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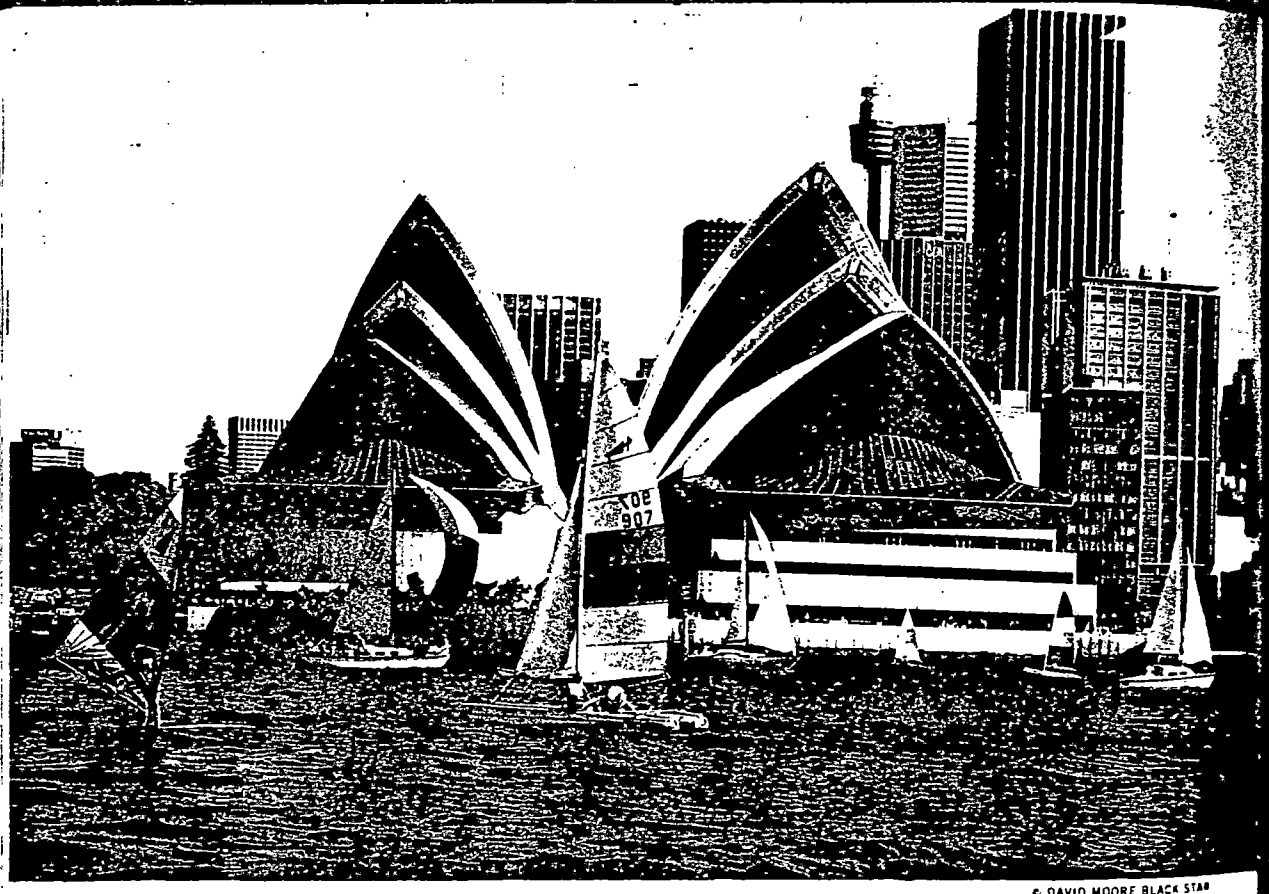
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The Sydney Opera House, with saillike roof structures, gives Australia's largest city a distinctive signature.



State Arms

AUSTRALIA

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AUSTRALIA, ô-strāl'yə, an independent member of the Commonwealth of Nations that lies wholly in the Southern Hemisphere. It comprises the continental island of Australia, with the adjacent island of Tasmania to the south and lesser coastal islands. Australia is geographically isolated by vast expanses of water: the Timor and Arafura seas on the north, the Coral Sea on the northeast, the Pacific Ocean and the Tasman Sea on the east, and the Indian Ocean on the south and west. The total area of the mainland and nearby islands is estimated at 2,966,151 square miles (7,682,300 sq km), making Australia the world's sixth largest country and smallest continent. Because of its overall flatness and regular coastline, Australia has been described as a "sprawling pancake." On a globe it appears to be "down under."

The Commonwealth of Australia, official name of the country, is a national federation of six states (New South Wales, Queensland, South Australia, Tasmania, Victoria, and Western Aus-

INFORMATION HIGHLIGHTS

Official Name: Commonwealth of Australia.
Name of Nationals: Australians.
Head of State: Monarch of the United Kingdom and Australia (represented by a governor-general).
Head of Government: Prime Minister.
Legislature: Federal Parliament, consisting of the Senate and the House of Representatives.
Area: 2,966,151 square miles (7,682,300 sq km).
Boundaries: *North,* Timor and Arafura seas; *east,* Coral Sea, Pacific Ocean, and Tasman Sea; *south* and *west,* Indian Ocean.
Elevations: *Highest*—Mt. Kosciusko, 7,310 feet (2,228 meters); *lowest*—Lake Eyre, 52 feet (16 meters) below sea level.
Population: (1981 census) 14,923,300.
Capital: Canberra.
Largest City: Sydney.
Major Language: English (official).
Major Religious Groups: Protestants and Roman Catholics.
Monetary Unit: Australian dollar (= 100 cents).
Flag: Dark blue field with Union Jack at upper left, seven-pointed federal star directly below and stars of the Southern Cross to the right. See also FLAG.

tralia) and two federal territories (the Australian Capital Territory and Northern Territory). Its parliamentary government is similar to Britain's, but its federal system, which divides power between the national and regional governments, resembles that of the United States.

Modern Australia has a pioneering history as a land developed first in the 19th century by people mainly of British ancestry. Through the wave of large-scale immigration from Britain and European lands that marked the post–World War II decades, and a more recent minor influx from Asia, Australia has gained a multicultural society. One of its contradictions is its low population density—5 people to the square mile (2 per sq km)—combined with urban concentration: two out of three of its citizens live in the eight largest cities, only one out of seven in rural areas, while the major cities continue to grow.

Combining the advances of the computer age with a lingering frontier tradition, Australia has retained some of the mystique associated with it since venturesome mariners from Europe in the 17th century first related tales of its unusual landscapes, unconventional animals, and Stone Age tribespeople. The first inhabitants arrived more than 40,000 years ago. They used simple watercraft for the comparatively short crossings from Asia, moving along the Indonesian island chain and finally reaching the northernmost areas of the Australian continent (which at times had land links with New Guinea). Successive generations drifted south into the unoccupied areas, and gradually they and later arrivals spread over the entire land. For the most part they were nomads, subsisting on plant roots, seeds, animals, birds, and fish rather than tilling the soil. Their only domesticated animal (which arrived with a later wave of newcomers) was the dingo, a hunting dog. At no time did the Aborigines exceed about 300,000 in number; yet they remained in undisputed possession of the whole land until the arrival of Europeans.

Northern Australia was subject to intermittent contact by Malay fishermen and other Asian voyagers, but these visitors were unimpressed with the mangrove swamps and rugged coasts they encountered. Across the continent the long-established tribal groups remained undisturbed. Once European mariners entered the Indian and Pacific oceans, speculation grew about the nature of the still unexplored regions. In the 16th century cartographers filled the great void south of Asia by adding an imaginary coastline that they labeled Terra Australis Incognita, or Unidentified South Land. From their trading posts in the East Indies, the Portuguese learned of an uninviting land to the south, while the Spaniards, reaching the Philippines from America, speculated that King Solomon's gold mines might be somewhere in the mythical South Land. But it was the Dutch who made the first extensive exploration of Australia's northern and western coasts after they ousted the Portuguese from the Spice Islands (Moluccas). When they found nothing of commercial value, they lost interest.

The British showed their first serious interest in Australia after Lt. (later Capt.) James Cook discovered and charted the fertile east coast in 1770 and took possession of it as New South Wales. Favorable reports by Cook and fellow voyagers led to the founding in 1788 of the first white settlement, at Sydney. After a few years settlements were made at other points along the temperate-zone mainland coast and in Tasmania.

From the 1820's English wool spinners drew increasing supplies from Australia's expanding flocks of sheep, which spread across the grasslands of New South Wales and Tasmania. How-

A modern jackeroo, or young rancher-in-training, often mounts a motorbike on the job instead of a horse.

© ULRIKE WELSCH





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Patches of white cling to the Snowy Mountains of New South Wales after winter's departure.

ever, after 50 years of settlement, little of the continent had been explored and the total European population was barely 150,000. By 1851, when gold was discovered, the figure was 400,000; thereafter the country experienced a period of extraordinarily rapid growth as rich gold finds lured a steady stream of settlers. Within a decade the population had trebled. Agriculture was stimulated, pastoral activities were expanded, and in gold-rich Victoria the rudiments of an industrial economy were established. Investment from abroad supported the construction of railways. By the 1890's the self-governing colonies that had become established were moving toward federation. The Commonwealth of Australia came into being with the adoption of a constitution on Jan. 1, 1901.

Unification under a single customs administration and adoption of a policy of tariff protection for domestic industry helped to stimulate manufacturing. During World War I shortages of goods led to industrial expansion, which continued in the 1920's as Australia became self-sufficient in steel production. Gradually the range of manufactures was extended, and during and after World War II major enterprises, including some heavy industry, were developed. By the 1960's home appliances, automobiles, farm implements, locomotives, ships, and precision-engineering products were being manufactured, as were chemicals, textiles, and paper. A significant part of the expansion resulted from investment by overseas enterprises. Sums were also drawn in for mining development. Farm production grew as well, although fewer workers were required because of mechanization.

Riding the worldwide commodity boom of the 1960's, Australia pressed on with expansion on many fronts and was steadily transformed by developments ushered in as a result of greater contact with Northern Hemisphere countries and the newer technologies. Still the world's leading wool producer, Australia developed a more varied manufacturing base and added greater dimension to the national wealth through successive discoveries of oil and coal and of a variety of other minerals (especially iron ore and bauxite) in huge quantities, consolidating the country's position as the world's leading exporter of ores. Living standards rose sharply, and the general buoyancy was maintained (with strong expansion of the gross national product) until the mid-1970's brought problems arising from inflated costs. The earlier exuberance was lost.

Until World War II, Australia followed Britain closely in foreign policy. Thereafter, its distinct role as a Pacific nation was more frequently stressed. Traditional concern over the pressures of overcrowded Asia grew more intense in the 1950's as Communist power was consolidated in China and Communist influence expanded in Southeast Asia. To help overcome poverty and hunger in underdeveloped lands, Australia supported aid programs aimed at economic advancement. Steadily, however, concern grew over Communist-backed subversion in Southeast Asia, and from the early 1960's defense outlays were increased.

While continuing close and active partnership with Britain, Australia pursued a firm and direct relationship with the United States. This partnership was cemented in 1951 in the ANZUS pact with New Zealand and the United States. From 1963, U.S. defense communications facilities were based in Australia, as well as space tracking and listening posts. Australia participated actively in the Vietnam War, and afterward links with the United States were further strengthened. Since World War II, Australia has played an increasingly important role in the overall defense policies applying to the Western Pacific and Indian Ocean regions.

R. M. YOUNGER
Author of "Australia and the Australians"

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1. The Land

Australia is for the most part a vast, undulating plateau. Its 23,000-mile (36,800-km) coastline is characterized by long stretches of sandy surf beaches. Off the northeast coast the Great Barrier Reef—the longest coral reef in the world, stretching for 1,250 nautical miles (2,300 km)—fringes the continental shelf. Unlike every other continent, Australia lacks mountains of truly alpine structure and elevation.

Compared with the other continents, the Australian landmass is geologically very old and stable. The western two thirds is a shield area of Precambrian igneous and metamorphic bedrock perhaps 3 or 4 billion years old. East of the shield the land was built up within the last 500 million years.

CONTINENTAL DRIFT

Many plants and animals are unique to Australia or nearly so, having evolved for millions of years without contact with forms characteristic of other continents. Australia has, for example, many more kinds of marsupials than does America, where these primitive pouched mammals faced stiffer competition from placental mammals.

Some flora and fauna are related to South American types. Presumably they had common ancestors on a southern supercontinent from which Australia broke away in the remote past. More varieties of plants and animals resemble those of the Indonesian Archipelago. After Australia was formed it drifted slowly northward; when it approached its present position some species would have been able to migrate from Southeast Asia over relatively narrow sea barriers.

R. M. YOUNGER
Author of "Australia and the Australians"

RELIEF AND DRAINAGE

The chief uplands in Australia are the Eastern Highlands, which have a width of 50 to 200 miles (80–320 km) along the eastern seaboard. Mount Kosciusko (7,310 feet, or 2,228 meters) is the highest peak, and only a few others rise above 6,000 feet (1,830 meters). The Eastern Highlands consist mainly of dissected plateaus containing many residual high plains, or tablelands, cut by deep river gorges. Through this complex of ranges runs a main divide, or water parting, that gives the area its common but inaccurate name Great Dividing Range.

The western slopes of the highlands lead down to interior plains. With a few interruptions caused by prominences of bedrock or by residual tablelands, the plains extend to the Flinders and Mt. Lofty ranges in South Australia and to the low but rough country around Mt. Isa and Cloncurry in western Queensland, at the borders of the Barkly Tableland.

Beyond this great belt of plains lies the Great Plateau, comprising more than half the continent and having an average elevation of 1,000 feet (300 meters). Above the general level of the plateau are many prominent peaks and ranges, some of which attain an elevation of 5,000 feet (1,525 meters). Mount Olga and Ayers Rock, two monolithic mountains of hard conglomerate, rise like islands from the sandy plains south of the Macdonnell Ranges.

Along the west coast the plateau breaks sharply down to narrow coastal plains along the



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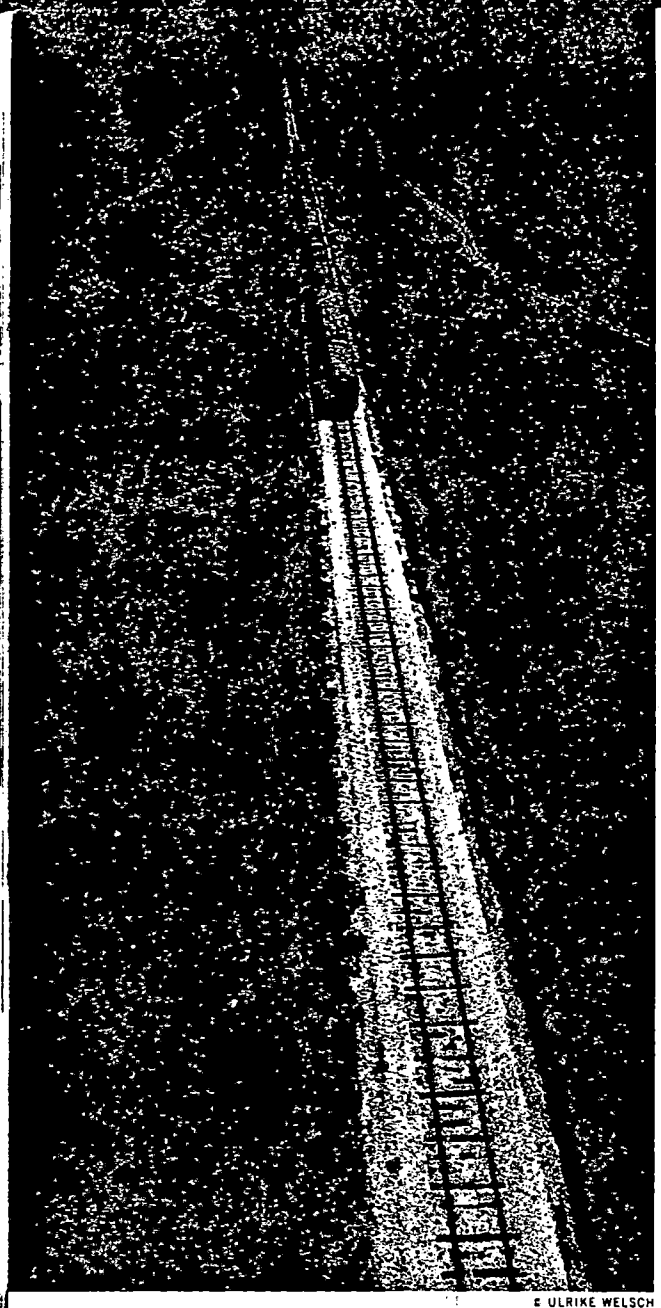
Spring wildflowers paint a eucalyptus grove in South Australia. The land rises toward the Flinders Ranges.

Darling scarp in the hinterland of Perth. To the south, along the Great Australian Bight, the old rocks are covered by flat-lying limestones that form the treeless Nullarbor Plain. In the far northwest the Kimberley Plateau, separated from the Great Plateau by the Great Sandy Desert and the Fitzroy River valley, is a rugged and sparsely settled region. The plateau of Arnhem Land, at the northern limit of the Northern Territory, has similar characteristics, but many fine gorges cut its edges and afford dam sites for the monsoon-fed rivers of the region.

The desert and semidesert areas of Australia are notable for their endless array of parallel sand ridges. Formed for the most part in a more arid period, the ridges are partly fixed by vegetation, and in places the rivers flood out between them during the wet season.

The greatest river system in Australia is that of the Murray and its major tributary, the Darling. These streams rise in the well-watered Eastern Highlands and spread out in complex systems of distributaries in the Riverina district of New South Wales, especially along the Lachlan and Murrumbidgee rivers. After receiving the Darling, the Murray gains no additional tributaries but flows through semiarid scrubland in a much more restricted floodplain. Originally it was subject to great reduction in flow in summer, but its level is now maintained by dams, weirs, and locks.

In the eastern and southeastern coastal ranges many permanent streams run directly to the sea, although only a few have extensive catchments. The largest is the Burdekin in Queensland, which rises west of the highland axis and passes through a gorge on its way to the coast. A great engineering project in the Snowy Mountains of New South Wales diverts the headwaters of the



© ULRIKE WELSCH

Crossing the Nullarbor ("treeless") Plain, the Trans-Australian Railway runs 298 miles (479 km) without a curve.

Snowy River westward into the Murray River system, which is used for irrigation.

Thousands of square miles in the Great Plateau are riverless. Those watercourses in which temporary streams flow only rarely after rain are marked by lines of shallow salt pans, which appear on maps as lakes. The major streams of monsoonal northern Australia are permanent but subject to marked variations in flow. A very extensive area of the Northern Territory, western Queensland, and northern South Australia is drained toward Lake Eyre, 52 feet (16 meters) below sea level. The streams are fed only during the wet season. Their slow-moving floodwaters spread out in numerous distributary channels that form a natural irrigation system and yield excellent cattle pastures for a large part of southwestern Queensland.

EDWIN S. HILLS, *University of Melbourne*

CLIMATE

In general the climate of Australia is warm and dry, conducive to outdoor activity and good health. Winters are mild and summers warm to hot. Seasons are the reverse of those in the Northern Hemisphere. The major climatic zones are arranged fairly simply, chiefly because of the scarcity of large marine gulfs, the continent's predominantly east-west spread, and the lack of high mountains and high plateaus.

The northern 39% of the country lies within the tropical zone, and northerly monsoon winds bring it a wet season generally from January to April. Small areas of the far north—the Kimberley Plateau, Arnhem Land, and Cape York Peninsula—receive annual rain of 40 to 60 inches (1,000–1,500 mm), but much of it falls on infertile soil in uninhabited country. In the interior the rain is more unreliable and much less abundant, and the heat increases so that a large area on either side of the Tropic of Capricorn has a January mean temperature of over 86°F (30°C). The coast of northeastern Queensland has a high rainfall, exceeding 100 inches (2,540 mm) in the vicinity of Cairns where the southeast trade winds and the summer monsoonal influences combine.

South of the Tropic of Capricorn the climate is influenced chiefly by the great pressure belts of the Southern Hemisphere. Farthest north is the high-pressure belt near the tropic; next is the low-pressure belt of variables, which influences particularly the southern states; and finally are the roaring forties, which consistently affect Tasmania. As the pressure belts move north and south each year, the regions affected by them change correspondingly. In winter the variables bring rain to the southwest corner of the continent, to southern South Australia, and to Victoria, whereas in summer the high-pressure belt swings south and these areas experience drought. Because of the combined influences of tropical air masses, trade winds, and variables, New South Wales enjoys a rainfall that varies little throughout the year.

A strongly marked weather cycle of about a week's duration is one of the notable features of southern Australia. Hot northerly winds may raise temperatures to over 100°F (38°C) in Melbourne and Adelaide, but southerly air moving in as a cold front causes sudden squalls, rainstorms, and temperature drops of 30°F (17°C) or more.

Two factors materially affect the usefulness of rainfall in Australia. The first is variability, which is very great in the interior. The second is seasonal distribution, which is unfavorable in many areas. In addition, evaporation is extremely high in the areas of lower precipitation, so that the number of months during which plants experience growth conditions drops toward zero in the central third of the continent where annual rainfall is less than 10 inches (250 mm). Three fifths of Australia has a growing season of less than five months. Nevertheless, the parts with a favorable climate constitute a large area.

EDWIN S. HILLS, *University of Melbourne*

PLANT LIFE

Australian flora is rich and exhibits peculiarities resulting from the continent's long geographic isolation. Angiosperms (flowering plants) underwent rapid speciation to produce a large number of genera that are endemic (native or confined) to Australia. *Eucalyptus*, with more

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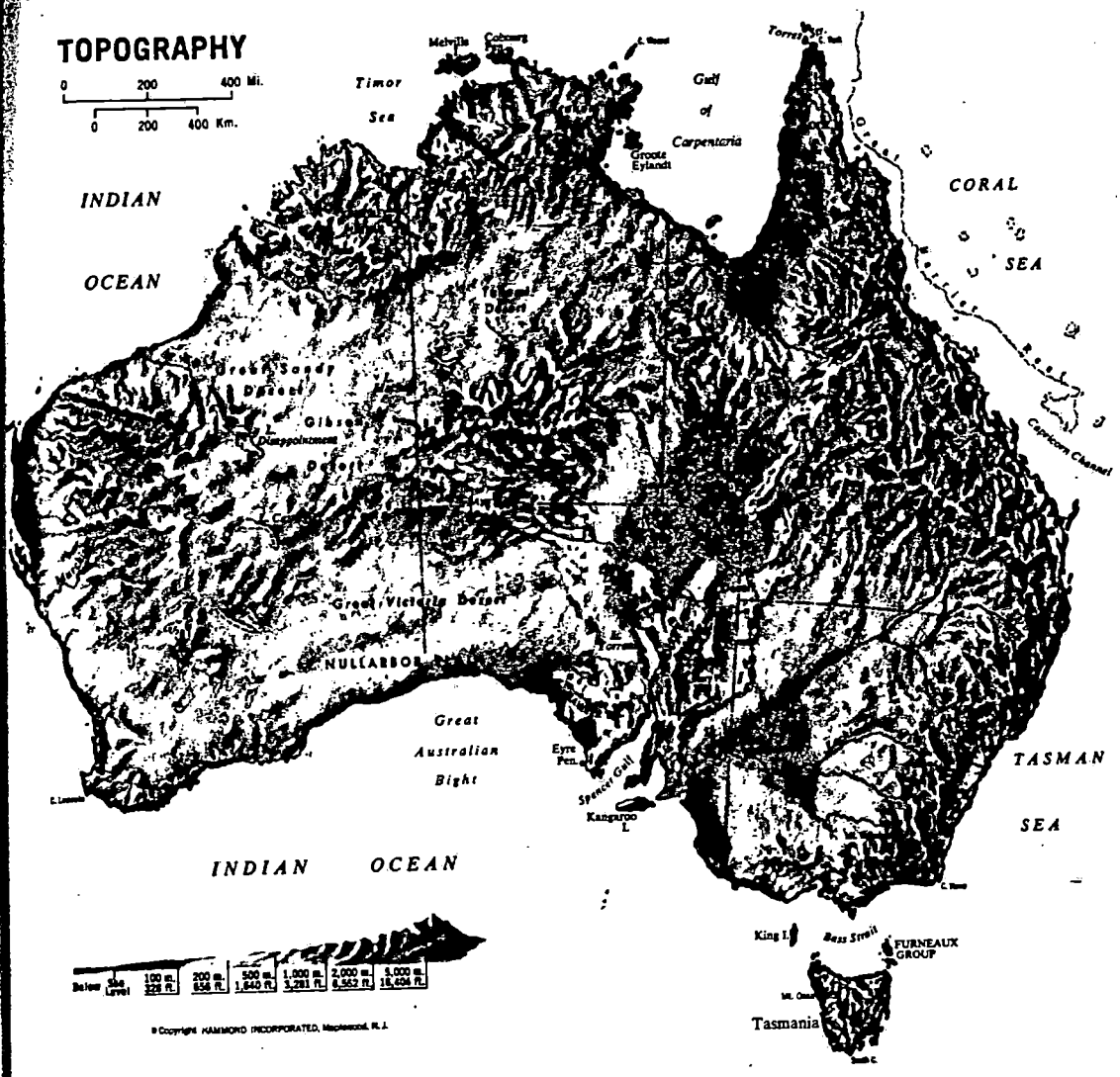
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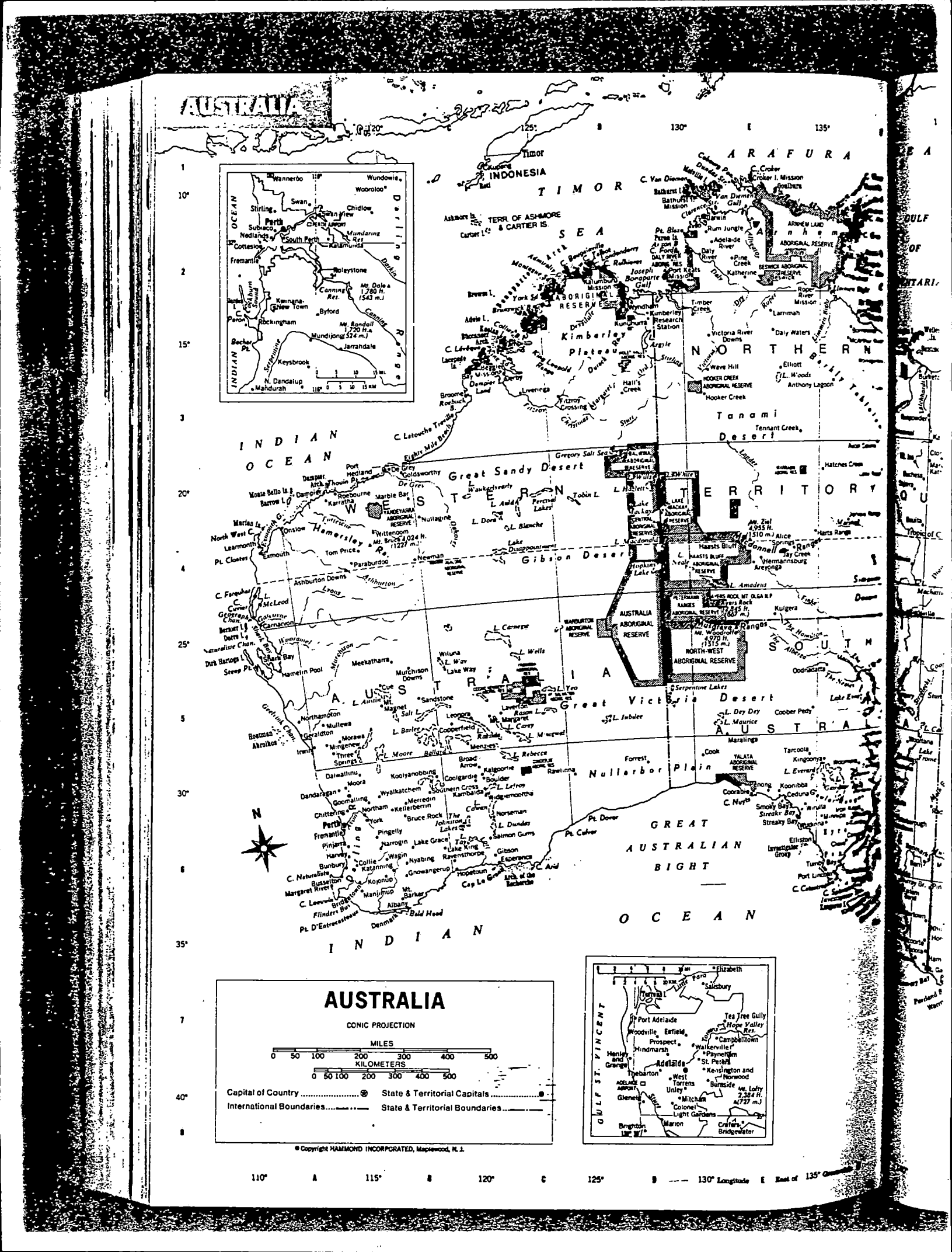
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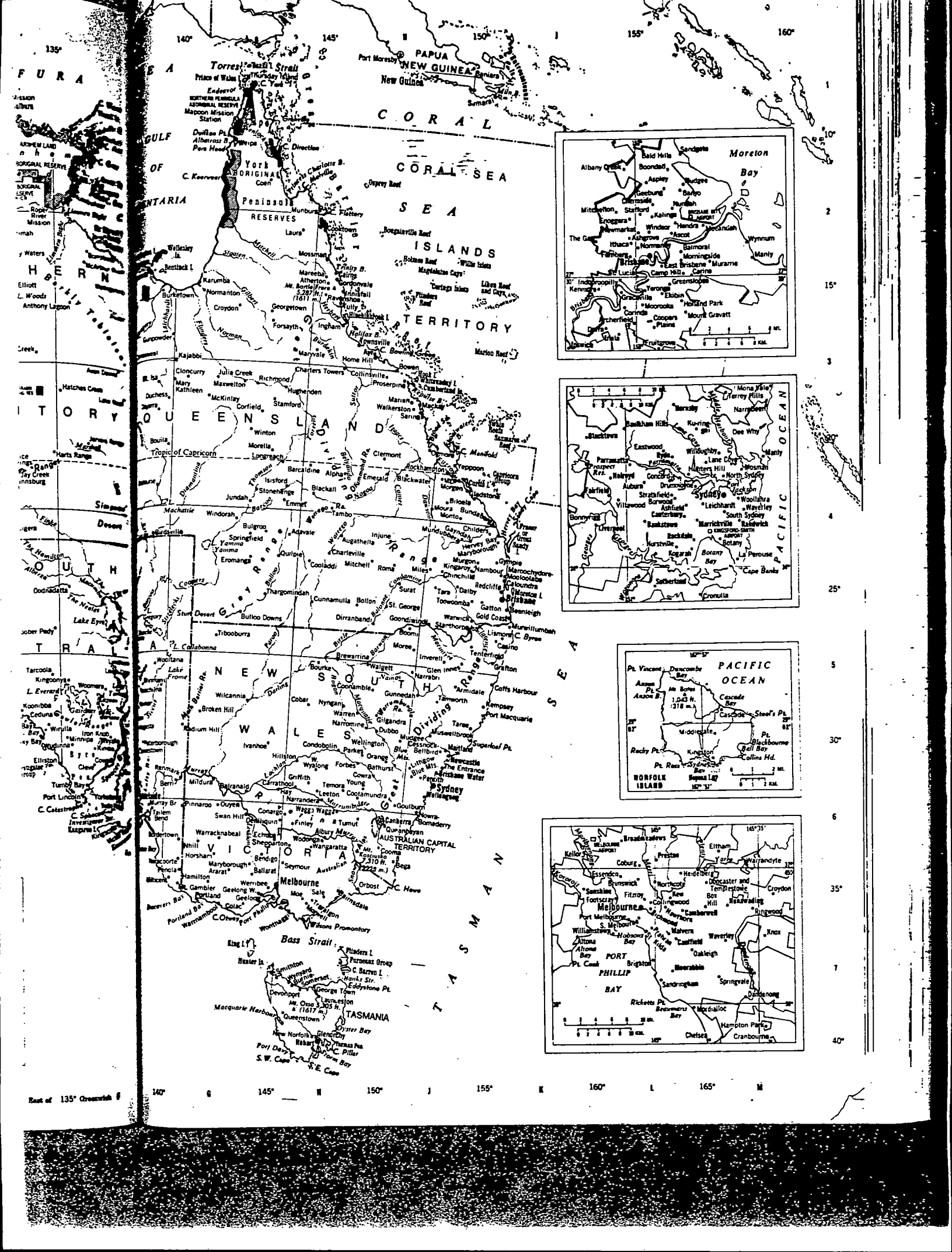


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Adelaide (cap.), S. Aust. 882,520 ..... D 8
Adelaide, S. Aust. *981,886 ..... D 8
Admiralty (gulf), W. Aust. ... D 2
Albany, W. Aust. 15,222 ..... B 6
Albury, N. S. W. 35,072 ..... H 7
Alice Springs, N. Terr. 18,395 ..... E 4
Amadeus (lake), N. Terr. ..... E 4
Arafura (sea) ..... E 2
Ararat, Vic. 8,336 ..... G 7
Armidale, N. S. W. 18,922 .. J 6
Arnhem Land (reg.), N. Terr. ..... E 2
Ashburton (riv.), W. Aust ... B 4
Auburn, N. S. W. 46,622 ... K 4
Australian Alps (mts.), Vic. ..... H 7
Australian Capital Territory 221,609 ..... H 7
Ayers Rock (mt.), N. Terr. ... E 5
Ayr, Queens. 8,787 ..... H 3
Bairnsdale, Vic. 9,459 ..... H 7
Ballarat, Vic. 35,681 ..... G 7
Ballarat, Vic. 71,930 ..... G 7
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Bankstown, N. S. W. 152,636 ..... K 4
Barcoo (creek), S. Aust. ..... F 5
Barkly Tableland, N. Terr. ... F 3
Barlee (lake), W. Aust. ..... B 5
Barrow (isl.), W. Aust. ..... A 4
Bass (str.) ..... H 7
Bates (mt.), Norfolk I. ..... L 5
Bathurst, N. S. W. 19,640 ... H 6
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Beenleigh, Queens. 7,839 .. J 5
Bega, N. S. W. 4,388 ..... J 7
Bendigo, Vic. 31,841 ..... G 7
Bendigo, Vic. *58,818 ..... G 7
Biloela, Queens. 4,643 ..... J 4
Blacktown, N. S. W. 181,139 ..... K 4
Blue Mountains, N. S. W. 55,877 ..... J 6
Bordertown, S. Aust. 2,138. F 7
Botany, N. S. W. 34,703 .... L 4
Botany (bay), N. S. W. ..... L 4
Bougainville (cape), W. Aust. ..... D 2
Bougainville (reef), Coral Sea Is. Terr. ..... H 3
Boulder-Kalgoorlie, W. Aust. 19,848 ..... C 6
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Bowen, Queens. 7,663 ..... H 3
Bowling Green (cape), Queens. ..... H 3
Box Hill, Vic. 47,579 ..... L 7
Bridgetown, W. Aust. 1,521 ..... B 6
Brighton, Vic. 33,697 ..... L 7
Brisbane (cap.), Queens. 942,836 ..... K 3
Brisbane, Queens. *1,028,527 ..... K 3
Brisbane Water, N. S. W. 71,983 ..... J 6
Broad (sound), Queens. ..... H 4
Broadmeadows, Vic. 103,540 ..... L 6
Broken Hill, N. S. W. 26,913 ..... G 6
Broome, W. Aust. 3,666 .... C 3
Bruce (mt.), W. Aust. ..... B 4
Brunswick, Vic. 44,464 ..... K 7
Buccaneer (arch.), W. Aust.. C 3
Bulloo (riv.), Queens. ..... G 5
Bunbury, W. Aust. 21,749 .. B 6
Bundaberg, Queens. 32,560 ..... J 4
Burnside, S. Aust. 37,593 .. E 8
Burwood, N. S. W. 28,896 .. K 4
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Camberwell, Vic. 85,883 ... L 7
Campbelltown, S. Aust. 43,084 ..... E 8
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Canterbury, N. S. W. 126,741 ..... K 4
Cape Barren (isl.), Tas. ..... H 8
Cape York (pen.), Queens... G 2
Capricorn Group (isls.), Queens. ..... J 4
Carnarvon, W. Aust. 5,053. . A 4
Carnegie (lake), W. Aust. ... C 5
Carpentaria (gulf) ..... F 2
Carrathool, N. S. W. †1,210. G 6
Cascade, Norfolk I. ..... L 5
Casino, N. S. W. 9,743 ..... J 5
Caulfield, Vic. 69,922 ..... L 7
Ceduna, S. Aust. 2,794..... E 6
Cessnock-Bellbird, N. S. W. ‡38,724 ..... J 6
Charleville, Queens. 3,523 . H 5
Charters Towers, Queens. 6,823 ..... H 4
Chelsea, Vic. 26,034 ..... L 8
Chinchilla, Queens. 3,161 .. J 5
Clarence (riv.), N. S. W. ..... J 5
Clarence (str.), N. Terr. ..... E 2
Cloncurry, Queens. 1,961 .. G 4
Cobar, N. S. W. 3,583 ..... H 6
Cobourg (pen.), N. Terr. ..... E 2
Coburg, Vic. 55,035 ..... K 7
Coffs Harbour, N. S. W. 16,020 ..... J 6
Colac, Vic. 10,587 ..... G 7
Collie, W. Aust. 2,667 ..... B 6
Collinsville, Queens. 2,756 . H 4
Condobolin, N. S. W. 3,355 ..... H 6
Coober Pedy, S. Aust. 2,078 ..... E 5
Cooma, N. S. W. 7,978 ..... H 7
Coonamble, N. S. W. 3,090. H 6
Coopers (Barcoo) (creek), S. Aust. ..... G 5
Cootamundra, N. S. W. 6,540 ..... H 6
Coral Sea Islands Territory . J 3
Corfield, Queens. ..... G 4
Corinda, Queens. ..... K 3
Coringa (isls.), Coral Sea Is. Terr. ..... H 3
Cowan (lake), W. Aust. ..... C 6
Cowra, N. S. W. 7,900 ..... H 6
Croydon, Vic. 36,210 ..... M 7
Cumberland (isls.), Queens. ..... H 4
Cunnamulla, Queens. 1,627 ..... H 5
Curtis (isl.), Queens. ..... J 4
Cuvier (cape), W. Aust. ..... A 4
Dalby, Queens. 8,784 ..... J 5
Dampier (arch.), W. Aust. .. B 4
Dampier Land (reg.), W. Aust. ..... C 3

‡City and suburbs. †Population of District. *Population of metropolitan area.


