village of Bullongong [Captain's Flat] 1887, Scale 1" = 4 Chains.

(B 9846) Plan for the Village of Bungendore near Lake George, 1837, Scale 1" = 8 chains.

Survey of the Village Reserve of Bungendore, 1837, Scale 1" = 8 chains. [Surveyor, J. Lamer]

(B 1-793) Plan of the Township of Bungonias, 1832, Scale 1" = 8 chains.

Design for the Town of Collector, 1859, Scale 1" = 8 chains.
Plan of the Village of Cooma, Monaro, 1849, Scale 1" = 10 chains.

Design for the Town of Crookwell, 1860, Scale 1" = 6 chains.

Township of Goulburn Plains, 1828, Scale 1" = 10 chains.

(75) Township of Goulburn Plains, 1828 [?], Scale 1" = 10 chains.

(E 65) Township Goulburn Plains, Scale 1" = 10 chains.

Survey of Country between the New and Old Towns of Goulburn, 1845, Scale 1" = 8 chains [Surveyor, J. Lermor]

(G 800b Design) Plan for the Town of Goulburn, 1853, Scale 1" = 8 chains.

(G 687) Plan for the Township of Goulburn Plains, 1829, Scale 1" = 5 chains.

(G 687c) Plan for the Township of Goulburn Plains, 1829, Scale 1" = 5 chains.

(G 800c Design) Plan of Vicinity of Goulburn, 1832, Scale 1" = 20 chains [Surveyor, W.R. Govett]

(G 800d) Plan showing Part of the Town of Goulburn as Staked Out also the relative situation of the Glebe, 1841, [?], Scale 1" = 10 chains.

(G 948) Plan of the Goulburn Reserve showing the Villa Allotments, 1836, Scale 1" = 20 chains.

(G 948a) Plan showing the town boundaries of Goulburn, 1848, 2" = 1 mile.

Plan for the town of Goulburn, 1833, Scale 1" = 8 chains.
(G 9483) Town of Goulburn, County of Argyle, 1849, c. 1" = 24 chains.
Survey of the Reserve for a Village at Gundagai, 1847, Scale 1" = 8 chains.

(G 347) Plan for the Village of Gunning, 1838, Scale 1" = 8 chains.

Plan of the Village of Jambaicumbene, 1857, Scale 1" = 8 chains.

Plan of the Town of Kiandra, 1862, Scale 1" = 4 chains. [Surveyor, T. Swan]

(L7 1187) Plan of the Village of Lorbert, 1837 [?]. Scale 1" = 4 chains.
Design for the Village of Marulan at the Junction of the Great Roads in the County of Argyle, 1835, Scale 1" = 4 chains.

Plan of a Village and Adjacent Lands at Monga, 1856, Scale 1" = 8 chains.

Survey of the Reserve of the Village of Mongarlowe, 1841, Scale 1" = 8 chains. [Surveyor, J. Larmer]

Plan of the Village of Morumbateman, 1876, Scale 1" = 5 chains.

Plan of the Country at the Bruced Crossing Place (village to be called Narriga) on the New Line of Road from Narriga to Jervis Bay, 1841, Scale 1" = 8 chains.

Village of Sutton, 1866, Scale 1" = 8 chains.

Plan of the Site for the Township of Tuena, 1858, Scale 1" = 4 chains.
DEPARTMENT OF LANDS (N.S.W.), (Y 954c). Plan for the Town of Yass, 1837, Scale 1" = 8 chains.

PUBLIC WORKS DEPARTMENT (N.S.W.), Adamsby Dam [Eaglehawk] - General Layout, 1954, Scale 1" = 200'.

SNOWY MOUNTAINS AUTHORITY, Plan of Cooma Headquarters Township, 1952, Scale 1" = 200'.

" " "

" " " Plan of Cabramurras Regional Centre, 1953, Scale 1" = 100'.

" " " Plan of Island Bend Township, 1952, Scale 1" = 200'.

" " " Plan of Jindabyne Works Township, 1952, Scale 1" = 200'.

MAPS OF URBAN CENTRES AND THEIR URBAN FIELDS

CROOKWELL SHIRE COUNCIL, Crockwell Shire Road Map, 1953, Scale 1" = 4 miles.