AUSTRALIA
INDONESIA
TIMOR SEA
ARAFURA SEA
INDIAN OCEAN
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Timor
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Darwin
Arnhem Land
Gulf of Carpentaria
Kimberley Plateau
Great Sandy Desert
Gibson Desert
Great Victoria Desert
Tanami Desert
Nullarbor Plain
NORTHERN TERRITORY
WESTERN AUSTRALIA
SOUTH AUSTRALIA
Perth
Fremantle
Geraldton
Carnarvon
Port Hedland
Broome
Derby
Kununurra
Wyndham
Katherine
Alice Springs
Ayers Rock
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Mt. Woodroffe
Mt. Ziel
Coober Pedy
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Whyalla
Port Pirie
Port Lincoln
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Shark Bay
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Dalwallinu
Moora
Wyalkatchem
Merredin
Narrogin
Pingelly
York
Northam
Toodyay
Goomalling
Chittering
Wagin
Collie
Katanning
Nyabing
Gnowangerup
Kojonup
Bridgetown
Manjimup
Mt. Barker
Denmark
Bald Head
Pt. D'Entrecasteaux
Cape Leeuwin
Cape Naturaliste
Margaret River
Busselton
Hopetoun
Ravensthorpe
Lake Grace
Newdegate
Southern Cross
Coolgardie
Kambalda
Laverton
Warburton Aboriginal Reserve
Yalata Aboriginal Reserve
Nullagine
Wittenoom
Tom Price
Paraburdoo
Ashburton Downs
Onslow
Roebourne
Karratha
Port Hedland
De Grey
Goldsworthy
Broome
Roebuck B.
Derby
Fitzroy Crossing
Halls Creek
Wyndham
Kununurra
Timber Creek
Victoria River Downs
Daly Waters
Tennant Creek
Hooker Creek
Wave Hill
Elliott
Anthony Lagoon
Lake Woods
Borroloola
Roper River Mission
Lajamanu
Yuendumu
Papunya
Kintore
Haasts Bluff
Hermannsburg
Areyonga
Kulgera
Finke
Oodnadatta
Marla
Coober Pedy
Roxby Downs
Olympic Dam
Andamooka
Woomera
Maralinga
Ceduna
Streaky Bay
Smoky Bay
Elliston
Port Lincoln
Tumby Bay
Cowell
Whyalla
Port Augusta
Quorn
Hawker
Leigh Creek
Lake Eyre
Lake Frome
Broken Hill
Menindee
Wilcannia
Cobar
Nyngan
Bourke
Walgett
Moree
Narrabri
Gunnedah
Tamworth
Armidale
Inverell
Glen Innes
Grafton
Coffs Harbour
Kempsey
Port Macquarie
Taree
Newcastle
Gosford
Sydney
Wollongong
Nowra
Batemans Bay
Bega
Eden
Merimbula
Orbost
Lakes Entrance
Sale
Bairnsdale
Traralgon
Morwell
Warragul
Melbourne
Geelong
Colac
Warrnambool
Portland
Hamilton
Ararat
Stawell
Horsham
Nhill
Dimboola
Swan Hill
Mildura
Wentworth
Balranald
Hay
Deniliquin
Echuca
Shepparton
Wangaratta
Wodonga
Albury
Corowa
Cootamundra
Young
Cowra
Orange
Bathurst
Lithgow
Katoomba
Penrith
Parramatta
Liverpool
Campbelltown
Wollongong
Nowra
Ulladulla
Batemans Bay
Moruya


PAPUA NEW GUINEA
Port Moresby
New Guinea
Torres Strait
Thursday Island
Prince of Wales I.
Cape York
Endeavour R.
NORTHERN PENINSULA ABORIGINAL RESERVE
Mapoon Mission Station
Weipa
Duyfken Pt.
Albatross B.
Pera Head
Direction I.
Gulf of Carpentaria
York Peninsula
C. Keerweer
Coen
ABORIGINAL RESERVES
Roper River Mission
Arnhem Land Aboriginal Reserve
Elliott
L. Woods
Anthony Lagoon
Hatches Creek
Harts Range
Simpson Desert
Lake Eyre
Lake Frome
Coral Sea
Coral Sea Islands Territory
Great Barrier Reef
Willis Islets
Lihou Reef and Cays
Tryon I.
Chesterfield Reefs
Marion Reef
Tasman Sea
Pacific Ocean
Northern Territory
Queensland
New South Wales
Victoria
Tasmania
Australian Capital Territory
Bass Strait
Tropic of Capricorn
Great Dividing Range
Great Barrier Reef
Great Sandy Desert
Great Victoria Desert
Great Australian Bight
Gulf of Carpentaria
Arafura Sea
Timor Sea
Coral Sea
Wellesley Is.
Mornington I.
Bentinck I.
Sweers I.
Groote Eylandt
Bickerton I.
Melville I.
Croker I.
Port Essington
Cobourg Peninsula
Darwin
Katherine
Tennant Creek
Alice Springs
Ayers Rock
Mt. Olga
Uluru Nat. Park
Mt. Conner
Finke
Oodnadatta
Marree
Coober Pedy
Woomera
Roxby Downs
Olympic Dam
Andamooka
Port Augusta
Whyalla
Spencer Gulf
Gulf St. Vincent
Eyre Peninsula
Yorke Peninsula
Kangaroo I.
Adelaide
Mt. Lofty Ranges
Murray Bridge
Renmark
Barmera
Loxton
Berri
Waikerie
Murray R.
Darling R.
Broken Hill
Menindee
Wilcannia
Cobar
Nyngan
Bourke
Walgett
Lightning Ridge
Goondiwindi
Dirranbandi
St. George
Surat
Roma
Charleville
Cunnamulla
Thargomindah
Eromanga
Quilpie
Windorah
Birdsville
Boulia
Mt. Isa
Cloncurry
Julia Creek
Richmond
Hughenden
Charters Towers
Townsville
Ayr
Home Hill
Bowen
Collinsville
Proserpine
Whitsunday I.
Cumberland Is.
Mackay
Sarina
Walkerston
Marian
Clermont
Emerald
Blackwater
Rockhampton
Yeppoon
Capricorn Group
Gladstone
Biloela
Moura
Monto
Bundaberg
Childers
Maryborough
Hervey Bay
Fraser I.
Gympie
Caloundra
Maroochydore
Nambour
Kingaroy
Murgon
Chinchilla
Dalby
Tara
Toowoomba
Redcliffe
Moreton I.
Brisbane
Beenleigh
Gatton
Gold Coast
Warwick
Stanthorpe
Tenterfield
Lismore
Casino
Murwillumbah
Byron
Grafton
Inverell
Glen Innes
Armidale
Coffs Harbour
Kempsey
Port Macquarie
Taree
Gunnedah
Tamworth
Narrabri
Moree
Walgett
Warren
Narromine
Dubbo
Gilgandra
Mudgee
Wellington
Orange
Bathurst
Lithgow
Blue Mts.
Newcastle
Maitland
Cessnock
Bellbird
Hunter Valley
The Entrance
Brisbane Water
Sydney
Wollongong
Nowra
Batemans Bay
Goulburn
Yass
Canberra
Queanbeyan
Tumut
Albury
Wodonga
Wangaratta
Shepparton
Echuca
Swan Hill
Finley
Deniliquin
Conargo
Wagga Wagga
Griffith
Leeton
Narrandera
Cootamundra
Young
Temora
Cowra
Forbes
Parkes
Condobolin
Hillston
Ivanhoe
Wilcannia
Broken Hill
Menindee
Mildura
Balranald
Carrathool
Hay
Deniliquin
Murray Br.
Pinnaroo
Ouyen
Tallem Bend
Murray Mouth
Victor Harbor
Goolwa
Port Elliot
Encounter Bay
Kangaroo I.
Penneshaw
Flinders I.
Furneaux Group
C. Barren I.
Hunter Is.
Smithton
Wynyard
Burnie
Somerset
Devonport
George Town
Launceston
Mt. Ossa 5,305 ft. (1617 m.)
Tasmania
Macquarie Harbour
Queenstown
Strahan
Hobart
New Norfolk
Glenorchy
Richmond
Port Davey
S.W. Cape
S.E. Cape
Tasman Peninsula
Port Arthur
Eaglehawk Neck
Oyster Bay
Great Oyster Bay
Freycinet Peninsula
Schouten I.
Maria I.
Swansea
Triabunna
Orford
Sorell
Cape Pillar
Storm Bay
Bruny I.
Victoria
Melbourne
Geelong
Portland
Warrnambool
Port Fairy
Port Phillip Bay
Western Port
Phillip Island
Wilsons Promontory
Corner Inlet
Ninety Mile Beach
Lakes Entrance
Gippsland Lakes
Mallacoota
Cape Howe
Mt. Kosciusko 7,310 ft. (2225 m.)
Australian Alps
Snowy Mts.
Murrumbidgee R.
Lachlan R.
Macquarie R.
Namoi R.
Gwydir R.
Barwon R.
Warrego R.
Paroo R.
Cooper Creek
Diamantina R.
Georgina R.
Thomson R.
Flinders R.
Gilbert R.
Norman R.
Leichhardt R.
Mitchell R.
Ord R.
Victoria R.
Fitzroy R.
Burdekin R.
Herbert R.
Daly R.
Roper R.
Limmen Bight R.
Gulf of Carpentaria
Arafura Sea
Timor Sea
Coral Sea
Tasman Sea
Pacific Ocean
Moreton Bay
Brisbane
Ipswich
Logan City
Redcliffe
Caboolture
Gold Coast
Sydney
Parramatta
Blacktown
Liverpool
Penrith
Campbelltown
Wollongong
Newcastle
Maitland
Cessnock
Hunter Valley
Port Stephens
Norfolk Island
Melbourne
Geelong
Ballarat
Bendigo
Mildura
Swan Hill
Shepparton
Wangaratta
Albury
Wodonga
Port Phillip Bay
Western Port
Phillip Island
Mornington Peninsula
Dandenong
Frankston
Werribee
Melbourne Airport
Tullamarine
Essendon
Brunswick
Northcote
Fitzroy
Collingwood
Richmond
Hawthorn
Kew
Camberwell
Box Hill
Doncaster and Templestowe
Croydon
Ringwood
Knox
Waverley
Malvern
Caulfield
Oakleigh
Moorabbin
Sandringham
Springvale
Dandenong
Hampton Park
Cranbourne
Chelsea
Mordialloc
Port Melbourne
South Melbourne
Williamstown
Altona
Altona Bay
Point Cook
Port Phillip Bay
Brighton
Beaumaris
Ricketts Pt.
Beaconsfield Bay
Hobsons Bay
Yarra R.
Maribyrnong R.
Moonee Ponds Creek
Merri Creek
Darebin Creek
Plenty R.
Moreton Bay
Bald Hills
Sandgate
Albany Creek
Boondall
Aspley
Nudgee
Geebung
Zillmere
Banyo
Mitchelton
Stafford
Kalinga
Enoggera
Newmarket
Windsor
Hendra
Wynnum
Ascot
Ithaca
Normanby
Ashgrove
Balmoral
Morningside
Manly
Fairfield
Brisbane
East Brisbane
Murarrie
St. Lucia
Camp Hill
Carina
Indooroopilly
Kenmore
Yeronga
Greenslopes
Graceville
Ekibin
Holland Park
Corinda
Moorooka
Mount Gravatt
Cooparoo
Plaza
Oxley
Sherfield
Darra
Inala
Fruitgrove
Warwick
Mona Vale
Terrey Hills
Narrabeen
Ku-ring-gai
Dee Why
Hunters Hill
Lane Cove
Mosman
North Sydney
Willoughby
Manly
Concord
Drummoyne
Sydney
Leichhardt
Woollahra
Waverley
South Sydney
Botany
La Perouse
Cape Banks
Cronulla
Sutherland
Kogarah
Rockdale
Bankstown
Marrickville
Kingsford-Smith Airport
Canterbury
Ashfield
Strathfield
Burwood
Auburn
Lidcombe
Granville
Parramatta
Prospect Res.
Holroyd
Fairfield
Villawood
Bonnyrigg
Liverpool
Georges R.
Cooks R.
Botany Bay
Norfolk Island
Pt. Vincent
Duncombe Bay
Anson Pt.
Anson B.
Cascade
Steel's Pt.
Middledale
Rocky Pt.
Kingston
Pt. Ross
Blackbourne
Bell Bay
Collins Hd.
Sydney
Bounty Bay
Pacific Ocean
Tasman Sea
Coral Sea
East of 135° Greenwich
135°
140°
145°
150°
155°
160°
165°
10°
15°
20°
25°
30°
35°
40°

Dandaragan, W. Aust. †1,748 ... B 6
Dandenong, Vic. 54,962 ... M 7
Darling (riv.), N. S. W. ... G 6
Darwin (cap.), N. Terr. 56,482 ... E 2
Deniliquin, N. S. W. 7,354 ... G 7
D'Entrecasteaux (pt.), W. Aust. ... B 7
Derby, W. Aust. 2,933 ... C 3
Devonport, Tas. 21,424 ... H 8
Diamantina (riv.), Queens. ... G 4
Dirk Hartogs (isl.), W. Aust. ... A 5
Disappointment (lake), W. Aust. ... C 4
Doncaster and Templestowe, Vic. 90,660 ... L 7
Drysdale (riv.), W. Aust. ... D 3
Dubbo, N. S. W. 28,986 ... H 6
Dundas (str.), N. Terr. ... E 2
Echuca, Vic. 7,943 ... G 7
Eddystone (pt.), Tas. ... H 8
Elizabeth, S. Aust. 32,608 ... E 7
Elliston, S. Aust. †1,345 ... E 6
Eltham, Vic. 34,648 ... L 6
Emerald, Queens. 4,628 ... H 4
Encounter (bay), S. Aust. ... F 7
Endeavor (str.), Queens. ... G 2
Enfield, S. Aust. 66,797 ... D 7
Esperance, W. Aust. 6,375 ... C 6
Essendon, Vic. 56,380 ... K 7
Everard (lake), S. Aust. ... E 6
Exmouth (gulf), W. Aust. ... A 4
Eyre (lake), S. Aust. ... F 5
Eyre (pen.), S. Aust. ... F 6
Fairfield, N. S. W. 129,557 ... K 4
Farquhar (cape), W. Aust. ... A 4
Fitzroy (riv.), Queensland ... J 4
Fitzroy, Vic. 19,112 ... L 7
Fitzroy (riv.), W. Aust. ... C 3
Flattery (cape), Queens. ... H 2
Flinders (riv.), Queens. ... G 3
Flinders (range), S. Aust. ... F 6
Flinders (isl.), Tas. ... H 7
Flinders (bay), W. Aust. ... A 6
Footscray, Vic. 49,756 ... K 7
Forbes, N. S. W. 8,029 ... H 6
Fraser (isl.), Queens. ... J 4
Fremantle, W. Aust. 22,484 ... B 2
Frome (lake), S. Aust. ... G 6
Furneaux Group (isls.), Tas. 1,039 ... H 8
Gairdner (lake), S. Aust. ... F 6
Garden (isl.), W. Aust. ... A 2
Gascoyne (riv.), W. Aust. ... A 4
Gawler, S. Aust. 9,433 ... F 6
Gawler (ranges), S. Aust. ... F 6
Geelong, Vic. 14,471 ... G 7
Geelong, Vic. *137,173 ... G 7
Geelong West, Vic. 14,823 ... G 7
Geelvink (chan.), W. Aust. ... A 5
Geographe (chan.), W. Aust. ... A 4
Georgina (riv.), Queens. ... F 4
Geraldton, W. Aust. 20,895 ... A 5
Gibson (des.), W. Aust. ... C 4
Gilbert (riv.), Queens. ... G 3
Gladstone, Queens. 22,083 ... J 4
Glen Innes, N. S. W. 6,052 ... J 5
Glenorchy, Tas. 41,019 ... H 8
Gold Coast, Queens. 135,437 ... J 5
Goomalling, W. Aust. 600 ... B 6
Goondiwindi, Queens. 3,576 ... H 5
Goulburn, N. S. W. 21,755 ... J 6
Goulburn (isls.), N. Terr. ... E 2
Grafton, N. S. W. 17,005 ... J 5
Great Australian (bight) ... D 6
Great Barrier (reef) ... H 2
Great Dividing (range), N. S. W. ... J 6
Great Dividing (range), Queens. ... H 4
Great Sandy (Fraser) (isl.), Queens. ... J 5
Great Sandy (des.), W. Aust. ... C 4
Great Victoria (des.) ... D 5
Gregory (riv.), Queens. ... F 3
Grenville (cape), Queens. ... G 2
Griffith, N. S. W. 13,187 ... H 6
Gunnedah, N. S. W. 8,909 ... H 6
Gympie, Queens. 10,768 ... J 5
Halls Creek, W. Aust. 966 ... D 3
Hamersley (range), W. Aust. ... B 4
Hamilton, Vic. 9,751 ... G 7
Hamilton, The (riv.), S. Aust. ... E 5
Hatches Creek, N. Terr. ... F 4
Hawthorn, Vic. 30,689 ... L 7
Hay, N. S. W. 2,958 ... H 6
Heidelberg, Vic. 64,757 ... L 7
Hermannsburg, N. Terr. 541 ... E 4
Hinchinbrook (isl.), Queens. ... H 3
Hindmarsh, S. Aust. 7,593 ... D 8
Hobart (cap.), Tas. 128,603 ... H 8
Hobart, Tas. *168,359 ... H 8
Holroyd, N. S. W. 80,116 ... K 4
Home Hill, Queens. 3,138 ... H 3
Hornsby, N. S. W. 111,081 ... K 3
Horsham, Vic. 12,034 ... G 7
Houtman Abrolhos (isls.), W. Aust. ... A 5
Hughenden, Queens. 1,657 ... G 4
Hunter (isls.), Tas. ... G 8
Hurstville, N. S. W. 64,910 ... K 4
Ingham, Queens. 5,598 ... H 3
Innisfail, Queens. 7,933 ... H 3
Inverell, N. S. W. 9,734 ... J 5
Investigator (str.), S. Aust. ... F 7
Investigator Group (isls), S. Aust. ... E 6
Ipswich, Queens. 68,297 ... J 3
Jamestown, S. Aust. 1,384 ... F 6
Joseph Bonaparte (gulf) ... D 2
Kadina, S. Aust. 2,943 ... F 6
Kalgoorlie, W. Aust. 9,145 ... C 6
Kangaroo (isl.), S. Aust. 3,515 ... F 7
Katanning, W. Aust. 4,413 ... B 6
Katherine, N. Terr. 3,737 ... E 2
Keerweer (cape), Queens. ... G 2
Kempsey, N. S. W. 9,037 ... J 6
Kimberley (plat.), W. Aust. ... D 3
King (isl.), Tas. 2,592 ... G 7
King (sound), W. Aust. ... C 3
Kingaroy, Queens. 5,134 ... J 5
King Leopold (range), W. Aust. ... D 3
Kingscote, S. Aust. 1,236 ... F 7
Kingston, Norfolk I. ... L 6
Kogarah, N. S. W. 46,322 ... K 4
Koolan (isl.), W. Aust. ... C 3
Kosciusko (mt.), N. S. W. ... H 7
Kulgera, N. Terr. ... E 5
Ku-ring-gai, N. S. W. 101,501 ... K 4
Kwinana-New Town, W. Aust. 12,355 ... B 2
Lacepede (bay), S. Aust. ... F 7
Latouche Treville (cape), W. Aust. ... C 3
Launceston, Tas. 31,273 ... H 8
Launceston, Tas. *64,555 ... H 8
Leeuwin (cape), W. Aust. ... A 6
Leichhardt, N. S. W. 57,332 ... L 4
Leichhardt (riv.), Queens. ... F 3
Leigh Creek, S. Aust. 1,635 ... F 6
Leonora, W. Aust. 524 ... C 5
Lévêque (cape), W. Aust. ... C 3
Lihou (cays), Coral Sea Is. Terr. ... J 3
Limmen Bight (riv.), N. Terr. ... F 3
Lismore, N. S. W. 24,033 ... J 5
Lithgow, N. S. W. 12,793 ... J 6
Liverpool, N. S. W. 92,715 ... K 4
Londonderry (cape), W. Aust. ... D 2
Longreach, Queens. 2,971 ... G 4
Lyons (riv.), W. Aust. ... B 4
Macdonald (lake), W. Aust. ... D 4
Macdonnell (ranges), N. Terr. ... E 4
Mackay (lake), N. Terr. ... D 4
Mackay, Queens. 35,361 ... H 4
Macquarie (harb.), Tas. ... G 8
Magdelaine (cays), Coral Sea Is. Terr. ... H 3
Maitland, N. S. W. 38,865 ... J 6
Mandurah, W. Aust. 10,978 ... B 3
Manifold (cape), Queens. ... J 4
Manly, N. S. W. 37,080 ... L 4
Mareeba, Queens. 6,309 ... G 3
Marion, S. Aust. 66,580 ... D 8
Marrickville, N. S. W. 83,448 ... L 4
Maryborough, Queens. 20,111 ... J 5
Maryborough, Vic. 78,518 ... G 7
McLeod (lake), W. Aust. ... A 4
Meekatharra, W. Aust. 989 ... B 5
Melbourne (cap.), Vic. 2,578,759 ... K 7
Melbourne, Vic. *2,722,817 ... K 7
Melville (isl.), N. Terr. ... E 2
Melville (cape), Queens. ... G 2
Merredin, W. Aust. 3,520 ... B 6
Mildura, Vic. 15,763 ... G 6
Mitcham, S. Aust. 60,309 ... D 8
Mitchell (riv.), Queens. ... G 3
Montague (sound), W. Aust. ... C 2
Monte Bello (isls.), W. Aust. ... A 4
Moora, W. Aust. 1,677 ... B 6
Moorooka, Queens. 8,740 ... K 3
Mordialloc, Vic. 27,869 ... L 7
Moree, N. S. W. 10,459 ... H 5
Moreton (bay), Queens. ... K 2
Mornington (isl.), Queens. ... F 3
Mossman, Queens. 1,614 ... G 3
Mount Gambier, S. Aust. 18,193 ... G 7
Mount Isa, Queens. 23,679 ... F 4
Mount Magnet, W. Aust. 618 ... B 5
Mount Morgan, Queens. 2,974 ... J 4
Mudgee, N. S. W. 6,015 ... J 6
Mullewa, W. Aust. 918 ... B 5
Murchison (riv.), W. Aust. ... B 5
Murray (riv.) ... G 6
Murray Bridge, S. Aust. 8,664 ... F 7
Murrumbidgee (riv.), N. S. W. ... H 6
Murwillumbah, N. S. W. 7,807 ... J 5
Musgrave (ranges), S. Aust. ... E 5
Naracoorte, S. Aust. 4,758 ... F 7
Narrabri, N. S. W. 7,296 ... J 6
Narrandera, N. S. W. 5,813 ... H 6
Narrogin, W. Aust. 4,969 ... B 6
Naturaliste (chan.), W. Aust. ... A 5
Nedlands, W. Aust. 20,257 ... B 2
Newcastle, N. S. W. 135,207 ... J 6
Newcastle, N. S. W. *389,207 ... J 6
New Norfolk, Tas. 6,243 ... H 8
New South Wales (state) 5,126,217 ... H 6
Norfolk Island (terr.) 2,180 ... L 5
Norman (riv.), Queens. ... G 3
Norseman, W. Aust. 1,895 ... C 6
Northam, W. Aust. 6,791 ... B 6
Northampton, W. Aust. 750 ... A 5
Northcote, Vic. 51,235 ... L 7
North Dandalup, W. Aust. ... B 3
Northern Territory 123,324 ... E 3
North Sydney, N. S. W. 48,500 ... L 4
North West (cape), W. Aust. ... A 4
Nowra-Bomaderry, N. S. W. 17,887 ... J 6
Nullarbor (plain) ... D 6
Nunawading, Vic. 97,052 ... L 7
Nuyts (cape), S. Aust. ... E 6
Nyngan, N. S. W. 2,485 ... H 6
Onslow, W. Aust. 594 ... B 4
Orange, N. S. W. 27,626 ... H 6
Ord (riv.), W. Aust. ... D 3
Ossa (mt.), Tas. ... H 8
Otway (cape), Vic. ... G 7
Parkes, N. S. W. 9,047 ... H 6
Parramatta, N. S. W. 130,943 ... K 4
Penrith, N. S. W. 108,720 ... J 6
Pera (head), Queens. ... G 2
Perth (cap.), W. Aust. 809,035 ... B 2
Perth, W. Aust. *898,918 ... B 2
Peterborough, S. Aust. 2,575 ... F 6
Pine Creek, N. Terr. 214 ... E 2
Port Adelaide, S. Aust. 35,407 ... D 7
Port Augusta, S. Aust. 15,566 ... F 6
Port Hedland, W. Aust. 12,948 ... B 3
Portland, Vic. 9,353 ... G 7
Port Lincoln, S. Aust. 9,846 ... F 6
Port Macquarie, N. S. W. 19,581 ... J 6
Port Melbourne, Vic. 8,585 ... K 7
Port Phillip (bay), Vic. ... K 7
Port Pirie, S. Aust. 14,695 ... F 6
Prahran, Vic. 45,018 ... L 7
Preston, Vic. 84,519 ... L 7
Queensland (state), 2,295,123 ... G 4
Quorn, S. Aust. 1,049 ... F 6
Randwick, N. S. W. 116,202 ... L 4
Recherche (arch.), W. Aust. ... C 6
Redcliffe, Queens. 42,223 ... J 5
Renmark, S. Aust. 3,475 ... G 6
Richmond, Vic. 24,506 ... L 7
Ringwood, Vic. 38,665 ... M 7
Rockdale, N. S. W. 83,719 ... K 4
Rockhampton, Queens. 50,146 ... H 4
Rockingham, W. Aust. 24,932 ... B 2
Roebourne, W. Aust. 1,688 ... B 4
Roma, Queens. 5,706 ... H 5
Ryde, N. S. W. 88,948 ... K 4
Saint Kilda, Vic. 49,366 ... L 7
Saint Vincent (gulf), S. Aust. ... D 8
Sale, Vic. 12,968 ... H 7
Salisbury, S. Aust. 86,451 ... E 7
Sandringham, Vic. 31,175 ... L 7
Sarina, Queens. 2,815 ... H 4
Shark (bay), W. Aust. ... A 5
Simpson (des.), N. Terr. ... F 4
Snowy (riv.), Vic. ... H 7
South Australia (state) 1,285,033 ... F 6
South Perth, W. Aust. 31,524 ... B 2
Spencer (gulf), S. Aust. ... F 6
Springvale, Vic. 80,186 ... L 7
Stanthorpe, Queens. 3,966 ... J 5
Stirling, W. Aust. 161,858 ... B 2
Strathfield, N. S. W. 25,882 ... K 4
Streaky (bay), S. Aust. ... E 6
Sturt (des.), Queens. ... G 5
Sunshine, Vic. 94,419 ... K 7
Sutherland, N. S. W. 165,336 ... K 5
Swan Hill, Vic. 8,398 ... G 7
Sydney (cap.), N. S. W. 2,876,508 ... L 4
Sydney, N. S. W. *3,204,696 ... L 4
Talbot (cape), W. Aust. ... D 2
Tamworth, N. S. W. 29,657 ... J 6
Tanami (des.), N. Terr. ... E 3
Taree, N. S. W. 14,697 ... J 6
Tasman (pen.), Tas. ... H 8
Tasmania (state) 418,957 ... H 8
Tea Tree Gully, S. Aust. 67,237 ... E 7
Temora, N. S. W. 4,350 ... H 6
Tennant Creek, N. Terr. 3,118 ... E 3
Tenterfield, N. S. W. 3,402 ... J 5
The Entrance (The Entrance-Terrigal), N. S. Wales 37,891 ... J 6
Thomson (riv.), Queens. ... G 4
Thursday Island, Queens. 2,283 ... G 2
Timor (sea) ... D 2
Toowoomba, Queens. 63,401 ... J 5
Torrens (lake), S. Aust. ... F 6
Torres (str.), Queens. ... G 2
Townsville, Queens. 86,112 ... H 3
Traralgon, Vic. 18,057 ... H 7
Tully, Queens. 2,728 ... H 3
Unley, S. Aust. 35,844 ... D 8
Van Diemen (cape), N. Terr. ... D 2
Victor Harbor, S. Aust. 4,522 ... F 7
Victoria (state) 3,832,443 ... G 7
Victoria (riv.), N. Terr. ... E 3
Wagga Wagga, N. S. W. 36,837 ... H 7
Wangaratta, Vic. 16,202 ... H 7
Warrnambool, Vic. 21,414 ... G 7
Warwick, Queens. 8,853 ... J 5
Waverley, N. S. W. 61,575 ... L 4
Waverley, Vic. 122,471 ... L 7
Wellesley (isls.), Queens. ... F 3
Western Australia (state) 1,273,624 ... B 5
West Torrens, S. Aust. 45,099 ... D 8
Whitsunday (isl.), Queens. ... H 4
Whyalla, S. Aust. 30,518 ... F 6
Williamstown, Vic. 25,554 ... K 7
Willoughby, N. S. W. 52,120 ... K 3
Wilsons (prom.), Vic. ... H 7
Winton, Queens. 1,259 ... G 4
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Wollongong, N. S. W. *222,539 ... J 6
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Woodville, S. Aust. 77,634 ... D 7
Woollahra, N. S. W. 51,659 ... L 4
Woomera, S. Aust. 1,658 ... F 6
Wyndham, W. Aust. 1,509 ... D 3
Wynnum, Queens. 10,794 ... L 2
Wynyard, Tas. 4,582 ... H 8
Yampi Sound, W. Aust. ... C 3
York, W. Aust. 1,136 ... B 6
York (cape), Queens. ... G 2
York (sound), W. Aust. ... C 2
Yorke (pen.), S. Aust. ... F 7
Young, N. S. W. 6,906 ... H 6



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Uluru, better known as Ayers Rock, swells up from the central Australian plain. Aboriginals hold Uluru sacred.

than 500 recorded species, is the most noteworthy example. Angiosperms became the dominant flora in place of gymnosperms (nonflowering seed plants, such as conifers), which persist conspicuously only in restricted areas. The continent's flora can be classified into three elements: Australian, Indo-Malayan, and Antarctic.

The most common species characterizing the Australian element of the flora belong to four families, or groups of genera: Myrtaceae (myrtle family), Proteaceae (protea family), Leguminosae (or Fabaceae, pea or pulse family), and Rutaceae (rue family). None of these is endemic. Of the five families that are endemic, none is widely distributed. Endemic genera, on the other hand, are abundant, aggregating some 500. Of particular interest besides *Eucalyptus* (in the family Myrtaceae) are *Darwinia* (Myrtaceae); *Banksia*, *Hakea*, and *Petrophila* (Proteaceae); *Pultenaea*, *Dillwynia*, and *Jacksonia* (Leguminosae); and *Boronia* (Rutaceae). All of these are exclusively shrubs except for *Eucalyptus* (usually trees), *Banksia* (trees or shrubs), and *Hakea* (shrubs or low trees). The Australian element is the characteristic flora of those parts of the continent with pronounced dry seasons.

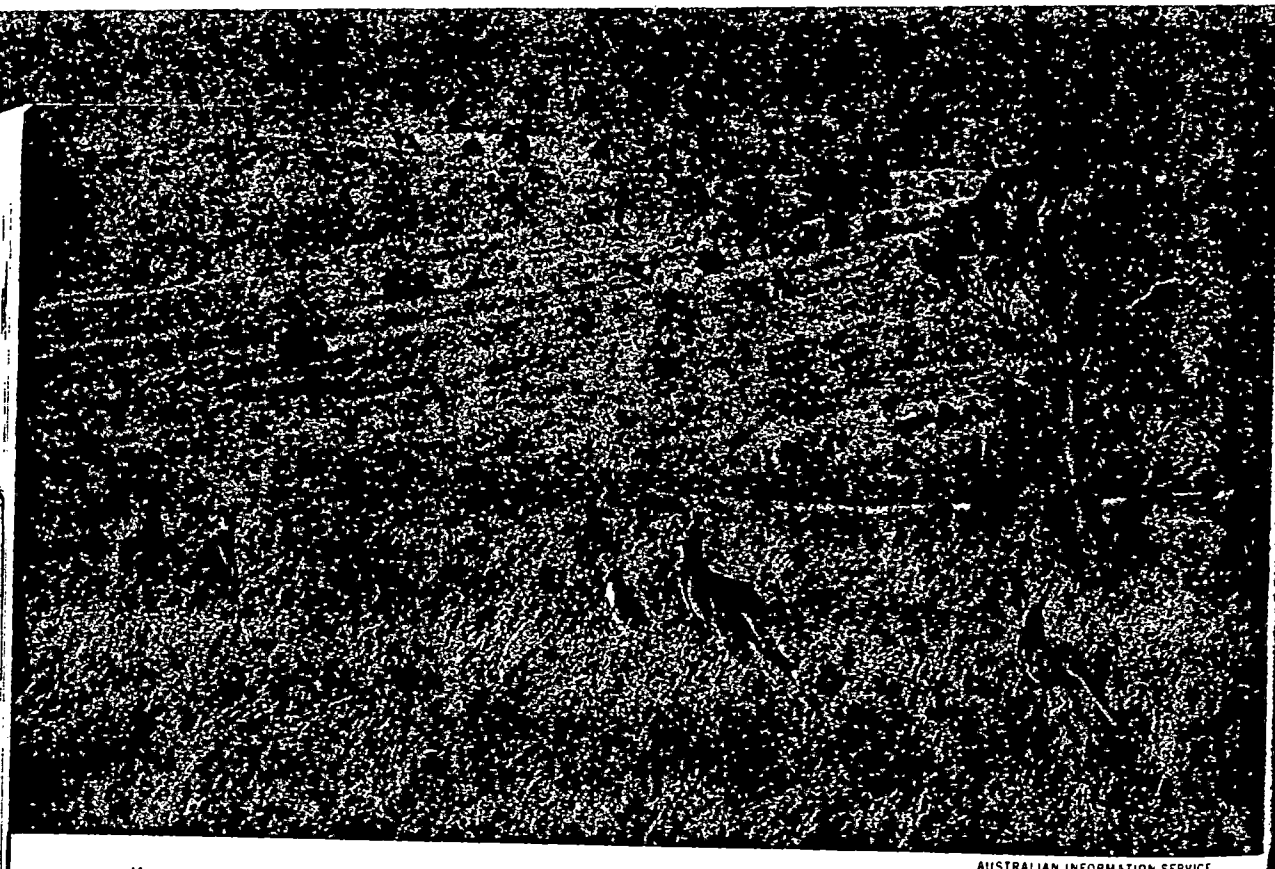
The components of the Indo-Malayan element are related to the flora of Southeast Asia. Speciation among this group likewise occurred in Australia, so that most of the present species are endemic. They constitute the rain forests of the north and northeast.

The Antarctic element is typified by *Nothofagus*, the Southern Hemisphere beeches found also in South America and represented in Antarctica by fossil pollens. In Australia this genus is confined to the colder parts of the mainland and to Tasmania.

Although the Australian continent is relatively dry, it is well vegetated, and many perennial species capable of surviving under desert conditions have evolved there. Even in the driest localities, where rainfall averages only 5 inches (130 mm) a year, perennial swards of saltbush (*Atriplex*) occur on the heavier soil types, while the sandy soils in such areas support scrubs of the mulga (*Acacia aneura*). A few dune areas are devoid of vegetation, while others are clothed with hummocks of the curious porcupine grass (*Triodia irritans*).

Areas that receive an average of at least 12 inches (300 mm) of rain each year are covered mostly with communities dominated by species of *Eucalyptus* or, in a few cases, by scrubs of *Acacia*. In the driest of these areas the eucalypts are dwarfed and assume a "mallee" form, which is characterized by the presence of a large, woody, underground lignotuber (root stock) producing many small stems usually less than 12 feet (4 meters) in height. With increased rainfall the height of the communities increases. Woodlands in which the trees are so spaced as to form a parkland occupy the areas of intermediate rainfall. Forests with trees taller than 300 feet (90 meters) develop in the wettest areas (the east coast and southwestern Western Australia), where the annual rainfall exceeds 30 to 40 inches (750–1,000 mm). As a rule, communities of different structural form are dominated by different species of *Eucalyptus*. Undershrubs and herbaceous plants occur below the trees. A general feature of all the species in these forests, woodlands, and mallees is the nature of the leaves, which are adapted to recurrent drought.

Interspersed among the tall *Eucalyptus* forests of eastern Australia are small areas of rain



AUSTRALIAN INFORMATION SERVICE

Kangaroos are among the native Australian animals that roam former farmland on a wildlife reserve near Canberra.

forest that are structurally similar to but floristically different from other tropical and subtropical rain forests. Occupying the soils of higher fertility, they are characterized by the broad, soft-leaved Indo-Malayan element of the flora. Small areas of beech-dominated rain forest (Antarctic element) are found at higher elevations on the mainland and in Tasmania.

Apart from desert and semiarid grasslands, only small areas of natural treeless grassland occur; these are found in central and southwestern Queensland and northern New South Wales. The dominant genera are *Astrebla* and *Stipa*. Most of the grassland used for grazing has been induced by the clearing of timber (chiefly *Eucalyptus*), followed by the introduction of fodder plants, notably clovers.

Australian plants as a whole are of little value as food, but timber is produced in abundance by certain species.

NOEL BEADLE
University of New England, Australia

ANIMAL LIFE

The native Australian fauna is one of the most interesting in the world. Long isolated and lacking competition from the superior types that developed in other parts of the world, it remained fundamentally unchanged until the arrival of Europeans late in the 18th century. Whereas the Aboriginal culture was adapted to sustain the native fauna, European agriculture and placental mammals modified or destroyed the old ecological balance in many areas.

Although the ancient fauna is best exemplified by the furred animals, it is by no means confined to them. The primitive shrimplike crustaceans *Phreatocopsis* and *Phreatoicus* are living fossils, and the inch-long bulldog ants (*Myrmecia*) exhibit many primitive insect features. The bivalve mollusk *Neotrigonia* is known in other parts of the world as a fossil shell, and the lungfish (*Neoceratodus*) and Port Jackson shark (*Heterodontus*) are among the last living remnants of an ancient type of fish.

Australia's peculiar furred animals, however, command the greatest popular interest. The unique egg layers (monotremes) and many of the varied forms of pouched mammals (marsupials) are restricted to the Australian continent. The monotremes are true, warm-blooded, fur-covered mammals that nourish their young with mother's milk. But their reproductive organs are so primitive that they lay leathery-shelled eggs—like the eggs of their reptilian ancestors—from which the young subsequently hatch. The platypus (*Ornithorhynchus anatinus*) is an aquatic animal with a flattened, naked muzzle similar to the bill of a duck. It lays two eggs each year in a nest made at the end of a long burrow in a riverbank; the eggs are nearly spherical and about a half inch (0.2 cm) in diameter. The echidnas, which are found in New Guinea as well as in Australia, are the only other egg-laying mammals known; they usually lay one egg each year.

The numerous species of Australian marsupials are very diverse and occupy many different habitats. The most salient of their anatomical peculiarities is the female's pouch, situated in the abdominal region and containing the teats of the mammary glands. The young, born in an imperfect condition, enter the pouch and remain there until they are fully developed. Small insectivorous-carnivorous marsupials, such as the marsupial "mice" (*Sminthopsis*) and "rats" (*Antechinus*), live under stones and logs. Slightly larger carnivorous forms, misleadingly called native cats (*Dasyurus*), make their homes in hollow logs. The related Tasmanian devil (*Sarcophilus*) and Tasmanian wolf (*Thylacinus*) are as large as a terrier and an Alsatian dog, respectively. Truly arboreal forms embrace some 23 species of Australian opossums ranging in size from the tiny dormouse opossum (*Cercartetus* or *Cercaërtus*), a nectar- and insect-eating animal, to the gray opossum (*Trichosurus*), which is as



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Cascading waters roar through a tropical rain forest in northern Queensland.

large as a domestic cat and is herbivorous. Some opossums have developed a parachutelike body membrane that allows them to glide from one tree to another. Allied to the opossums is the well-known koala (*Phascolarctos*), a large-eared arboreal marsupial that feeds on eucalyptus leaves. The kangaroolike animals (Macropodidae), characterized by their hopping gait on elongated hind legs, comprise more than 50 species. The rat kangaroos (subfamily Potoroinae) may be smaller than rabbits, while the larger species (*Macropus*) can measure 6 feet (1.8 meters) tall when erect.

Although the flight of birds has allowed much intercontinental migration, a typical Austral-Pacific avifauna flourishes. Flightless birds possessing primitive features are represented by the cassowary (*Casuarius*) and the emu (*Dromaius*). The former is confined to the rain forest of the northeast, while the latter is distributed throughout the continent. Parrots (Psittaciformes) are well represented, with more than 50 species, and the nectar-feeding honey eaters (Meliphagidae) number about 70 species. The lyrebird (*Menura*), a mimic of tremendous voice, is found in the damp fern gullies of the eastern coastal mountains. Bowerbirds (Ptilonorhynchidae) are noted for the distinctive structures built by the male to attract females. Such groups as quail, birds of prey, waterfowl, waders, and perching birds are well represented.

The reptilian fauna is typically Indo-Australian. Geckos (Gekkonidae), monitor lizards (Varanidae), dragons (Agamidae), and skinks (Scincidae) are widely distributed. There are no true adders (Viperidae), but many species of elapid snakes (Elapidae) with toxic venom are present. The largest of these, the taipan (*Oxyuranus*), reaches a length of 11 feet (3.5 meters), and species such as the tiger snake (*Notechis*), the copperhead (*Denisonia*), the brown snake (*Demansia*), and the death adder (*Acanthophis*) are all lethal, although few exceed 5 feet (1.5 meters) in length. The python family (Boidae) is represented by the Queensland python (*Liasis*), which attains a length of 21 feet (6.4 meters), and some 10 species of smaller rock pythons (*Liasis*), carpet snakes (*Morelia*), and rock snakes (*Aspidites*).

C. W. Brazenor
National Museum of Victoria

ENVIRONMENTAL CONCERNS

Beginning in the 1960's, recognition of a wide range of environmental issues led to active and widely publicized debate in Australia on

A scuba diver explores the Great Barrier Reef, a system of coral reefs and islands lining coastal Queensland.

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Lake Pedder, in the wilderness of southwestern Tasmania, was formed by damming the Gordon River for hydropower.

aspects of the universal problem of balancing economic with ecological interests. Perceived threats to the natural environment included urban sprawl; emissions from automobiles, power stations, and factories; wood cutting; the encroachment of new mining operations, dams, and settlement on wilderness areas; and, as part of general nuclear concerns, the mining of uranium. With responsibility in the broad field shared between the state and the federal governments, a succession of legislative initiatives created new organizations to handle individual aspects of the problem. At the same time, public participation in the formulation of advice grew, with citizen action groups and labor unions in the vanguard.

All states have ministers responsible for matters pertaining to the protection of the urban environment, rural and wilderness areas, and the historical heritage. Each ministry commands an array of enforcement agencies. At the national level, environmental issues were recognized in 1971 (in a department styled Home Affairs and Environment). Environmental impact reporting has been introduced as a prelude to all major development, and rational use of resources has become an objective. Federal-states councils on the environment and on conservation meet regularly to monitor progress, discuss standards, and coordinate broad policy direction.

R. M. YOUNGER
Author of "Australia and the Australians"

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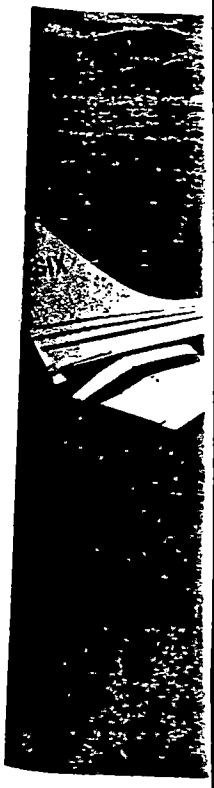
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2. The People

With a population of 15 million Australia is one of the world's most sparsely inhabited countries, averaging 5 persons per square mile (2 per sq km). Even more striking is the concentration of people in a few coastal cities, notably Sydney and Melbourne, which together account for 40% of the national population. Moreover, the state capitals, all of which are on the seacoast, contain at least 40% of their states' populations—Melbourne (Victoria), Perth (Western Australia), and Adelaide (South Australia) each accounts for over 70% of its population; Sydney (New South Wales), for over 60%; Brisbane (Queensland), for over 45%; and Hobart (Tasmania), for over 40% of its population.

In number of inhabitants, Sydney (the largest city) and Melbourne rank in the 3 million category; Brisbane, Perth, and Adelaide have about 1 million people each. No other city has above 500,000, and Canberra, the national capital, contains about half that number.

Population becomes increasingly sparse with distance from the major urban centers. The 19th century aim of establishing a large rural community had only qualified success despite persistent efforts; a second-generation drift to the cities resulted from the stringencies faced by smallholders because of uncertain rainfall. The usual sheep and cattle grazing and grain growing were augmented in a few districts with irrigation crops, while along the northeast coastal strip sugarcane was successfully established. However, the vaster areas continued to be used principally for wool production (in the temperate zone) and beef production (in the tropics), employing minimal labor.

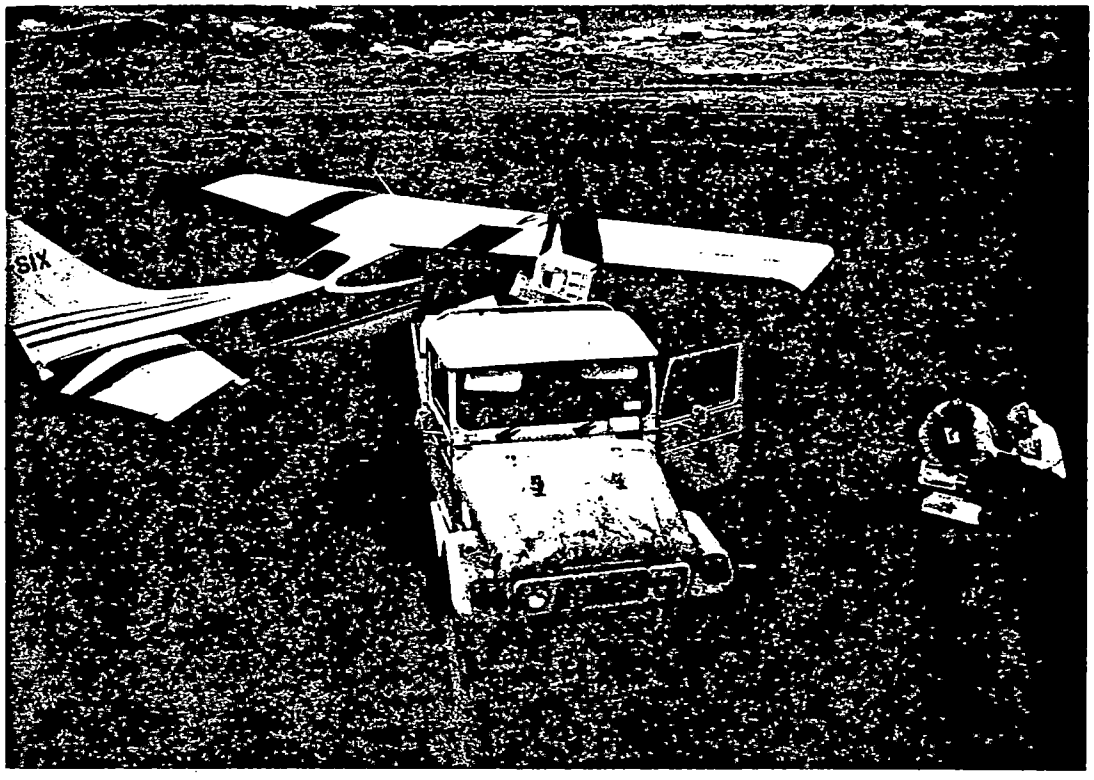


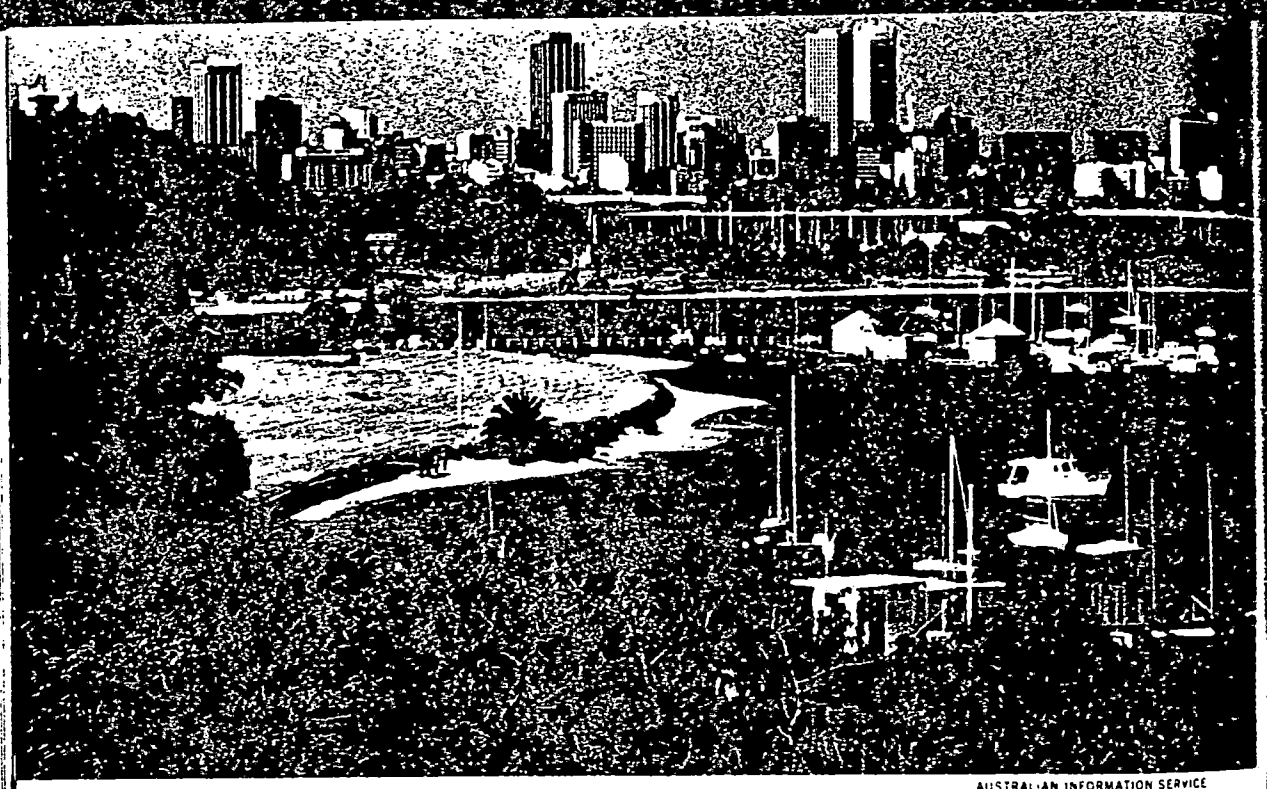
© STEVE VIDLER-LEO DE WYS

Relaxation is the keynote in Manly, where the bustle of Sydney is left behind for leisurely shopping and sunning.

The weekly mail-and-supplies plane services a remote Aboriginal settlement in central Australia.

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AUSTRALIAN INFORMATION SERVICE

Central Perth overlooks a broadening of the Swan River. The city is the capital of Western Australia.

Urban growth rates in the 1980's varied among the major centers of population. Sydney, Melbourne, Adelaide, and Hobart all slowed to about a 1% increase a year, approximating the national average. By contrast, Perth grew by almost 3% a year and Brisbane by over 2%, while the city of Gold Coast, a leisure and resort center near Brisbane, registered an annual increase of 6% to 7%. In all three places growth reflected the drawing power of sunshine, although in Perth prosperity from Western Australian mining was a major factor. Canberra also exceeded the overall level of population increase. Meanwhile the smaller cities and towns serving rural areas were steadily losing population.

A considerable degree of residential relocation occurs, much of it intrastate or local and in particular within individual cities. By official estimate, over a five-year span 43% of the population move, the most mobile group being those between the ages of 20 and 34.

The "graying" of Australia has been running a few years behind a similar trend in other Western nations. However, men over 65 and women over 60 (pensionable ages) are expected to increase in number by more than 2% a year to become the fastest-growing age component of the population.

Immigration and Population Growth. Modern Australia was created under the stimulus of active, officially sponsored immigration, which produced a continuing inflow of people attracted by the opportunities offered in a "new" country experiencing broad economic expansion. Of the two components of population growth, natural increase declined from 150,000 a year in the early 1970's to about 130,000 a year after 1976, while net immigration showed marked volatility.

The non-Aboriginal population is almost wholly of European origin and is composed principally of descendants of immigrants from the United Kingdom and Ireland, supplemented after 1945 by arrivals from other countries. In the 1980's, 79% of the people were Australian-born. Of the 21% born overseas, Europe accounted for about 15%, Asia 3%, and other areas (including the Americas) 3%. The prime source of those of foreign origin was the United Kingdom and Ireland (37%). About 9% were born in Italy, 5% in Greece and Yugoslavia each, 3% in Germany and the Netherlands each, and 2% in Poland; New Zealand represented 6% of the foreign-born, with miscellaneous countries making up the remaining 30%. Approximately 50,000 Vietnamese reached Australia after 1975, as did hundreds of thousands of settlers from other Asian countries.

Immigration has long been a crucial factor in Australia's population growth. Because of the slowness of family formation in the early decades of settlement, when men outnumbered women by more than two to one, the Australian-born did not equal the overseas-born in number until the 1870's. By the 1880's, however, natural increase had become the prime source of growth. Nevertheless, people drawn to Australia as a land of opportunity were a major factor in enlivening the national outlook and accelerating national development.

Population building gained major attention when concerns about an underpeopled continent were loudly voiced—in 1905–1914, the 1920's, and the early 1940's. In the 1950's and 1960's new arrivals numbered well over 100,000 a year; a similar number of births over deaths provided a total annual growth rate of over 2%. In 1966 the traditional "restrictive" immigration policy applying to the entry of non-Europeans was relaxed, and Asians began to be admitted. All told, between 1945 and 1975 approximately 3.5 million people arrived in Australia, including more than 350,000 refugees.

By the early 1970's, Australia's newcomers were no longer seen as candidates for simple or

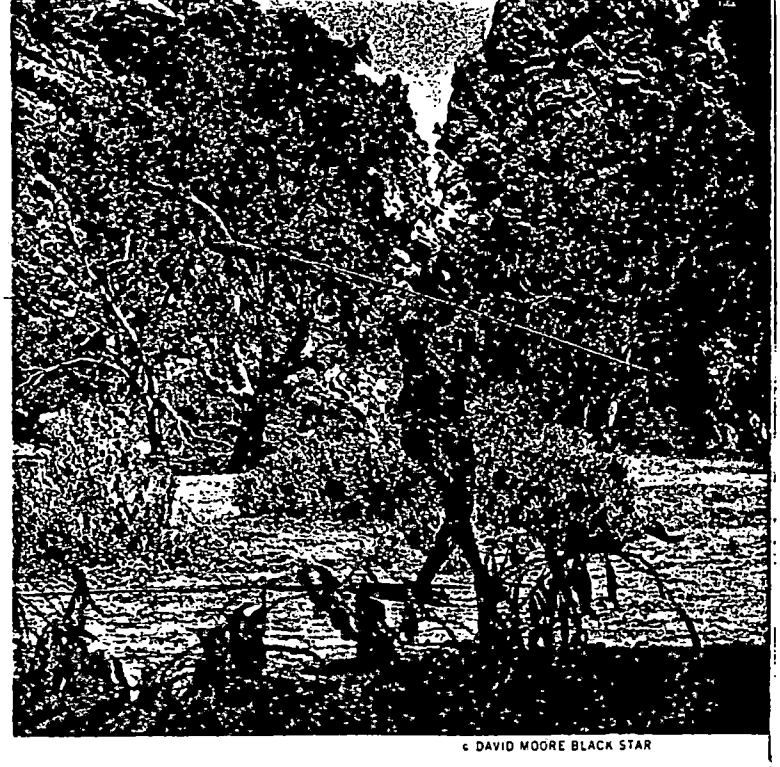


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© ROBERT FRERCK WOODFIN CAMP & ASSOC

The Aboriginal at right hunts with a spear and woomera (spear thrower), as his ancestors did for thousands of years. Many Aboriginals, such as the tractor driver above, have abandoned traditional ways to live like other Australians.



© DAVID MOORE BLACK STAR

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certain "assimilation." With the realization that their manifold backgrounds and qualities were assets, official policy moved away from the long-held assimilation aim and adopted in its place the development of a multicultural society to augment the old Anglo-Australian tradition.

People of Greek, Italian, Polish, and other European backgrounds were the most numerous of those outside the Anglo-Australian tradition; the Pacific region was represented by Vietnamese, Koreans, and Filipinos. The clustering of many of the newcomers in particular sections of major cities (especially Sydney and Melbourne) led to some shopping streets taking on an ethnic character, with restaurants and stores in the styles of their Greek, Italian or Vietnamese owners.

Meanwhile, Australians of Aboriginal descent were making increasing contributions to national life. See AUSTRALIAN ABORIGINALS.

Total annual population increase has settled at about 175,000, or 1.1%, with births at about 240,000 and deaths 110,000 and a net overseas migration gain of under 50,000. Government policies remain the key determinant in overall immigration levels as well as in the composition of the immigrant body, since all non-Australians except New Zealand citizens require official approval for admission for residence. Official policy continues to favor Europe as the prime source of new settlers. Following 1971, however, the government placed greater emphasis on recruiting skilled workers, on admitting refugees, and on reuniting families, regardless of the region of origin.

The Society. The widely held view that the Australian prototype is a tall, rangy, sun-browned countryman with wide-brimmed hat and faithful horse and dog has been robbed of much of its validity. Whatever was true in the past, the average Australian is a city dweller within a predominantly urban—or, more precisely, suburban—society. The hinterland is sparsely settled and continues to lose people to the cities. Perhaps the only thing the idealized prototype and the statistical reality have in common is that both manifest an egalitarian attitude.

Australia's relatively classless society persists even though economic differences have widened with a burgeoning of middle- to upper-income earners. At the same time social services have been expanded to reduce the pressures of poverty and personal hardship at the low end of the scale. The egalitarianism of the community is more obvious in the Australian's attitude than in an objective assessment of the individual's financial or social circumstances.

High ethical standards and levels of skills in professional and working life have come to be expected. At the same time, a dislike of social pretense and personal affectation is accompanied by a tendency to support the underdog, even if a person is thought to deserve that status. This attitude fosters self-confidence and a sense of comradeship that leads to unaffected, cordial, and equal collaboration among individuals. It makes for personally generous and hospitable people, and generates a social mobility akin to that in the United States and Canada.

Australians continue to hear of their perceived virtues from the media. Visitors—whether travelers or journalists—usually praise their qualities, and this is echoed in Australia's press. An editorial in the nationally circulated *Australian* newspaper lauded Australians' tolerant attitudes in a country "made up of ethnic communities which are a microcosm of the world." Australians were found to be placid, happy, and "comfortable with people of any color from any part of the world," and this made them "rich in more ways than just affluence: we are rich in mind and spirit and are some of the most pleasant people [in a world] which is increasingly becoming ugly and violent." Such satisfaction with the Australian condition reflects values widely present in the community.

A special factor in the Australian scene is that in spite of geographical spread its people are



AUSTRALIAN INFORMATION SERVICE

An Australian Rules football match pits two clubs in Victoria. Soccer and rugby are also popular in Australia.

conditioned more by their socioeconomic environment than by any regional traits. In comparison with other, similarly large nations, Australian internal differences are slight. The Australian colonies that later federated as Commonwealth states were settled at much the same time by quite similar types of people, and in general terms the political economies of all followed quite similar lines. Distinctions have remained minor: houses show more or less comparable variations (according to cost) in the various geographical regions, and the Australian accent—perhaps most clearly characterized by a distinctive broad *a*—varies considerably with education level but very little from state to state.

Australian living styles equate quite closely with those in California and continue to follow the same trends: Australia has become a society attuned to the automobile, with a propensity for outdoor living, an affinity for shopping centers and supermarkets, hi-fi and skiing, and a more relaxed life-style than that of most of the Western world's crowded older cities. Even in dress Australians take their cues from California.

Current life-styles have been shaped by a consumer-oriented economy in an industrially advanced nation. Many of the more rigid values that motivated earlier generations have been muted. For the great majority, church influence has waned or vanished; social problems arising from broken homes have increased; a "new poor" composed of the least aggressive and least protected groups has resulted from inflation and rises in costs. Yet success and confidence have remained boldly evident: rapid upward movement has marked the course of the economically powerful.

With the broad economic advance, disparate groups have pressed for improvement in their particular condition. Mixed in with economic matters have been concerns over a multitude of issues for which political leadership was expected to provide beneficent solutions. Clearly fewer people are attracted to the older, frugal, work-oriented standards; some commentators believe that, coupled with the uncertainties unleashed by technological change and loss of old dedication to the family, "a feeling of discontinuity [has] led to a society with exceptional emphasis on sectional rather than broader concerns." Responsive politicians have become involved in an unending endeavor to placate special-interest groups as part of a generally pliant attitude to change. As one instance, the importance of "gray power" has made itself felt as the community's median age moved steadily higher.

Sport plays an important part in the Australian way of life. The climate is generally favorable to outdoor activities, and the countrywide stress on proficiency has led to the provision of excellent sports facilities. These in turn have resulted in widespread participation in sports throughout the community and the development of outstanding performers in international competition in many fields.

The trade-union movement remains a major shaping force, being of great political as well as industrial significance. Since the late 1960's it has been increasingly cohesive and forceful in its aims and vocal in pressing its claims. It expresses itself politically through the Labor party, which is directly fostered by the union movement and is more subject to union influence than is its British counterpart. Although Australia was in the vanguard of sociopolitical experimentation with secret and compulsory voting, pensions for the elderly and the disabled, unemployment compensation, and compulsory school attendance, the general attitude of Australians to political and community affairs has been pragmatic rather than doctrinaire.

Australians favor public ownership of services of many kinds, from electric power and telephones to insurance. Sometimes (as in case of banking, airline operation, and insurance) the services operate in competition with private enterprises; in other cases (such as the railways, telephone system, and urban public transit) they are government monopolies. The Labor party has long pressed for an increasing range of publicly owned services, especially at the federal level, and has installed Medicare as a universal, tax-supported health fund. In the states, all parties have generally acquiesced in the extension of government involvement.

The social changes characterizing the 1960's placed greater strains on the Liberal party's ability to hold the middle ground of politics as Labor realigned its appeal from the artisan to the white-collar worker and the young graduate. In the early 1970's and again in the 1980's the tilt was enough to win power for Labor on a broader scale than in the past. At the same time support by the public for the unions began to falter. In the mid-1980's opinion polls suggested that public views had moved quite strongly against unionism as a result of the stronger exercise of "union power" through strikes and more subtle forms of industrial disruption.



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Surfboat crews battle the breakers in a race off Sydney.

As institutions of long standing were being challenged, leading commentators asked, "What's wrong with Australia?" Critics questioned the power exercised by interest groups over governments and the nation's "sclerotic" industrial tribunals headed by the Arbitration Commission. Employer groups and unions were seen as resisting change in ways that precluded improvement in productivity and hence a real growth of the economy. One leading economic commentator believed that unions had grown beyond their proper role; and that their aggrandizement had been matched by the Conciliation and Arbitration Commission, which allegedly had often ignored the public interest and instead had rewarded those groups that appeared before it if they served the "commission's own self-aggrandizement."

In attitudes toward international affairs the Australian has been moving steadily away from the parochial outlook that was dominant until the 1950's. Reluctantly the average citizen has been trying to come to terms with the implications of a resource-rich, underpopulated Australia being located in a region of crowded developing nations aspiring to higher status in the world. For years the sense of geographical isolation from kindred Western nations brought a closer identification with, and understanding of, American views and policies. By the mid-1980's, however, strong undercurrents of opinion had developed to lessen the rapport with the United States shown in defense cooperation and the installation of U.S. space-monitoring and communications facilities on Australian soil. A strong disarmament and antinuclear movement has been present among young people especially. Overall, however, Australians recognize their international responsibilities, and their tendency to avoid a doctrinaire approach to international affairs appears unimpaired.

The Australian constitution guarantees religious freedom. It provides that there shall be no established church and no law imposing any religious observances or prohibiting the free exercise of any religion. Australians of English or Scottish descent are generally Protestants, while those of Irish descent, as well as many of the more recent European settlers, are mainly Roman Catholics. Since World War II the only substantial change in the overall pattern has been the increase in number of Catholic, Lutheran, and Greek Orthodox adherents and the appearance of significant Islamic and Buddhist groups—all due to immigration.

In more remote areas the Uniting Church—mainly former Methodists and Presbyterians—has replaced individual Protestant denominations; in the cities the fusion has not been so complete. Roman Catholic schools are widespread, and in the larger cities each Protestant denomination supports schools giving religious instruction that supplement the secular state schools. Various universities have residential colleges of the principal religious groups.

A steadily increasing number of Australians acknowledge no religious affiliation whatsoever. At the 1981 census 11% of respondents stated that they had no religion, and an equal percentage chose to ignore the question of their faith. The ratios of those acknowledging affiliation with Christianity were: Episcopalian 26%, Roman Catholic 26%, Uniting Church 5%, Presbyterian 4.5%, Orthodox 3%, and Lutheran and Baptist 1.5% each. Among non-Christians, Muslims numbered 76,000, Jews 62,000, and Buddhists 35,000.

The position of women has received much attention. Although throughout Australia's development women have shown spirit and a willingness to share in the pioneering tradition, their role generally was long that of homemaker. Ow-



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Queensland's popular Gold Coast resort area takes its name from the soaring value of prime seaside real estate.

ing to many factors but perhaps, most important, that of female economic dependence, the social freedom and vigor of the traditional Australian way of life was more noticeable among men than women. The latter were slower than their American and Canadian counterparts to play a significant public role in society.

A greater sense of independence began to be shown by women from the early 1970's on, when "women's rights" became a major issue. Campaigners against the lingering effects of what was long a strongly male-oriented society succeeded in obtaining most feminist legislative aims, including abortion "on demand" and less complicated divorce procedures. Advancement of women's role and status was seen as requiring a strengthened economic base for them. Although their percentage of the labor force had risen (with two thirds of all married women gainfully employed), pressure was exerted toward achieving greater equality in pay and responsibility as well in employment opportunities. By the early 1980's women had statistical support for their claim to a greater role in national life: for the first time, women outnumbered men in the overall population count.

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3. Education

Although Australia is not densely populated, it has a wide range of educational institutions that provide instruction resembling, both in variety and standards, that found in other English-speaking countries. Between 1872 and 1893 all six of the prefederation colonies introduced universal and compulsory education.

Schooling is universally compulsory from ages 6 to 15 (16 in Tasmania). Three out of four children attend public schools, where tuition is free; nongovernment primary and secondary schools charge fees. Throughout Australia, student-teacher ratios are about 20 to 1. Most schools outside the state-run systems are operated by the Roman Catholic Church. Most others are under the auspices of other religious groups.

The educational and cultural aspects of Australian life find their primary source in the British tradition and outlook, although American influence has been considerable. In some directions, however, Australia has departed markedly from both the British and the American pattern. In most cases these departures have been brought about by geographical, economic, and governmental conditions. Centralization of educational control, for instance, is due partly to a determination to provide a good primary education for all children, partly to the scattered nature of much of the population's settlement, and partly to reliance on state action for equalizing opportunities for all.

Public Education. Along with other social services, public education was left in the hands of the six states when the federal government was constituted in 1901. The federal government is responsible for education only within the federal territories. Each state system operates under a professional head, who is responsible to the state minister of education and a highly specialized staff. All administrators and the teachers in the public school systems enjoy permanent tenure of office.

Each state system is centralized to a high degree. New South Wales and Queensland have regional directorships, but this has resulted in improved services in the outlying areas rather than in any transfer of autonomy to the regions involved. Since all state public school expenditure is derived from the consolidated revenues of the state, even the large cities play no part in controlling schools or in deciding what schools will be established in their areas.

Although the federal government has no constitutional responsibility for conducting schools, it has steadily increased its participation in matters relating to education. The first formal body,

the Universities Commission, was set up in 1943 to organize postwar education and training for ex-servicemen and women. The Education Act of 1945 gave permanent form to the commission and also established the Commonwealth Office of Education as the central coordinating body for Australia's contact with UNESCO and other international groups in education.

The first significant extension of federal funding in the field of education came in the mid-1960's, after a rising school population, which reached 2 million in 1959, had begun to place pressure on the various school systems. A report to the government by Professor Peter Karmel in 1973 resulted in greatly augmented support for both public and nongovernment schools and universities. The generous supplementary funding for the state school systems (8% of federal budget outlays) was soon contrasted with the greater numbers of students failing to pass basic educational tests; as a result, quality of instruction became an issue.

In 1981 the Senate education committee, concerned over a rise in youth unemployment and reports of school dropouts being ill equipped to enter the work force, criticized schools for giving too little emphasis to preparing young people for the job market and for allowing standards in reading and mathematics to decline. The committee found evidence of a mismatch between community expectations and the system as revealed by the students it produced, with teachers unappreciative of practical needs. The committee expressed its hope for an increase in the "overall proficiency" of early schooling and suggested that parents and employers be allowed to become more active participants in the school process.

In 1983, Karmel headed a new committee. Its report offered some criticism of the effort of schools and teachers but excused the overall performance, blaming the difficulties on major social and economic pressures placed on schools. However, the report called for keener monitoring of the funds given: in particular, schools should be obliged to show every three years that the money had actually produced improvements in student performance and higher attainment by girls in major subject areas. Meanwhile, some commentators pointed to the schools' success in inducing more students to remain beyond the compulsory age limit and suggested that since the early 1970's a "notable rise" had occurred in the population's educational attainment.

Private Education. Church schools usually are controlled by their school councils, and even within a single denomination these may be appointed in a variety of ways. The schools sponsored by the Roman Catholic Church are organized more closely, however, and in each state the church authorities appoint a director of education.

All private schools began to receive federal grants with the early 1970's. The proportion of students attending nongovernment schools rose steadily, with parents impressed in particular by the greater discipline provided by them.

Higher Education. Australia has a three-tiered system of higher education. Students go from secondary schools to a university, a "college of advanced education," or a college of "technical and further education" (TAFE). Nothing corre-

Houses and pools jostle for space in Perth, where population growth and mining wealth touched off land speculation.

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sponds exactly to the American college or junior college.

Admission to a university is gained through statewide examinations over which the university has direct or indirect control. No degree-granting institution can be set up without legislative authority, nor do any private universities operate without state aid. However, the universities exercise full authority over their own affairs. From 1973 on, all universities and colleges of advanced education were tuition free.

The oldest of Australia's score of universities are Sydney (1850) and Melbourne (1853). By 1911 each state had a public or private university in its capital city. The federally operated Australian National University in Canberra was established in 1946.

"Colleges of advanced education," which have greater vocational emphasis than universities, were set up in the late 1970's. Serving special community needs, some 40 institutions offer degrees, diplomas, or associate diplomas in a great variety of fields.

The TAFE system consists of about 1,000 institutions and annexes. Technical colleges offer training in the major industrial skills and in commercial, artistic, and domestic occupations. Generally these institutions provide apprenticeship and trade and technical studies in addition to commercial and general courses. Some farm areas have agricultural colleges with boarding facilities and programs geared to rural studies.

Special Education. Correspondence schools are run by state departments of education for children whose daily attendance at school is prevented by distance, illness, or physical disability. For children living in isolated locations, "schools of the air" supplement correspondence instruction, using two-way radio links between teachers and pupils.

An outback School of the Air student receives two-way radio lessons supplementing education by correspondence.

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Each state offers nonformal classes for adults. The system of control and the proportion of funds received from government grants for adult education vary from state to state. Both vocational and nonvocational interests are served in wide-ranging programs. Some states have taken special steps to reach rural areas and populations by means of summer schools, traveling troupes, exhibitions, and the like.

Foreign students and specialists are assisted under various international plans and scholarship programs, especially those related to Commonwealth and South Pacific nations. The Australian-American Educational Foundation facilitates interchanges of lecturers, research scholars, postgraduate students, and teachers.

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4. Cultural Life

Basic to the development of the creative arts in Australia has been the interplay of local influences on a fundamentally British heritage. Much attention and support have been given to the expression of distinctively Australian qualities in all art forms. The Australia Council, founded in 1968 and funded by the federal government, has backed this concept as one aspect of its policy of promoting excellence in the arts. State governments, local authorities, and some large corporations also have lent generous support to creative endeavor.

The genesis of an indigenous culture dates from the final decades of the 19th century, when tentative attempts were made to develop an Australian approach to the arts in keeping with an emerging sense of national unity among the six British colonies that federated in 1901. This awareness in turn sprang from an outlook on life that in all essentials was the same throughout the continent and transcended colonial separatism. At first the effort of opening up a new continent had consumed the energies of the people. With little time for leisure and reflection, few Australians could develop or appreciate valid interpretations of the countryside and of the new living patterns that were so dissimilar from those of the British homeland. In the late 1880's, a century after the initial settlement began, a feeling of national identity emerged; Australia was no longer seen as something alien, to which adjustment had to be made. Rather, it had become a familiar setting with positive qualities to be treated with understanding. Initially the newfound sense of nationhood was rather aggressively asserted, with marked self-consciousness and exaggeration. Several decades passed before artists and writers were able to delineate the Australian scene without flaunting it.

Literature. The first descriptions of Australia were written with an eye to publication in



NATIONAL GALLERY OF NEW SOUTH WALES

Coming to terms with the land is an abiding theme in Australian art and literature. An example of this may be found in Russell Drysdale's *Sunday Evening*, painted in about 1941.

Britain. Some of the early explorers were gifted writers, and during the gold rush period of the latter half of the 19th century a host of visitors to the continent competently recorded their observations and impressions.

In Australian literary history, poetry preceded the short story and the short story preceded the novel. The first poet of significance was Charles Harpur, who in the mid-19th century applied himself with some success to the interpretation of the country and its scenes, but the later work of Henry Kendall had more authentic poetic quality. An interesting early work of fiction was *The Recollections of Geoffry Hamlyn* (1859), an idealistic pioneering story by Henry Kingsley. *For the Term of His Natural Life* (1874), a reconstruction of life in early convict settlements by Marcus Clarke, and *The Mystery of a Hansom Cab*, a detective story by Fergus Hume, were among the few early writings of lasting interest. Although there were recognizable Australian characters in the exciting *Robbery Under Arms* (1888) by Rolf Boldrewood (pseudonym of Thomas Alexander Browne), neither he nor contemporary authors established real contact with the country or the developing ideas of its people.

By the 1880's, however, a marked trend toward the creation of a distinctively Australian manner was apparent. Habits of life and thought brought from Britain had begun by that time to show cumulative change, the sense of a separate life had grown with the increasing proportion of Australian-born among the population, and the emergence of a national consciousness had set the stage for the development of a national literature. A definitive expression of this trend came with the growth of the *Bulletin*, a weekly founded in 1880 by John Haynes and John Feltham Archibald. Through this medium writers interpreted Australians for themselves, and a folk culture based on the pastoral hinterland began to emerge. The "bush idiom," in which Australian speech is particularly rich, was absorbed into writing and brought into print a multitude of expressions developed in the outback.

The first notable Australian literary form was the bush ballad, but the same characteristics later shaped the short story. The new writing was the product of a pioneering land, and the writers were themselves engaged in the practical work of its development. Their output was simple and sometimes crude, but it was individual and, above all, vital. Among the first balladists was Adam Lindsay Gordon, whose influence on those who followed was strong. Perhaps the greatest of the balladists—certainly the most popular—was Andrew Barton ("Banjo") Paterson, but Henry Lawson was the outstanding figure of the movement. Lawson was also the author of short stories, in which he was perhaps supreme. His compassion and realism touched many persons of succeeding generations, who have considered him the voice of much that is finest in the Australian tradition.

The printing of short stories in periodicals was sometimes followed by collections in book form, and *The Bulletin Story Book* (1901) contained the work of 60 writers. Encouragement for authorship in longer forms was scant, however, and few early novelists appeared. Only one is notable: Joseph Furphy, who as Tom Collins wrote *Such Is Life* (1903), a work of exceptional complexity and breadth. Furphy himself described it as "democratic" in temper with an "offensively Australian" bias. Meanwhile, in 1901, Miles Franklin published her first novel, *My Brilliant Career*, portraying a young woman determined to pursue an independent life in a male-oriented society.

Among the poets born in the second half of the 19th century, Victor Daley early established a reputation as a lyricist, but the work of John Shaw Neilson and Hugh McCrae proved more durable. McCrae stands as the most accomplished verbal artist of his generation, although his contemporaries William Baylebridge (pseudonym of William Blocksidge) and Bernard O'Dowd were poets of intellectual force. Another intellectual, and a poet almost entirely divorced from his environment, was Christopher Brennan. Furnley Maurice (pseudonym of



AUSTRALIAN INFORMATION SERVICE

Peter Weir's film *Picnic at Hanging Rock* (1975) was based on an Australian novel inspired by an Australian painting. The film was the first from "down under" to win rave reviews overseas.

Frank L. T. Willmot) can be said to have been the first to develop a style that was at once poetically acceptable and genuinely Australian. The poems of Dame Mary Gilmore showed a strong social content as well as a marked lyrical gift.

Among descriptive works, *We of the Never-Never* (1908) by Jeanne (Mrs. Aeneas) Gunn is a simple account of the author's experience in the Northern Territory in the early 1900's. *My Crowded Solitude* (1926) by Jack McLaren tells of the author's lonely life as a planter in northernmost Queensland. *The Confessions of a Beachcomber* (1908) by Edmund James Banfield won recognition, as did a later work, *The Pea Pickers* (1942) by Eve Langley. Also of interest is *On the Wool Track* (1910) by Charles E. W. Bean, which presents an engagingly veracious description of the dry pastoral country of New South Wales.

Based as it was on the secluded distinctiveness of the outback, the early national movement lost its momentum as modern transportation and communications developed. From 1905 to about 1925 little of note was produced in longer forms. An exception was *The Fortunes of Richard Mahony* (trilogy, 1917–1929), a classic treatment of the theme of immigration and assimilation, by Henry Handel Richardson (pseudonym of Henrietta Richardson).

Beginning in the late 1920's, however, a steady stream of novels of quality appeared. Among the earliest were Katharine Susannah Prichard's *Working Bullocks* (1926), set in Western Australia, and *A House Is Built* (1929) by M. Barnard Eldershaw (pseudonym of Marjorie Barnard and Flora Eldershaw in collaboration). Other notable works showing rare descriptive qualities were *The Passage* (1930) by Vance Palmer and *The Man Who Loved Children* (1941) by Christina Stead. One of several writers who employed authentic backgrounds was Frank Dalby Davison, whose stories are set mainly in the cattle country of southern Queensland. The central and northern interior regions formed the scene for works by William Hatfield and Arthur William Upfield, and the latter used that setting for detective stories that brought him a large following abroad. *Capricornia* (1939), the first major novel of Xavier Herbert, dealt with the mistreatment of Aboriginals.

Novels of Australia's developing urban life also made their appearance. Eleanor Dark, the first novelist to make use of latter-day urban scenes, published *Prelude to Christopher* (1934), *Return to Coolami* (1936), and other fiction with strong psychological overtones, while sociological implications were strong in novels of the Depression years by Kylie Tennant. *Flesh in Armour* (1932) by Leonard Mann, a story of Australian troops in World War I, is still the most notable Australian war novel. *We Were the Rats* (1944) by Lawson Glassop deals with the Tobruk campaign of 1941–1942 in North Africa. *The Winds Are Still* (1947) by John Hetherington concerns the escape of Australian soldiers from Greece following the German invasion, as is *The Sea Eagle* (1944) by James Aldridge. The English writer Nevil Shute introduced Australian settings for some of the popular novels he wrote after settling in the Commonwealth in 1950.

The range and volume of talented, perceptive work increased steadily as leading novelists enlarged their horizons. This trend was earliest and best exemplified in the work of Patrick White. With *The Tree of Man* (1955) and *Voss* (1957), both set in Australia but employing universal themes, he displayed a modern outlook in the use of psychological narrative and exploitation of language. His *Riders in the Chariot* (1961) was built around four misfits in suburban Sydney; his short-story collection *The Burnt Ones* (1964) dealt with rejection of the "illuminates" by the society in which they are placed. In *The Solid Mandala* (1966), White drew on a body of mythic and visionary material derived from Carl Jung's observations and writings; in subsequent fiction, including *The Eye of the Storm* and *The Cockatoos*, White extended his view of the struggle against the "dreary everyday life." In 1973, White was named Australia's first Nobel laureate for literature.

Meanwhile, three Australian writers established reputations abroad. The novelist Morris West wrote award-winning bestsellers such as *The Devil's Advocate* (1959) and *Shoes of the Fisherman* (1963). Shirley Hazzard reached a pinnacle with her novel *The Transit of Venus* (1980), an ambitious family narrative with multilayered meanings. Alan Moorehead, in *The White Nile* (1960) and *The Blue Nile* (1962) traced the exploration of Africa's longest river; his *Cooper's Creek* (1963) recounted a tragic epi-

sode of inland Australian exploration; and *The Fatal Impact* (1966) reassessed the European incursion into the South Pacific.

In poetry a new phase had opened in the 1930's with the appearance of Robert David FitzGerald and Kenneth Slessor, whose works revealed the rare gift each possessed for imparting color and creating images. They were joined in the 1950's by other mature poets—notably Judith Wright, a lyricist emphasizing imagery and commanding a rare mastery of technique; and Alec Derwent Hope, a sometimes wild romantic with a preference for severely classical forms. James McAuley won acclaim for his epic poem *Captain Quiros* (1964), and Vincent Buckley in *New Land for My Family* (1966) linked the quest for an earthly paradise with the dreams of Australian immigrants in general.

An assault on traditional unquestioning attitudes in Australia intensified in the early 1970's, extending beyond the mass media to books revealing a sense of unsatisfied quest: Ronald Conway's *The Great Australian Stupor* (1971) and Ian Moffit's *The U-Jack Society* (1972) portrayed a nation glorifying itself and obsessed with day-to-day affairs. With *The Female Eunuch* (1970), Germaine Greer came to rank as an international pacemaker in the advancement of women's status.

Several trends were evident in Australian literature by this time. Leading writers were showing greater awareness of the world scene, and the distinction between "Australian" and "international" writing blurred. The work of many of the newer authors—Thomas Keneally, Christopher Koch, David Malouf, Blanche d'Alpuget, Robert Drewe, and others—ranged between Australia and foreign countries in themes and settings. Increasingly novelists concerned themselves with the urban and suburban scene and the changes brought about by postwar immigration.

Generous grants and fellowships awarded by the Literary Board of the Australia Council spurred creativity. The interest in Australian films, many based on literary works or historical events, heightened international awareness of Australia's culture and helped authors find American and British publishers. Colleen McCullough's novel *The Thorn Birds* (1977) was on American bestseller lists for over a year. But the foreign market was not restricted to sagas of life on a sheep ranch early in the 20th century. David Ireland, for example, signed up his surrealistic *A Woman of the Future* (1979) in New York, as did Peter Carey his *Illywhacker* (1985), with a multitude of Australian colloquialisms working to its advantage. By then Australian literature was acknowledged to possess qualities that had made it a distinctive addition to the Western mainstream, and it was substantial and important enough to be studied at universities abroad.

Theater and Dance. The 1950's and 1960's brought a burgeoning of the nation's achievement in the performing arts. The Elizabethan Theatre Trust, created in 1954, provided sponsorship for drama, ballet, and opera. The National Institute of Dramatic Art, which followed, brought steady technical gains. The broad advance was extended in the years that followed.

From the earliest days of settlement, efforts were made to provide dramatic entertainment. The first play was an improvised performance (1789) of George Farquhar's *The Recruiting Officer*. In 1833 a properly constituted theater was opened in Sydney. A series of "Dramatic Amusements" was announced in the same year in Hobart, and in 1837 the Royal Victoria Theatre (later renamed the Theatre Royal) was built there by public subscription. Adelaide had a theater in 1838, and plays were first presented in Perth at about that time. Melbourne's first theater was opened in 1841. By 1856, Sydney had three theaters in full production, and during Melbourne's boom in the late 19th century many of the world's leading artists played to packed houses.

Actors from Britain and the United States brought their talents for theatrical organization to Australia. George Selth Coppin, a British actor who arrived in 1843, appeared in Sydney, Hobart, and Adelaide before settling in Melbourne, where he won distinction as actor and entrepreneur. Another influential figure was Bland Holt, Australian-born but British-trained, who presented some spectacular productions. The most far-reaching influence was achieved by the American actor-manager James Cassius Williamson, who reached Melbourne in 1874. In 1884 he joined two English managers, Arthur Garner and George Musgrove, to form the Comic Opera Company, a dominant force for four decades. Fresh companies were brought in, theaters were built, and such international celebrities as Sarah Bernhardt and Irene Vanbrugh appeared. Shakespearean plays and Gilbert and Sullivan operettas, as well as comedy melodramas and such dramatic successes as the younger Dumas' *Camille* and Ibsen's *A Doll's House*, were presented. Nor did the local theater depend solely on imported talent, for a number of Australian stars developed, among them Nellie Stewart, who began her career in the 1870's, and Oscar Asche, who made several tours of his homeland between successful engagements in Britain and the United States.

Interest in the theater flagged under the impact of motion pictures, however, and many theaters were converted to film showings. After 1930 commercial stage presentations were confined mainly to such assured successes as musical comedies and light plays. Significant drama was found only in the smaller theaters. The little-theater movement, made up largely of amateur groups but including semiprofessionals and some professionals, helped to keep interest alive, and the Independent and Metropolitan theaters in Sydney and the Arrow and Union theaters and the National Theatre Movement in Melbourne gave excellent productions of classical and modern plays. It was in small theaters that native playwrights found some support, although their work generally had literary rather than theatrical value. Greater success was achieved in radio drama, which received encouragement from the Australian Broadcasting Commission.

Interest in serious theater revived after World War II. Great English actors—Dame Sybil Thorndyke, Sir Lewis Casson, Sir Ralph Richardson, and Sir Laurence Olivier—visited Australia. Hopes that Australia was about to produce distinctive drama were encouraged by the success of *Summer of the Seventeenth Doll* by Ray Lawler, which was presented in Melbourne and Sydney in 1956 and became the first local drama to achieve broad success in the theater and to be well received in London and New York. *The Shifting Heart* (1957) by Richard Beynon did

well in London, and *The One Day of the Year* (1960) by Alan Seymour scored a success in several European capitals.

In the main cities, drama was kept alive in professional repertory or little theaters, which provided a stage for Australian plays as well as for experimental or controversial work from abroad. Adelaide's biennial Festival of Arts encouraged Australian playwriting. The Adelaide University Theatre Guild staged Patrick White's *The Ham Funeral* (1960), *Season at Sarsaparilla* (1962), and *Night on Bald Mountain* (1964).

Dramatic creativity gained strength in the 1970's, when composers and choreographers as well as playwrights contributed to the national achievement. Television drama production units expanded, providing training and employment for writers and performers.

Federal funds helped support theater companies and dramatists. Early beneficiaries were professional theater companies—the Melbourne Theatre Company and Sydney's Old Tote, both of which had developed from semiprofessional repertory companies. These were followed by companies in other states: the Queensland Theatre Company, the South Australian Theatre Company, the National Theatre at the Playhouse (all in Perth), and the Tasmanian Theatre Company. Each toured with productions within its state. "Alternative" theater companies sprang up in Melbourne and Sydney.