" " "

Crockwell Town Improvements Area, 1954, Scale 1" = 8 chains.

DEPARTMENT OF HOME AFFAIRS (COMM.), Map of the Federal Territory, Counties of Cowley and Murray, 1915, Scale 1" = 100 chains.

DEPARTMENT OF THE INTERIOR (COMM.)

(NATIONAL MAPPING SECTION), Topography of Canberra and the Australian Capital Territory, 1952, Scale 1" = 2 miles

(PROPERTY AND SURVEY BRANCH), Canberra, 1954, Scale 1" = 2,000'.

" " " (G 54) Village of Tharwa, 1954, Scale 1" = 4 chains.

" " " Village of Tharwa (sections 1, 6, 7, 8) n.d. [c. 1953], Scale 1" = 2 chains.

" " " (D 72) Village of Hall, 1954, Scale 1" = 2 chains.
DEPARTMENT OF THE INTERIOR (COMM.)

(PROPERTY AND SURVEY BRANCH), (D 127A) Oaks Estate, 1944, Scale 1" = 100'.

(TOWN PLANNING SECTION), (TP23/55) Canberra Residential Development: Indicated Population Densities, Gross and Net, 1955; Scale 1" = 800'.

DEPARTMENT OF LANDS (N.S.W.), Town of Adaminaby and Suburban Lands, 2nd edition, 1921, Scale 1" = ¼ chains.

Village of Araluen. West and Suburban Lands, 2nd edition, 1930, Scale 1" = 8 chains.

Village of Bowning and Suburban Lands, 2nd edition, 1926, Scale 1" = 8 chains.

Village of Bradley and Suburban Land, 1913, Scale 1" = 8 chains.

Village of Bungendore and Suburban Lands, 3rd edition, 1931, Scale 1" = 8 chains.

Town of Bungonia and Suburban Lands, 2nd edition, 1932, Scale 1" = ¼ chains.

Village of Bunyan and Suburban Lands, 3rd edition, 1922, Scale 1" = 4 chains.

Town of Captain's Flat and Suburban Lands, 2nd edition, 1931, Scale 1" = 4 chains.

Town of Collector and Suburban Lands, 1912, Scale 1" = 8 chains.

Town of Cooma and Suburban Lands, 3rd edition, 1926, 1" = 8 chains.
DEPARTMENT OF LANDS (N.S.W.),

Town of Dalton and Suburban Lands,
2nd edition, 1942, Scale 1" = 4 chains.

Town of Eirlington [Major's Creek] and Suburban Lands, 2nd edition, 1918, Scale 1" = 8 chains.

City of Goulburn and Municipal and Suburban Land (2 sheets), 5th edition, 1932, Scale 1" = 8 chains.

City of Goulburn, n.d., 1" = 4 chains.

Village of Gundaroo and Suburban Lands, Scale 1" = 8 chains.

Village of Gunning and Suburban Lands, 3rd edition, 1932, Scale 1" = 8 chains.

Village of Jembaicumbene and Suburban Lands, 4th edition, 1933, Scale 1" = 8 chains.

Village of Korumbateman and Suburban Lands, 1924, Scale 1" = 4 chains.

Town of Nimmitabel and Suburban Lands, 2nd edition, 1930, Scale 1" = 4 chains.

Town of Queanbeyan and Suburban Lands, 3rd edition, 1933, Scale 1" = 8 chains.

Village of Sutton and Suburban Lands, 3rd edition, 1926, Scale 1" = 8 chains.

Town of Yass and Suburban Lands, 4th edition, 1936, Scale 1" = 8 chains.

GOULBURN CITY COUNCIL,

City of Goulburn, n.d., Scale 1" = 10 chains.
LAKE GEORGE MINES PTY. LTD., Captain's Flat, N.S.W., Prospecting Areas 30th June, 1953, Scale 1\" = 2 miles.

Plan of Parishes of Bullongong and Ballalaba, County Murray, showing Freehold and Leasehold Property of Lake George Mines Pty. at Captain's Flat, June 1952, Scale 1\" = 200\".

MULWAREE SHIRE COUNCIL,

Kenmore-Bradfordville, 1947, Scale 1\" = 4 chains.