The works of Australian playwrights were the mainstay of the new companies. Patrick White wrote *Big Toys* (1977), *Signal Drive*, and *Netherwood* (both in 1982). David Williamson, who first became known in 1970 with *The Coming of Stork*, had 10 plays performed (several of them commissioned) within 10 years; four were staged in London. Other playwrights were Jack Hibberd, Alexander Buzo, Dorothy Hewitt, and Steve J. Spears, whose *The Elocution of Benjamin Franklin* was taken to New York and London with its Australian star Gordon Chater. Thomas Keneally gained attention in 1972 with *The Chant of Jimmie Blacksmith*, which was made into a successful film. Keneally later established himself as an author and playwright with a solid following in the United States.

Beginning in the 1970's, some entertainers turned their talents to television caricature of Australian stereotypes. The exemplars of "Ockerism"—glorification of the uncouth Australian working man, a male chauvinist with boorish manners, but good-natured and resourceful—were Paul Hogan and Gary ("Norm Gunston") McDonald.

A significant aspect of the theatrical scene is the sustained popularity of ballet. The initial impetus was given by a tour that Col. Vasili de Basil's Ballet Russe de Monte Carlo made of Australia in 1936. Thereafter, Australian groups developed. Among them were the Borovansky Ballet, founded in Melbourne by Édouard Borovansky, a member of the Monte Carlo group who left the cast in 1939, and the Bodenweiser Ballet, a modern expressive dance group that reached Australia in 1939. After Borovansky's death (1959) direction of his company was taken over by English dancer Dame Peggy van Praagh, who in 1962 became the first artistic director of the Australian Ballet Company, an internationally acclaimed national company and advanced ballet school established with government support. She was joined in 1965 as codirector by dancer-choreographer Sir Robert Helpmann, who had returned after 30 years in London. By this time Marilyn Jones, the company's *première danseuse* and afterward its director (1979–1982), was being hailed as Australia's first truly classical ballerina.

The Australian Ballet developed a diverse repertoire of more than 100 works. One of its most widely acclaimed of its modern ballets was Helpmann's *The Display*, based on the courtship of the lyrebird. The score is by the Australian composer Malcolm Williamson, and the sets by the Australian artist Sidney Nolan.

Motion Pictures. Although motion pictures were made in Australia from the earliest days of the cinema, few Australian films gained serious attention from the rest of the world until the 1970's. Earlier reliance on exaggerated provincialism coupled with inexpensive production quickly gave way to substantial films made with sensitivity and possessing broad appeal.

Increased interest in filmmaking beyond the routine began with federal backing provided from 1969. The growth of the television industry built up both skills and incentive, and in 1975 a federally funded Film Commission provided organizational backing.

Peter Weir's haunting *Picnic at Hanging Rock* (1975), based on Joan Lindsay's novel (itself inspired by a painting by William Ford), was the first film to gain rave reviews overseas. Fred Schepisi's *The Chant of Jimmie Blacksmith*, a film about racial bigotry scripted by Thomas Keneally from his play, and Gillian Armstrong's *My Brilliant Career* (1979), adapted from Miles Franklin's classic feminist novel (1901), handled subjects based on factual material with which viewers in other countries could identify. War themes were powerfully handled in Bruce Beresford's *Breaker Morant* (1980) and Weir's *Gallipoli* (1981), the latter scripted by David Williamson. Uncompromisingly "commercial" themes were the basis of the success enjoyed by George Miller's *Mad Max* (1979) and *The Road Warrior* (or *Mad Max 2*, 1981). A notable television production was Hector Crawford's adaptation (1981) of Nevil Shute's *A Town Like Alice*, which had been made into a film in Britain in 1956. Highly successful film festivals were held annually in Melbourne, Sydney, and Adelaide.

Interest in documentary film production faded after some successes of the 1940's and early 1950's—notably the officially backed *Kokoda Trail* (1942), *School in the Mailbox* (1948), and *Down in the Forest* (1953), and the Shell Oil Company's *Back of Beyond* (1953). Distribution of educational films is handled in each state by a state-funded film center.

Music. Music is one of the most highly developed arts in Australia, and many of the country's singers and instrumentalists have become celebrated. Beginning in the 1870's, when rich talent first appeared, singers went abroad to be acclaimed; later, instrumentalists and composers also achieved world recognition. Teaching—instrumental, vocal, and theoretical—is of a high standard, and the effects of close cooperation with educational authorities are reflected in the fine work in music that is a feature of both primary and secondary schools.

Melbourne's Philharmonic Society, a choral group, was founded in 1853, and choral music of a high order has also been produced in Sydney and Adelaide. The development of orchestral

music dates from 1888, when a full orchestra under Sir Frederick Cowen was brought to Melbourne, where it gave 241 concerts in six months. In 1890, Adelaide became the first Australian city to have a chair of music at its university. The University of Melbourne created one in the following year, and by 1895 it also had a conservatory directed by its professor of music—the country's first great musical personality, George W. L. Marshall-Hall. Besides founding and conducting an orchestra, he later organized his own conservatory, which provided performers and teachers whose influence on Australian musical life has been great.

In 1906, Alberto Zelman founded the Melbourne Symphony Orchestra, which he conducted until his death. The University Symphony Orchestra, recruited from past and current students, and the University Conservatorium Orchestra were combined in 1932 under Sir Bernard Heinze to form a new Melbourne Symphony Orchestra. Meanwhile, in Sydney the State Conservatorium of Music of New South Wales had been established in 1916 under Henri Verbrugghen, who added distinction to the school by forming a string quartet.

Beginning in 1870 opera attracted sizable audiences. Companies from other countries presented French and Italian works and, later, those of Richard Wagner. One of the greatest of all operatic performers, soprano Dame Nellie Melba, heads (chronologically) a long list of Australian singers who have won international fame. Making her operatic debut in Brussels in 1887, she later returned to Australia for many visits. Melba (Helen Porter Mitchell, who took her stage name from "Melbourne") did much to stimulate Australian musical life. So too did soprano Dame Joan Sutherland, after returning in 1965 as the star of her own touring company. The Sydney Opera House, opened by Queen Elizabeth (in 1973), provides an opulent setting for a wide range of entertainments.

The greatest single impetus to professional music came with the establishment in 1932 of the Australian Broadcasting Commission (ABC), which fostered wider appreciation of music and helped to provide greater opportunities for performers. An enthusiastic and discerning following developed. The ABC presents eminent soloists from Europe and the United States, and it has created in each of the states symphony orchestras that together provide about 750 concerts and recitals annually, although not all are broadcast. In addition, financial support from its subscribers and sponsors has made possible tours by Australian artists. Resident and visiting conductors of world standing have helped to build up the orchestras, which provide assured employment for trained musicians. Wider audiences have been developed through the children's orchestral concerts founded in Melbourne in 1929 by Sir Bernard Heinze. In smaller cities, state and municipal authorities have also helped to support symphony orchestras.

In the mid-1950's the Musica Viva Society began bringing to Australia many leading chamber ensembles from Europe and the United States as well as sponsoring tours in Australia and abroad of Australian chamber groups. A considerable range of new works were introduced.

Several Australian composers gained recognition before 1945. The innovative Percy Grainger, although best known for his arrangements of English folk melodies, experimented in "free music" featuring unconventional rhythms and sonorities. Arthur Benjamin, also noted for his light music, abandoned his characteristic joviality in profounder late works, as in his only symphony. Alfred Hill's prolific output was not generally experimental, but in some compositions he was influenced by the music and legends of the New Zealand Maori and Australian Aboriginals.



THE AUSTRALIAN OPERA

The Australian diva Joan Sutherland won universal acclaim, as her compatriot Nellie Melba had done before her.

Grainger and Benjamin made their reputations overseas and spent most of their productive years abroad, as did some notable composers of later generations, such as Don Banks, Peggy Glanville-Hicks, and Malcolm Williamson. On the other hand, Felix Werder, George Dreyfus, and Larry Sitsky were born in Europe and made their careers mainly in Australia. Of the Australian-born resident composers who made their names from the 1950's onward, the most frequently performed outside their own country were Peter Sculthorpe and Richard Meale. In their different ways, both adapted traditional East Asian music to advanced Western idioms—Sculthorpe in his *Sun Music* and Meale in his *Images (Naugata)*. In *Irkanda* and other works, Sculthorpe evoked the feeling of Aboriginal myth and folklore, as John Anthill had done with the spirit of native dance music in his popular ballet suite *Corroboree*. Aboriginal music, known to be of great antiquity, has attracted some public attention but is left to Aboriginal performers.

Jazz and popular music have a big following in Australia. The first jazz group to achieve international recognition was the Dixieland band of pianist Graeme Bell, which was acclaimed for decades. Among the later jazz combos, attention focused on the Don Burrows quartet.

Many of the world's top popular entertainers have included Australia on their itineraries since the 1960's. The visit of the Beatles opened the way for an avid rock following. By the 1970's



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Como House (1864) is a colonial mansion in Melbourne. The warm climate made verandas popular in Australia.

numerous Australian recording artists and writers were active in rock, folk, and country music. Some gained a considerable recognition abroad—notably the Bee Gees. Other names that appeared on world recording charts included Peter Allen, Lana Cantrell, Slim Dusty, Johnny Farnham, Rolf Harris, Frank Ifield, Olivia Newton-John, Johnny O'Keefe, Helen Reddy, and the Seekers.

Architecture. The earliest buildings in Australia were mere shelters. It was some time before the use of local hardwoods was mastered and Sydney's fine sandstone was shaped for the first substantial structures. Francis Howard Greenway, an English architect who arrived in Sydney in 1814, achieved a strong and simple architectural expression. His style, now known as colonial, was a transition from the Georgian with modifications in the form of verandas to suit the Australian climate. Buildings of some charm were produced in Hobart. Meanwhile, in the hinterland, the country home was developing, as the first rough shelters were replaced by more permanent and spacious buildings with extensive verandas. At first roofs were made of split shingles, but the danger of fire in a dry summer brought about the use of corrugated galvanized iron sheets.

The Gothic Revival style, everywhere considered a proper form for churches, appeared on the Australian scene in the mid-19th century. Impressive public buildings were constructed in the various styles of the Victorian period in the capitals of all the prefederation colonies. The most remarkable were those of Melbourne, which were built in the grand period of the city's expansion, from the 1850's to 1890. The city's commercial buildings, some 11 or 12 stories high, included the world's tallest in their day.

Terrace houses were built in large numbers in the late 19th century. These rows of two-story attached dwellings, sometimes with balconies decorated in wrought-iron filigree, still lend charm to older residential areas of large cities. With suburban expansion, starting in the 1920's, the individual one-story bungalow (cottage) derived from California became the characteristic type of domestic architecture. House plans showed great uniformity until the 1950's, when more varied layouts were adopted.

An architect whose work had a continuing influence was Walter Burley Griffin of Chicago, whose design for the national capital, Canberra, won a worldwide competition in 1912. He also designed many buildings in Melbourne and Sydney. After World War I the first organized architectural schools were founded. The University of Sydney established a complete course of study, and the University of Melbourne a less extensive one; both relied on on-the-job training in practical building.

Young architects increasingly traveled in Europe and the United States. In commercial building, functional styles following international trends have come to the fore. In domestic architecture, the individual dwelling is still favored, and relatively few high-rise apartment blocks have been built except in Sydney, Melbourne, and the Gold Coast resort area in Queensland.

After 1945 three Melbourne architects—Roy Grounds, Frederick Romberg, and Robin Boyd—were major forces in inculcating contemporary trends in domestic architecture and in large-scale projects. Grounds was responsible for the highly individual design of Melbourne's Victorian Arts Centre, comprising the National Gallery of Victoria and the State Theatre. Australia's "signature" structure, the harborside Sydney Opera House (1958–1973), was the concept of Danish architect Joern Utzon. Its vaulting white-tiled roof structures simulate billowing sails.

In the late 1960's, John Andrews won international recognition and important commissions in North America. He was also the principal designer of some of Australia's most innovative buildings. His King George Tower in Sydney is a triangular-plan office development with an open forecourt integrated with the sidewalks and streets of the intersection at which it stands.

Elaborate sunshields protect the tower's ceiling-to-floor glass walls and add a powerful note.

Painting and Drawing. Prehistoric art in Australia consists mainly of paintings and carvings on rock. Some engravings are estimated to date back over 20,000 years.

Among the earliest representations of the Australian scene by Europeans are sketches made by the topographical draftsmen who accompanied Capt. James Cook to the continent in 1770. The scientific recording of fauna and flora followed, and explorers who pushed inland usually made sketches that were reproduced in the books about their journeys. After 1835, when an art school was established in Sydney, the field widened slightly, and with the expansion of the pastoral (grazing) industry, landholders and merchants were able to lend limited patronage to the arts.

Conrad Martens, a 19th century landscape painter, produced some delicate watercolors in which he used space, light, and color well. Other painters attempted to capture the adventurous pioneering life of the pastoralists. Their works, reproduced or exhibited in England, helped to stimulate the interest of prospective migrants. With the discovery of gold in 1851, artists depicted life in the mining fields. Representative of this period was Samuel Thomas Gill, whose popular lithographs give a vivid picture of colonial life and manners. Among other artists of quality were John Skinner Prout, William Strutt, and Nicholas Chevalier. Still, little progress was made in interpreting the Australian environment until the arrival in 1865 of Louis Buvelot, the "father of Australian landscape painting."

Victoria, growing rapidly, set up a commission on the fine arts in 1863 and schools of art and design in 1867. In the 1870's national galleries were established in Melbourne and other colonial capitals. These moves, combined with an appreciable degree of local patronage, made possible the emergence of an Australian art form, a development that coincided with the growth of the national spirit in writing. What Henry Lawson did with his pen to stimulate a national sentiment based on the rural tradition, Frank Mahony furthered in painting and drawing.

During his stay in Europe, Tom Roberts had become interested in the work of the French Impressionists. After his return to Melbourne in 1885, he and a group of painters that included Frederick McCubbin, Sir Arthur Streeton, and Charles Conder created a new form of Australian painting by interpreting the landscape according to Impressionist principles.

In the 1890's an economic crisis made it difficult for artists to sell their work, and by 1900 many of those who had helped develop an Australian approach had gone abroad. Conder, George Washington Lambert, Rupert Bunny, and Emanuel Phillips Fox won recognition abroad. In Australia, lighter and more tonal watercolors by such artists as Blamire Young, Norman A. W. Lindsay, and Jesse J. Hilder became increasingly popular.

A munificent bequest made by Alfred Felton to the National Gallery of Victoria in 1904 was of some assistance to Australian painters, although the bulk of the money was spent on foreign works. In 1916 the periodical *Art in Australia* was established by Sydney Ure Smith, who was to play an important role in gaining a wider critical following for art.



COLLECTION, AUSTRALIAN NATIONAL GALLERY, CANBERRA

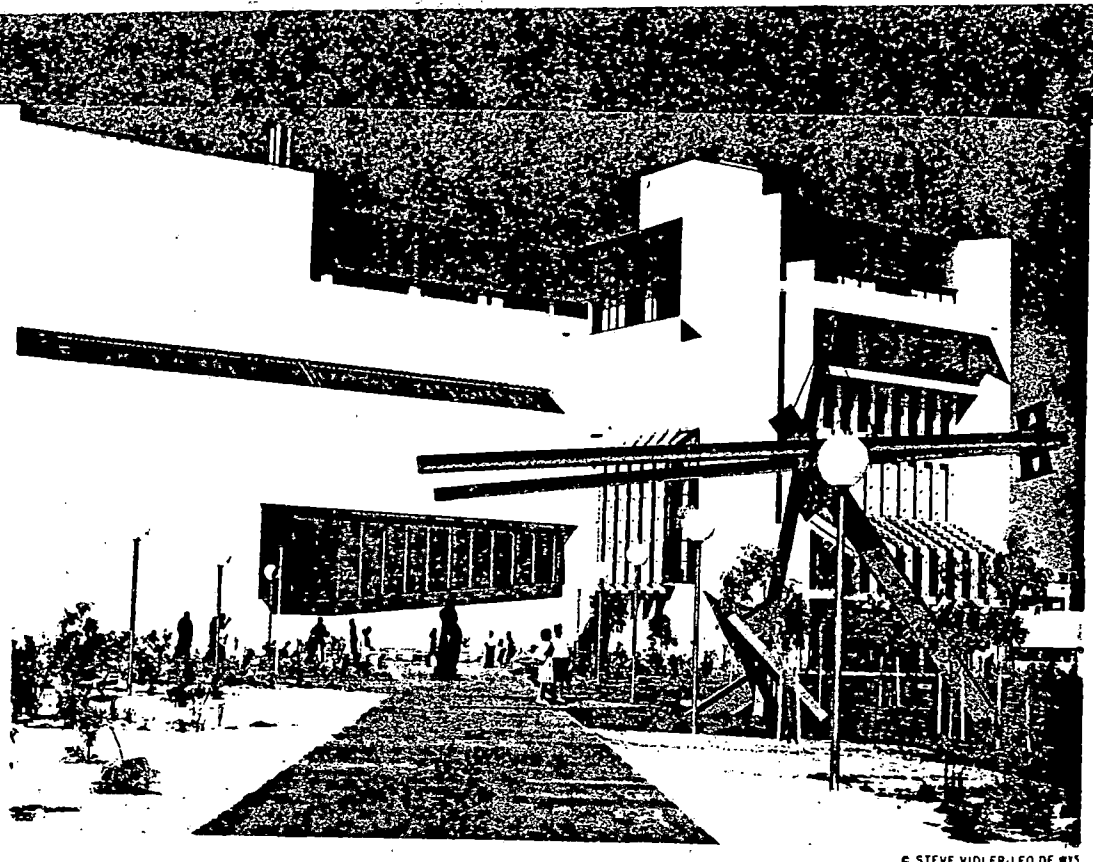
Burning at Glenrowan (1947) is one of Sidney Nolan's paintings on the exploits of outlaw folk-hero Ned Kelly.

By the 1920's, although some excellent work was being done by the leading landscapists, the Australian style was becoming stereotyped. One of the few innovators was Sir Hans Heysen, known for his gnarled eucalyptuses set against immense distances. Another was Kenneth Macqueen, one of the first painters to search for design and rhythm in the Australian landscape.

In 1926 the Contemporary Art Group was formed in Sydney; and in 1931, George Bell and Arnold Shore founded an art school in Melbourne. Following successful exhibitions of contemporary British and French works, Australia's Contemporary Art Society was founded in 1938.

In the 1940's artists returning from study abroad adopted more advanced styles, set new national standards, and produced work that was at once subjective, Australian, and of high quality. The main function of Australian painting was no longer to reveal the country's natural beauties to the ordinary citizen. Sir William Dobell led the advance with distinctive though controversial portraits, while George Russell Drysdale drew on the special character of the "great Australian loneliness," presenting attenuated figures dramatically isolated against the astringent ocher-red inland landscape. The surge of artistic energy was matched by public enthusiasm and support for work that was novel in Australia.

The greater freedom and boldness won acclaim overseas. In the 1960's leading reviewers in London were conceding that over a generation Australian artists had made a "major contribution to modern painting" while bringing about "the birth of a national school." Sidney Nolan ranked as an exemplar. He concentrated on extreme



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The Australian National Gallery, designed by a Sydney architectural firm, was opened in Canberra in 1982.

simplification of expression in his landscapes as well as in several series of paintings: on colonial legends based on exploits of the 19th century bushranger (rural outlaw) Ned Kelly; on Australia's involvement in World War I at Gallipoli, in Turkey; and on Australian activity in Antarctica. Others gaining acclaim for sharpness of vision and energy in execution included Arthur Boyd, a painter of mysterious allegories in dark and tangled bushscapes, and Albert Tucker, who offered his own symbolic versions of the national scene. By the late 20th century Frederick Williams and dozens of other Australian painters had won recognition for work reflecting an identifiably Australian vision or one expressed in varied international styles.

Cartooning and other black-and-white work have been features of Australian art since the 1890's, when the *Bulletin* began to support a group of first-rate men. Among the most notable exponents of this school, most of whom were connected with the *Bulletin*, were Phil May, Norman A. W. Lindsay, Sir Lionel Lindsay, William Henry Dyson, David Low, and Livingston Hopkins, an American who became known as Hop. Later artists, particularly some who came from Europe, were responsible for new progress in a form of expression that in Australia has traditionally shown great vitality.

Sculpture. Until the mid-19th century, Australian sculptors followed the British tradition. Charles Summers, a Briton, created a huge bronze memorial in Melbourne to the ill-fated Burke and Wills exploration of northern Australia that ended disastrously at Cooper Creek in 1861. The first Australian-born sculptor to be acclaimed at home and abroad was Sir Bertram Mackennal. He and other sculptors received commissions to decorate buildings and gardens, but major commissions were few and sculpture barely survived until the mid-20th century, when interest in it revived. The Victorian Sculptors' Society, which had been discontinued, was formed again in Melbourne in 1947. Lyndon Dadswell, who was the head teacher of sculpture at East Sydney Technical College from 1938 to 1949, had great influence. The college became an important training ground for sculptors.

Acceptance of modernism came slowly until the 1950's, when commissions increased with growing prosperity. Ola Cohn and Daphne Mayo were in the vanguard; more conservative contemporaries included George Allen, Andor Meszaros, and Thomas Dwyer Bass. Expensive sculpture, often showing considerable innovative talent as well as technical excellence, was produced for many shopping complexes as well as important new government and commercial buildings. Sculpture courses expanded, with many of the younger sculptors becoming teachers. A triennial sculpture exhibition at Mildura (Victoria), begun in 1961, helped expand interest in and support for the more radical developments.

Museums and Libraries. Museums in all state capitals have extensive collections; most are strong in materials relating to the natural history and anthropology of Australia and the South Pacific. In Canberra the Australian War Memorial houses a large collection from all wars in which Australian armed forces have fought. Folk museums in many centers emphasize the pioneering tradition. Pioneer settlements and gold-rush towns have been authentically reconstructed. The two major art museums in Melbourne and Sydney have internationally important collections thanks to the Felton and J. J. W. Power bequests. In 1982 the federally funded Australian National Gallery was opened in Canberra.

Reference and municipal lending libraries and services are strongly developed in all states. The State Library of New South Wales holds more than 2 million volumes, and both it and the State Library of Victoria have extensive 19th century materials. Specialist libraries for commercial, scientific, and broadly academic purposes

have undergone considerable expansion.

Publishing. A free and vigorous press has been a feature of Australian life since early in the settlement of the country. Although official policy and requirements were reflected in the first newspaper—the four-page *Sydney Gazette* issued by the government printer, George Howe, in 1803—an independent newspaper, the *Australian*, was published in Sydney by William Charles Wentworth in 1824. Wentworth clashed with Gov. Sir Ralph Darling, who in 1827 sought to enact a law under which newspapers could be issued only if they were licensed. This act was not certified, and an alternative act imposing a prohibitive stamp duty was not enforced. From that time on the press was free from government control. The *Australian* ceased publication in 1850, and the oldest surviving newspapers in the country are the *Sydney Morning Herald* (founded in 1831) and the Melbourne *Herald* (1840).

Ownership of most city newspapers has been transferred from families to public companies. While political comment tends to favor conservative groups, no newspaper is directly the mouthpiece of a political party. Each paper jealously guards its right to an independent point of view, and between elections there is frequently strong criticism of the government.

The leading newspapers maintain bureaus in New York and London and representatives in other centers to supplement the basic news service provided by Australian Associated Press–Reuter, which gives world cable coverage. For Australian news, country papers as well as some metropolitan dailies subscribe to Australian United Press.

Circulation increased after 1945 but suffered a setback in the 1970's with competition from improved radio and television news coverage. Nevertheless Australia continues to rank among the nations with the highest per capita circulation of daily newspapers. Rupert Murdoch's *The Australian*, established in 1964, is the only major national daily; it is published simultaneously in several state capitals. The *Financial Review*, also a daily, serves business.

Periodicals cover a great range. The Australian edition of the *Reader's Digest* has wide circulation, and an Australian edition of *Time* competes with the *Bulletin*, which incorporates a truncated version of *Newsweek*. *Cleo* and other magazines cater to socially mobile working women. Three widely read magazines written primarily for women are oriented to the family and home.

Among hundreds of publications directed to smaller groups, those dealing with business, investment, rural matters, and sports are most numerous. Many are devoted to technical, scientific, educational, professional, and religious interests, while community matters are aired in suburban weeklies and other local publications.

Reflecting a multiethnic society, over 300 publications appear in 25 or more foreign languages. These range (alphabetically) from Arabic to Vietnamese.

Book publishing has expanded strongly, especially on Australian subjects, which have been taken up by the Australian offshoots of British publishing houses as well as by locally owned enterprises. The government provides an annual "public lending right" payment for all books by Australian authors held in libraries.

Broadcasting. The Australian Broadcasting Commission (ABC) is wholly funded by the federal government. Ownership of commercial radio and television stations is restricted so that no network monopoly is possible.

The ABC maintains a national news service with its own journalists throughout Australia and in main world centers. It also operates Radio Australia shortwave services in English, French, and seven Asian or Pacific languages. A publicly funded Special Broadcasting Service (SBS) serves Australia's ethnic communities.

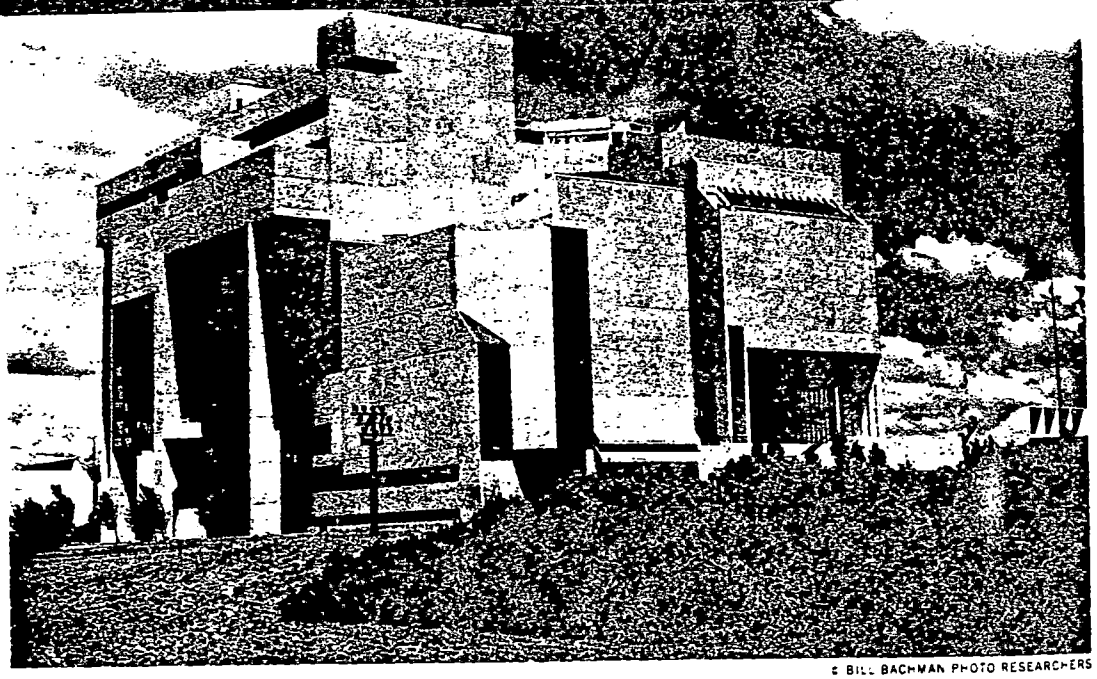
After the first telecasting stations were opened in Melbourne and Sydney in 1956, the television industry grew rapidly. For the commercial stations (radio as well as television), sharply expanded programming outlays accompanied the strong increase in advertising revenues generated by Australia's highly competitive consumer society.

Programming tends to follow the patterns prevailing on commercial stations in the United States. On radio, popular music and talk shows (with or without audience participation by telephone) have retained their appeal; broadcasts of art music have declined. Television leans heavily on live sports, major films, comedy and drama series, variety and talk shows, and quiz programs. Many films and series are American or British. Commercial stations devote fewer resources than government-owned stations to cultural programming and current affairs.

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Author of "Australia and the Australians"

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A new building for the High Court of Australia was completed in 1981 in Canberra, the national capital.

5. Government

Australia was united in 1901 by the federation of six self-governing British colonies—New South Wales, Queensland, South Australia, Tasmania, Victoria, and Western Australia—which thereby became states of the indissoluble Commonwealth of Australia. Legislative independence from Britain was a practical reality from 1901 onward and was formally acknowledged in the 1931 Statute of Westminster, in which the British Parliament guaranteed that it would not legislate for Australia except at the Commonwealth government's request.

Australia's perception of its unique character and position in the world was heightened by its World War II experience, by great postwar immigration programs, and by the expansion of Asian and Pacific trade after the 1960's. Diplomatic missions overseas increased from three in 1939 to over 100 four decades later.

The Commonwealth combines British-style cabinet government, responsible to Parliament, with a U.S.-style written federal constitution that is judicially interpreted. This system has provided political stability as an underpinning for Australia's development and growth.

The power of the federal government has grown steadily since 1901, but the individual states and their governments remain distinct and vital elements of the nation. Increasing central power has stemmed mainly from federal tax dominance (which the states have accepted), from community expectations of greater government services, and from the willingness of most governments to provide those services.

The Commonwealth Parliament moved to Canberra from Melbourne in 1927, and the permanent Parliament House building was designed for Australia's bicentennial in 1988. In the preceding decades, the High Court and virtually all government departments also had moved to Canberra.

The Constitution. The formation and subsequent evolution of Australia's constitution reflects the conditions under which it came into being. Before agreeing to join a federation, the less populous and wealthy colonies demanded constitutional protection against possible domination of the future central government by New South Wales and Victoria. Consequently, each colony was represented in the constitutional convention by an equal number of popularly elected delegates, who worked out a delicate balance of Commonwealth and state powers.

The Federal Structure. The constitution is the supreme law of the land. As in the United States, it specifies the powers of the federal government, leaving the undefined residue of powers to the states. Valid federal law prevails over state law that conflicts with it.

The constitution identifies more than 40 areas of Commonwealth legislative power, including taxation, trade, tariffs, defense, foreign affairs, currency, banking, insurance, and social security. A power over corporations provides a basis for some price control. The federal government's authority in industrial relations is limited to conciliation and arbitration of labor disputes extending beyond one state. The Commonwealth has no specific power to regulate wages, except those of federal employees.

Some clauses of the constitution have proved to be of particularly great significance. Section 92, which makes trade and commerce among the states "absolutely free," has often thwarted both Commonwealth and state governments, and it prevents many monopolies. Section 96 states that the Commonwealth may give financial assistance to any state on such terms as Parliament "thinks fit." The High Court's literal interpretation of this provision permits the federal government to tie such grants to the fulfillment of certain conditions that it may set for a state. In this way the Commonwealth has been able to intervene in areas such as education, where it has no specific or inherent constitutional power.

Constitutional Amendment. Judicial interpretation is a major source of constitutional evolution. The initiative to propose formal amendments to the constitution rests with the government of the day. A proposed amendment must be passed by



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a majority in both houses of Parliament and then submitted to the electorate in a referendum. Approval by referendum requires an assenting majority of votes nationwide and majorities in more than half of the states.

During the first 85 years of federation, 38 constitutional referendums were held and eight amendments were approved. Centralists—persons who favor expanded authority for the federal government—have disliked the constitution from its inception, but the people have usually rejected any amendments that were perceived to enlarge Commonwealth authority. Labor governments, which favor increased central power, succeeded in obtaining wide Commonwealth control over social services, but all other amendments that they placed before the people over the period were defeated in referendum.

Executive Authority. As in Britain, the prime minister is the head of government and all the government's ministers must be members of Parliament. Any government that lost the support of the lower house of Parliament would have to resign.

The British monarch is also the Australian monarch. The governor-general, who acts as an independent representative of the crown and is de facto head of state, is appointed by the monarch on the advice of the Australian prime minister. The functions of the governor-general are similar to those of the monarch in Britain, but with the powers of the office stated in Australia's written constitution.

Parliament. The Commonwealth Parliament consists of a Senate, a House of Representatives, and the monarch. Both chambers are elected by popular vote, and their constitutional powers are the same except that the Senate cannot initiate or amend money bills.

As long as a government remains in office, it invariably and of necessity controls the House of Representatives, though often not the Senate. This executive control and the strong party discipline of House members tend to diminish the direct impact of the House of Representatives on government policy. Nevertheless, reputations can be made and broken in the House, and skillful use of the daily question time and censure motions can put real pressure on the government.

Voting is compulsory in Australia. The Senate is half the size of the lower house, and voters in each state elect equal numbers of senators—12 after 1984—to represent them. A state constitutes a single senatorial district represented by all 12 senators.

Seats in the House of Representatives are distributed among the states in proportion to their population, but each state is allotted a minimum of five seats—a provision that now applies only to the smallest, Tasmania. For the election of members of the House, the states are divided into electoral districts called constituencies, with boundaries drawn to contain an approximately equal number of voters nationwide (except, necessarily, in Tasmania). The boundaries are redefined every seven years by independent commissioners. Each of the two territories elects two delegates to the Senate and two to the House of Representatives.

Three years is the maximum term of office in the House of Representatives, but the prime minister often can call an early election. Senators hold office for six years, with half of the Senate coming up for election every three years except when both houses of Parliament are dissolved, which has occurred on several occasions. The governor-general is empowered to dissolve both houses, on advice of the prime minister, when the Senate has twice rejected a bill passed twice by the House of Representatives.

The double dissolution that took place in 1975 has particular interest because it flowed from the dismissal of the Labor (Whitlam) government in that year. A constitutional crisis arose because the Whitlam government was unwilling to advise the governor-general to dissolve both houses and call for an election when the opposition used its power in the Senate to block the passage of appropriation bills. The resulting deadlock was finally resolved when the governor-general (Sir John Kerr) exercised the reserve powers of the crown to dismiss the government. He appointed a caretaker government and dissolved both houses on its advice, so that the whole matter could be dealt with by the people at an election. Great controversy surrounded all these events, but the ensuing election brought the Liberal (Fraser) government to power with a record majority.

Political Parties. In the decades following World War II the Liberal Party of Australia (in coalition with the National Party of Australia) governed the Commonwealth for a substantially greater number of years than its rival, the Australian Labor Party (ALP). A uniform national swing of less than 3% of the voters was usually enough to unseat governments.

The Liberal party is oriented to free enterprise and an individualist philosophy, while the National (formerly Country) party has remained concerned principally with rural matters. The ALP has trade-union affiliations and is more committed to equality and a centralist outlook. Although the argument is often made that the two parties are closer in practice than their ideologies might indicate, there is little doubt that the Labor government of 1972–1975 set a substantially different course from that of Liberal administrations.

The fortunes of minor parties have been checkered. The proportional system of voting used for Senate seats assists small parties and enabled the Democratic Labor Party (DLP) to gain a significant voice in the upper house for more than a decade after it split from the ALP in 1955. In the same way the Australian Democrats achieved important representation in the Senate beginning in the late 1970's.

In House of Representatives elections, minor parties gain some leverage over major parties from the system of preferential voting for members, which ensures that no candidate is elected without a popular majority. Voters cast ballots specifying the order of their preferences among contenders for a particular seat. If no candidate receives over 50% of first preferences, the candidate with the fewest votes is eliminated; then the second preferences specified on his ballots are distributed among the contenders so named as if first preferences. The process continues until one candidate receives more than 50% of the votes. Elections for a considerable number of seats normally are decided in this way, and minor parties achieve bargaining power because they can influence the second-preference votes of their supporters.

Party leaders have assumed an increasingly high profile in election campaigns. The elec-

Federal Finance. The Commonwealth budget is, in effect, the most important annual instrument of economic policy. The extent of government spending, taxation, and regulation is high on the agenda of national concerns. Because income tax generates more than half of Commonwealth revenue and is thought to be too high, the introduction of broad-based indirect taxes (such as a wholesale sales tax) has long been considered and has caused much debate. Commonwealth outlays amount to three fourths of all government spending, but over 30% consists of grants to state and local governments.

A need for less regulation, especially in the financial system, was recognized from the late 1970's onward. It led to a reduction in government control of interest rates and greater freedom for financial institutions to respond to market pressures. The Loan Council, which is dominated by the Commonwealth, has given state governments and their authorities more responsibility for their borrowing requirements. The Australian dollar was floated in 1983.

Defense and Foreign Policy. Australia is an independent and aligned nation. Through the American alliance, formally expressed in the ANZUS security treaty with the United States and New Zealand, Australia is part of the Western alliance. In support of regional security, Australia favors minimal Great Power involvement in the Indian Ocean and the Southwest Pacific. Australia also engages in defense cooperation programs with friendly nations in Southeast Asia and the Southwest Pacific. Australia's participation in several peacekeeping forces around the world shows an international concern extending beyond its region.

The basis of Australian defense policy is a recognition that several possible contingencies could threaten Australia's security. The objective of policy is to increase self-reliance and maintain a mobile, technologically advanced defense force. Increasing emphasis has been placed on the development of defense facilities in Australia's north and west. Permanent military personnel number about 70,000, with reserves averaging about 30,000.

At the end of the 1960's, government policy embraced the concept of an integrated national defense force, but with individual services retaining their identity and functions. The Australian Defense Force Academy was established in Canberra during the 1980's.

Social Services. A comprehensive network of social services is organized and financed by the federal and state governments and by voluntary agencies. The Commonwealth provides the major social-welfare payments, including old age and invalid pensions, unemployment compensation, and also family allowances. Most benefits, but not family allowances, are indexed to inflation. Eligibility for many benefits, such as pensions for the elderly, is subject to both income and assets tests. Payments come from general revenues.

The federal Medicare system, introduced in 1984, is financed by a 1% levy on taxable incomes. Medicare pays 85% of doctor fees and offers limited free public hospitalization. Private insurance covers most other health care.

Generous provision for the needy receives strong public support in Australia, and the welfare lobbies are well organized and vocal. Nevertheless, the rising level of social-service outlays has been a matter of considerable concern. Between the mid-1970's and mid-1980's, for example, payments increased from 21% to 28% of the Commonwealth budget because of extended benefits, higher unemployment, and the aging population. Governments have therefore sought to restrict social-welfare payments to those persons in the greatest need.

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6. The Economy

The Australian economy is advanced, prosperous, and well diversified, with characteristics similar to the industrial economies of North America and Europe. Two features that distinguish it from the economies of most other industrial countries are the importance of the agricultural and mining sectors in earning export revenue and the need for long-term overseas investment funds to assist the financing of economic development. Australia has long been one of the world's leading suppliers of agricultural products, especially wool, wheat, and beef. It has also become one of the world's principal exporters of minerals—notably, iron ore, coal, aluminum, copper, uranium, and mineral sands. Australia's political stability makes it a particularly attractive supplier of commodities.

With the development of abundant natural resources combined with expansion in the industrial and service sectors, the Australian economy had faster average growth rates during the 1960's and 1970's than many of the major Western economies. Economic growth and political stability have given Australians a standard of living comparable with other advanced countries.

The deindustrialization process, common to advanced economies, has been a feature of the changing structure of the Australian economy. Manufacturing's growth rate has fallen significantly—resulting, for example, in the decline of that sector's share of national income from 28% to 18% between 1963 and 1983. Agriculture also experienced a decline, its share of activity dropping from 13% to 4%. In contrast, services and mining expanded strongly, the latter particularly following the mining boom of the mid-1960's to early 1970's. In the 1960's the minerals sector accounted for only 2% of national income, but by the early 1980's its share had reached 5%. During the same period the contribution of the services sector had grown from 57% to 73%.

Another major feature of the economy has been the increasing proportion of national expenditure attributable to the government sector. This virtually doubled in the two decades before 1983 as government assumed a greater role in

providing services and welfare support to the community.

Along with its democratic political system, Australia has developed a basically free-market, private-enterprise economy. The federal, state, and local authorities provide mainly services and infrastructure—often in areas where private industry cannot operate at a profit but where a community benefit can be gained, as in the provision of public transportation. Other major areas of government involvement include electricity, gas, water, telecommunications, postal service, airports, and ports.

AGRICULTURE

Australia is a large, relatively flat, dry country with highly variable weather. Soils, in general, are not notably fertile, and the limited availability of water is a major problem for agriculture. About 65% of Australia's land is used by rural industry: 4% for crops, 5% for sown pastures, and the balance mainly for grazing. Most of the remainder of the country is unoccupied and consists chiefly of desert. Unreliable rainfall and recurrent droughts have always been hazards in Australian farming. With a small population by world standards, any growth in agriculture depends on the export of a large proportion of rural products. Because of its physical and economic environment, Australian agriculture is renowned for "boom-and-bust" seasons.

From the time of European settlement in 1778 until the 1940's, agriculture played a dominant role in the economy. Australia rapidly became self-sufficient in foodstuffs after settlement, and later the rural sector generated the majority of export income. Since the 1940's, Australian agriculture has undergone considerable change as the economy has diversified and grown. Output of farm products has increased steadily with a smaller agricultural work force. Capital and other inputs, such as fuel, fertilizers, and pesticides, have reduced the need for labor.

Crops. A wide range of crops, including wheat, barley, oats, rice, and sugarcane, are grown in Australia. In cultivated area, value of output, and value of exports, wheat is the most important. It contributes as much as 20% or more of rural production and rural export income.

For most of the 19th century wheat was grown for domestic consumption. The extension of railways across the coastal ranges to the present wheat belt, combined with a climb in prices after a slump in the 1890's, boosted wheat production and exports rapidly.

Australian wheat yields vary greatly because of the wide differences in soil types and the erratic rainfall. Yields have improved with the use of phosphatic fertilizers as a phosphorus supplement for soil and the introduction of clover between crops to preserve soil nitrogen. All the wheat produced is marketed through the Australian Wheat Board. This authority pools the grain for sale and markets it by contract to domestic and overseas buyers.

Barley and sugarcane are Australia's next-largest sources of income from crops. Both industries export most of their output. Barley has experienced wide fluctuations in production. Sugarcane grows mainly in a tropical zone in the northeastern state of Queensland. Production is regulated by quotas assigned to the sugar mills, which are sensitive to market conditions.

Other important crops include cotton, coarse grains, rice, oilseeds, and a great variety of vegetables and fruits, including wine grapes.

Wool. The wool industry is internationally recognized for its significant influence on the growth and development of the Australian economy. Australia is the world's largest producer and exporter of wool. Over 90% of the clip is exported in raw form for processing. Wool exports (greasy and processed) represent almost 25% of the total value of Australia's rural exports.

The wool industry grew rapidly because of attractive markets and abundant land suitable for sheep grazing. A gradual spread from the coastal ranges to the semidesert interior occurred in the southern half of the continent. Pastoral management has improved as a result of Australia's technological progress in the industry, including use of better fertilizers and control of disease. These factors contributed to the growth of the sheep population, which reached a peak of 177.8 million in 1970–1971. Afterward the number of sheep was reduced to between 133 and 139 million because of lower wool prices and recurrent droughts.

Some 80% of shorn wool produced in Australia is sold by public auction overseen by the Australian Wool Corporation, a statutory body. The role of the corporation is to promote the orderly and efficient export of wool.

Meat. The meat industry in Australia ranks with the wool and wheat industries in income-earning capacity. Price movements cause shifts in emphasis between meat and wool production as changes in their relative profitability occur.

Beef cattle, the principal source of meat, are concentrated in the northern half of the continent, where conditions are unsuitable for sheep-herding and dairy enterprises. With the advent of modern refrigeration, Australia was able to compete for distant export markets by the 1930's. As a result about half of Australian beef and veal production has been exported. Production and prices have varied considerably.

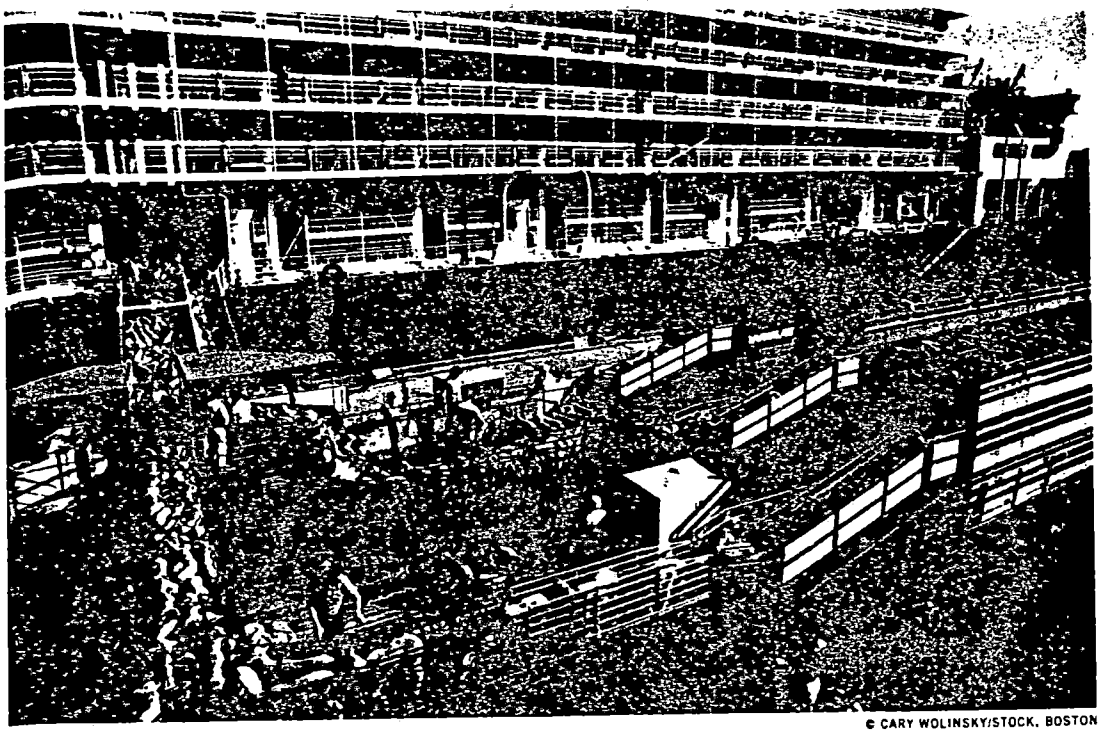
A large proportion of the lamb produced in Australia is consumed domestically, while almost half of the mutton is exported. A major export trade in live sheep has developed with the Middle East.

Output of pork products varies with the availability of feed and with the prices of other meats. Poultry production has expanded rapidly since the 1960's.

Dairying. This industry is concentrated in southeastern Australia, where the combination of soil type and rainfall is conducive to prolific pastoral growth over a large part of the year. Since the mid-1950's, irrigation has been expanded in the drier inland areas to supplement rainfall.

Dairy farms and cows have steadily declined in number since the late 1950's. Milk production, however, continued to increase until 1970 with markedly better average yields due to improved husbandry practices and the concentration of dairying in more favored regions. Since 1970 production has decreased because of oversupplied markets, particularly in Europe.

Forestry. This industry has grown and developed mainly to provide Australia with forestry products, indicating a low income-earning capacity compared to other Australian rural industries. Because of Australia's dry climate, forest cover was limited chiefly to the humid coastal strips



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Sheep are herded onto one of Australia's sheep ships. This one can hold as many as 115,000 head of sheep.

and adjacent highlands of the eastern and southern mainland and to Tasmania. Much of the forested area was cleared by European settlers to make way for agriculture. Today, potentially productive native forests occupy less than 6% of the national territory.

While Australian forest product industries traditionally have depended on native hardwoods (mainly eucalyptus), an increasing reliance is being placed on rapidly expanding softwood (conifer) plantations. The logs extracted from the forests and plantations are processed mainly into sawn timber, plywood, wood-based panels, and paper products. To supplement output, Australia imports large quantities of sawn softwoods and tropical hardwoods, softwood pulp, and paper. The value of imports is usually three times greater than that of exports of forest products. The government is predominantly responsible for forest growing, while private enterprise carries out most of the logging and processing.

Fisheries. Although Australia is a minor fishing nation, a profitable industry has developed that ranks with poultry and pig-meat production in income-earning capacity. Recreational fishing is popular and adds further to the value of fisheries.

Australians consume a low level of seafood per capita, in relation to nations such as Japan, because of the wide variety of meat readily available. Moreover, quality species such as rock lobsters, prawns, abalone, and scallops are mainly exported and command premium prices in local markets and restaurants. Only a few of the thousands of species of fish that live in coastal waters are both economic to catch and good to eat. Among the popular fishes sold fresh, frozen, or canned in Australia are tuna, flathead, gemfish, luderick, morwong, mullet, redfish, Australian salmon (a sea perch), shark, snapper, tailor (bluefish), and whiting. Trout are farmed to meet the increasing demand for them.

MINERAL INDUSTRIES

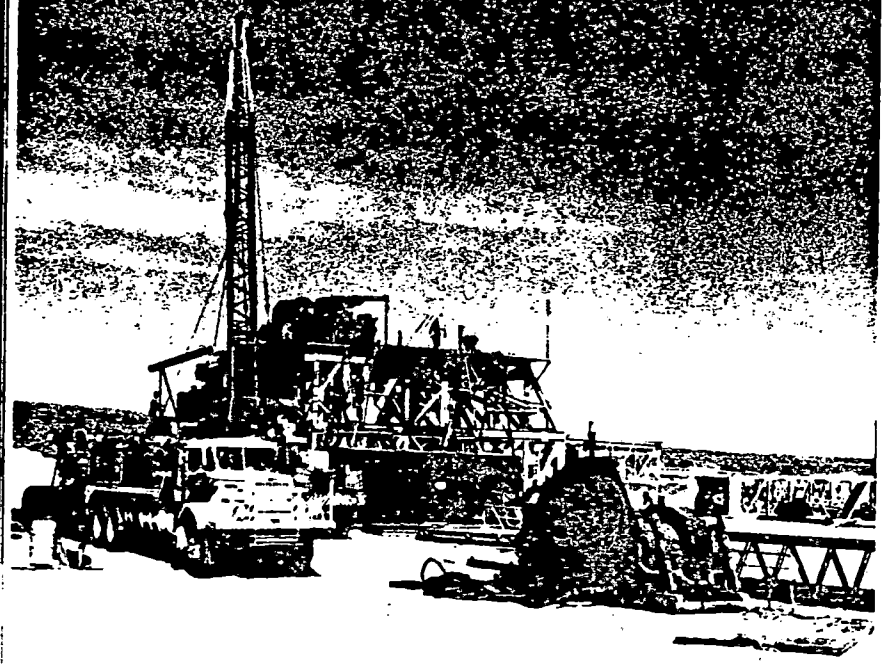
Australia is well endowed with mineral resources, including bauxite, coal, copper, iron ore, lead, natural gas, nickel, uranium, and zinc. In general, these resources are above average in quality, while mining costs are lower than the world average. Largely because of ongoing exploration and development programs, Australia enjoys self-sufficiency in most major minerals and produces surpluses for export.

Trends. Since the mid-1960's mineral resources have contributed substantially to Australia's economic growth, and output has expanded at nearly twice the rate of the national economy. Development of new discoveries has generally been aided by opportunities to utilize open-pit mining, a method that is suitable when deposits are at or near the surface. This method is applied to resources such as bauxite, iron ore, and coal, and often helps to curb mining costs while achieving high levels of output.

Among the many important mineral discoveries since the early 1950's have been uranium in the Mary Kathleen (Queensland) and Rum Jungle (Northern Territory) fields, bauxite at Weipa (Queensland) and Gove (Northern Territory), and large iron-ore deposits in Western Australia at Yampi Sound and in the Pilbara district. Roxby Downs in South Australia is notable for its copper, uranium, gold, and silver, while Jabiluka in the Northern Territory is said to be Australia's highest-grade uranium deposit, as well as one of the world's richest.

Construction of townships, port facilities, and railway lines has accompanied the growth of the resources (minerals) sector. A notable example is the infrastructure developed in the Pilbara district of Western Australia.

Mineral Fuels. One of the most significant resource discoveries in Australian history was made in the early 1970's off the coast of Western Australia. Known as the North West Shelf



An oil rig is erected in the desert. Although Australia is not a major oil producer, its output meets the greater part of domestic demand.

© KEN STEPNELL TAURUS

natural-gas field, it is situated 80 miles (130 km) from Dampier, a port in the Pilbara, and is one of the largest gas fields in the world.

Commercial development commenced in 1980 with an initial view to supplying natural gas for industrial purposes to the Pilbara, and also to areas south of Perth by way of a 940-mile (1,500-km) pipeline. This first stage of the project was completed late in 1984, at a cost of A$2.2 billion, which included the pipeline construction. The second stage involves an additional investment of A$9 billion and is aimed toward the export of liquefied natural gas to Japan.

The earliest discoveries of oil suitable for commercial production were made in the early 1960's in the Surat Basin of Queensland. From these beginnings further major developments in the industry have occurred in the Gippsland Basin (Bass Strait, offshore Victoria), the Cooper Basin (South Australia), and the Carnarvon Basin (Western Australia). Although Australia's oil resources are widespread and satisfy the major portion of domestic requirements, the country is not considered a major world producer. The Gippsland Basin fields dominate output.

Coal is Australia's leading mineral in volume of output. Important black-coal mines are located near Newcastle and the Burragorang Valley in New South Wales, the Bowen Basin in Queensland, and the Collie Basin in Western Australia. Large brown-coal deposits are found in the Latrobe Valley in Victoria.

In 1984, Australia became the world's largest exporter of coal. Japan is the traditional buyer of Australian coal, but a growing share of new sales has been generated in other markets.

Metallic Minerals. After coal, iron ore is Australia's next most significant mineral resource. Production has increased extraordinarily since the mid-1960's, and reserves estimated at 40 billion tons give Australia the potential to remain a prominent force in world iron-ore markets.

Bauxite, the ore of aluminum, although not produced in the same volume as coal and iron ore, provides an important contribution to export revenues. About half of Australia's bauxite production comes from Western Australia.

Australia is one of the top ten gold producers in the Western world, accounting for roughly 3% of total Western production. Western Australia contributes about 75% of the national output.

Australia is the world's sixth-largest silver producer. It accounts for about 10% of world economic silver resources and produces approximately 8.5% of world output. The great majority of silver mining in Australia is a by-product of lead and zinc mining.

Nonmetallic Minerals and Construction Materials. Australia has widespread deposits of nonmetallic minerals and construction materials. Nonmetallic mineral output is dominated by limestone, clays, salt, silica, gypsum, and dolomite; major construction materials include crushed and broken stone, sand, and gravel. Deficiencies persist in phosphate rock and sulfur.

Since the mid-1960's production of these resources, especially salt, silica, limestone, and the construction materials, has increased substantially. However, their contribution to Australia's export income is not as important as those of the metallic minerals and mineral fuels.

Gems such as opals, sapphires, topazes, and diamonds are found in various locations throughout Australia. Their importance to the national economy is relatively insignificant.

MANUFACTURING

Manufacturing is a vital part of the Australian economy and produces an extensive range of goods. Industries that are well represented include steel, petroleum refining, automobiles and other transportation equipment, heavy engineering, electrical appliances and electronic goods, medical and scientific equipment, chemicals and plastics, food processing, and textiles, clothing, and footwear.

Historical Development. Before federation in 1901 the manufacturing market in Australia was strongly divided by tariff barriers, with Victoria, South Australia, and Tasmania pursuing a protectionist approach and New South Wales committed to free trade. The inadequate transportation system, together with the small size and fragmentation of the domestic market and isola-

tion from Europe and America, held back manufacturing. They contributed to its tendency to be unsophisticated and labor-intensive in techniques and capital equipment.

After federation, internal customs barriers were eliminated. The effect of the new, larger market was to favor specialization and to foster growth in the more populous states of Victoria and New South Wales, which eventually came to dominate national demand.

From 1901 to 1949, Australia's manufacturing sector was greatly influenced by major events in the world economy, such as the two world wars and the Great Depression. The wars, for example, were instrumental in increasing the demand for goods and materials and in stimulating the growth of several new industries. Some of the more significant developments of this period were the opening of the Newcastle steelworks in 1915, the start of motor-vehicle assembly by Ford and General Motors in the mid-1920's, and the establishment of a high tariff wall by various Commonwealth governments (administrations) in the 1920's and 1930's to assist local producers.

Manufacturing productivity rose steadily during the 1950's and 1960's, easily outpacing the rate for the economy as a whole. Industries involved in the processing of primary products into metals, chemicals, and paper, for example, showed the most rapid rates of growth. However, the manufacturing sector continued to perform its traditional role of producing goods that would otherwise have to be imported; it failed to progress to production for export. Capital was redirected from manufacturing to export-oriented mining and agriculture during the 1960's. This trend has continued.

Geographical isolation and the small scattered domestic market have contributed to relatively high costs in Australian manufacturing. As a result, Australian industry has generally been at a disadvantage in world markets, except in the processing of rural and mining products. This inherent cost disadvantage, combined with the historically based import-replacing structure of the manufacturing sector, has tended to retard the growth of manufacturing exports. Australia's most important manufactured exports are textiles, fertilizers, pharmaceutical products, plastic materials, nonferrous metal products, and scientific instruments.

Some Key Industries—*Steel.* Australia is well represented at all stages of the steel production cycle by firms involved in smelting, converting, refining, iron and steel rolling, sheet-metal working, and pressing and stamping. The large range of steel products includes billets, rails, structural shapes, rods, coated and uncoated sheets, and tinplate.

The major steel producer is the Broken Hill Proprietary Company (BHP), which also has worldwide interests in coal and petroleum exploration. The company operates steelmaking facilities at Port Kembla and Newcastle in New South Wales and Whyalla in South Australia, and has smaller finishing mills at Geelong in Victoria and Kwinana in Western Australia. Each integrated plant is supplied with raw materials from the company's coal deposits in New South Wales and iron-ore deposits in South Australia and Western Australia. The industry normally supplies most of Australia's requirements and is an important source of export earnings.

Chemicals. The chemical industry was established in Australia before World War II. Its growth was encouraged by government policy, including investment incentives.

The industry has a diversified output that includes basic chemicals, plastics, paints, fertilizers, adhesives and sealants, cosmetics, toiletries, and aerosols. The bulk of the industry is concerned with organic chemicals derived mostly from oil and gas, although salt, phosphate rock, and sulfur are also important.

Oil Refining. Since the mid-1950's, oil refining has been important and has experienced rapid expansion. Domestic crude oil, most of which is refined in Australia, accounts for two thirds of total refinery production.

Motor Vehicles. Because of the small size of the domestic market, Australia's motor-vehicle industry is at a cost disadvantage compared with manufacturers in more populous countries where larger production runs are possible. But in the jobs it provides and the demand it creates for steel and other materials, the industry is vital.

The major assembly plants are located in Melbourne and Adelaide. Production is dominated by transnational corporations.

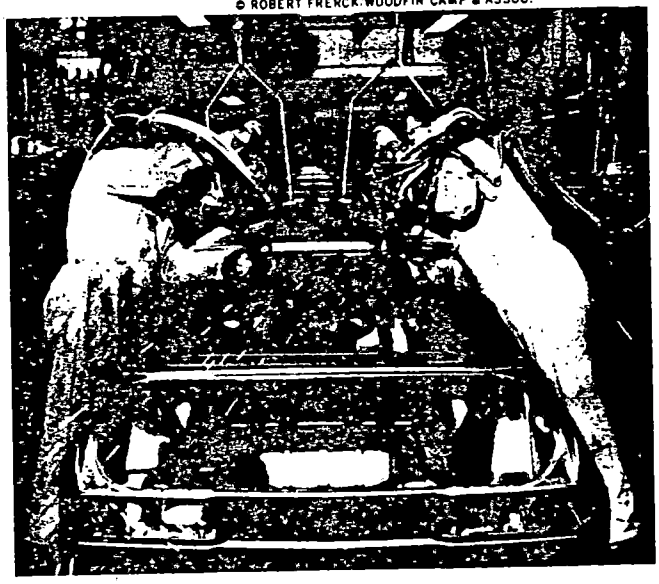
THE FINANCIAL SYSTEM

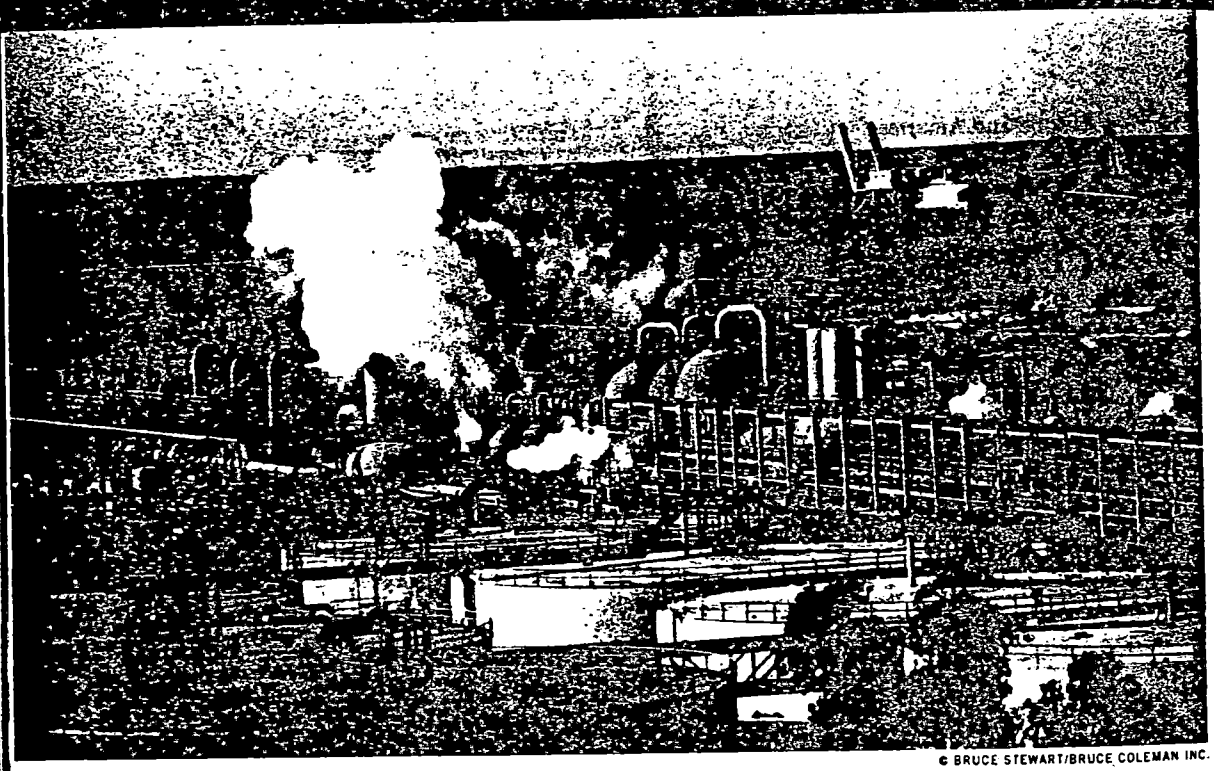
The Australian economy is serviced by a sophisticated and technologically advanced financial system. The major banks are active in international financial markets.

During the 1960's and 1970's the banks were generally constrained in their domestic operations by direct regulation of the volume and price of their lending. Consequently, their share of financial intermediation declined. Rapid deregulation began in the 1980's. Of particular importance—besides the removal of certain restrictions on the banking sector—were the decision to allow the entry of a selected number of major overseas banks and the floating of the Australian currency so that its value relative to other currencies would be determined by market forces.

Automobiles have been mass-produced in Australia since 1948. The country has one car for every two inhabitants.

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A Queensland plant processes bauxite into alumina. Australia is the world's leading producer of bauxite.

Deregulation hastened the blurring of traditional roles among the various types of financial institutions. The principal beneficiaries of deregulation were the banks, as they became more competitive relative to the other types of intermediaries.

Financial Institutions. The structure of the banking system has developed along branch-banking lines. The four major institutions operate national networks of branches, with one branch in virtually every suburb and town. Australian banks are at the forefront in the introduction of technology in banking, and the branches of the major bank networks are linked electronically.

The main distinctions within the banking system lie between trading (commercial) and savings banks and between banks that are subject to federal legislation and those that are incorporated under state legislation. The four major banks operate both trading and savings facilities. Because their branches reach across state lines, they are subject to federal legislation. The primary role of savings banks is the provision of loans for housing on the security of land. Trading banks concentrate on the business sector and consumer lending.

The state banks, those that operate only within the borders of a particular state, are established by law as either trading or savings banks. However, these banks have been diversifying their operations due to increasing competition.

Three specialist banks are also subject to federal legislation. They were established to help provide finance to agricultural, small-business, and natural-resource industries, which in certain circumstances could find it difficult to obtain financing elsewhere.

Banks operating under federal legislation are supervised by the Reserve Bank of Australia, which possesses a wide range of powers to ensure that prudential standards are met. However, the prime responsibility for the prudent management of a bank's business lies with the individual bank itself. State banks are not subject to the powers of the Reserve Bank but voluntarily keep in close contact.

Other financial institutions include a diverse range of intermediaries, some operating nationally and others on a state or regional basis. This sector includes building societies, finance companies, merchant banks, life insurance companies, and pension funds.

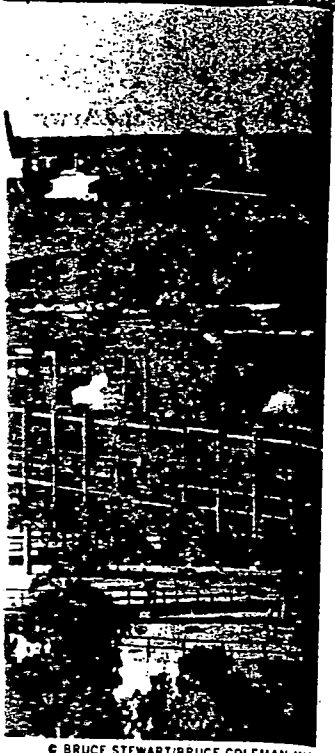
Monetary and Fiscal Policy. Monetary policy in Australia is managed through the Reserve Bank by open-market operations—transactions involving the buying and selling of government securities. Formerly, direct controls over the banking system were employed. Open-market operations affect all financial intermediaries rather than a particular sector.

The main focus of monetary policy since the mid-1970's has been on controlling growth in certain key monetary aggregates such as M_3, which includes currency and all deposits at both trading and savings banks. However, some of these aggregates have become distorted by the rapid changes in the Australian financial system, which has led the authorities to monitor a wider range of factors, including interest rates and the exchange rate.

The broad goal of fiscal policy is the pursuit and maintenance of full employment coupled with price stability. These objectives are carried out mainly through the federal government's annual budget, which is framed in conjunction with monetary policy objectives. The decision to float the Australian dollar enhanced the government's ability to coordinate monetary and fiscal policy measures.

TRADE AND SERVICES

A wide range of goods and services is available in Australia, with the pattern of expenditure typical of an advanced economy. Consumption expenditure by the private sector accounts for



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leading producer of bauxite.

about 60% of national expenditure and, on average, is the largest single influence on growth in the economy. Nearly one quarter of household consumption is spent on the basic necessities of food and clothing. Home ownership, relatively high in Australia, has been stable at about 70% since the 1960's. Therefore, for the majority of households, spending on dwellings takes the form of mortgage payments rather than rent. On average, Australians have considerable discretionary spending power, and new consumer goods such as electronic products find a ready market. Overseas travel is also relatively popular. Of their net disposable income after taxes, Australians save an average of about 13%.

The tertiary sector of the economy has achieved a faster average growth rate than manufacturing and agriculture. Banking, finance, and business services are expanding as technology is harnessed to provide more comprehensive and efficient services to both the business and personal sectors. The substantial investment in private housing, along with provision of infrastructure for natural-resource projects, has stimulated the growth of utilities.

Communications and transportation have received a great impetus to growth from advances in technology and the general economic development of such a large country as Australia. For example, new microwave technology is being used to provide information on request at a lower cost than older systems using land lines.

Domestic Trade. The Australian constitution guarantees the right to introduce goods from one state to another, the right to sell such goods, and the right to travel between states—all free of restrictions, regulations, or obstructions. In general, this has permitted a free flow of interstate trade. However, in the case of agriculture, government-controlled marketing arrangements and the need to prevent the spread of disease can restrict the flow of some commodities.

Since federation in 1901, the Commonwealth government has had legislation dealing with restrictive trade practices, such as monopolies and cartels. In 1974 the Trade Practices Act established the Trade Practices Commission, with powers covering the maintenance of competition and consumer protection.

The National Companies and Securities Commission has the responsibility for the entire area of policy and administration with respect to company law and the regulation of the securities industry. It is active in ensuring that company takeovers occur in a manner fair to all parties concerned.

Foreign Trade and Economic Relations. Spurred by the growth of mineral industries, Australian exports have expanded rapidly. Between 1970–1971 and 1984–1985, for example, the value of exports rose from A$4.2 billion to A$29.5 billion, an average annual increase of 14.9%. During the same period the import bill rose at an average annual rate of 15.9%, from A$3.8 billion to A$30.1 billion. One of the main features of Australia's overseas transactions has been the rapid expansion in the nation's net invisible payments. This has resulted from transportation and insurance charges on the high volume of two-way trade, payments overseas by Australian tourists in excess of tourist receipts in Australia, and the servicing of the nation's overseas debt.

As a consequence of these payments and the disparate rates of growth in exports and imports, Australia's current-account deficit rose from A$0.8 billion in 1970–1971 to A$10.2 billion in 1984–1985. As a proportion of gross domestic product the deficit rose from 2.4% to 4.9%.

Capital Flows. In conjunction with the increased current-account shortfall, the rate of capital inflow into Australia has accelerated markedly. During the last half of the 1970's overseas private and public inflow of capital into Australia amounted to $9.1 billion. However, during the next five years capital inflow reached $36.2 billion. While a large portion of the inflow was in direct investment, a considerable amount was either of a short-term nature or was used to finance public sector deficits.

For most of the postwar period the United Kingdom and United States were the chief overseas sources of capital investment in Australia. While these two countries continue to be the major investors, Japan and the countries of the Association of South East Asian Nations (ASEAN) have increased in relative importance.

Composition of Trade. Because of the small size of the domestic market in Australia, the bulk of its primary production is destined to be exported. With manufacturing slow to bid for a greater share of exports, primary products continue to be chief commodities that Australia supplies to the world. What has changed dramatically since the mid-1960's is the composition of primary exports.

In 1970–1971, for example, rural commodities such as wheat, wool, meat, and sugar constituted 68.7% of the value of all exports. By 1983–1984 the contribution of the rural sector had declined to only 35.2%. Over the same period, during which Australia's mining boom occurred, mineral exports rose from 10.7% of the total to 35.6%.

By comparison, changes in the general composition of imports have been only minor. Manufactures and industrial raw materials remain by far the largest components, while agricultural imports make up only a small proportion. The one exception has been crude and refined petroleum. Because of a combination of rapid price increases and higher demand, the bill for crude and refined petroleum rose from 4.3% of total imports in 1970–1971 to 9.4% in 1983–1984. Despite this increase, Australia is now more nearly self-sufficient in crude oil, and the value of its crude and refined petroleum exports has risen rapidly.

Direction of Trade. An examination of Australia's pattern of trade since 1970 reveals a marked shift away from traditional markets for exports and sources of supply for imports. The entry of the United Kingdom into the European Economic Community and the general economic advancement in Asia have resulted in a sharp decline in the relative share of Europe in Australia's two-way trade and a rapid increase in trade with Asia. Japan is Australia's largest trading partner, accounting for 24% of the two-way trade. The United States is second, representing 16%.

Prices. In light of the composition of Australia's two-way trade, movement in the nation's overseas accounts are susceptible to the uncertainties of world commodity prices both for farm products and minerals. The general slowdown in the pace of world economic activity together with the more efficient use of raw material inputs and their abundant supply have restricted growth in the bulk of Australia's export prices.



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Hydroelectricity is generated in a plant of the Snowy Mountains project, which also provides irrigation water.

At the same time, accelerated world inflation has been reflected in the prices of manufactured imports. These factors in conjunction have caused a substantially adverse movement in Australia's terms of trade. In the 10 years to 1984, for example, Australia's export prices relative to import prices declined by 37.5%.

Telecommunications. Australia's telecommunications system began in 1854 with the erection of the first telegraph line for public use. The country now has about 8 million telephones, or roughly one for every two persons, a figure comparable to other developed nations. Overseas private telecommunications are provided by means of communications satellites, submarine cables, and, at a decreasing rate, short-wave radio. Satellites carry more than 60% of Australia's telecommunications.

Australian radio and television broadcasting falls within the jurisdiction of the federal government. Separate services in both media are provided by the Australian Broadcasting Commission and commercial stations. More than 130 commercial radio stations and over 50 commercial television stations transmit to 16.6 million radio receivers (about one per person) and 5.5 million television receivers (a 1:3 ratio).

Water, Gas, and Electricity. Gas, electricity, and water supplies are the responsibility of state governments and their respective public authorities. The construction of water-storage facilities has increased substantially, and consumption of electricity has one of the highest rates of growth among developed countries, with total usage doubling approximately every eight years. About 30% of all energy consumed goes into the production of electricity.

As a result of oil price increases, greater reliance has been placed on the large reserves of natural gas and coal. Other increasingly used energy sources include liquefied petroleum gas and solar power. Possible hydroelectric installations are limited generally to a narrow strip in the eastern highlands and to Tasmania. Moreover, the federal government can block hydroelectric development in environmentally significant areas.

TRANSPORTATION

Because of Australia's large size and small population, transportation has been costly and has used a relatively large proportion of the labor force. The system initially was developed in a fragmented manner, for the main roads and rail lines were laid out in the second half of the 19th century when the continent was a group of colonies trading mostly with Britain. Today, despite its geography, Australia has extensive and well-developed road and rail systems.

With a warm climate and a vast expanse of arid and relatively flat land, Australia is well suited to air travel. Conversely, it is almost devoid of inland waterways.

Roads. Motor vehicles are the major form of domestic passenger transport. Australia has about 500,000 miles (800,000 km) of roads and tracks and more than 8 million cars, or one for every two persons. Driving is on the left.

The main road networks radiate from the state capital cities and are the responsibility of individual state governments. Because of long distances and the relatively low volume of traffic in sparsely populated areas, most highways are two lanes wide. The upgrading of interstate highways is progressing in line with their increased usage. Coordination of a uniform approach to the improvement and development of the road system is carried out by the National Association of Australian State Roads Authorities.

Railroads. The railways are the responsibility of the six state governments, which own and operate their own systems, and the federal government, which operates the Australian National Railways. On a smaller scale, private rail companies serve particular mining, agricultural, and industrial complexes. The largest private system provides rail facilities to the iron-ore mines in the northwestern part of Western Australia.

Although Australian railways are at a cost disadvantage relative to road and air services, they are still important to the nation's economic development. New capital expenditure is being undertaken to standardize gauges across states and to build new lines into growth areas.

Electrified suburban railway systems are important. In Melbourne and Sydney they include sections of underground track, with trains making several stops in the central business area.

Ports and Shipping. Because Australia is far from its major trading partners, shipping is vital. About 70 ports are commercially significant. Most of these are on the east or southeast coast, with Melbourne, Sydney, and Brisbane together accounting for about 37% of overseas shipping movements. Other major harbors include Botany Bay and Newcastle on the east coast, Port Adelaide on the south coast, and Fremantle, Dampier, Port Hedland, and Gladstone on the west coast.

While Australian shipping companies dominate interstate trade, most international shipping is conducted by overseas-based companies.

Aviation. Australia has one international airline, Qantas Airways Ltd., which is owned by the federal government and is one of the world's leading air carriers. Major domestic carriers in-

clude Trans-Australia Airlines, also owned by the federal government, and Ansett Airlines of Australia, which is privately owned. Other private domestic airlines provide regional and commuter services. Qantas carries about 50% of the 4 million air passengers to and from Australia each year.

LABOR

Since the 1960's, Australia has experienced a significant change in the composition and structure of its labor force. A shift in social attitudes toward female participation in the work force has been one major change, as in most Western industrialized countries.

Characteristics of the Labor Force. From the early 1900's to the 1960's the proportion of the Australian working-age population in the labor force was about 40%. By the 1980's this rate had risen to 45%. Female participation in the work force rose from about 20% at the turn of the century to 25% by the 1960's and to nearly 40% by 1983. Since the 1960's an increasingly large proportion of persons aged 55 and over have left the labor force. Despite this development and the fact that Australia meanwhile has enjoyed virtually continuous economic growth, a climb in the numbers of unemployed has taken place.

The structure of the labor force has undergone tremendous change. While nearly 30% of the work force was employed in the manufacturing sector during the early 1960's, the figure was below 20% by the mid-1980's. The agricultural component of the labor force fell from nearly 10% to under 7%, with simultaneous increase in output, reflecting greater capital intensity. Several sectors of the economy have remained closer to static in the proportion of the labor force used: mining (1.5%), transportation (19.5%), and wholesale and retail trade (6%).

The largest category change has been in employment by government, concomitant with its increased role in the economy. Direct government employment has risen from about 10% to nearly 25% of the labor force since the 1960's. The proportion employed in business services has increased from 6% to 9%. Overall, 74% of Australians work in the tertiary sector.

Labor Relations. Australia is highly unionized, with nearly 50% of the work force organized. A feature of the Australian labor market is the large number of unions and the wide difference in size of membership. Unions vary in membership from less than 100 to more than 80,000. However, one quarter of the more than 300 unions account for over 90% of membership in organized labor. The main national organization is the Australian Council of Trade Unions (ACTU), which came into being in 1927. The ACTU has more than 150 affiliated trade unions with a combined membership of about 2.45 million, out of a total of 3.0 million unionized members.

Most disputes or negotiations concerning wages or work conditions that cannot be settled by union and employer representatives at a plant or company level are brought before state and federal arbitration tribunals. The Federal Conciliation and Arbitration Act (1904) and state industrial arbitration acts provide for the registration of employer and employee organizations. Normally, registration is necessary before an organization may appear before the relevant industrial arbitration tribunal. Australia has a centralized system of award-wage determination. Under this system the award wage applicable to each industry is adjusted semiannually, based on movements in the consumer price index.

TOURISM

Australia has many tourist attractions, including beaches, deserts, rain forest, the Australian Alps (including Mount Kosciusko), the Great Barrier Reef, places of historical interest, and bustling, cosmopolitan cities. The country attracts about a million overseas visitors each year. Of these, typically 24% are from New Zealand, 16% from the United Kingdom and Ireland, 15% from the United States, and 8% from Japan.

Tourism is a major part of the economy. Each year, domestic tourists spend about A$8 billion on trips of at least one night away from home and A$1.8 billion on day trips. A further A$1.1 million is spent by domestic travelers on holiday homes, motoring expenses, and travel-related incidentals. Foreign tourists add another A$1.6 billion to give a total expenditure of A$12.5 billion. This represents 4.8% of gross domestic product. Tourist expenditure generates employment for 340,000 persons, or 5% of the work force.

Despite Australia's broad international appeal, the great distances between it and most other high-income countries make tourism largely a domestic industry. Overseas visitors account for about 17% of both the employment and income attributable to tourism. The industry is further localized regionally, for less than one sixth of all overnight trips by Australians have their main destination outside the traveler's state of origin. A feature of domestic tourism is the high proportion of travel expenditure by residents of Queensland—almost 26%, compared with less than 19% for more populous Victoria.

About a million foreign visitors spend some A$1.6 billion in Australia each year, and outbound travel by about 1.25 million Australian residents results in foreign currency payments of about A$2.4 billion. However, receipts from inbound tourism have grown at a faster rate than expenditures by Australians traveling abroad. The ratio of foreign-exchange expenditures to receipts has declined by half since the 1970's.

The outlook for the tourist industry is promising. In many senses Australia is the last frontier, and as Americans, Europeans, and Japanese grow more affluent and develop a greater taste for new and unusual experiences, more of them are expected to travel to Australia.

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7. History

Beginning about 40,000 years ago Australia was slowly peopled by groups arriving at its northern reaches from the great archipelago looping from mainland Southeast Asia to New Guinea. Migration into Australia was sporadic and never on a large scale. Once tribal groups were established they dispersed slowly over the entire continent and the island of Tasmania.

After crop cultivation developed in the Southeast Asian mainland and islands, onward migration to Australia faded. In later times, as the archipelago's population built up, occasional brief visits to uninviting Australian shores by Malay fishermen and other seafarers were not followed up. The Aboriginal Australians remained undisturbed behind their shield of remoteness until the first European visits, beginning in the 16th century.

R. M. YOUNGER
Author of "Australia and the Australians"

FROM DISCOVERY TO THE END OF WORLD WAR II

The history of European occupation and development of the island continent that, with Tasmania, was to become an outpost of Western civilization in the South Pacific began with the British convict settlement at Port Jackson (Sydney), New South Wales, in 1788. After the Blue Mountains had been crossed in 1813, the progress of the pastoral industry successfully challenged the concept of a purely penal establishment near the coast. Then the subsequent rural squattocracy, as the group of wealthy pastoralists came to be called, was itself challenged by a combined immigrant and emancipist small settler opposition, which by 1840 had secured the end of regular convict transportation to the mainland. In 1851 the young colonial society of eastern Australia was rudely disturbed by the influx of diggers seeking fortunes on the goldfields of New South Wales and its southern daughter colony, Victoria, which had acquired separate colonial status in that year. The aftermath of these gold rushes not only sharpened controversies already present in the closing decade of the first half of the 19th century but also added new problems and opened new trends of political, social, and economic evolution. Many of the distinctive features of Australian life were thus determined before the establishment of the federated Commonwealth of Australia on Jan. 1, 1901.

Conditions had indeed varied considerably in the federating colonies of New South Wales, Victoria, and their four neighbors. South Australia had been founded in 1836 as an experimental free society on the principles of Edward Gibbon Wakefield. Tasmania, which had been a penal offshoot of New South Wales from 1804, became a separate colony in 1825 but continued to receive convicts until 1853. Another six years passed before the mother colony's northern neighbor, Queensland, also received separate status. The isolated and sparsely settled Western Australia, which covered one third of the continent, had barely held its own from its foundation in 1829 as a free settlement until convicts were admitted from 1850 to 1868 for service on public works and in private employment; in the late 1880's and the 1890's it, too, enjoyed its gold rush and belated prosperity. In none of the six colonies, however, was the pastoralist to regain the political and social primacy that he had enjoyed in the pre-gold rush era. The infant Australian Commonwealth continued to shape its own peculiar form of political and social democracy in a setting that became increasingly urban and industrialized as the new century lengthened—and this despite the persistent importance of the pastoralist's wool as a staple export, the growing significance of wheat exports, and all the economic changes that two world wars brought to the now more diversified Australian economy.

Discovery. The discovery by Europeans of the mainland of Australia, like that of the Americas, was largely accidental. The 17th and 18th century voyages that resulted in the charting of the greater part of the coastline were designed mostly for other purposes. The Portuguese and Spaniards, who in the 16th century had reached Java, the Moluccas (Spice Islands), the north coast of New Guinea, the Philippines, and the Solomons by venturing from Peru (1567), had been concerned chiefly with the location of speedier routes to the coveted Spice Islands.

When also moved, like the Spaniard Álvaro de Mendaña de Neyra, by the traditional conviction that a considerable land mass lay awaiting discovery in the southern seas, these Spanish and Portuguese navigators had sought not an island continent but the mythical great south land, Terra Australis Incognita, which was supposed to balance Europe and Asia by stretching southward unbroken to the pole. Thus, Pedro Fernandes de Queirós, a Portuguese who had served under Mendaña in the latter's second and unsuccessful voyage of 1595, later sailing from Peru for King Philip III of Spain, reached the New Hebrides Islands (now Vanuatu) in 1606 and was convinced that he had found the great southland. His more spirited lieutenant, Luis Vaez de Torres, who lost his leader in a storm, proved that the New Hebrides were not part of the continent and was on his way to the Philippines when circumstances diverted him from the normal course north of New Guinea and led him through the dangerous strait to the south of the island. If, as is possible but improbable, he then sighted Australia at Cape York, he was ready enough to include it among the "very large islands" that he had seen. No Spaniard or Portuguese got nearer to the mainland than had Torres in 1606. On the other hand, the north coast of New Guinea, which had been discovered accidentally by the Portuguese Jorge de Meneses as early as 1526, was further explored by several Spaniards, including Álvaro de Saavedra (1527) and Íñigo Ortiz de Retes (1545).