Marulan Township, 1948, Scale 1\" = 4 chains.

Map of the Village of Taralga, 1929, Scale 1\" = 4 chains.

TALLAGANDA SHIRE COUNCIL,

Braidwood, n.d. [c.1953], Scale 1\" = 4 chains.
2 NEWSPAPERS

(M indicates that the newspapers are filed in the Mitchell Library, Sydney; R, those in the General Reference Collection of the Public Library of N.S.W.)

Sydney

1803-1848

Sydney Gazette and N.S.W. Advertiser, vol. I, no. 1-vol. XL, no. 4503, March 5, 1803-Oct. 20, 1842

1824-1848

The Australian, No. 1, Oct. 14, 1824-Sept. 23, 1848

1831-

Sydney Morning Herald [prior to Aug. 1842 Sydney Herald] vol. I no. 1, April 15, 1831-

1870-1919

Australian Town and Country Journal, No. 1, Jan. 8, 1870-June 25, 1919 (ceased publication)

Araluen

1863-4


Binalong and Boorowa (Burrowa)

1898-1905

Burrowa Times and Binalong, F neuropore, Reid's Flat and Pye Park Advertiser, 1898-1905, Burrowa (weekly)

Bombala

1898-1931

Monaro Mercury, Cooma and Bombala Advertiser, Cooma (afterwards incorporated in Cooma Express)
1899-1911

Bombala Herald, Delegate, Cooma, Eden and Coast Districts Advertiser, 1899-Aug. 22, 1911 (weekly)  R

1899-1905

Bombala Times and Monaro and Coast Districts General Advertiser, 1899-1905 (weekly)  R

Braidwood

1859

Daily News and Braidwood Advertiser, No. 5-114, Feb. 15-June 22, 1859 (incomplete)  M

1859-1862


1862; 1864

Braidwood News and Goldfields General Advertiser, Mar. 29-Sept. 2, 1862; Jan.-Dec. 17, 1864 (bi-weekly, incomplete)  M

1898

Braidwood Dispatch and Mining Journal, 1898 [with] (Braidwood Review and District Advocate, Nov. 30, 1915- )

(Dispatch and Review alternate with one another, each issued weekly)  R

1899-1907


Burrowa

1898-1907

Burrowa News, 1899-1907 (weekly)  R
Canberra
1926-

Canberra Times, vol. 1, no. 1, Sept. 3, 1926 (weekly and daily)

Ooma
1899-1906, 1932-

Ooma Express 1899-1906; 1932- (twice weekly) 1899-1906 entitled Ooma Express, Manaro and Southern Districts Advertiser

Crockwell
1893-1907

Crockwell Gazette and Settlers' Advocate, 1893-1907 (twice-a-week)

1903-1907

Argyle Liberal and District Recorder, vol. 1, no. 1, Oct. 13, 1903-1907 (twice-a-week)

Goulburn
1848-1907

Goulburn Herald, vol. 1, no. 1, Jan. 1, 1848-Dec. 27, 1907
Prior to 1860 entitled Goulburn Herald and County of Argyle Advertiser. Afterwards incorporated in Goulburn Evening Penny Post

1866-1877

Southern Argus. Prior to June 1867 Goulburn and Yass Argus
1866-7; 1870-1877 twice and three times a week

1886-

Goulburn Evening Post with which is incorporated the Goulburn Daily Herald, 1886-1895; May 7, 1896-

1901

Warrina Times and Goulburn District News, Aug.-Dec. 23, 1901 (3 times a week)
Kiandra

1860


Queanbeyan

1860-1862

Golden Age and General Advertiser for the Districts of Queanbeyan and Monaro, vol. I-III, no. 120, Sept. 15, 1860-Dec. 25, 1862 (weekly)

1899-1907

Queanbeyan Observer 1899-1907. Afterwards incorporated in Queanbeyan Age (twice-a-week)

1899

Queanbeyan Age with which is incorporated the Queanbeyan Observer, 1899- (twice-a-week)

1905-1907

Queanbeyan Leader, No. 1-311, Jan. 24, 1905-Dec. 31, 1907 (twice-a-week)

Yass

1857-1862; 1899-1929


1866-1877

Southern Argus. Prior to June 1867 Goulburn and Yass Argus, 1866-7; 1870-1877, Goulburn (twice and three times a week)

1899-1907

Yass Evening Tribune 1899-1907
From April 4, 1929 amalgamated with Yass Courier to form the Yass Tribune-Courier
1929

Yass Tribune-Courier, April 4, 1929—Formed by amalgamation of Yass Courier and Yass Evening Tribune (twice-a-week)
3. PHYSICAL


Handbook for Canberra Meeting 1954, see Canberra, A Nation's Capital, ed. H.L. White general and historical list

AUSTRALIA - COMMONWEALTH BUREAU OF METEOROLOGY

Results of rainfall observations made in New South Wales (1915-1944) Districts 70/71 comprise the Southern Tablelands, Govt. Printer, Melbourne, 1948


AUSTRALIA - DEPARTMENT OF POST-WAR RECONSTRUCTION (REGIONAL PLANNING DIVISION), Snowy River Valley, preliminary investigation of resources, Canberra, 1946 (mimeographed)

AUSTRALIA - ROYAL COMMISSION ON SITES FOR THE SEAT OF GOVERNMENT OF THE COMMONWEALTH - Report of Commissioners with appendices and plans, Govt. Printer, Sydney, 1903 (Parl. paper 23 of 1903) [John Kirkpatrick, Chairman]

Supplement to report ... report on a proposed site for the Federal Capital at Dalgety (with plans), Govt. Printer, Sydney, 1903 (Parl. paper 52 of 1903)


BYLES, B.U.  A Reconnaissance of the Mountainous Part of the River Murray Catchment in New South Wales, Comm. Forestry Bureau Bulletin No.13, Canberra, 1932


CLARKE, Rev. W.B.  Researches in the Southern Goldfields of New South Wales, Sydney, 1880


JENNINGS, J.V.  'Lake George and Lake Bathurst' Geography vol. XXXIX, 1954, pp.143-4

KENNY, E.J. and MULHOLLAND, C. St.J. 'The Ore Deposits of Captain's Flat, N.S.W.', A/sian Inst. Min. and Metallurgy, Proc. (New Series), No.122, 1941, pp.45-64


LAKE GEORGE MINES (GEOLoGICAL STAFF OF) 'Geology of the Lake George Mine at Captain's Flat' in Geology of Australian Ore Deposits, A/sian Inst. Min. and Metallurgy. (Fifth Empire Congress), vol. I, 1953, pp.910-20


MAHONY, D.J. and TAYLOR, GRIFFITH, Report on a geological reconnaissance of the Federal Territory: with special reference to available building materials, Govt. Printer, Melbourne, 1913


MORLAND, R.T. 'Notes on the Snow Lease Section of the Hume Catchment', J. Soil Conserv. Serv. N.S.W., vol. VII, 1951, pp.5-29

NOYE, D.G. Notes on the Geology of the Snowy Mountains Area, in itinerary of ANZAAS (Geology) excursion to the Snowy Mountains, Jan. 1954 (mimeographed)


NAYLOR, G.F.K.  'Geological History of the Goulburn District' in Goulburn Evening Post, 1st Nov., 1935


PITTMAN, E.F.  Report on the Geology of the Federal Capital Site, Govt. Printer, Melbourne, 1911


'Landscape Development' [Canberra] idem pp.221-3


'The Southern Tableland', BAAS Handbook for N.S.W., 1914, p.501


'Geology and Physiography of the Australian Capital Territory and surrounding areas', in ANZAAS Handbook for Canberra, 1938, p. 111
GENERAL AND HISTORICAL

ALEXANDER, S. 'Trade and resources of the district served by the Moruya River', Parl. pap. N.S.W., Govt. Printer, Sydney, 1892


ANDREWS, J. 'Agricultural Regions of Western and Central N.S.W.', Aust. Geogr. vol. II, 1934, pp.9-23

ANDREWS, Mrs. W.G. History of Collector (unpub. essay) 1951 [Public School, Collector]

A.N.Z.A.A.S. Handbook for Canberra Meeting 1932, Govt. Printer, Canberra, 1933

Handbook for Canberra Meeting 1954 [see WHITE, H.L. (edit.) - Canberra, A Nation's Capital]