The Dutch navigators, who are credited with most of the discoveries on the Australian coast before the voyages of the Englishman Capt. James Cook, came upon the west and northwest shores of the continent by their seeming misfortune—an untimely delay in their passages to and from the rich Spice Islands, of which they had dispossessed the Portuguese. Blown off the course then thought most favorable, Dirk Hartog in 1616 nailed a pewter dish to a post on the island that bears his name outside the entrance to Shark Bay, halfway up the coast of what is now Western Australia. Three years later another Dutch captain, Frederik Houtman, sighted the coast farther south and followed it north to Dirk Hartog Island after narrowly escaping disaster on an Abrolhos reef. Upon these treacherous reefs, still known as Houtman Rocks, the *Batavia*,



The landing of Captain Cook on the east coast of Australia in 1770 is depicted in a painting by Australian artist E.E. Phillips Fox.

AUSTRALIAN NEWS AND INFORMATION BUREAU

a Dutch man-of-war commanded by Frans Pelsaert, was wrecked in 1629. In similar fashion other pieces of the west coast were discovered by Dutch captains off their course—Cape Leeuwin at the southwest corner in 1622 and De Witt's Land near North West Cape in 1628.

Dutch discoveries were not entirely fortuitous. Some of these errant captains found curiosity too much for them and deliberately extended their wanderings. In 1627 the *Gulden Zeepaard* pressed eastward along the south coast of what was called Nuyts Land as far as the head of the Great Australian Bight. In the northern waters more than one attempt was made to solve the mystery of what lay east and south of New Guinea. A few weeks before Torres had proved the existence of a strait between New Guinea and the mainland, the *Duyfken* coasted down the west side of Cape York Peninsula. In 1623 the Dutch sailors of the *Pera* and *Arnhem* under Jan Carstensz made another attempt, and failed again, but charted farther down into the Gulf of Carpentaria, the coast of which they treated as continuous with New Guinea—so little known was the discovery of Torres until it was confirmed by Cook after 164 years.

The best-known name in the story of Dutch discovery in Australian waters is that of Abel Janszoon Tasman, to whom fell the task of piecing together the knowledge of the north and northwest coasts of New Holland (the Dutch name for Australia) in his voyage of 1644 from the Gulf of Carpentaria to North West Cape, and, on a famous voyage two years earlier, of carrying further the search for the great south land. It was then that he discovered the southern portion of Van Diemen's Land (now Tasmania) and sailed up part of the west coast of New Zealand, establishing its separation from New Holland but wrongly assuming it to be the northwestern extremity of the mythical Terra Australis Incognita. That further discoveries were not made by the Dutch in the century that followed Tasman's great voyage was due partly to the poor reports that Dutch navigators had given of the western mainland and its people. In this they were strongly supported by the first British navigator to touch Australia, the buccaneer William Dampier (1688–1689). As yet the pleasant coastal country of the southern and eastern sections of the continent had not been explored, and Dampier's account of "a dry and dusty soil" inhabited by "the miserablest people in the world" remained the general impression of what had actually been seen of Australia and Australians until the second half of the 18th century.

Speculation concerning the unknown nevertheless continued. By the 1760's, French as well as British writers had whipped up sufficient interest to induce their respective governments to assist further voyages in the southern seas. Capt. Samuel Wallis, who sailed in 1766, discovered Tahiti for the British in the following year, and Louis Antoine de Bougainville, who set out three months later and came within sight of the track of Torres, southwest of New Guinea, was the first of a line of distinguished French navigators in Australian waters. Bougainville's departure rather than his actual discoveries stimulated fresh British voyages to forestall French discovery of rich lands that might compensate France for the loss of Canada. Alexander Dalrymple and other geographers assured the British government that the great south land would yet be found south and east of Tasman's New Zealand. This mythical land was still more enticing than the unknown spaces between Van Diemen's Land and the Gulf of Carpentaria.

The efforts of Dalrymple and his friends to continue the search were aided by the desire of British scientists to dispatch a ship to the South Pacific to observe the transit of Venus in 1769. This done, exploration might be renewed. The British government agreed, and before Bougainville returned to Europe the voyage of the *Endeavour* had begun under the command of Lt. (later Capt.) James Cook of the Royal Navy. The transit was duly witnessed at Tahiti in June 1769. Early in October of the following year the *Endeavour's* commander reached Batavia (now Jakarta) after having effectively disproved the alleged connection of New Zealand with the continent and having confirmed the almost forgotten discovery of Torres that a dangerous strait separated New Guinea from the land around the Gulf of Carpentaria. In addition Cook had charted the east coast of the continent from Point Hicks to Cape York, opening the way for the first European settlement on the hitherto unattractive mainland and for the founding of the first British colony in the Pacific.

Foundation and Early Settlement, 1788–1820. Most Australians celebrate January 26 as Australia Day or Foundation Day in commemoration



TATE GALLERY, LONDON, FROM AUSTRALIAN NEWS AND INFORMATION BUREAU

The Founding of Australia recreates the unfurling of the British Flag at Sydney Cove on Jan. 26, 1788. January 26 is now celebrated as Australia Day.

of Jan. 26, 1788, when Capt. Arthur Phillip landed a company of over 1,000 (including 717 convicts, of whom 188 were women) and with his officers toasted success to the infant colony of New South Wales. In making this settlement the British government had no intention of claiming the whole continent, nor was New South Wales strictly speaking a colonial settlement. The very site of the convict prison was itself a second choice. Phillip had sailed direct for Botany Bay, which had been specified in his instructions as "the most eligible situation upon the coast for the first settlement." There he landed on January 18, but was not long in satisfying himself that there was little to substantiate what had been stated by Joseph Banks, the naturalist who had accompanied Cook on the *Endeavour*, concerning Botany Bay's suitability for a settlement. Phillip therefore ordered the 11 vessels of his fleet to move north along the coast to the more attractive site he had discovered inside Port Jackson, a harbor that Cook had seen only from a distance.

Fortunately, Phillip, who served as the first governor, was a man of vision as well as courage. He refused to regard the colony as merely a convict settlement, and he frequently urged upon the government the desirability of encouraging free settlers. Though the future character of the colony as a free settlement had not been determined, Phillip's successful efforts to make it self-supporting prepared the way. Ill supported by many of his officers, who regarded themselves for the most part as jailers, handicapped from the first by the poor quality of the human material upon whose labor he could draw, and often faced with the threat of starvation, which was increased by the arrival of fresh batches of convicts, Phillip nevertheless persevered. He spared no effort in the attempt to demonstrate the soundness of his view that New South Wales would one day rank among the most valuable parts of the British Empire. When Phillip retired in 1792, his goal of a self-supporting colony had not been reached, but the first governor of a penal colony had succeeded in laying the foundations of free British settlement in Australia.

Some measure of Phillip's contribution is indicated by the chaos that developed after his withdrawal, when direction of the young settlement passed into the hands of lesser men. The officers of the New South Wales corps, which had been sent out to aid the governor in maintaining order, obtained a corner in trade and endangered the future of the colony by traffic in rum. This became the recognized currency of the community with disastrous effects on its morals and its economic welfare. The officers openly challenged Phillip's naval successors, Capt. John Hunter (1795–1800) and Capt. Philip Gidley King (1800–1806), and played a prominent part in the so-called Rum Rebellion against another naval governor, Capt. William Bligh (1806–1808).

Lt. Col. Lachlan Macquarie, the soldier who replaced Bligh in 1809 and held the governorship until 1821, left a mark on the colony no less significant than that of Phillip. His claim to recognition as the greatest of the early governors lies in his determination to make New South Wales more than a convict prison but less than a colony of free settlers—a colony of reformed convicts reshaping their lives in a new environment. He succeeded in the former aim but failed in the latter. Whatever may be the ultimate judgment of history on Governor Macquarie, the surprising thing is that he should have achieved so much in the teeth of opposition from a home government that could see no further than a convict prison and from the more prosperous free settlers, brave but grasping, whose imagination reached beyond the limits of a closely controlled community of peasant proprietors. Under Macquarie the population of the colony rose from 11,590 in 1810 to 38,778 in 1821, and farmland under cultivation from 7,615 to 32,267 acres (3,082 to 13,058 hectares). But Macquarie could not withstand the main stream of colonial development, for the economic potentialities of the colony had been revealed by the crossing of the Blue Mountains in 1813. The pathway was thus provided to the pasture lands on which would graze the flocks descended from the Merino sheep bred by the governor's greatest rival, John Macarthur. By the time of Macquarie's departure there were nearly 300,000 sheep in the colony, as compared with only about 26,000 at the time of his arrival.

The Founding of Australia recreates the unfurling of the British Flag at Sydney Cove on Jan. 26, 1788. January 26 is now celebrated as Australia Day.

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Regular convict arrivals in New South Wales did not cease until 1840, and Macquarie's successors as governor ruled with legal authority but little restrained by the nominated legislative councils of 5 to 7 and 15 members established in 1823 and 1828, respectively, and by the two-thirds elected legislative council of 36 constituted in 1842. Nevertheless, the so-called age of the tyrants was giving way to the era of squatters.

The term "squatter," transplanted first from North America to Van Diemen's Land and thence to the parent colony of New South Wales, originally expressed contempt for those occupying land outside settled areas. A certain undesirable element among the first Australian squatters was, however, soon dwarfed in numbers and importance by the more enterprising free settlers who sought greater opportunities beyond the 19 counties near the coast, an area within a radius of about 150 miles (241 km) from Sydney within which government policy in New South Wales sought to restrict settlement. Authorities in Sydney were eventually forced to admit the economic value of the fleeces shipped to expanding English woolen factories by squatters from runs to which they had no legal title and for which at first they paid no rent. From mere "poaching beyond the pale" squatting by the 1840's had become a pursuit both respectable and—drought periods excepted—profitable. It was still far from providing the pseudoaristocratic life it came to offer in the 1860's and 1870's, after the first squatters had made the runs, and their descendants the fortunes. Many battles had yet to be fought before the squatters' constantly changing, unfenced runs gave place to fenced stations with comfortable homesteads and boundary riders who replaced nomadic shepherds. Squatters' claims for security of tenure and compensation for improvements were resisted, on the whole without success, by colonial governors like Sir George Gipps (1838–1846) and small-farmer interests who sought to deny titles in perpetuity that might restrict intensive agricultural development. But the squatting age had come to stay in New South Wales and also to exercise its influence on the extension of settlement far beyond the confines of the mother colony.

Extension of Settlement, 1820–1850 and After. Political and economic considerations were closely interwoven in the extension of British settlement in Australia. Economic opportunity stimulated the expansion from Port Jackson into the interior, but political factors were largely responsible for the first coastal settlements in the more distant regions to the south, west, and north. By 1829 the whole continent was claimed for the British.

Convict transportation, which was abolished gradually between 1840 in New South Wales and 1868 in Western Australia, certainly had an effect on Australia's development, but three schools of thought appraise its influence differently. One school regards the convicts as more sinned against than sinning and stresses the valuable contribution made to Australian political and social democracy by those who were sent out for political offenses as well as the services of those who provided much needed labor in government gangs or as assigned servants, or who, as emancipists, founded some highly respectable pastoral families of a later era. A second school points to the known depravity of some of the convicts and insists on recognition of the widespread degradation caused by the severity of the system in the early days of New South Wales, in Queensland, and, in particular, in Tasmania, to which many of the worst felons were retransported. Others go further still and find in the regimentation of convict days one of the predisposing causes of the allegedly excessive government interference with the Australian economy of the 20th century.

The New South Wales Hinterland and Queensland. The reversal in the early 1820's of Macquarie's rigid emancipist policy encouraged a steady stream of free settlers who were ready to make a moderate outlay on the purchase of land on which to raise sheep for wool with the aid of convict labor. Such an increase in the occupation of extensive pasture lands necessarily implied expansion into the interior. This took the form of a series of movements westward beyond the excellent pasture lands around Bathurst (founded in 1815 after Gregory Blaxland's conquest of the Blue Mountains); northwestward to the Liverpool Plains, New England, and the Darling Downs; southward across the Murrumbidgee River; and southwestward into the more distant but equally rich pastoral districts of Australia Felix, the existence of which was confirmed by the explorations of Charles Sturt and Sir Thomas Livingstone Mitchell in 1828–1830 and 1836, respectively. The attempts of Governor Sir Ralph Darling (1825–1831) to restrict settlement to the 19 counties were therefore doomed to failure. Squatters were, however, debarred from effecting the natural economic expansion beyond the Darling Downs to the Moreton Bay district by the decision in 1824 to establish a convict settlement at the mouth of the Brisbane River. It was not until shortly after transportation had ceased, in 1840, that this district was thrown open to free settlement. Therefore, Brisbane gradually became the port, and later the capital of a predominantly pastoral community.

Settlement gradually pressed farther north and northwest and, in 1859, compelled the recognition of Queensland as a self-governing colony separate from New South Wales and in some ways peculiarly distinct from all the other Australian colonies. Its special tropical conditions were emphasized by the extension of settlement northward along the coast of sugar plantations as well as northward and northwestward into the interior for pastoral purposes. This latter expansion led to the inclusion in the colony, in 1861, of the Albert region south of the Gulf of Carpentaria.

Victoria. Meanwhile the pastoral development and inland exploration southwest of Sydney, together with the colorful exploits of independent settlers from Tasmania—the Hentys at Portland Bay in 1834, and John Batman and John Pascoe Fawkner at Port Phillip Bay in 1835—prepared the way for a new southern colony. Officials in Sydney were, however, slow to recognize or to encourage it. The failure of officially authorized establishments at Port Phillip in 1803 and at Westernport in 1826, inspired by fear of the French, had exhausted the enthusiasm of Sydney officials for extending the range of an administration already proving difficult, but economic forces once more proved too strong for officialdom. Accordingly, a police magistrate from Sydney formally represented the New South Wales governor in Melbourne from 1836 to 1839, when the British government sent out Charles Joseph Latrobe as superintendent of this Port Phillip dis-

trict of squatters. Port Phillip remained part of the colony of New South Wales until the Australian Colonies Government Act, 1850, gave separate representative institutions to a separate colony of Victoria (1851).

Tasmania. Economic pressure was thus mainly responsible for the extension of settlement to the northern and southern colonies of the eastern mainland. But the island of Tasmania—smallest of the six states of the 20th century Commonwealth, yet first of the daughter colonies to attain separate colonial status (1825)—owed its settlement, if not its development, to the endemic fear of the French that possessed successive governors in Sydney. The first British settlement in Van Diemen's Land, made by Lt. John Bowen at Risdon Cove on the Derwent River in 1803, was in the following year taken over and transferred to Hobart by Lt. Col. David Collins, who had been sent to forestall the French in Port Phillip, where he did little but compose pessimistic reports for Governor King. In 1804 another settlement under Lt. Col. William Paterson was made on the Tamar River, but was transferred to the present site of Launceston two years later.

The early development of Van Diemen's Land was aided by the transfer of free settlers and convicts from Norfolk Island. This island, which had been occupied in 1788 to forestall "any other European Power," was gradually abandoned between 1806 and 1813. It was reoccupied in 1825 and governed thenceforward by New South Wales, except for a period of Tasmanian control from 1844 to 1856, until the Commonwealth took over in 1914. Tasmanian development was also assisted by the growth of a profitable whaling industry centered at Hobart and, later, by the rapid progress of the wool industry after Macarthur's experiments in New South Wales. Further development of the colony was retarded by gross mishandling of the native question and by the steady influx of convicts. In 1821 the grim Macquarie Harbour was established in the western part of the island for the worst type of convict, and the first independent governor, Col. George Arthur (1824–1836), though he replaced Macquarie Harbour by a new prison at Port Arthur, regarded Van Diemen's Land as primarily a convict settlement. The number of convicts increased rapidly after transportation to the mainland stopped in 1840. Transportation to Van Diemen's Land did not cease until 1853, when the island's name was also changed to Tasmania.

Western Australia. The first British station in the largest of the states of the 20th century Australian Commonwealth was also due to fear of the French and not to economic factors favorable to settlement. Although Albany, in the southwest corner, can boast of a continuous history from the arrival of Maj. Edmund Lockyer in 1826, the extension of settlement in Western Australia came from the Swan River Settlement on the west coast. In 1827, Capt. James Stirling had explored the river with the approval of Governor Darling, who was much concerned that "so advantageous a position should not be taken possession of by the French." The problems of the colonists who came with Stirling to the Swan in 1829 and of those who followed him during the next few years were caused by poor land, marked shortage of labor, and difficulties with the Aboriginals. In 1832 the population was only 1,500, and the lack of further immigration accentuated the labor problem until it was met by the British government's decision to grant the colonists' request for convict labor. The first group arrived in 1850. Transport was also provided for a small number of free settlers.

This costly British subsidy to the colony had substantial economic results. When transportation ended in 1868, expansion into the enormous hinterland had begun. Settlement extended eastward across the Darling Range around York, Northam, and what was later known as Toodyay. Fresh settlers established themselves on the southwest coast—at Australind near Bunbury, where an abortive settlement had been attempted in 1841; and from Augusta north to the Vasse River, where the Bussell family pioneered with more success from 1831. Geraldton was founded in 1851. In the 1860's, adventurous settlers pressed north with sheep and cattle as far as the De Grey district, and by the 1880's the pearling industry was established in the northwest, and gold prospectors as well as pastoralists were at work in the Kimberleys.

South Australia. The extension of settlement to what is now the state of South Australia was due less to strategic considerations and owed more to the influence of ideas than was the case with any other Australian colony. Six men are inseparably associated with this settlement. Charles Sturt, by his epic voyage down the Murray in 1830, drew attention to the rich lands near the river's mouth. The difficulties that attended the ill-planned settlement at the Swan River emphasized the need for closer coordination of land, labor, and capital in any new colony, and Edward Gibbon Wakefield provided a reasoned theory of coordination and was instrumental in founding the South Australian Association, which engineered the passage of the Foundation Act of 1834. George Fife Angas was one of the ablest and least doctrinaire of the commissioners appointed under the act to share with the colonial office the organization of the new settlement. As the promoter and main supporter of the privately owned South Australian Company, Angas also made possible the land sales necessary to bring the act into operation. William Light, who arrived as surveyor general in August 1836, determined the site of and laid out the future capital city of Adelaide. George Gawler, the second governor (1838–1841) of the colony but the first with unified authority, had to face the consequences of the speculation in land that had prevented the Wakefield theory from operating smoothly and that threatened the colony with starvation while settlers were still pouring in. By a vigorous policy of public works financed by bills drawn on the authorities in London he prevented the colony from collapsing. Recalled in 1841 and virtually disgraced by a home government that at first refused to honor his promissory notes, Gawler had nevertheless given the colony the equipment in roads, buildings, and country services necessary to its future development, which followed the vital reconstruction and rigorous economy ruthlessly effected by his capable successor, George Grey (1841–1845). Thereafter the extension of settlement in South Australia proceeded more steadily than in Western Australia. The land itself was more uniformly good, and what convicts did for the western colony was more than equaled by the natural stimulus afforded to South Australian agriculture by the markets opened up after the silver, lead, and copper discoveries in the colony

lives. This direct conflict with authority gave place to a more constitutional opposition to vested interests after the advent of capitalist mining in the 1860's.

Most diggers were then absorbed into the ranks of an urban proletariat or became more or less disgruntled small farmers seeking to take advantage of Victorian and New South Wales legislation for "free selection before survey" in a largely vain attempt to force squatters to "unlock the land." The former diggers certainly provided a new and welcome labor force, which made possible the manufacturing industries created in Victoria under the dominant influence of David Syme and his protectionist program. They gave new significance to the development of the Australian trade union movement, which had begun in the 1830's. Population in Australia increased from 405,356 in 1850 to 1,145,585 in 1860. Similar results were to follow the opening of the Western Australian fields some 25 years later; the western colony's population rose from 39,584 to 179,708 between 1886 and 1900, when gold indeed put Western Australia on the map. The colony's exports multiplied ten times in value during the period, and responsible government, foreshadowed before the gold rushes and granted in 1890, became an effective instrument in agricultural expansion after the decline of gold mining early in the 20th century.

The social consequences of the gold rushes, like those of convict transportation, are not easily assessed. But it must be recognized that the mass migrations of the gold rushes had some leveling influence during the common search for fortunes on the fields and in the less spectacular search for a living when the alluvial gold had petered out. A certain ethnic infusion should also be recognized. Though the proportion of non-Britishers among the diggers was surprisingly small—the census of 1861 put it as low as 7.5%—the intermingling of English, Scottish, and irish immigrants with colonial diggers helped to produce a distinctively Australian stock from which Asian strains were excluded. This was partly the result of the vigorous policy of immigration restriction—a policy owing much to the hard feelings between Europeans and Chinese on the goldfields. The policy eventually was embodied in the Immigration Restriction Act, passed immediately upon the establishment of the Commonwealth (1901).

One clearly understandable consequence of both convict transportation and gold discoveries was the increase in bushranging, or frontier violence. The final outburst of lawlessness in sections of an almost empty land was brought under control in 1880 with the destruction of the notorious Kelly gang led by Ned Kelly.

Economic Depression and Prelude to Federation, 1890–1901. The most serious sequel to the gold rushes, the land boom of the 1880's, had long-term results that were political and social as well as economic. The boom of the late 1880's and the acute depression that followed its bursting in the early 1890's, when 23 banks failed within two years, had many contributory causes. In the traditional interpretation of the boom of 1890 paramount importance is attached to the colonial self-confidence that had followed the gold rushes long after the gold yield had begun to decline. The significance of this single causative influence has, however, been challenged in view of the steady and healthy growth of many urban manufacturing and building industries between 1860 and 1885. Gold production throughout Australia nevertheless decreased more than 50% in value between 1860 and 1886, though falling world prices in manufactured goods helped to offset the reduction in gold exports as long as world prices for wool remained high. Eastern Australia also experienced an unusually long run of good seasons in the 1870's and 1880's, which helped to disguise a relative decline in efficiency of some expanded pastoral properties.

This expansion and some unhealthy urban building ventures were assisted by money from English and Scottish sources, which was freely invested in Australian banks and other private enterprises. Colonial governments also had no difficulty in raising loans on the London market, which were spent on developmental works whose economic soundness was too seldom subjected to careful scrutiny. Overseas interest commitments trebled between 1861 and 1890, and the situation was aggravated by unwise banking policy. Banks that had once given overdrafts on wool and stock in process of sale extended their credit until eventually the land itself was considered sufficient security. Speculation in land values made this security more than doubtful, especially when the advances were made on city blocks, in which an orgy of speculation developed in the 1880's. The reappearance of drought in New South Wales and South Australia between 1884 and 1886 checked the overconfidence of Sydney and Adelaide speculators, but Victoria continued to enjoy good seasons. People poured into the southern colony from other parts of Australia, and huge sums from overseas were invested between 1886 and 1890. Stock exchange activities in mining shares and the scrip of land companies nearly doubled between 1887 and 1888. Melbourne became a veritable boom city. When the banks endeavored to call a halt to the speculation, which their overgenerous advances had encouraged, land companies took advantage of Victorian legislation of 1888 to convert themselves into banks. They had little difficulty in obtaining financial support in the United Kingdom, and speculation in land values extended from the capital to country towns until the whole colony was affected.

There was no sudden bursting of the bubble, but the price of wool was an indicator. Steady from 1875 to 1884, it dropped each year thereafter until it was down to half of the 1884 price in 1894. British investors were also alarmed by failures in Argentina in the late 1880's and the sources of private and public loans began to dry up. The pinch was felt in Melbourne by the close of 1889, when a building association suspended payment. Building construction stopped suddenly in the early part of the following year, and most of the land companies collapsed in 1891 and 1892. The associated banks held on until January 1893, when the first of their number, the Federal Bank of Australia, went down.

Resolute action by the government of New South Wales checked panic in Sydney and made possible the use of the gold resources of the mother colony to assist reconstruction elsewhere, but rehabilitation was a slow and painful process. Millions of pounds of British deposits were locked up in the form of preference shares in reconstructed banks, and colonial investors had to settle down to a period of lean

years from which many of them never recovered. Between 1898 and 1900, however, recovery was rapid despite the recurrence of drought conditions.

When financial, commercial, and rural interests had adjusted themselves to postboom conditions, they were faced with labor forces that themselves had undergone a difficult period of readjustment following a trial of strength with employers, while the boom was still at its height, from which the trade unions had come off second best. The Australian labor movement, which in its pre-goldfields phase had been influenced largely by British trade unionism, was strengthened and refashioned in the 1860's as a "unionism native to the country" by former diggers absorbed into older urban and rural industries, the new capitalized mining ventures, and the young manufacturing industries. The growing strength of the trade unions was displayed in a series of strikes in the 1870's and 1880's. Other landmarks in their rapid development were the formation of a coal miners' mutual protective association in the Hunter River district in 1874, the holding of the first intercolonial conference of trade unions in 1879, and the launching of the Amalgamated Shearers' Union (1886), which by 1894 was to become the powerful Australian Workers' Union (AWU), embracing shearers and shed hands in Victoria, New South Wales, South Australia, and New Zealand and joined a decade later by the Queensland Shearers' Union. The AWU thus organized by William Guthrie Spence, with a membership of 50,000, was to remain one of the most influential Australian trade unions, whose nationwide organization swept across political boundaries and absorbed minor rural unions. Elsewhere, craft unionism continued to retain a considerable hold on the labor movement, while geographical and political factors reinforced craft union arguments in favor of federation rather than amalgamation.

Meanwhile, the whole trade union movement, with its emphasis on industrial rather than on political activity, received a shattering blow from the failure of the great shipping strike of 1890, which both sides treated as a trial of strength. Although shearers and miners struck, the approach of the depression, already reflected in falling prices and increasing unemployment, and the strength of the political and press support for employers spelled disaster for the unions. After both leaders and rank-and-file members had retired to lick their wounds and to share in the general suffering caused by the bursting of the boom, Australian labor reemerged in a new political phase in which it rapidly rose to leadership in what became the federal and state parliaments of the new Commonwealth of Australia.

Although labor's advent as an organized political party dates from the 1890's, political pressure had been exercised by unions long before, as is shown by the general adoption of an eight-hour day by colonial legislatures between 1873 and 1896 and the passage of various factory and mines acts. A labor member had been elected to the legislative assembly of Victoria as early as 1859, and to that of New South Wales in 1880 and 1883. Such political intervention was merely incidental, however, and industrial activities were considered the real concern of trade unionists. The growing difficulties of the 1880's had suggested to some the need for a change of tactics, and the disastrous defeat in the shipping strike of 1890 brought many more round to this point of view, which was strengthened by the payment of members of the New South Wales Legislative Assembly in 1891, following the lead of Victoria in 1871 and South Australia in 1887.

New South Wales and Queensland were most active in this new political phase of the labor movement. Some 36 Labor party members were elected in New South Wales in 1891, and 27 in 1894, only to be split on the fiscal issue by the superior tactics of Premier Sir George Dibbs. From 1895 on, the reunited party, though still in the minority, held the balance in the Legislative Assembly. Increasingly skillful tactics—the party now included two future Labor prime ministers of the Commonwealth, John Christian Watson and William Morris Hughes—made possible the making and unmaking of ministries. Labor thus secured the passage of important social legislation before it obtained a majority of the assembly in 1910 and formed the first Labor ministry in New South Wales, under James S.T. McGowen, though not the first in Australia. That distinction belongs to Queensland, where Anderson Dawson became premier in 1899. The Dawson ministry lasted only a week, but it included the second Labor prime minister of the Commonwealth, Andrew Fisher.

The fortunes of the Labor party in the various states in the early years of the 20th century were affected by local issues, reflecting to some degree the level of economic development reached in each. However, by this time the Australian labor movement was concentrating more and more of its political attention on the Commonwealth Parliament, to the creation of which organized labor had made an indirect contribution—though the influences leading to federation were concerned with external as well as internal affairs and in both respects considerably antedated the political phase of the labor movement.

It is difficult to estimate the relative importance of these external and internal influences. The need for coordination in defense policy and for joint action in external affairs undoubtedly played an important part in transforming vague aspirations for political federation into positive action. This was especially evident after the early 1880's, as the activities of foreign nations in the Pacific continued to alarm the several colonial communities in eastern Australia. But both the main stimulus and the most persistent opposition to federation came from the growing divergence of the domestic policies of the several colonial governments and from increasingly acute local rivalries and jealousies. There was a pressing need to find some way of coordinating the customs policies of neighboring colonies. Particularly glaring was the contrast between free trade New South Wales and protectionist Victoria after the late 1860's. Other common needs might be met from time to time by intercolonial conferences, which did indeed produce agreement concerning ocean mails, lighthouses, and the like. Some such ad hoc method might also have resolved the difficulties involved in the navigation and use of the waters of the Murray River, in which three colonies were closely interested, but without some more general and permanent machinery the search for a customs agreement was bound to be fruitless. On the other hand the very sharpness of the contrast between Victoria and New South Wales made a common tariff policy almost as elusive.

The first project for central government to achieve prominence dates from 1837, when Earl Grey suggested the establishment of a general assembly for the several colonies. The Australian Colonies Government Act of 1850 did contain such a provision in its first draft, but the centrifugal tendencies in Australian development made such attempts fruitless, although there were men in the colonies—Edward Deas-Thomson, William Charles Wentworth, and John Dunmore Lang—who early recognized the need of a machinery for common action. In the 1870's and 1880's the stiffening of Victoria's protectionist policy and the urgency of Murray River problems gave suport to the convictions of three political leaders in Victoria, New South Wales, and Queensland, respectively—James Service, Henry Parkes, and Samuel Walker Griffith—to whom the cause of federation owed much. Events in the Pacific then played their part. In 1883 the British government refused to confirm Queensland Premier Sir Thomas McIlwraith's annexation of New Guinea, although it was supported by colonial opinion elsewhere. Service and Griffith then endorsed the earlier suggestion of Parkes for a federal council of Australasia, which was duly established in 1885 by an act of the British Parliament.

The first practical step in the movement toward federation was endangered by its founders' attempt to create a comprehensive unit including New Zealand and Fiji. The council's powers were also too limited, for they excluded defense and the question of tariffs. To make matters worse Parkes, who had been in England in 1883–1884 while his colleagues were somewhat hastily drafting the constitution of the new body, failed to persuade New South Wales to become a member. The federal council, indeed, fell far short of the federation of which Parkes dreamed, and for which he began an active campaign in the late 1880's.

The national convention that met in Sydney in March 1891 did not have sufficient popular drive behind it to overcome the partly factious opposition in all colonies. Nevertheless, it brought together a number of able men (including representatives of New Zealand) who, under the leadership of Parkes and Griffith, produced a draft embodying the details of a federal constitution to be submitted to the British Parliament after the endorsement of the colonial legislatures had been obtained. The colonial parliaments of 1891 failed, however, to give the necessary confirmation. Opposition, led by George Houstoun Reid, was strongest in Sydney, where there were real fears for the prosperity that had been built up by free trade. The opposition in the other colonies, though not so serious except in Western Australia, was sufficient to prevent the governments concerned from moving without the assurance of New South Wales cooperation, and there was no organized nonparty federal movement strong enough to force the issue.

The second national convention, held in 1897–1898, was the direct result of the rapid rise of such an organized popular movement. A conference of federal leagues and the older Australian Natives' Association, which assembled at Corowa in 1893, reflected the sentimental enthusiasm for union and the practical search for more efficient government inspired by the collapse of the land boom and the widespread depression of the early 1890's. Political changes and retirements also provided parliamentary leaders for the federal movement. Edmund Barton in New South Wales and Alfred Deakin in Victoria gave steady support, while Reid, though still hesitant, was shrewd enough to recognize the political significance of the popular movement and give it the equivocal support that later earned him the nickname of "Yes-No" Reid. The popular side to the federal movement in the 1890's was reflected in the composition of the second national convention. Its members, following the procedure recommended by John Quick at Corowa, were elected by the people of the several colonies (except in Western Australia, where they were again appointed by the British Parliament, and in Queensland, which was not represented). Additional popular support was invited by the decision to submit the convention's revised version of the draft constitution of 1891 to the electors of the several Australian colonies.

The course was now set for federation, but opposition again sprang up in New South Wales and Western Australia. At Reid's instigation the legislature of New South Wales had made an 80,000 affirmative poll a condition for its further action, and the referendum of June 1898 produced an affirmative majorty vote totaling only 71,595. Despite clear majority votes in Victoria, South Australia, and Tasmania, followed by a similar result in Queensland, a position of stalemate was thus reached. Further negotiations led in January 1899 to a premiers' conference at Melbourne, where it was agreed to resubmit the bill with certain amendments concerning, among other subjects, financial clauses and the alteration of the constitution, and providing for the establishment of the federal capital within the boundaries of New South Wales, but more than 100 miles (161 km) from Sydney. A revival of opposition in Sydney threatened still further delay, but affirmative votes, with increased majorities, were obtained in all the colonies except Western Australia. There the government of John Forrest was at length persuaded, and a referendum held on July 31, 1900, produced the necessary affirmative vote. Meanwhile, the other five colonies had proceeded to London with their bill, and the Commonwealth of Australia Constitution Act came into operation on Jan. 1, 1901. Barton became the first prime minister of the new Commonwealth, with Deakin as his attorney general and leading colleague.

From Federation Through World War II, 1901–1945. The first Australian Commonwealth of 1901 would be scarcely recognizable to those who have known only the nation that emerged from the second of the two world wars that so deeply affected the first half century of its development. Its behavior in its first 14 years reflected its colonial parentage as well as its overseas ancestry. In many respects the young Commonwealth was but old colonial societies writ large. Leading figures at the seat of federal government—in Melbourne until 1927, thereafter at the new federal capital city of Canberra—were men of local political experience. The first prime minister had been both attorney general of New South Wales and a speaker of its Legislative Assembly; his attorney general had been premier of Victoria; five other members of his first ministry—John Forrest, Sir George Turner, Sir William John Lyne, Charles Cameron Kingston, and Sir Philip Oakley Fysh—had held the premiership in Western Australia, Victoria, New South Wales, South

Australia, and Tasmania, respectively. The official leader of the opposition, George Reid, had given up his colorful political career in Sydney for what was to be a somewhat indifferent success in federal politics, though he was to hold the office of prime minister in 1904–1905. John Christian Watson, Andrew Fisher, and William Morris Hughes, the first three Labor prime ministers of the Commonwealth, were also members of its first Parliament.

Apart from the problems peculiar to the new federal governmental system, it had to take on the many issues that had already been hammered out in the several colonies. In the formative period of the young Commonwealth preceding World War I most of these isues were clarified in general with very substantial common consent—a fact that helps to explain their high degree of subsequent acceptance.

In many cases the colonial antecedents are readily detectable in legislation passed in the early years. Protection, which became the accepted fiscal policy in 1908 after an initial compromise, was a victory for Victorian as against New South Wales practice—a victory made inevitable by the support of the Labor minority in the House of Representatives. The peculiarly Australian system of industrial arbitration developed in the Commonwealth Court of Conciliation and Arbitration set up by the Commonwealth Parliament in 1904 was modeled on New Zealand experience embodied in Kingston's Conciliation and Arbitration Act of 1894 in South Australia, Bernhard Ringrose Wise's New South Wales Arbitration and Conciliation Act of 1901, and the Western Australia Court of Arbitration created in 1900, although the system was also influenced by the minimum wage boards introduced in Victoria in 1896, in Queensland in 1908, and in Tasmania. The Immigration Restriction Act of 1901 was the sequel to an agitation that dated back to goldfields rivalries and had already found expression on the prefederation statute books of more than one colony. The decision to repatriate and exclude South Sea Islanders was made by general consent through the Pacific Islands Labourers Act of 1901, and the concurrence of Queensland cane sugar interests was secured by a tariff designed to compensate for the additional cost of white workers in the cane fields.

Some of the measures passed in the first 14 years reflected the growing influence of the Labour party. Though lacking a clear majority until 1910, Labor, under Watson until 1907 and then under Fisher, had a strong ally in Alfred Deakin. This made possible many of the reforms that gave the prewar Australian Commonwealth a reputation for pioneering social legislation. The year 1908 witnessed the introduction of old-age and invalid pensions. A maternity allowance (1912) followed Labor's advent to power in 1910, and 1911 saw King O'Malley's act for the establishment of the Commonwealth Bank of Australia. However, the electors of the Commonwealth refused Labor the necessary votes at referendums held in 1911 and 1913 to extend federal powers under the constitution to speed up its gradualist policy of "socialism in our time."

Public as well as parliamentary interest centered mainly on domestic affairs in the prewar years, but substantial progress was made in the related fields of defense, imperial relations, and external affairs that had greatly influenced the establishment of the Commonwealth. The decision to create the Royal Australian Navy (1909) had the support of all political parties, and the new Australian military system established by Deakin's legislation of 1909, as amended by Labor's minister for defense, Senator George Foster Pearce, in the following year, provided for a citizen army based on the principle of compulsory training for home defense.

The early leaders of the Commonwealth had no difficulty in reconciling a sturdy Australian nationalism with retention of the imperial tie, but Deakin in particular was not afraid of frank speech in rejection of imperial federation, in denunciation of the "disdain and indifference" with which British enterprise in the Pacific was treated by the Colonial Office, and in advocacy of an imperial secretariat of officials appointed by the several Dominions to maintain direct contact between their governments and United Kingdom departments of state. Deakin's demand for a greater share by the Dominions in the shaping of imperial policy was reinforced by Fisher, but the United Kingdom's control over foreign relations affecting Australia remained virtually unfettered down to the outbreak of war in August 1914. The Australian government had also shown its readiness to qualify its economic nationalism by a mild form of imperial preference (1908). The existence of a portfolio of external affairs in prewar ministries was, indeed, justified chiefly by such legislation as the Navigation Act of 1913, designed to implement the domestic social policy of the Australian Commonwealth by denying interstate coastal trade to ships whose crews did not enjoy the conditions and wages prescribed for Australian seamen.

To the nation at large World War I thus came as a shock, and the reaction was instinctive and emotional rather than reflective of a considered responsibility in foreign affairs. Both as leader of the opposition and as prime minister from September 1914, Fisher pledged "our last man and our last shilling to see this war brought to a successful issue." The wartime record of the young Australian navy in its Indian Ocean sinking of the *Emden* (1914) and in service with the Royal Navy, the capture of German New Guinea (1914), and the contribution of some 329,000 volunteer servicemen (from a total population of less than 5 million) were rightly regarded as a national baptism of fire.

Service on the battlefields also won a place for Australian politicians in the councils of peace at the end of the war, as well as in imperial war cabinets. The nation was behind William Morris Hughes (who had succeeded Fisher as prime minister in 1914) when he insisted before and during the Paris Peace Conference that Australia should secure all of Germany's Pacific possessions south of the equator, with or without the nominal restrictions of a League of Nations mandate. Hughes had nevertheless failed to carry a majority of the Australian people with him when he sought by successive referendums (1916 and 1917) to replace voluntary enlistment by conscription for overseas service.

These conscription referendums had a profound and lasting effect on Australian politics, for they split the Labor party as well as the nation. Hughes and most of his lieutenants left the federal party, which went embittered to the wilderness and remained there until 1929. Hughes led his wartime non-Labor allies until

The Menzies Years. The new prime minister ended rationing and then proceeded to govern Australia in coalition with the disciplined, ultra-conservative Country (afterward National) party. Menzies was to dominate Australian political life for the next 23 years.

An imposing figure—he was 6 feet 3 inches (190 cm) tall—Menzies maintained his political power by manipulating divisions in the opposition Labor party and by skillfully using his physical presence and commanding oratory to enhance his popular appeal. During his long prime ministership he presided over an unprecedented prosperity, which he guided with a gentle, almost laissez-faire hand. The chief criticism of Menzies was that he allowed the economy to coast instead of leading it in a more aggressive expansion, as through the development of export-oriented manufacturing industries. But his achievements were real and lasting. Menzies expanded the educational system at an unparalleled rate and on all levels. In foreign policy, he brought Australia into the ANZUS mutual-defense treaty (1952) with the United States and New Zealand—a turning point in national diplomacy, for it ensured U.S. participation in regional defense. An important and controversial ramification of the ANZUS treaty was that it enabled the United States to establish vital intelligence bases on Australian soil.

That question aside, Menzies' reputation as a political leader of world stature was contested on several grounds. In 1956, for example, he was involved in a ludicrously ineffective personal attempt to persuade Egypt's President Nasser to return the just nationalized Suez Canal to French-British ownership. He justified his later involvement of Australia in the Vietnam War as a means "to prevent the downward thrust of China." Moreover, he authorized the sending of conscripts to Vietnam, although previously all Australians who had fought overseas had been volunteers. Critics also pointed to his opposition to the admission of newly independent black and Asian former British colonies to the Commonwealth. But in the early 1960's, Menzies sanctioned the end of the "white Australia" policy, which since 1901 had restricted permanent immigration to people of European stock.

The Labor Split. Through most of Menzies' term of office, the opposition Labor party was in turmoil. After Chifley's death in 1951, it was led for nine years by Herbert Vere Evatt, a former High Court judge who had been Chifley's foreign minister and president of the United Nations General Assembly. In 1954, following his narrow defeat by Menzies in a general election, Evatt confronted right-wing members of the Labor party who allegedly were led from outside the organization by Bartholomew Santamaria, organizer of a large Catholic social-action movement. The prime minister accused the rightist Labor faction of running "dead" during the campaign and of conspiring to take over the party. The issue split the labor movement, with most of its right wing forming the Democratic Labor Party (DLP).

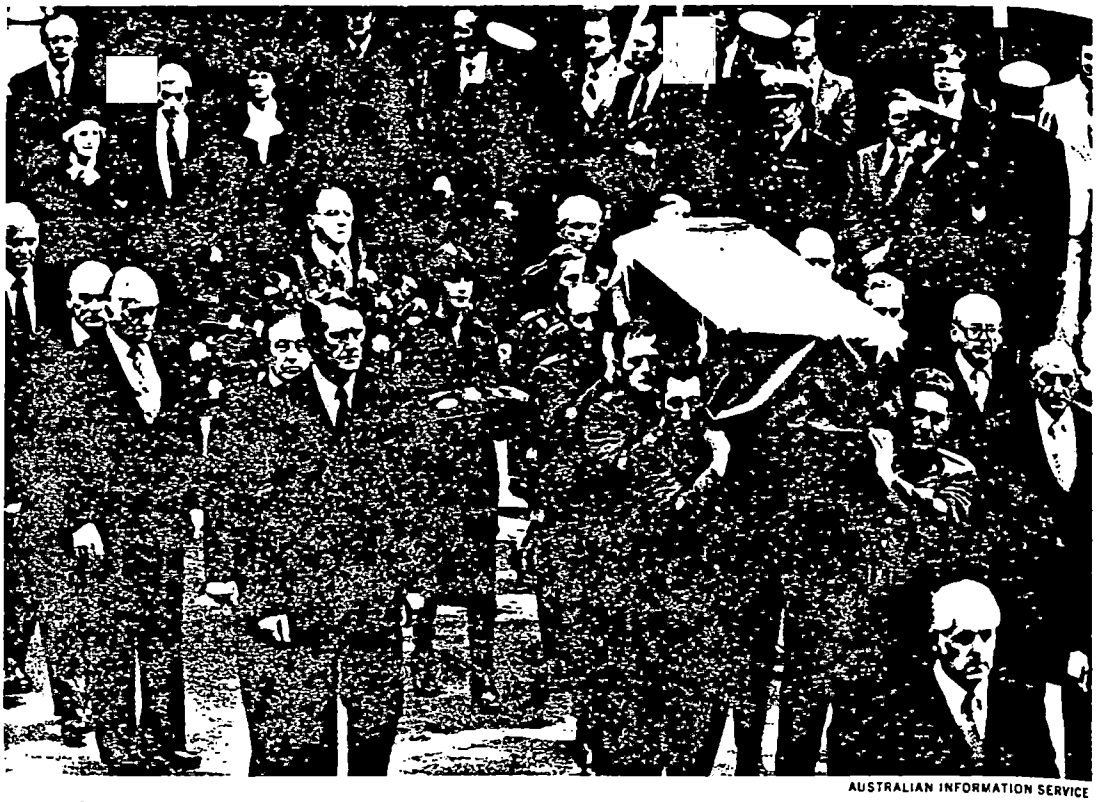
Santamaria, who since the late 1930's was one of the most influential figures behind the scenes in Australian politics, became the driving force of the DLP. For much of the next 20 years the DLP won enough seats in the Australian Senate to hold the balance of power there; and by directing its supporters to allocate against the Labor party their second-preference votes in elections for the House of Representatives (see under *Government*), it kept the Liberal-Country coalition in office. Not until Howard Gough Whitlam emerged as a new Labor leader in the mid-1960's—replacing Evatt's successor, Calwell—did the Labor party begin to regain conservative, middle-class votes and edge toward power.

The Liberal Succession. In 1966, Menzies stepped down voluntarily to pass the prime ministership to his long-favored deputy, Harold Holt. But Holt disappeared in the surf off a private beach near Melbourne in December 1967, his body never to be found. After his death the Liberal party elected as prime minister the little-known John (later Sir John) Grey Gorton, a senator, former minister for education and science, and a wartime fighter pilot. Once in power, Gorton proved to be a centralist who angered powerful elements in his own party who believed that the six Australian states should retain, even expand, their considerable power. More popular with the public than with the Liberal party, he barely retained power in the 1969 election, having lost popular support because of party wrangles, growing voter hostility to the Vietnam War, which Gorton supported, and strong campaigning by Whitlam. In 1971, Gorton yielded the prime ministership to William (later Sir William) McMahon. But McMahon's fumbling attempts to control his disintegrating party and to restrain the rolling Whitlam bandwagon paved the way for Whitlam's victory over him in 1972.

McMahon became the only Australian conservative prime minister who never won an election. His tactics—such as ardent opposition to Communism, which had been successful (and more relevant) in Australia 20 years earlier—were symbolized by an incident that occurred shortly after he began his brief reign. Whitlam had traveled to China, the first major politician from either side of Australian politics to do so since Mao Zedong's victory in 1949, and in Peking he had conferred for several hours with Premier Zhou Enlai. McMahon branded Whitlam a "traitor" who was undermining the American alliance. Two days later, while Whitlam was resting in Japan on his way home, the Nixon administration announced that Secretary of State Henry Kissinger was in China, his secret mission having coincided with Whitlam's public one. At the same time it was disclosed that President Nixon would visit China the next year.

The Whitlam Government. Although he held power for only a sixth as long as Menzies, Whitlam in many ways challenges the earlier leader as the most significant Australian political figure after World War II. Until his emergence, Labor had seemed destined for permanent opposition despite the turmoil in the three conservative coalition governments that governed for their parties in the six years following Menzies' resignation.

Whitlam was Australia's most intellectually brilliant prime minister, and he displayed his knowledge with unabashed arrogance to those he saw as fools and to his political enemies. His Menzian appearance and oratory made him an awesome figure in the 1972 political campaign, especially when pitted against the diminutive McMahon. Whitlam's election slogan was "It's time!" Australians, tired of the internally divided conservative parties and (especially the young) fed up with the Vietnam War, agreed.



AUSTRALIAN INFORMATION SERVICE

A state funeral in Melbourne was held in 1978 for former Prime Minister Sir Robert Gordon Menzies. Among the dignitaries in attendance was incumbent Prime Minister Malcolm Fraser, who leads the cortege on the left.

Since 1945 the nation had changed dramatically—in its economy, its politics, and its culture. A rich and confident country, Australia had become a multicultural society because of its immigration program. Less than 50% of the population were now of British stock, compared with 75% a generation earlier. Thanks to a decision of the government in 1960 to lift the traditional ban on Australian mineral exports, the nation's economy was thriving. Huge quantities of iron ore, coal, bauxite, and other minerals were being shipped to foreign markets, and the usual exports of wool, meat, wheat, and grain continued unabated. Reflecting the changing social mores, Whitlam abolished fees for all tertiary education, granted equal pay to women, lowered the voting age to 18, and obtained a new family law that effectively introduced no-fault divorce and gave the state the power and ultimate responsibility for supporting children of broken marriages.

The alliance with the United States was the cornerstone of Australia's foreign policy, and Whitlam supported it. But he was the first prime minister to declare that the relationship was interdependent, and that as a close ally of medium strength Australia had the right and duty to tell the United States when it thought Washington was wrong. This attitude immediately brought Whitlam into direct conflict with President Nixon's administration. Whitlam's first act as prime minister was to withdraw the remaining Australian troops from Vietnam, end conscription, and order the release of draft dodgers from jail. He strongly criticized Nixon for the bombing of Hanoi and the invasion of Cambodia, and in 1973, on a visit to the White House, he even lectured the president on what he saw as the errors of U.S. foreign policy.

In 1974, Whitlam was reelected, though by a reduced majority, defeating and triggering the political demise of Billy (later Sir Billy) Snedden, who had replaced McMahon as Liberal leader. For the first time an Australian Labor leader had led his party to two election victories. Confident Australia had the wealth and vigor to match wits in trading with the rest of the world, and Whitlam had slashed tariffs by 25% across the board in 1973. The timing proved to be terrible. The first OPEC-induced recession was just getting under way, a wage explosion was occurring in Australia, and both unemployment and inflation were soaring. Thanks to Labor's 23 years in the political wilderness, Whitlam's ministers had had no experience of government; worse, most were aging and had passed their peak of energy and judgment.

The Crisis of 1975. Early in 1975, Malcolm Fraser gained the Liberal party leadership from Snedden. A wealthy rancher, Fraser had nerves of steel and a commanding presence, equaling Menzies and Whitlam in physical stature. His conservatives controlled the Senate, where they proceeded late in 1975 to delay passage of the Labor government's money supply, demanding that Whitlam call an election of both houses of Parliament to find a political answer to Australia's deepening recession. Whitlam refused.

In a long battle of nerves, Fraser kept his forces in line. Governor-General Sir John Kerr—a Whitlam appointee, who when appointed was an old friend of the prime minister—then stepped in and invoked reserve powers of the

crown provided in the constitution but never before used. Kerr sacked the Whitlam government and dissolved Parliament. He appointed Fraser as interim prime minister on the condition that his party vote appropriations immediately and that an election be held. The day of the dismissal, Nov. 11, 1975, was the most dramatic in Australian peacetime history, with Labor supporters taking to the streets in protest throughout the nation. The most popular political figure, trade-union leader Robert Hawke (later to become prime minister), checked the surge to violence, but millions of Labor supporters never forgave Kerr and Fraser. The subsequent years of the Fraser government were marked by community bitterness and the prime minister's failure to win the confidence of large sections of the population.

The Fraser Government. In the election of December 1975, Fraser led the conservatives to a landslide win, the biggest in Australian history. Whitlam remained Labor's leader for another two years, when Fraser was reelected by a large majority and Whitlam retired, paving the way for William Hayden's leadership of the Labor party. Fraser, however, defeated Hayden in 1980. In that year Hawke, who had consistently and publicly expressed his ambition to be prime minister, entered the political arena as a member of the House of Representatives.

In the early 1980's inflation hovered above 10%, unemployment persisted at the highest levels since the depression of the 1930's, and Australia's exports were suffering from stagnant world prices for minerals and the worst drought of the century. As Fraser put it in his most famous declaration, "Life was not meant to be easy."

Another dramatic day in Australian politics dawned on Feb. 9, 1983. As Fraser was calling an early election, Hayden stood down as Labor leader to make way for Hawke. The latter was under pressure from party lieutenants to take over, despite Hayden's own opinion that "even a drover's dog" could have led Labor to victory over a dispirited and politically battered Fraser. Hawke won impressively. His populist style and his declaration that he would govern by consensus had struck chords in an Australian middle class that admired his political image and believed, as he did, that he was a natural leader of the nation. The Fraser years had been stark and often sterile, politically as well as economically.

The Hawke Consensus. Weeks after Hawke took office, the drought broke and the rural economy bounded to new records. At an economic summit called by the new prime minister, the three pillars of power in Australia—the government, business, and the unions—agreed on restraining wages and prices. A wage-price accord between the administration and the labor movement held wage increases to the rate of inflation. Hawke called an early election—an Australian political habit—and in December 1984 he was returned with a reduced but comfortable majority over the new Liberal leader, former foreign affairs minister Andrew Peacock. Less than a year later, the Liberals replaced Peacock with former treasurer John Howard, who promised less government control of the economy. Hawke called for an early election again in 1987 and won his third successive victory in July, in spite of the fact that the economy still suffered from falling world prices for Australia's raw material exports.

The New Australia. The Commonwealth of Australia had entered the postwar era facing social changes and a population explosion greater than at any time since the gold rushes of the 19th century. The nation undertook a program of massive immigration and with few social interruptions absorbed a flow of newcomers that included increasing numbers of non-British European ancestry, later reinforced by many thousands of Asians.

Meanwhile, Australia rapidly developed into one of the world's most affluent nations. Its prosperity was fed by the wave of immigration and backed by continuous strong exports of an efficient agriculture and by government policies that encouraged foreign investment in manufacturing and mining. Under a principle of wage justice long established by the government-appointed Conciliation and Arbitration Commission, the central wage-fixing authority, a national basic wage with margins added for different skills meant that much of the newly created wealth was more evenly distributed than in most industrializing countries. From 1945 until the mid-1970's, unemployment rarely existed, and when it did it was relatively low and short-lived. Afterward, although unemployment rose to a high level (by Australian standards) and the nation's traditional deficit in world trade increased sharply, the great majority of Australians remained prosperous.

Australia necessarily came to play a more prominent part in world affairs. When Japanese bombers raided northern coastal towns in 1942, Australians were shocked into recognition of their proximity to Asia. At the end of World War II, community leaders of all political persuasions were determined that their country would assume greater peacetime responsibilities. While retaining traditional ties with Britain and the older members of the Commonwealth of Nations, Australia welcomed increasing association with the United States in matters of regional defense and strengthened its links with friendly Asian and Pacific nations.

PETER COSTIGAN, *Melbourne "Herald"*

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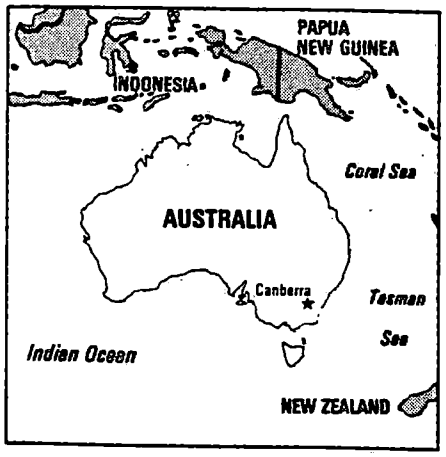
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background notes

Australia

United States Department of State
Bureau of Public Affairs

March 1989



Official Name: Commonwealth of Australia

PROFILE

Geography

Area: 7.7 million sq. km. (2.966 million sq. mi.); about the size of the continental United States. **Cities:** (1987 est.) *Capital*—Canberra (pop. 286,000). *Other cities*—Sydney (3.5 million), Melbourne (3.0 million), Brisbane (1.2 million), Perth (1.1 million). **Terrain:** Varied, but generally low lying. **Climate:** Relatively dry, ranging from temperate in the south to semitropical in the north.

People

Nationality: *Noun and adjective*—Australian(s). **Population** (1988 est.): 16.5 million. **Annual growth rate:** 1.5%. **Ethnic groups:** European 93%, Asian 5%, aboriginal 1%. **Religions:** Anglican 26%, Roman Catholic 26%. **Languages:** English, aboriginal. **Education:** *Years compulsory*—to age 15 in all states except Tasmania, where it is 16. *Literacy*—100%. **Health:** *Infant mortality rate*—8.8/1,000. *Life expectancy*—males 73 yrs., females 79 yrs. **Work force** (end-1987, 7.9 million): *Agriculture*—6%. *Mining, manufacturing, and utilities*—26%. *Services*—63%. *Public administration and Defense*—5%.

Government

Type: Democratic, federal-state system recognizing British monarch as sovereign. **Constitution:** July 9, 1900. **Independence** (federation): January 1, 1901.

Branches: *Executive*—prime minister and cabinet responsible to Parliament. *Legislative*—bicameral Parliament (76-member Senate, 148-member House of Representatives). *Judicial*—independent judiciary.

Administrative subdivisions: Six states and two territories.

Political parties: Liberal, National, Australian Labor, Australian Democrats. **Suffrage:** Universal and compulsory over 18.

Central government budget (FY 1988–89): $65.1 billion.

Defense (FY 1988–89): 2.7% of GDP or 9.3% of government budget.

Flag: On a blue field, UK Union Jack in the top left corner, a large white star directly beneath symbolizing federation, and five smaller white stars on the right half representing the Southern Cross constellation.

Economy

GDP (1988): $220.96 billion. **Per capita income:** $14,458. **Inflation rate:** 7.3%.

Natural resources: Bauxite, coal, iron ore, copper, tin, silver, uranium, nickel, tungsten, mineral sands, lead, zinc, diamonds, natural gas, oil.

Agriculture (1985–86, 4% of GDP): *Products*—livestock, wheat, wool, sugar. *Arable land*—9%.

Industry (1985–86, 36% of GDP): *Types*—mining, manufacturing, and transportation.

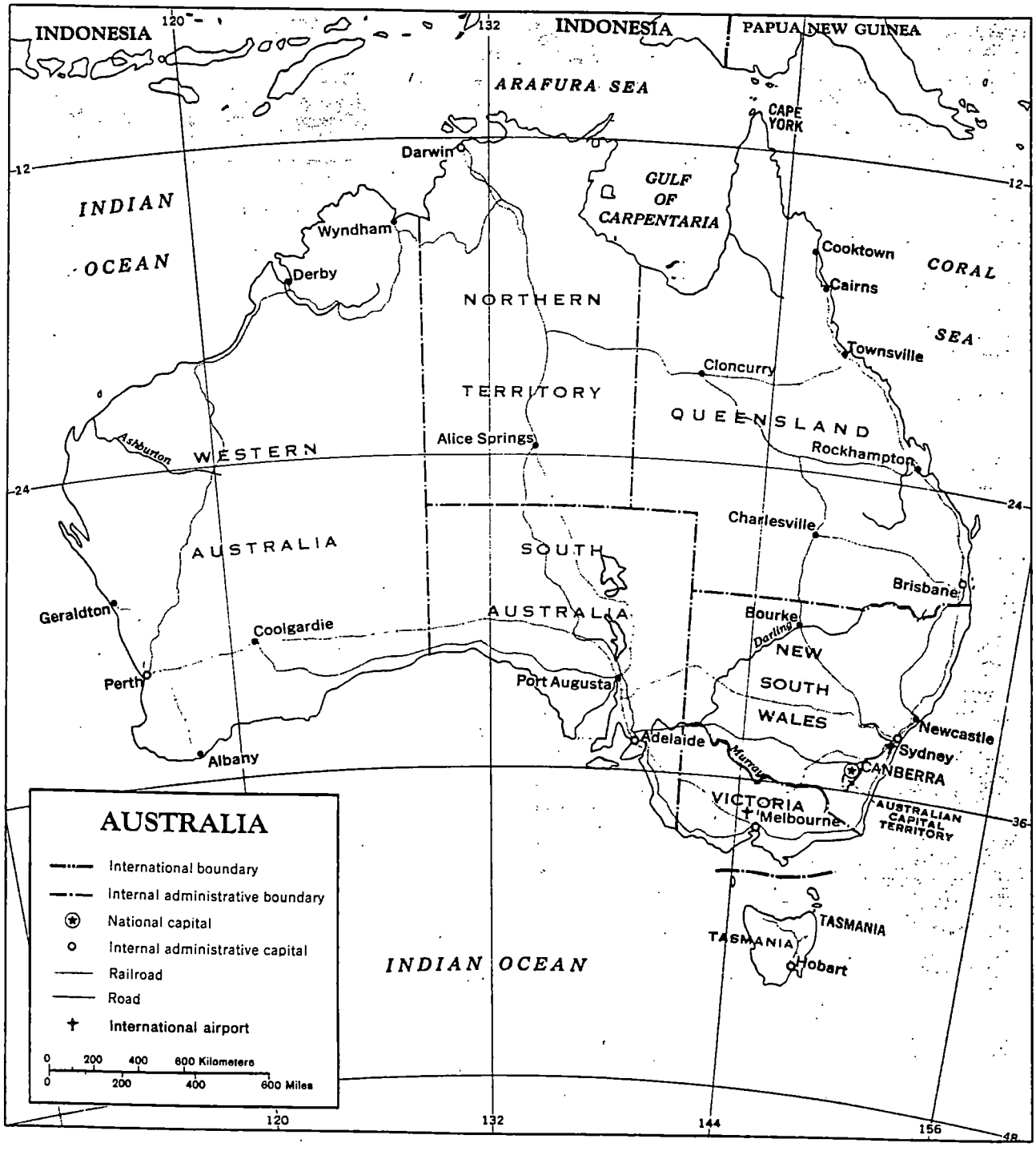
Trade (1988): *Exports*—$30.7 billion: coal, wool, wheat, meat, iron ore and concentrates, alumina, aluminum, petroleum oils, nonmonetary gold. *Major markets*—Japan, US ($3.3 billion in CY 1987), UK, Korea, PRC, Hong Kong, Taiwan, West Germany. *Imports*—$30.6 billion: transportation equipment, capital goods, industrial supplies, petroleum products. *Major suppliers*—US ($5.5 billion in CY 1987), Japan, West Germany, UK, Taiwan, New Zealand, Italy, Korea.

Official exchange rate: The Australian dollar floats freely. The November 1988 rate was approximately US$0.85 = Australian $1.

Fiscal year: July 1–June 30.

Membership in International Organizations

UN and most of its specialized and related agencies, including the UN Education, Scientific, and Cultural Organization (UNESCO) and the Food and Agricultural Organization (FAO); Organization of Economic Cooperation and Development (OECD); Asian Development Bank (ADB); Economic and Social Council for Asia and the Pacific (ESCAP); Australia-New Zealand-US security treaty (ANZUS); Commonwealth; Colombo Plan; International Energy Agency (IEA); the Antarctic Treaty Consultative Group; and many others.


INDONESIA
120
132
INDONESIA
PAPUA NEW GUINEA
ARAFURA SEA
CAPE YORK
Darwin
12
INDIAN OCEAN
GULF OF CARPENTARIA
Wyndham
Derby
Cooktown
CORAL SEA
Cairns
NORTHERN TERRITORY
Townsville
Cloncurry
QUEENSLAND
Ashburton
WESTERN AUSTRALIA
Alice Springs
Rockhampton
24
Charlesville
SOUTH AUSTRALIA
Brisbane
Geraldton
Coolgardie
Bourke
Darling
NEW SOUTH WALES
Perth
Port Augusta
Newcastle
Adelaide
Murray
Sydney
CANBERRA
Albany
VICTORIA
Melbourne
AUSTRALIAN CAPITAL TERRITORY
36
TASMANIA
TASMANIA
Hobart
INDIAN OCEAN
AUSTRALIA
International boundary
Internal administrative boundary
National capital
Internal administrative capital
Railroad
Road
International airport
0 200 400 600 Kilometers
0 200 400 600 Miles
120
132
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156
48

GEOGRAPHY

Australia, the world's smallest continent but one of the largest nations, is located below the Southeast Asian archipelago and is bounded on the east by the Pacific Ocean and on the west by the Indian Ocean.

Most of the continent is a low, irregular plateau. The center is generally flat, barren, and arid. In the southeastern quarter of the country are 1.3 million square kilometers (500,000 sq. mi.) of fertile plain. Average elevation is slightly more than 274 meters (900 ft.) above sea level. The 19,300-kilometer (12,000-mi.) coastline is regular, major exceptions being the Gulf of Carpentaria on the northern coast and the Great Australian Bight on the southern coast. The Great Barrier Reef, the longest coral reef in the world, stretches 1,930 kilometers (1,200 mi.) off the east coast of Queensland.

Mountains lie roughly parallel to the east coast, in the center of the continent, and in western Australia. Chief of the eastern group are the Great Dividing Range, which runs from north to south almost the entire length of the coast, and the Australian Alps, extending for about 480 kilometers (300 mi.) through New South Wales and Victoria in the southeast. The highest point in Australia is the summit of Mt. Kosciusko, in the southeast—2,230 meters (7,314 ft.).

The coastal region is well watered by rivers, although many are short, swift, and unnavigable. The greatest of the rivers is the Murray (2,590 km.—1,609 mi.-long), which forms the major part of the boundary between New South Wales and Victoria before entering the sea in South Australia, southeast of Adelaide. Its chief tributaries are the Darling, the Murrumbidgee, and the Lachlan. Many other rivers become mere trickles in the dry season. Availability of water is the dominant factor in settlement; one-third of the continent is desert, and another third consists of marginal grazing areas.

Because of its size, Australia experiences wide variations in climate, but its insularity and lack of striking physical features make it less subject to extremes of weather than countries in corresponding latitudes. Since the country lies south of the Equator, the seasons are opposite to those of the Northern Hemisphere. Most of southern Australia has warm summers and long hours of sunshine. Nearly 40% of the country lies within the Tropics; it suffers intermittently from disastrous droughts and floods. Snow is unusual outside the mountain region.

Australia lies within the zones of prevailing westerly winds and the southeast trades, both of which affect its rainfall. On the coast, rainfall is generally plentiful, but a great part of the interior has fewer than 25 centimeters (10 in.) of rain per year. Parts of the tropical north, with an annual rainfall of 150–250 centimeters (60–100 in.), have been compared with the monsoon area of India. Other extensive areas, especially in the southeast and southwest, enjoy about 100 centimeters (39 in.) of rain annually.

PEOPLE

Australia's aboriginal inhabitants, a huntering-gatherering people, probably arrived at least 38,000 years ago. Although their tools remained primitive, their spiritual and social life was complex. When the first European settlers arrived in the late 18th century, the aboriginal population was between 250,000 and 300,000. There were as many as 500 tribes speaking many different languages. The aboriginal population currently numbers 206,000, or about 1.3% of the total population. Since the end of World War II, efforts have been made by the government and public to be more responsive to aboriginal rights and needs.

Today, tribal aboriginals lead a settled but traditional life in remote areas of northern, central, and western Australia. In the southern states, where most aborigines are of mixed descent, movement to the cities is increasing.

Immigration has been essential to Australia's development since the beginning of European settlement in 1788. For generations most settlers came from the British Isles, and the people of Australia are still predominantly of British or Irish origin, with a culture and outlook similar to those of Americans. Since World War II, the population has more than doubled, the increase reflecting, in part, an influx of newcomers through an extensive, planned immigration program. From 1945 through 1987, almost 4.5 million migrants settled in Australia, and about 80% have remained; one of every five Australians is foreign-born. Britain and Ireland have been the largest sources of postwar immigrants, followed by Italy, Greece, and Yugoslavia. Immigrants from the Middle East, Asia, and Latin America have become increasingly prominent since the late 1960s.

The 1970s saw progressive reductions in the size of the annual immigration program due to prevailing economic and employment conditions. In 1969–70, 185,000 persons were permitted to settle, but by 1985–86 the number had dropped to 84,000. The numbers are now increasing, and in the 1987–88 fiscal year Australia accepted about 132,000 regular immigrants. In addition, some 17,000 New Zealanders took up residence in Australia during the year.

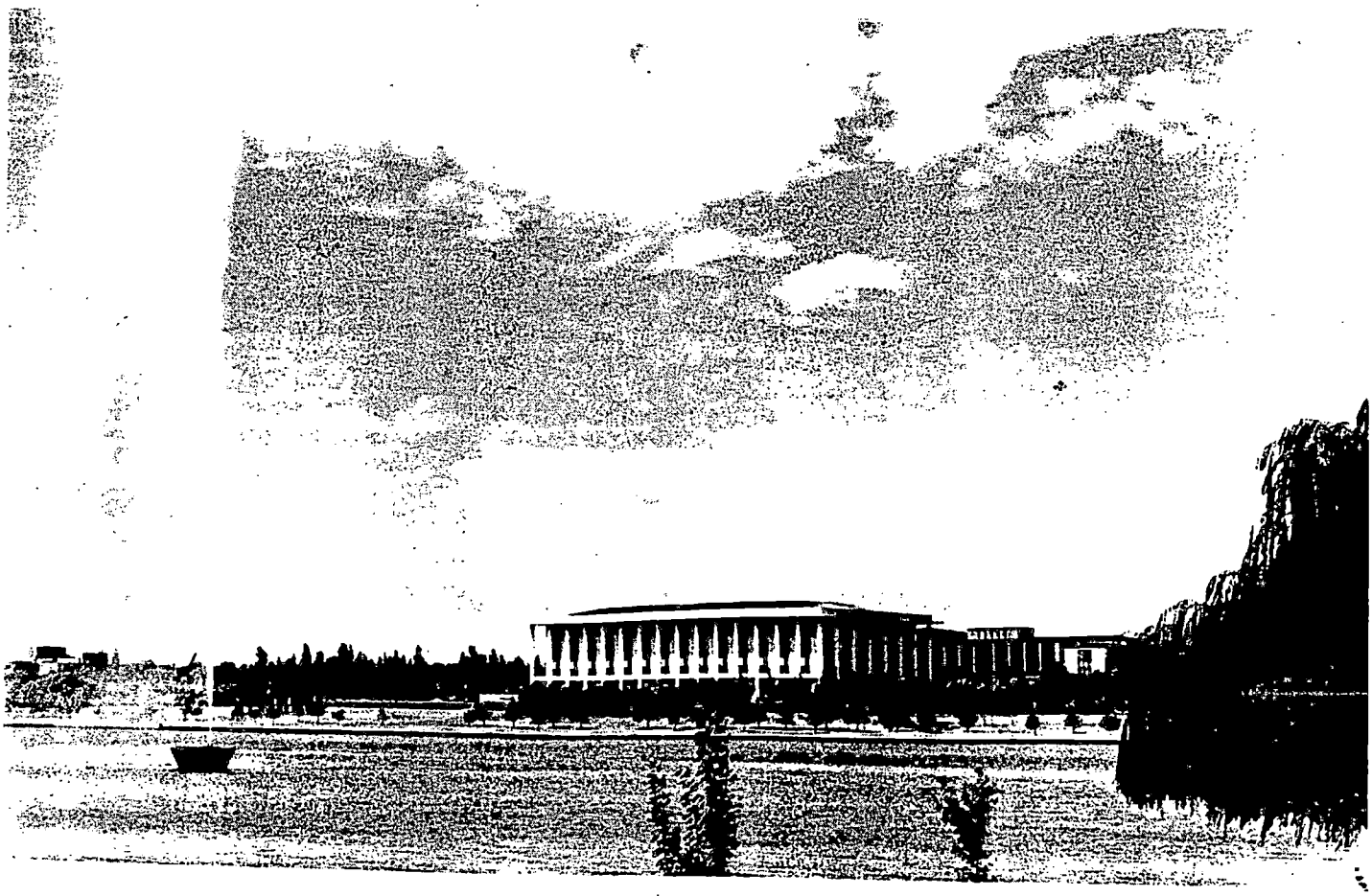
Australia's refugee admissions of about 12,000 per year are in addition to the normal immigration program. Half of these refugees are from Indochina. In fact, Indochinese refugees have made up the largest single group in Australia's refugee program in recent years. Since 1975, it has accepted more than 114,000 refugees from Vietnam, Laos, and Cambodia; it now has, on a per capita basis, more Indochinese refugees as permanent residents than any other country.

Although Australia has scarcely more than two persons per square kilometer, it is one of the world's most urbanized countries. Fewer than 15% of the population live in rural areas.

Cultural Achievements

Much of Australia's culture is derived from European roots, but distinctive Australian trends have evolved from the environment, aboriginal culture, and the influence of Australia's neighbors. The vigor and originality of the arts in Australia—opera, music, painting, theater, dance, and crafts—are achieving international recognition.

Australia has had a significant school of painting since the early days of European settlement, and Australians with international reputations include Sidney Nolan, Russell Drysdale, and Arthur Boyd. Writers who have achieved world recognition include Nobel Prize winner Patrick White, Thomas Keneally, Colleen McCullough and Morris West. Australian movies have become well known during the past few years. International successes include *Breaker Morant*, *Picnic at Hanging Rock*, *My Brilliant Career*, *Gallipoli*, *The Year of Living Dangerously*, and *The Man from Snowy River*. Australians Bruce Beresford and Peter Weir regularly direct Hollywood films.



The Captain Cook Memorial Water Jet; in the background stands the National Library, Canberra.

HISTORY

Little is known of Australia before its discovery by Dutch explorers in the 17th century. In 1770, Capt. James Cook explored the east coast and annexed it for Great Britain (Cook's crew included three American colonists). On January 26, 1788 (now celebrated as Australia Day), the First Fleet under Capt. Arthur Phillip landed at Sydney, and the Colony of New South Wales was founded. Many, but by no means all, of the first settlers were convicts, some of them condemned for offenses that today would be thought trivial. In the mid-19th century, government policies to emancipate convicts and assist immigration of free persons began. The discovery of gold in 1851 led to increased population, wealth, and trade.

The six colonies that now constitute the states of the Australian Commonwealth were created in the following order: New South Wales, 1823; Tasmania, 1825; Western Australia, 1838; South Australia, 1842; Victoria, 1851; and Queensland, 1859. Settlement had preceded these dates in most cases. Discussions between Australian representatives and the British Government led to the establishment of the Commonwealth of Australia Constitution Act of 1900.

The first federal Parliament was opened at Melbourne in May 1901 by the Duke of York (later King George V). In May 1927, the seat of government was transferred to Canberra, a planned city designed by an American, Walter Burley Griffin, and the first session of Parliament in that city was opened by another Duke of York (later King George VI). Australia passed the Statute of Westminster Adoption Act on October 9, 1942, which officially established Australia's complete autonomy in both internal and external affairs. Its passage formalized a situation that had existed for years. The Australia Act (1986) eliminated the last vestiges of British legal authority.

GOVERNMENT

The Commonwealth government was created with a constitution patterned partly on the U.S. Constitution. The powers of the Commonwealth are specifically defined in the constitution, and the residual powers remain with the states.

Australia is a fully independent nation within the Commonwealth. Queen Elizabeth II is the sovereign and since 1973 has been officially styled "Queen of Australia." The Queen is represented throughout Australia by a governor-general and in each state by a governor.

The federal Parliament is bicameral, consisting of a Senate and a House of Representatives. Twelve senators from each state and two from each territory are elected for 6-year terms, with half elected every 3 years. The 148 members of the House of Representatives are allocated to the states and territories roughly in proportion to population. In ordinary legislation, the two chambers have coordinate powers, but all proposals for appropriating revenue or imposing taxation must be introduced in the House of Representatives. Under the prevailing Westminster parliamentary system, the leader of the political party or coalition of parties that wins a majority of the seats in the House of Representatives is named prime minister. The prime minister and the cabinet wield actual power and are responsible to the Parliament, of which they must be elected members. General

elections are held at least once every 3 years; the last general election was in July 1987.

Each of the six states is headed by a premier, who is the leader of the party that commands a majority in the lower house of the state legislature. In addition, Australia has two territories: the Australian Capital Territory (similar in status to the District of Columbia) and the Northern Territory. The latter attained self-government in 1978. Australia also is responsible for the administration of several external territories, including Christmas Island (2,610 km–1,622 mi.—northwest of Fremantle, Western Australia); the uninhabited Coral Sea Islands Territory; and the Ashmore and Cartier Islands (in the Timor Sea).

At the apex of the court system is the High Court of Australia. It has general appellate jurisdiction over all other federal and state courts and possesses the power of constitutional review.

Principal Government Officials

Governor General—William G. Hayden
Prime Minister—Robert J. L. Hawke
Deputy Prime Minister—Lionel F. Bowen
Treasurer—Paul J. Keating
Foreign Affairs and Trade Minister—Gareth Evans
Defense Minister—Kim C. Beazley

Ambassador to the United States—F. Rawdon Dalrymple
Ambassador to the United Nations—Peter Wilenski

Australia maintains an embassy in the United States at 1601 Massachusetts Ave. NW., Washington, D.C. (tel. 202–797–3000), and consulates general in New York (212–245–4000), Chicago (312–645–9440), San Francisco (415–362–6160), Honolulu (808–524–5050), Los Angeles (213–469–4300), and Houston (713–629–9131).

Travel Notes

Climate and clothing: Most of southern Australia has warm summers and mild winters (seasons are the reverse of those in the Northern Hemisphere). Wear lightweight clothing year round except in the more temperate regions during winter; warmer clothes and an overcoat are then required.

Customs: In general, when visitors arrive in Australia they must present:

- A (gratis) visitor's visa (usually valid for multiple entries within 5 years of issue or until passport expires. Stays of 6 months per entry may be permitted); and
- A return or onward-passage ticket.

Immunizations are not usually required for travelers when arriving directly from the United States, New Zealand, or Europe. Health requirements change; before departure, check with an airline ticket office, the Australian Embassy in Washington, DC, or the nearest Australian Consulate General.

No restrictions are placed on bringing US dollars into or out of Australia. No more than 5,000 Australian dollars in Australian currency notes may be taken out. Letters of credit, travelers checks, and US currency are freely negotiable. Australia uses a decimal system of currency denominated in dollars and cents. A tourist's personal property is generally exempt from customs duty. Pets may be allowed entry but only after long and expensive periods of quarantine outside Australia.

Health: Australia has no unusual health problems or serious endemic diseases, and no special health precautions are necessary for tourists. Hospitals are modern and competently staffed and accept Blue Cross or Blue Shield insurance. Drug stores carry familiar brand-name medicines; some are open 24 hours and provide delivery service.

Telecommunications: Reliable international telephone, telegraph, telex, and postal services are available.

Transportation: International airlines serve Australia regularly. Domestic airlines, trains, and buses provide reliable and comfortable service between major cities. Rail and bus fares are reasonable, but domestic airfares are high. Car rental services are available in all cities. Public transportation and taxi service are good.

Tourist attractions: Australians are great sports enthusiasts: horseracing, cricket, tennis, and (in Victoria) Australian football attract large crowds. The Sydney-Hobart Yacht Race commences December 26; the yachting armada streaming out the majestic Heads of Sydney Harbor is a magnificent sight. Surfing carnivals are staged by Surf Life Saving Associations on summer weekends in many parts of Australia. Melbourne is famous for fine race courses and golf courses, for its Royal Botanical Garden, and for its Boston-like charm. Sites of interest include the National Museum (natural history) and the Old Melbourne Gaol and Penal Museum—a prison built in 1841, with relics from colorful chapters of Australian history. In Sydney, favorite attractions are the breathtaking harbor; the Sydney Opera House, with its striking architecture; the Rocks area, often referred to as "the cradle of Sydney"; and the Taronga Park Zoo. The Great Barrier Reef, off the coast of Queensland, is renowned for skindiving and big game fishing.

Time zones: Australia has three time zones. Because the seasons in Australia are opposite those in the Northern Hemisphere, those states in Australia that observe daylight saving time return to standard time in March, about when the US commences daylight saving. Consequently, when the US east coast is on daylight saving time, the Australian east coast is 14 hours ahead, i.e., 6 pm eastern daylight time is 8 am the next day on the Australian east coast. Similarly, when the US east coast goes off daylight saving time in October, and most localities on the Australian east coast commence it, the difference between the two becomes 16 hours—6 pm eastern standard time is 10 am the next day on the Australian east coast. Queensland and western Australia remain on standard time throughout the year.

National holidays: New Year's Day, Australia Day (Jan. 26 or the first Monday after that date), Good Friday, Easter Monday, ANZAC Day (Apr. 25), Queen's Birthday (second Monday in June), Christmas Day, Boxing Day (Dec. 26).

POLITICAL CONDITIONS

The three main political groups in Australia are the Liberal Party (LP), nominally representing urban business-related groups; the National Party (NP), nominally representing rural interests; and the Australian Labor Party (ALP), nominally representing the trade unions, working classes, and liberal and leftwing groups. Although embracing some extreme leftists, the ALP overall is moderately socialist in its policies and approaches to economic and social issues. All political groups are tied by tradition to domestic welfare policies, originating at the turn of the century, which have kept Australia in the forefront of societies offering extensive social welfare programs. There is strong bipartisan sentiment on a number of issues, including Australia's commitment to the ANZUS alliance.

The ALP came to power on March 5, 1983, ending more than 7 years of rule by the Liberal/National coalition led by Malcolm Fraser. Bob Hawke, leader of the ALP and former head of the Australian Council of Trade Unions, became prime minister. The ALP, as of mid-1988, held 85 seats in the House of Representatives against 45 for the Liberal Party and 18 for the National Party. The ALP also controlled three state governments: Vic-

toria, South Australia, and Western Australia. The Liberal Party controlled New South Wales and Tasmania, while the National Party governed in Queensland. As in the United States, state and federal elections are separate, and control of state parliaments does not necessarily translate into federal parliamentary seats.

In the Senate, the ALP held 32 of the 76 seats, the Liberal Party 27, the National Party 7, the Australian Democrats—a small party originally linked to the Liberal Party—7, and there were three independents. Thus, the ALP lacked a majority in the Senate. This could be important because budgetary legislation, while originating in the House, must be approved by the Senate. Repeated refusal by the Liberal/National opposition in the Senate to approve the budget in 1975 led to dissolution of the then-Labor government by the Governor-General. Although such a controversial event is not again anticipated, the possibility for a deadlocked Senate exists.

ECONOMY

Throughout its modern history, the Australian economy has consisted of a diversified manufacturing/service sector dedicated to domestic requirements coupled with export-oriented agricultural and mining sectors. In 1987, more than 72% of all Australian exports were primary agricultural or mineral products. Thus, the Australian economy and balance of payments can be significantly influenced by world movements in these markets.

Australia has immense mineral and energy resources. It is one of the world's leading producers and exporters of aluminum, alumina, bauxite, cobalt, copper, industrial diamonds, gold, iron ore, lead, nickel, silver, and uranium. In addition, abundant supplies of coal, natural gas, liquid petroleum gas, and uranium make Australia a net exporter of energy products.

The manufacturing sector is limited by Australia's small domestic market and relatively high labor costs arising from a strong union movement. However, Australia has developed a broad-based manufacturing sector largely due to an extensive and effective range of tariffs and other protective measures. Trade barriers long have insulated domestic industry from foreign competition.

The traditional ways of doing business in Australia are undergoing radical change. Prime Minister Hawke's Labor government has undertaken a program to liberalize the economy and introduce greater industrial competitiveness and openness to the international market. By floating the Australian dollar and allowing it to fall dramatically from 1984 to 1987, the government rendered the manufacturing sector more competitive with imports and more capable of exporting overseas. Corporate taxes were significantly reduced, and the unions agreed to falling real wage rates. With industry thus strengthened, protective barriers are being dismantled. In 1988, the government embarked on a phased program to reduce tariffs significantly by 1995, although tariffs on automobiles and textiles would still remain above 15%. The financial sector also has been liberalized and exposed to international competition.

With the government's macroeconomic policy now largely in place, management and labor are busy adapting to the new business conditions. The focus of the government has shifted somewhat to microeconomic reform. For the first time, a system of national wage awards linking wage gains to productivity increases has been introduced.

The government maintained a tight rein on the economy in 1988, and prospects for Australia's economic future are generally bright. Gross domestic product (GDP) growth is among the highest in the Organization for Economic Cooperation and Development (OECD). Real annualized GDP grew at the rate of 3.4% in FY 1988. The inflation rate in FY 1988 was 7.3%, and the average unemployment rate was 7.8%.

For FY 1988, the government produced the first budget surplus in 35 years. However, gross external debt, at $87 billion, is high for a country of 16.5 million people. Inflation and average weekly earnings growth rates remain above the OECD average, and the current account deficit, although diminishing, remains imposing.

Foreign investment has been vital to the development of Australian ranching, transport, and manufacturing. The Australian Government welcomes foreign investment that is consistent with the needs of the Australian community, expands private investment, develops export-oriented industries, and creates employment opportunities. The government generally seeks to facilitate foreign investment within certain guidelines. Some restrictions on foreign ownership are in force in banking, the media, civil aviation, mining, and real estate. In 1987, cumulative U.S. investment in Australia amounted to $11 billion.

FOREIGN RELATIONS AND DEFENSE

Australia has been active in international affairs since World War II. Its first major independent foreign policy action was to conclude an agreement in 1944 with New Zealand dealing with the security, welfare, and advancement of the people of the independent territories of the Pacific (the ANZAC pact). After the war, Australia played a role in the Far Eastern Commission in Japan and supported Indonesian independence during that country's revolt against the Dutch (1945–49). Australia was one of the founders of the South Pacific Commission (1947), and in 1950 it proposed the Colombo Plan to assist developing countries in Asia. In addition to contributing to UN forces in Korea (it was the first country to announce it would do so after the United States), Australia sent troops to assist in suppressing the communist revolt in Malaya in 1948–60, and later to combat the Indonesian-supported invasion of Sarawak in 1963–65. Australia also sent troops to assist South Vietnamese and U.S. forces in Vietnam. Australia was a member of the South East Asian Treaty Organization (SEATO) and later of the Australia-New Zealand-U.K. agreement and the Five Power Defense Arrangement, successive arrangements with Britain and New Zealand to assist in the defense of Singapore and Malaysia.