AUSTRALIA - FEDERAL CAPITAL ADVISORY COMMITTEE Construction of Canberra .... general report: 1st - final [3rd], Govt. Printer, Melbourne [1921-25]
(Parl. pap. No.134 of 1920-21; Parl. pap. No.41 of 1922; Parl. pap. No.58 of 1926-28)

FEDERAL CAPITAL COMMISSION ... Annual report: 1st - 5th: 1924/5-1928/9, [Melbourne], Govt. Printer, Canberra [1925-29]

FEDERAL CAPITAL COMMISSION Canberra and the Territory for the seat of government of the Commonwealth: brief review of history, features and progress, Govt. Printer, Melbourne [1925]; new edition [1926, 1927]

AUSTRALIA - HOME AFFAIRS DEPARTMENT, Federal Capital City: report of board appointed to investigate and report to the Minister for Home Affairs in regard to competitive designs, Govt. Printer, Melbourne, 1912 (Parl. pap. No.17 of 1912)
AUSTRALIA - HOME AFFAIRS DEPARTMENT Information, conditions and particulars for guidance in the preparation of competitive designs for the Federal Capital City, Commonwealth of Australia, Govt. Printer, Melbourne, 1911 (Parl. pap. No.65 of 1912)

HOME AFFAIRS DEPARTMENT The Federal Capital: report explanatory of the preliminary plan [by Walter Burley Griffin], Govt. Printer, Melbourne, 1913

HOME AFFAIRS DEPARTMENT Schedule No. 16 (Containing information respecting matters dealt with by the Dept. of Home Affairs), 1st Nov., 1913; Schedule No. 17, 1st Feb., 1914


HOME AFFAIRS DEPARTMENT Report together with minutes of evidence and diagrams relating to the proposed dams for ornamental waters at Canberra, Govt. Printer, Melbourne, 1916 (Parl. pap. No.353 of 1916)


AUSTRALIA - INTERIOR DEPARTMENT Report on the administration and development of the Australian Capital Territory, 1950/51- , annual (processed)

INTERIOR DEPARTMENT, (NEWS AND INFORMATION BUREAU), Canberra: A Guide to the National Capital, Sydney, [1952]

INTERIOR DEPARTMENT, Your Guide to Canberra, Canberra, [1953]

INTERIOR DEPARTMENT, (PUBLIC RELATIONS SECTION), Services available to residents of the Australian Capital Territory [Canb.], 1950
AUSTRALIA - ROYAL COMMISSION ON SITES FOR THE SEAT OF GOVERNMENT OF THE COMMONWEALTH, Report of Commissioners, with appendices and plans, Govt. Printer, Sydney, 1903 (Parl. pap. No.23 of 1903) [John Kirkpatrick, Chairman]

ROYAL COMMISSION ON SITES FOR THE SEAT OF GOVERNMENT OF THE COMMONWEALTH, Supplement to report ... report on a proposed site for the Federal Capital at Dalgety (with plans), Govt. Printer, Sydney, 1903 (Parl. pap. No.52 of 1903)

ROYAL COMMISSION ON FEDERAL CAPITAL ADMINISTRATION Report, 5 parts, Govt. Printer, Melbourne, 1917

SENATE SELECT COMMITTEE INVESTIGATING THE DEVELOPMENT OF CANBERRA, Report, with a minority report by Senator Wood, Canberra, Oct. 1955 (mimeographed)

SNOWY RIVER COMMITTEE, Proposals to divert the Snowy River : Report by the Commonwealth and State Officers, Melbourne, 1943

SNOWY RIVER COMMITTEE, (HYDRO-ELECTRIC SUB-COMMITTEE) Snowy River investigations by interstate committee, 1948; report by hydro-electric sub-committee, Melbourne, 1948 (mimeographed)

AUSTRALIAN BROADCASTING COMMISSION, 'The best use of the Snowy River', Nation's Forum or the Air, vol. IV, 21st Jan., 1948


BAILLIE, F.F. New South Wales Gazetteer and Road Guide, Sydney, 1866

BAKER, W. Australian Atlas, Sydney, 1846

BAYLEY, W.A. Upland Pastures : The History of Crookwell District, N.S.W., Crookwell, 1950
BAYLEY, W.A.  History of the Central South Coast of N.S.W., Moruya, 1951

Lilac City : The Story of Goulburn, N.S.W., Goulburn, 1954


BRAIDWOOD : OFFICIAL SOUVENIR, Back to Braidwood, Back to Braidwood Week, Nov. 22nd-29th, 1925, (compiled by Agnes Hogg)


COLE, H.J.R.  Report on civic administration with a recommendation for a city council for Canberra (A.C.T.) [Canberra, Dept. of Interior], 1949, (processed)


'Your Capital' [Canberra], Comm. Office of Education, Sydney, 3rd Dec., 1951

'Southern Tablelands, N.S.W.', Tutorial Classes Dept. Sydney University, 28th Feb., 1955

CURRIB, M.J.  Journal of an Excursion to the Southward of Lake George in New South Wales in 1823, Chap. 14 in E. Field's Geographical Memoirs on N.S.W., London, 1925


DENNING, W.E.  
Capital City: Canberra to-day and to-morrow, Sydney 1932, 2nd edn. Canberra, 1944

FALLICK, A.M. (and SONS)  
The Story of Queanbeyan, 1838-1938, Queanbeyan, 1938


FITZHARDINGE, L.P.  
Historical notes on the route from Sydney to Melbourne via Prince's Highway and Canberra, New Education Fellowship, 1937 (mimeographed)
St. John's Church and Canberra, Canberra, 1941

"In Search of a Capital City" Canberra in Canberra, A Nation's Capital, ANZAAS Handbook for Canberra, 1954, pp. 3-13

"Old Canberra and District", Idem, pp. 14-32

GALE, J.  
Canberra, History and Legends, Queanbeyan, 1927

GORMLEY, J.  

GOULBURN DISTRICT DIRECTORY - Directory 1882-3, Sydney, 1882, 1883

GRIFFIN, W.B.  
The Story of Canberra's Design, Building, July 12, 1912, pp. 42-3

"The Architectural Developmental Possibilities of Australia's Capital City"
Pt. I Building, Nov. 12, 1913, pp. 65-72
" II " Dec. 12, 1913, pp. 65-8
" III " Jan. 12, 1914, pp. 65-8
" IV " Feb. 12, 1914, pp. 65-7
" V " Mar. 12, 1914, pp. 65-7
" VI " Apr. 11, 1914, pp. 65-6

GRIFFITHS, MESTA  
Some Homes of Southern New South Wales, Sydney, 1952
HARRIS, A. ["An Emigrant Settler"], Settlers and Convicts: Recollections of Sixteen Years' Labour in the Australian Backwoods, London, 1847; reprinted 1852; reprinted at Melbourne, 1953

HASSALL, J.S. In Old Australia, Brisbane, 1902


JEVONS, W.S. Social Survey of Australian Cities, 1853 [Binder's title], Mitchell Library MS. E.364, [the map of Goulburn is dated 1859]


KING, H.W.H.  
'Canberra as a City: Factors of Site and Plan' *Idem*, pp. 209-20

'Canberra Grows Up', *Geography*, vol. XXXIX, 1954, pp. 142-3

LUOTSKY, J.  
*A Journey from Sydney to the Australian Alps*, undertaken in the months of January, February and March, 1834, Sydney, 1835

MacALISTER, C.  
*Old Pioneering Days in the Sunny South*, Goulburn, 1907

MACDONALD, W.A.  

MACKANESS, G.  

MACQUARIE, L.  
Report on the Colony of New South Wales to Earl Bathurst, in July, 1822 [House of Commons] 1822

MITCHELL, F.F.  
*Back to Cooma*, Sydney, 1926

McFARLAND, A.  
*Illawarra and Monaro*, Sydney, 1872

NEW SOUTH WALES  
*Kosciusko State Park Act, 1944*, Govt. Printer, Sydney

N.S.W. PARLIAMENT  
Papers respecting the selection of a site for government of the Commonwealth. Govt. Printer, Sydney, 1904 [A number of these papers relate to the Monaro region]

(Zone Development and Settlement Committee)  
South Coast and Monaro Tableland; report of official committee on inspection of Monaro and South Coast districts, Govt. Printer, Sydney, 1924. [Chairman of Committee, Thomas Kennedy]

N.S.W. PREMIER'S DEPARTMENT, The Southern Tablelands - Preliminary Resources Survey, Sydney, 1949

The Monaro-South Coast Region - Preliminary Resources Survey, Sydney, 1950
N.S.W. PREMIER'S DEPARTMENT, ROYAL COMMISSION ON SITES FOR THE SEAT OF GOVERNMENT OF THE COMMONWEALTH, 1899-1900, Report of the Commissioner...
Govt. Printer, 1900 (Parl. pap. No. 425 of 1900). Plans in separate volume. [Alexander Oliver, Commissioner]

SNOWY RIVER INVESTIGATION COMMITTEE, Report on the utilization of the waters of the Snowy River, Govt. Printer, Sydney, 1945

STANDING COMMITTEE ON PUBLIC WORKS, Report together with minutes of evidence relating to a proposed railway from Tarago to Braidwood, Govt. Printer, Sydney, 1901

STANDING COMMITTEE ON PUBLIC WORKS, Report together with minutes of evidence and plan relating to the proposed railway from Cooma to Adaminaby and branch to Dalgety; Govt. Printer, Sydney, 1923 (Parl. pap.).

PARKINS, J.A. 'Early Monaro', in The Cooma Express, 6th June, 1947

ROBINSON, F.W. Canberra's First One Hundred Years and After, Sydney, 1947.

RURAL BANK (N.S.W.), 'Pastoral Highlands', Trends, vol. I, March 1951, pp. 9-13

'Fool's Gold' [Pyrites and its production and use], Trends, March 1952, pp. 12-17

SANDS AND McDOUGALL, Directory of Canberra and the A.C.T., 1946- , Melbourne, (annual)

SELKIRK, W. Memorandum on the establishment of the town of Goulburn, Mitchell Library. MS, 1913


SLOSSON, E.B. 'Hunting for the Capital of Australia', The Independent [New York], Sept. 12, 1912, pp. 593-595

SNOWY MOUNTAINS AUTHORITY, Annual Report, 1950-51, Sydney, 1950/51

Snowy Mountains Hydro-Electric Scheme, Sydney, 1951 (processed)


STEADMAN, G.T. Goulburn Weather Almanack and Business Guide, Goulburn, 1891, 1892

SULMAN, Sir J. 'The First Stande Pre-eminent' [criticism of Canberra plans], Building, June 12, 1912, pp. 53-4

TARLETON, MYRTLE 'Early History of Goulburn', prize-winning essay in Goulburn Evening Post, March 19, 1903

TAYLOR, C.A. 'The Federal Capital and a Grave Scandal' Building, June 12, 1912, pp. 43-4

'The Federal City: The World's Competitions Criticised', Building, June 12, 1912, pp. 47-53

Tam Planning for Australia, Sydney, 1914

TAYLOR, GRIFFITH 'Evolution of a Capital: Canberra' Geogr. J. vol. XLIII, 1914, pp. 378-95

UNIVERSAL DIRECTORIES Central and Southern N.S.W. Trade and Business Directory, 5th edit., Sydney 1954


WATSON, P. A Brief History of Canberra, Canberra, 1927

WAUGH, D. Three Years' Practical Experience of a Settler in New South Wales, 1838

WELLS, W.H. A Geographical Dictionary; or Gazetteer of the Australian Colonies ...., London, 1851


'A Centre of Learning' [Canberra], pp. 81-111 in the above

WHITTET, J.N. *Pasture Improvement in Central and Southern Tablelands Districts*, Govt. Printer, Sydney, 1948

WILKINS, W. *Geography of New South Wales*, Sydney, 1937

WRIGHT, W.D. *Canberra*, Sydney, 1923

WYATT, R.T. *The History of the Diocese of Goulburn*, Sydney, 1937


*History of Goulburn*, Goulburn, 1941

YEO, MARGARET E.J. 'The Early Days of Yass', in *Yass Evening Tribune*, July 1, 1920 et seq.