A participant in the drafting of the UN Charter, Australia has given firm support to the United Nations and its specialized agencies. It was a member of the Security Council for 1986–87, a member of the Economic and Social Council for 1986–89, and a member of the UN Development Program Governing Council for 1984–86. Australia takes a prominent part in many other UN activities, including peacekeeping, disarmament, human rights, and narcotics control. Australia also is active in meetings of the Commonwealth Regional Heads of Government and the South Pacific Forum.

Australia has devoted particular attention to relations between developed and developing nations, with emphasis on the countries of the Association of South East Asian Nations—Indonesia, Singapore, Malaysia, Thailand, the

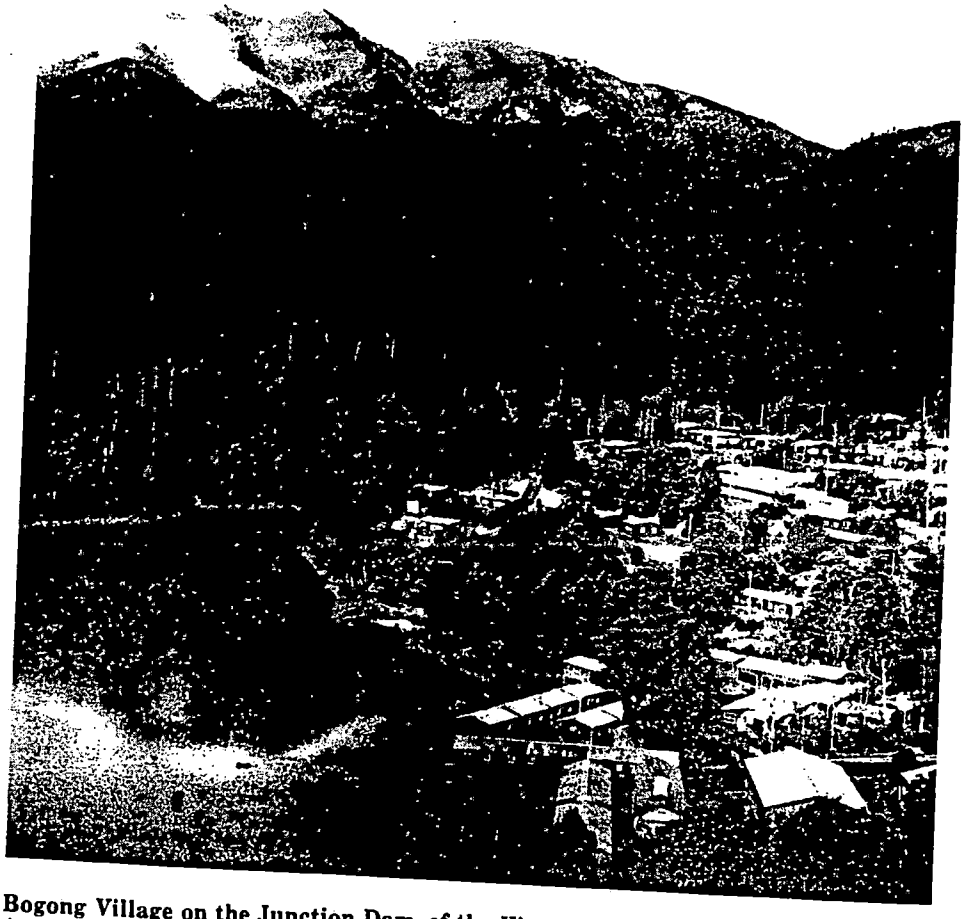
Philippines, and Brunei—and the island states of the South Pacific. Australia has a large bilateral aid program (about U.S. $875 million for 1988–89, mostly in the form of grants) under which some 80 countries receive assistance. Papua New Guinea, Australia's former colony, is the largest recipient of Australian assistance.

ANZUS

The ANZUS security treaty was signed by representatives of Australia, New Zealand, and the United States at San Francisco on September 1, 1951, and entered into force on April 29, 1952. The treaty binds the signatories to recognize that an armed attack in the Pacific area on any of them would endanger the peace and safety of the others. It commits them to consult in the event of threat and, in the event of attack, to meet the common danger in accordance with their respective constitutional processes. Furthermore, an attack on the territories or forces of any of the parties in the Pacific area is deemed to be an armed attack as described in the treaty. Finally, it pledges Australia, New Zealand, and the United States to maintain and develop individual and collective capabilities to resist attack.

In early 1985, the nature of the ANZUS alliance changed after the Government of New Zealand refused access to its ports by nuclear-capable and nuclear-powered ships of the U.S. Navy. The United States suspended most forms of defense cooperation with New Zealand, and a series of annual bilateral meetings between the U.S. Secretary of State and the Australian Foreign Minister replaced annual meetings of the ANZUS Council of Foreign Ministers. The first bilateral meeting, in 1985, was held in Canberra. At the second, in San Francisco in 1986, the United States announced that it was suspending treaty security obligations to New Zealand pending the restoration of port access. Subsequent U.S.-Australia bilateral meetings took place in Sydney (1987) and Washington (1988).

The Australia-U.S. alliance under the ANZUS treaty remains in full force. Defense ministers of one or both nations often have joined the annual ministerial meetings, which are supplemented by consultations between the U.S. Commander in Chief Pacific and the Australian Chief of Defence Force. There also are regular civilian and military consultations between the two governments at lower levels on topics of mutual interest.



Bogong Village on the Junction Dam of the Kiewa hydroelectric scheme in the Australian Alps. Photo by W. Pederson, Australian News & Information Bureau.

Unlike NATO, ANZUS has no integrated defense structure or dedicated forces. However, in fulfillment of ANZUS obligations, Australia and the United States conduct a variety of joint activities. These include military exercises ranging from naval and landing exercises at the task-group level to battalion-level special forces training, assigning officers to each other's armed services, and standardizing where possible equipment and operational doctrine. The two countries also operate five joint defense facilities in Australia.

The Australian Defence Force numbers about 71,000 men and women on active duty: 32,000 in the army, 16,000 in the navy, and 23,000 in the air force. Supplementing the regular forces are some 27,000 members of the army, navy, and air force reserves. The Royal Australian Navy's front-line fleet comprises three guided-missile destroyers, four guided-missile frigates, six destroyer escorts, and six Oberon-class submarines. The F/A–18 fighter, built in Australia under license from the U.S. manufacturer, is coming into service as the principal combat aircraft of the Royal Australian Air Force.

U.S.-AUSTRALIAN RELATIONS

The World War II experience, similarities in culture and historical background, and shared democratic values have made U.S. relations with Australia exceptionally close and friendly. Ties linking the two nations cover the entire spectrum of international relations, from commercial and cultural contacts to political and defense cooperation. Traditional friendship is reinforced by a wide range of common interests and similar views on most major international questions. For example, both countries called for the Soviet Union to withdraw its forces from Afghanistan; both also attach high priority to controlling and eventually eliminating chemical weapons. The

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For information on foreign economic trends, commercial development, production, trade regulations, and tariff rates, contact the International Trade Administration, US Department of Commerce, Washington, DC 20230; this information also is available from Commerce Department district offices.

Australian Government and opposition share the view that Australia's security depends on firm ties with the United States, and the ANZUS Treaty enjoys bipartisan support.

Frictions sometimes arise in trade relations. In recent years, the Australians have protested what they consider U.S. protectionist barriers against their exports of wool, meat, dairy products, lead, zinc, and uranium. At various times, Australia has expressed concern about the spill-over effect on world trade of U.S. inflation, government deficits, and agricultural policies.

Multilaterally, Australia and the United States work together very closely in the General Agreement on Tariffs and Trade for the elimination of subsidies and import barriers from world agricultural markets.

A number of U.S. institutions conduct scientific activities in Australia because of its geographical position, large land mass, advanced technology, and, above all, the ready cooperation of its government and scientists. A significant amount of U.S.-Australian scientific activity occurs within the framework of the 1968 scientific and technical cooperation agreement between the two countries. Under a separate agreement concluded in the same year, and since renewed, the National Aeronautics and Space Administration maintains in Australia its largest and most important program outside the United States, including a number of tracking facilities vital to the U.S. space program.

Principal U.S. Officials

Ambassador—Laurence William Lane, Jr.
Deputy Chief of Mission—Richard W. Teare
Economic Counselor—Tain P. Tompkins
Political Counselor—John E. Kelley
Public Affairs—Lewis R. Luchs
Defense and Air Attache and Representative of the Commander in Chief Pacific—Col. Dean Stickell, USAF
Agricultural Counselor—James V. Parker
Senior Commercial Officer—Robert A. Taft (resident in Sydney)

The U.S. Embassy in Australia is located at Moonah Place, Yarralumla, Canberra, Australian Capital Territory 2600 (tel. 62–70–5000). Consulates General are in Sydney (2–261–9200), Melbourne (3–697–7900), and Perth (9–221–1177). There is a Consulate in Brisbane (7–839–8955). ■

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TO A LOVING SISTER OR DAUGHTER.

Dear sister, may the light of Heaven
Illume thy path both morn and even;
The world is false on every side,
Yet virtue can thy footsteps guide.
Remember, that bliss ne'er is given
To them that break the laws of Heaven;
One hour enchained in virtue's ties
Is worth a life of sin's false guise;
Shun fashion's fetters, ever strong,
Simplicity will ne'er thee wrong.—
In dress and diet, hope and joy,
Let luxury vile ne'er thee annoy;
And may no miscreant's false love snares
E'er riot on thee unawares.
Abstain from impious, vile romancing;
Exciting drink, and guilty dancing;
May no false kiss e'er stain thy cheek
Where bloom love's blushes pure and meek;
That when once gone, are gone for ever,
As virtue is alone their giver.
My loved one, listen to this song,
From one who never would thee wrong;
Read this, and learn to shun each snare,
And Heaven will bless thee everywhere.

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æum, *Literary Gazette*, and various other European journals, and said by the *London Guardian* to be "a phenomenon of Australian, if not, of universal interest," to the above reviewers he feels much indebted, his object being to arrest attention in order to do good, an unfavourable notice being perhaps as often of use in such a case as otherwise. It may not be out of place to state, that the author of the PROVERBS, &c., is not an Australian, but a native of the Highlands of Scotland, born among the grey heather, rugged rocks, and pine-clad precipices of Strathspey, having served a long apprenticeship in the shades of solitude, in Nature's open-air school in many lands, and that his history, which may one day see the light, is rather an eventful one, it having been his lot to be thrown early in life on the world's rude tide, he has consequently been a stranger in strange lands nearly all his life, yet while sojourning in the land of the Celt, Saxon, Gaul, Greek, Turk, Tartar, Sclavonian, Russian, and Australian, was never left friendless, and to his friends in every land, and of every creed and caste, he now respectfully dedicates the first instalment of his AUSTRALIAN PROVERBS, AND TRUE LOVE SONGS.

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AUSTRALIAN PROVERBS.

Proverbs—Proverbs are short sermons that speak loud.

Constancy—Constancy is not torn by distance or time.

Fathoming—Who can fathom man's intellect or tell its force?

Baselessness—The fabrics of pride, luxury, or lust, are baseless.

Scarcity—There is no scarcity in nature's realm like man's realm.

Delusion—Delusion is propped up by pride, pleasure, and wrong.

Trickery—The tricks of apes are eclipsed by man's luxurious ones.

Blossoms—Flowers bloom in season and men often not.

Sublimity—Who can chain sublimity to pulpit or professor's chair?

Outline—Who hath given the inimitable outline to nature's works?

Learning—Learning without good behaviour is of little worth.

Deities—It is infamy to add to Deity.

Statues—Did statues speak, sad tales would be disclosed.

Poverty—By nursing pride, poverty of spirit is glorified.

Sabres—Could tyrants weep, sabres were then sheathed.

Temperance—The word "Temperance," is misused and abused.

Shaving—Shaving is wrong, as it detracts from health & beauty.

Politics—Honesty in politics is as necessary, as virtue in religion.

Renown—Blood does not give renown, but virtue does.

Animosity—Animosity extinguishes love, honor, and generosity.

False love—False love generally ends in lust and distrust.

Wild beasts—No raving passions curse the wild beasts' home.

Hatred—The woman, or man-hater, is a monster of iniquity.

Piety—Piety takes its degree at true love's joyous feast.

Degrees—How many college degrees can teach good behaviour?

Brevity—Brevity is the soul of true poetry, as of true wit.

Drunkenness—Very few men leave the world drunkards.

Trifling—The trifler with nature's laws pays dear for his trifling.

Flattery—Flattery never exalts but debases.

Gifts—One of the best of gifts is a good wife.

Songs—Sacred songs will sooth while winds, waves, and seasons roll.

Inconstancy—What wind so cutting as inconstancy's blast?

Laurels—True honors's laurels adorn not false honor's brow.

Fortune—Fortune can neither mar nor make true greatness.

Thought—From whence cometh thought's inexhaustible supplies?

Echoes—The echoes of truth's trumpet are the loudest and longest.

Truth—Truth smites where steel, lead, and lies, fail.

Love—Cold as Greenland, or hot as Ætna, is love's frown or smile.

Flogging—We wail o'er the flogging of others, yet we flog ourselves.

Care—Care enters every home, and defies all its bad adversaries.

Innocence—Innocence hath made kings quail, and lawyers tremble.

Lies—At the birth of a lie, hell's angels are in arms to defend it.

Wickedness—Bad subjects never had, nor will have, true liberty.

Duty—No knock so loud at the door of life's tabernacle as duty's.

Shrieks—No shriek so loud as when Heaven's laws are violated.

Virtue—Virtue is always victorious, and vice always vanquished.

Robbery—To steal our own life and health is the worst of robbery

Time—Time's tooth gnaws earth's proudest temples of art.

Vice—No warrior's lance kills like vice, slaying by day and night.

Cant—Cant, rant, and cunning, befriend neither rich nor poor.

Nature's laws—To break nature's laws is to violate life's fountain.

Teaching—The teaching of nature, puts that of art to shame.

Chastity—Chaste is light, air, earth, fire, water, and true love.

Wails—The widow's sigh, and the orphan's wail, are not unheard.

Cheerfulness—Cheerfulness is found with peasants as with kings.

Luxury—Luxury hath sapped the vitals of empires and subjects

Compassion—Compassion heals where diet and doctors fail.

Goodness—An hour with a good author is worth a life with a bad one.

Social evil—The so called evil is base, unsocial, and unchristian.

Armour—No armour like that of a clear conscience.

Hope—Hope lives first and last in the human breast.

Lust—Lust shuns matrimony to court sorrow and misery.

Rank—False rank often wears true rank's tunic.

Torturers—No torturer like the self made one, ever torturing.

Wisdom—Wisdom's fountains are full and ever flowing.

Ties—True love's ties are never torn or weakened.

Lovers—The true lover of God can only be the true lover of man.

Sycophants—Smiles, frowns, or kicks, are alike to sycophants.

The Tongue—Man's tongue bites deeper than lion's teeth.

Solitude—Solitude makes more sages than literary revels do.

Fields—Wisdom's fields yield more than gold fields do.

Sleep—The sleep of innocence can only be bought by innocence.

Colts—Colts are like boys gambolling until harnessed fairly in life.

Reputation—A bad reputation is more sensitive than a good one.

The Press—The Press is prostituted by evil and exalted by good.

Repose—Evil seeks repose by sea and land, and finds it not.

Reservation—Strive to reserve some of youth's pleasures for age.

Strong-mindedness—The strong minded are shunned.

War—In war, vulture-like, rise pride, plunder, and woe.

Error—Scorpion error would inter virtue's vigils, if possible.

Throttling—Virtue often gets throttled, yet never killed.

Fetters—Unfettered minds will soar o'er human mists to sunshine.

Idleness—Idleness clothes in rags and misery.

Justness—The just man's voice, who can drown its echoes?

Rod-seeking—Sin is eternally rod-seeking and not for nought.

Maternal love—Who can trace the source of a mother's love?

Simplicity—What is sublime must be simple.

Love's wounds—True love heals false love's wounds.

Vulgarity—There is no vulgarity in nature, but much in art.

Unhallowed love—False love is like sand, true love like hills.

Warmth—Waste not animal heat by false stimulants.

Poets—Great poets are universal singers, and little poets local ones.

Water—Water is the gift of Heaven, and the sustainer of life.

Life's Flame—Where life's flame burns fiercely, it's soon over.

Enamelling—What enamel like the coating of a good conscience?

Bashfulness—Bashfulness and worth cannot be counterfeited.

Humility—The bread of humility fattens where ostentation fails.

Blushes—The depth of a blush is often the soul's index.

Husbands—Good wives will not wink at husbands' faults.

Wonder—Wonder is young and old, green in age as youth.

Life—Heaven kindles life's flame, beware of extinguishing it.

Mental food—Good genius will find mental food where bad fails.

Respect—Nature makes her cares to be more respected than art's.

Pleasure—To do good in need is a true and lasting pleasure.

Hunger—Hunger is the mightiest tamer, and peace maker.

War makers—Brutes are harmless compared with war makers.

Thirst—Water cures thirst when all other drinks fail.

Language—Language gives thought, and thought language.

Inspiration—Good and evil inspirations do not dwell together.

Hands—Hands wreck empires, by blood, false honor, and misery.

Helms—A man of sin is a man of sorrow, and like a helmless ship.

Life's Sea—The sea of life is deep, calm to some, stormy to others.

Rivers—Rivers are life's emblems going like life to eternity.

Animalism—Guilty animalism and lust conquer their supporters.

Pests—The kinds of pests and their workings are undescribed.

Fiends—Passions fiends smile and sting at the same time.

Luxury—Luxury's sea contains more wrecks than earth's oceans.

Blessings—Cold ingratitude is receiving perpetual blessings.

Rulers—Wicked men choose wicked rulers.

Soldiers—The tear of soldier or sigh of virgin is not issued in vain.

Sages—Earth's mightiest sages know but little of wisdom.

Mirth—False mirth's flame can light not true mirth's temple.

Liberty—Liberty, and Equality; big words for little people.

Moon-Beams—The Moon beam sleeps not and is never tired.

Paths—Nature's paths are hidden from the sons of earthly science.

Infamy—Infamy smiles through rouged lips and black eyebrows.

Stimulants—Hunger, thirst, love, and fear, are powerful stimulants.

Shields—No shield like virtue's that will only fit virtue's votary.

Sin—Sin is so strong as to be able to smite its nurser and victim.

Passion—Passions kill more than war, famine, and pestilence.

Dupes—The pleaser of a wicked multitude is the dupe of dupes.

Healing—Who hath healed nature's children without drugs?

Snakes—No snake can sting like the harlot's insatiated smile.

Fury—Fury's dart wounds giver and receiver.

Wisdom—Time's blasts destroy not wisdom's workings.

Reform—Self-reform is more wanted than any other kind of reform.

Heaven's Love—One ray of Heaven's love can light empires.

Heaven's Wrath—One ray of Heaven's wrath none can comprehend

Sorrow—Sorrow works wonders unseen and unknown to us.

Nature's Harps—The harps of nature are always in tune.

Slander—Guilt trembles while virtue smiles at slander's workings.

Adultery—Not all the light of earth could light adultery's den.

Lamps—Love's lamp can only burn with the oil of innocence.

Adornments—No robe so bright as virtue's stainless one.

Murder—Murder cannot be committed legally or illegally.

Surfeiting—The worst kind of surfeiting is crime's.

Wrinkles—Wrinkles ask not leave to sit on king or peasant's cheek.

Health—Life depends on health, injure one you shorten the other.

Charity—True charity and pride are sworn foes in every land.

Prayer—Prayer will make a dungeon brighter than a sinful palace.

Early Rising—Thieves and philosophers are often early risers.

Whispering—No whispering so loud and lasting as conscience's.

Heaven's Light—The light of Heaven never leads astray.

Virtue—One blast of virtue's trump could shake empires.

Malice—Nurse malice and kill love, nurse love and kill malice.

Nature—Among the sands or snows Nature's power sleeps not.

Magnanimity—Magnanimity tries philosopher or pastor.

Philanthropy—True philanthropy requires no trumpeter.

Mistakes—Nature makes no mistakes like erring man.

Cloaks—What cloak or coloring can hide guilt, or balm sooth it?

Nakedness—Sin is always naked, and virtue always clothed.

Glory—Glory gilds rich and poor when properly won and kept.

Pride—Pride's secret workings are hidden from us like their author.

Garlands—A well-spent life will bring an everlasting garland.

Brothels—No miscreant so base as the brothel-keeper's aider.

Modesty—No earthly mineral or vegetable can adorn like modesty.

Gratitude—Gratitude blots out ills, and blesses giver and receiver.

Self—If we truly love ourselves we are sure to love our neighbors.

Love's Fire—What fire will burn like love?

Inhumanity—Cruel inhumanity hath torn hearts asunder.

Seasons—What is done in a good cause is never done out of season.

Discretion—Discretion's chains are light to wear.

Greatness—What is by many called greatness, is really littleness.

Charity—True charity glorifies, where false charity fails.

Ceremony—Good deeds require no ceremony's salt to season them.

Distrust—Distrust thyself when a favorite among the bad.

Charlatanism—Charlatans are prompted and upheld by charlatans.

Plaisters—Would a tree be strengthened by putting a plaister on it?

Kindness—Kindness tames where gold and stripes fail.

Conviviality—Conviviality's courts are thronged with pilgrims.

Gifts—Life's gifts are too often undervalued until too late.

Stimulants—Wholesome air, food and exercise, are true stimulants.

Neglect—Cold neglect can neither weaken nor kill true worth.

Mercy—The lamp of mercy need not want oil if sought.

Freedom—It is of nouse to seek for freedom where it cannot live.

Anger—No anger like sin's, as it hears and knows no reasonings.

Assistance—Assistance where most wanted is most often rejected.

Wild Men—Wild men are less guilt-stained than tame ones.

Veils—Virtue's eyes can pierce the thickest of sin's veils.

The Soul—Where Heaven lights the soul no evil art can stifle it.

Evil Thoughts—Evil thoughts are the seeds of crime and misery.

Courtship—Courtship is to court with one true heart to win another.

Ambition—Ambition makes spoils where evil passions burn.

Rebels—The greatest rebel is the man who cannot govern himself.

Fidelity—Conjugal fidelity's chain, binds stronger than parchment.

Oblivion—Oblivion lurks near false glory's crown.

Democracy—Sham democrats fatten on the wrecks of poor men.

Treasure—The purest treasure is a true lover's heart.

Prudence—Wisdom is unveiled by courting prudence.

Vanity—Vanity, in what is called civilized life is well supported.

Friendship—True friendship cannot live among bad men.

Scourging—We get well scourged between custom and fashion.

Spoils—War's emblems are withered leaves, its spoils broken hearts.

Old Maids—More pure are virtue's silver locks, than virgin's curls.

Rancour—Sow rancour and reap spleen; sow peace and reap joy.

Silence—Silence hath made more sages than ever did garrulity.

Portraits—Heart portraits are always the truest.

Storming—Love storms the stoutest ramparts of the heart.

Reputation—Lust blasts the reputation, and ruins the health.

Duellists—Duellists are cold-blooded murderers.

Serfs—Tyrants make serfs, and serfs make tyrants.

Sectarianism—Has one sect more happiness than another?

Rifles—Virtues are more defensive than rifles.

Drums—Beat well the drum of true instruction only.

Bumps—The cranium's bumps who can decipher truly?

Toasts—Toasts and tastes play mighty pranks.

Hens—Hens hatch chickens in strange circumstances.

Rats—Rats, cats, and rabbits, are multiplied by man's art.

Hedges—What hedge can surround injustice?

Scholars—Scholastic art should curb smoking.

Syllables—Syllables play mighty parts altho' small.

Infinitude—The infinitude of eternity is beyond comprehension.

Contamination—Contamination lurks near sin's supporters brow.

Painters—He is the greatest painter, who can paint sin best.

Roarers—Roarer's voices are not always the loudest.

Puzzles—To curb self is the grandest puzzle of life.

Artificers—Artificers construct for others and undo for themselves.

Warriors—He is the greatest hero who can rout the Devil's troops.

Ladies—Ah! where can a lady be found in crimes' ranks?

Gentlemen—Gentlemen are such, when their conduct is good.

Snails—Snails are less defenceless than passion's dupes.

Age—We do in old age what is left undone in youth.

Liars—Liars often offend, not like good truth-tellers.

Soup—Soup is ale's substitute, fattening where ale fails.

Slumberers—Man slumbers at noonday in life's heyday.

Character—No article so brittle as man's character.

Leaders—Good leaders lead to peace instead of war.

Liberators—When we liberate ourselves, liberty begins.

Storms—Fierce storms bring fruitful fields and healthful air.

Friendship—True friendship heals false friendship's wounds.

Offspring—Love of offspring will make us brave life's storms.

Earth—Earth is a paradise to the wise, a pandemonium to the sinful.

Peace—Sacred peace heals wounds and makes joy spring from woe.

Habits—Bad habits are sooner learned than good ones.

Hearing—The gift of hearing like that of seeing is often misused.

Loving—If we love not what is good our love is unworthy.

Living—If we live not faithful to ourselves we are very unfaithful.

Separation—Separation's wounds no doctor can heal.

Seduction—The seducer is the seduced and the most punished.

Integrity—No well so pure as integrity's; ever full and open to all.

Bathing—Bathe in innocence for cleanliness, and in luxury for filth.

Time—Time's tide carries the ready and unready on to eternity.

Impatience—Impatience is a barrier to peace and health.

Teachers—True teachers bridle their passions and prejudices.

Doctors—True doctors uphold nature's beverages, ever pure.

Orators—Truth, honor, and honesty, will only make great orators.

Kings—True kings use for sceptre truth, and for crown innocence.

Bitterness—Extravagance makes life's cup bitter and scanty.

Foes—Men are often the makers of their own foes and fortunes.

Contention—Contention's bone costs much to pick everywhere.

Ideas—Can a fine idea be conceived by a very wicked man ?

Darkness—Shun life's darkness and its light is at hand.

Artifice—No artifice can hide sin, crime, or misery.

Giants—Giants in literature are often dwarfs in virtue.

Anger—Anger's burnings are fanned by hell's angels.

Self-Support—Self finds support from self, yet ever against itself.

Prayer—Prayer lights dungeon or palace where other lights fail.

Hand-shakers—Most hand-shakers have designs on each other.

Dreams—Dreams are the soul's workings, unfathomable to man.

Guilt—Guilt's greatness lies in its shame, its littleness in itself.

Unmanliness—Man stings his soul and builds his shame.

Loyalty—False loyalty can be bought or sold by gold.

Wives—One hour with a virtuous woman is worth a life of evil.

Pandering—Panderers barter peace and health for sorrow.

Philanthropy—Sham philanthropy flogs and heals, and flogs itself.

False love—False love burns, lives, and dies in sorrow.

Faith—Faith braves danger and sin triumphantly.

Fear—Fear will kill sleep, and virtue will kill fear.

Hatred—Hatred's shafts return on their owner.

Disdain—Reason disarms disdain when called into use.

Mirth—True mirth's march is slow and sure, false mirth's quick.

Joy—All is not joy where wedding bells are heard.

Life boats—Earth's sea hath many life boats, and life's sea, few.

Pleasure—The unhallowed brand of false pleasure is unfading.

Resignation—Resignation enriches more than gold.

Ice—The ice king's breath fertilizes the earth.

Rain—Rain enriches more than gold ever could.

Summer—King Summer breathes forth life, health, and beauty.

Autumn—Autumn blesses all of earth's tenants, asleep or awake.

Day—Day's inexhaustible phials are never empty.

Genius—Genius gets but too often bespattered with its own brains.

Faith—Faith can live well, die well, and be remembered well.

Heaven—Earth may be made a Heaven by sobriety and piety.

Dress—Wisdom's undying dress decks vaulted sky and glassy deep.

Eternity—Earth's ocean echoes are as nought to dread eternity's.

Sympathy—Sympathy's fountains are never dry among the good.

Printing—The art of printing may be made a curse, or blessing.

Originality—Originality may turn up where least expected.

Slaves—White slaves to passion outnumber black ones.

Battles—Life's battles are many, the truly virtuous are the victors.

Virtuous Age—Virtuous age is merrier than guilty youth.

Wounds—The blasts of vice wound deeply crime's supporters.

Dignity—Nature never confers true dignity for nought.

Example—Bad example slays liberty and upholds crime.

Forgiveness—Forgiveness lightens, and revenge darkens.

Nothingness—Making a bad use of our faculties is nothingness.

Temptation—Temptation smiles as it slays, saddens, and darkens.

Armour—Life's strongest armour is the mail of innocence.

Home—A good husband or wife can cheer the dreariest home.

Fattening—Hatred fattens on the hater more than on his victim.

Crime—Crime upholders fondle o'er gold that will not bless them.

Heroes—Sin's heroes are Earth's monsters.

Mind—No chain or dungeon strong enough to chain the mind.

Rings—If the finger requires a ring, the toe ought to have one.

Tonics—Tonics touch closer than their upholders imagine.

Fame—The world's fame for what will not leave it better, is no fame.

AUSTRALIAN LOVE SONGS.

TO ERIN MY NATIVE LAND.

O Erin dear, where I was born,
My first home o'er the sea,
My ties for thee will ne'er be torn,
My soul still clings to thee.
Green be thy hills for evermore,
Thy streams like virtue's pure,
Tho' far off on a foreign shore,
My love doth still endure.
Thou land of statesmen good and bold,
And poets true through time,
'Till death my heart will ne'er grow cold
For thee in any clime.
Thy sons have gone o'er earth afar
May virtue guide their souls,
May wild war's clang their peace ne'er mar,
While time still onward rolls.
O Erin dear, now with a tear,
To thee I sing this song,
May it be hallowed far and near,
And echoed loud and long.
Tho' land and sea doth us divide,
My soul still to thee clings,
May Heaven o'er thee guard and guide
'Till time's last requiem rings.

EVER-FAILING STREAM

de of the stars, in my mind,
clear water running over them,
strangely feelings of im-
remoteness with intimacy,

e and the same time I
a far white mist of stars
there, but had my fingers
ong those solid stones.

William Hart-Smith

WHY KOOKABURRA LAUGHS AT DAWN

SOME time when the world was young, birds and animals had grown to an enormous size. They were as big as mountains and they lived in darkness that was lit only by the dim light of the stars. The animals were quarrelsome, for it was difficult to find food enough to support their enormous bodies. Baiame had begun his acts of creation, but had not yet determined what form his people would take. These animals he had made were his first experiments.

The world was not a comfortable place in which gods could live. Baiame preferred to remain in his home in the Milky Way which he shared with another powerful spirit, whose name was Punjel. In the frosty realms of the sky it was cold, and every day the gods collected firewood, which they piled in a heap in front of their celestial wurley.

"Why do we gather all this wood but never set it alight?" Punjel asked plaintively.

"We have no fire. Fire is found only in the world below."

"Then why don't we go down and get some for ourselves? I am cold."

"You must remain cold for a while longer," Baiame told him. "The time will come. You cannot hasten the processes of creation."

Punjel was prepared to argue, but his attention was attracted by an unusual sight. Both he and Baiame were able to see clearly in the half-light that enveloped the world. They saw that Eagle and Emu were fighting over the carcase of some animal. Emu managed to snatch it away from Eagle. He rushed towards his nest with the other bird hot in pursuit. Eagle's beak was stretched out and he was pulling the tail feathers from the fleeing bird. Emu did not dare to stay by the nest. He ran straight on into the dense undergrowth and was lost to sight. Eagle stopped, and began to walk back towards the Emu nest. He looked in and saw two white eggs glimmering in the darkness. He picked one of them out with his beak, transferred it to his claw, and with a wicked smile on his face, threw it up in the air with all his might.

Punjel had been watching closely. The egg soared upwards, higher and higher, and as it came closer to him it seemed to grow so large that it blotted out his view of the world. Instinctively Punjel put out his hand to catch it, but it slipped through his fingers and smashed against the wood pile outside the wurley. It broke into a thousand pieces, and the timber was splashed with white and gold. As the two great spirits watched, the shattered egg burst into flames, the wood was kindled, and as it had been stored for so long and was tinder-dry, it burned furiously. The gods drew near to warm their bodies.

Presently they looked down. The stars had paled before the intense glow of the fire, and the whole world was lit up by the flames. They drew their breath quickly at the sight. Never before had they seen such beauty. Mountain tops were touched with pure gold; trees were like a feathery green garment on the hillsides; silver streams and waterfalls adorned a land that shone in splendour. Even the arid plains were glowing with a thousand bright colours; while the clouds that drifted over the earth's face were gossamer veils that enhanced her loveliness.

"This is your doing, Baiame," said Punjel. "Under cover of darkness you have been making the world beautiful so that we may enjoy it forever."

Baiame smiled: "Not for us alone, Punjel. The huge animals of the darkness have had their day. Now it is time to people this world of mine with little animals, small birds and reptiles, even tiny insects that we can scarcely see, and to put silvery fish into the rivers and lakes."

As he was speaking the fire began to die down, and some of the beauty was concealed again.

"What is the use of making such a world if no one is able to see it?" Punjel asked.

"Now that we have the gift of fire in the heavens," Baiame replied, "we will never let it go out. At night it will die down till no one can see it, but in the morning I shall light it again. Men will call it the sun, but we know that it is a new woodpile burning brightly to waken all living things from sleep."

"What is sleep?" asked Punjel.

"Sleep is a gentle spirit that closes men's eyes and soothes the thoughts out of their heads. It is a time of resting. Living things need sleep."

"Do you mean that they are dead?"

"No, no. It is hard to tell you, becaus
sleep is a not-living that keeps men aliv
Punjel shook his head in a puzzled
stand, Baiame," he said. "If you say it i
But if men are living yet not living, ar
they will not know when the fire is lit, an
in this thing that you call sleep, which i
"They will open their eyes to the
assured him. "I shall hang a bright star
they will know that the fire is to be lit
coming back to the world."
"How can they know when the star i
shut?"
"There will be a noise that will wa
shines."
"What kind of noise? Who will make
"That is for you to find out, Punjel. Sir
lest my little ones should not wake up ea
find a way of letting them know."
Punjel went back into his wurley, and
carry stones up to the Milky Way and d
he thought, "but then they might hurt
they fell. Anyway, that would not be a
everyone. They might be afraid."
After thinking for a long time, he w
wandered through the bush. He listened
creaking together in the wind, to water
the thudding of the paws of animals on t
these things satisfied him.
Then he heard a sound of laughter, and
He found Kookaburra perched on the bra
happily to himself.
"Kookaburra!" he cried, "that is just
you laugh louder than that?"
Kookaburra opened his beak wide and
laughter that Punjel had to block his ears
"Wonderful!" he cried again. "Everyo
that noise in the farthest corners of th
before the sky fire is lit each morning Bai
the eastern sky. Will you watch for it, a
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ked Punjel.
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ads. It is a time of resting. Living things

they are dead?"

"No, no. It is hard to tell you, because you do not know it, but sleep is a not-living that keeps men alive."

Punjel shook his head in a puzzled fashion. "I don't understand, Baiame," he said. "If you say it is good, it must be good. But if men are living yet not living, and their eyes are closed, they will not know when the fire is lit, and they will go on and on in this thing that you call sleep, which is like death."

"They will open their eyes to the fire each day," Baiame assured him. "I shall hang a bright star in the east, and by that they will know that the fire is to be lit again, and that light is coming back to the world."

"How can they know when the star is there, if their eyes are shut?"

"There will be a noise that will wake them when the star shines."

"What kind of noise? Who will make it?"

"That is for you to find out, Punjel. Since you are so concerned lest my little ones should not wake up each day, you must try to find a way of letting them know."

Punjel went back into his wurley, and tried to think. "I could carry stones up to the Milky Way and drop them on the earth," he thought, "but then they might hurt Baiame's people when they fell. Anyway, that would not be a happy sound to wake everyone. They might be afraid."

After thinking for a long time, he went down to earth and wandered through the bush. He listened to the branches of trees creaking together in the wind, to water trickling over stones, to the thudding of the paws of animals on the ground; but none of these things satisfied him.

Then he heard a sound of laughter, and went to see what it was. He found Kookaburra perched on the branch of a tree, laughing happily to himself.

"Kookaburra!" he cried, "that is just the sound I want. Can you laugh louder than that?"

Kookaburra opened his beak wide and let out such a peal of laughter that Punjel had to block his ears to stop being deafened.

"Wonderful!" he cried again. "Everyone will be able to hear that noise in the farthest corners of the world. Kookaburra, before the sky fire is lit each morning Baiame will hang a star in the eastern sky. Will you watch for it, and laugh your happy laugh when you see it?"

"Of course I will," said Kookaburra. "I am happiest when I am laughing."

Punjel flew up to the sky, and told Baiame what he had done.

"Good!" said the Great Spirit. "When I put the morning star in the east, listen and tell me whether you can hear Kookaburra giving the dawn call."

But there was no need for him to ask Punjel to listen. He could hear it himself, like everyone else except those who are stone deaf.

THE BLUE FISH AN

WHO can tell how the moon was m
on his long journey across the sky?
live in the Dreamtime with Baiame
the heavens? Who can tell?

But there is a tale that is told o
and Loolo, the Miserable Man, wh
shone, when the nights were dark a

"My heart is like the dark," Lool
in the shelter of the fence and huddl
heat in their bodies. "The night is
spirits will walk through an uner
winds will blow through the empty
will shrivel up and die, and we sha

His only answer was the sobbing
head in her arms.

From Nullandi's fire came sound

"See the darkness!" he said. "It
light of the sun by day."

"You are foolish, husband," his
see the darkness? There is nothing
to place our hands over our closed

"That is because you do not look
the fire, wife. Look into the fire, ch
there. Keep on looking. Now look
see now?"

"We see flames in the darkness,"
that, Father? Are there many fires

"No, they are in your heads. It
should be there than in the world.

"They are growing dim, Father.

"Then look up into the sky. Wha

"We see many many sparks up t
from?"

"They must be sparks from the
cannot see it yet, but when dawn
glow."

W. KERR (?)

Fisher's Ghost
A Legend of Campbelltown

Of Australia's traditional tales none has attained a wider celebrity than that of the murder of a ticket-of-leave man, Frederick George Fisher, near Campbelltown (NSW) in the year 1826. The crime itself was not very remarkable; and no account of the murder or of the bringing of the perpetrator, George Worral, to justice would, in the ordinary course of events, have sustained the interest of readers over the past century and a quarter. But an extraordinary thing happened. Fisher's vengeful ghost appeared one night to a home-going settler, John Farley. Local suspicion was aroused as to the fate of Fisher who, until then, was generally believed to be paying a visit to England. Fisher's remains were discovered; and the murderer was caught, tried and hanged – thanks to an apparition.

The story has been told and retold countless times. It has been the subject of poems, ballads, sketches, essays and an opera. The first literary expression of the tale follows. It appeared in the March 1836 issue of Tegg's Monthly Magazine. *It was reprinted in Geoffrey C. Ingleton's* True Patriots All *(1952) with a footnote suggesting that the author may well have been W. Kerr, a journalist and editor who founded the Melbourne* Argus. *This version of the tale gives the name of the settler who first saw the ghost as Hurley, not Farley. The reader may be interested to compare the 'Kerr' narrative with that by John Lang, also included in this anthology.*

Suggested further reading: Douglas Stewart, Fisher's Ghost *(1960); Frank Cusack,* True Australian Ghost Stories *(1967).*

Reader, have you ever paid a visit to the town, or rather to the village of Campbelltown? If you have, then you must have observed as you strolled through the village, a large unfinished brick building, fast mouldering to decay, which seems to have been intended at the time of erection for a store. It is now rapidly falling into decay, and the freshness of the grass which covers

the sward around it, shows that whatever the cause may be the ruins are not much frequented by the inhabitants of the surrounding cottages. The unfinished building and the land which surrounds it were the property some years ago of a man named Frederick Fisher, who occupied an adjoining cottage, of which scarcely a trace now remains.

Fisher had been originally a prisoner, he had served his time in the employ of a gentleman in the neighbourhood, and had removed to the town, when he obtained his ticket-of-leave. Some years previous to the commencement of our tale, he had received his certificate of freedom, having undergone the sentence which had been awarded him by the laws of his country. He had also soon after he became free obtained a grant of a town allotment and had commenced the building referred to, intending on its completion to occupy one portion of it as a dwelling-house, and to convert the remaining part into a store.

Fisher was but a boy at the time of the commission of the offence which had led to his transportation. His relatives, enraged at the disgrace he had subjected them to by his misconduct, had taken little notice of him after that period; and as he could put no trust in those whom he saw around him, placed in circumstances similar to his own, he had consequently formed no friendship, which might have enabled him to pass his vacant time; his education also, had been much neglected in his youth by those very relatives who were so liberal of their censure after he had gone astray; it is not therefore, a matter of surprise, that his time should have, occasionally, hung heavy on his hands.

His own fireside presented few attractions to him; his conduct, since his arrival in the colony, not having been such as to afford him much gratification in the retrospect; the resolution of amendment he had made whilst in jail and on the passage out, had melted like snow when exposed to the demoralizing influence of the example set by those around him. Fisher, like most of his class, flew for refuge from unpleasant recollections, to the society which the neighbouring tap-room afforded, and sought for that which he found not at home, in quaffing the flowing bowl.

The necessary consequences of conduct such as this soon became apparent, his business, to which, on gaining his freedom, he had paid strict attention, was now neglected, but instead of

endeavouring, by exertion, to e
culties which began to surround
a life of dissipation, frequenting
and night. His inevitable ruin b
creditors resolved no longer to h
arrested and lodged in jail, at the
for a debt of £150.

Although Fisher had been v
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reached the pitch of depravity w
attained: although he had negle
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The persuasions of Worral, wh
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ever to recover the amount of his
his release, returned to Campbell
of his scheme.

About a week after Fisher's retu
ning with the intention, it was sup
to his usual custom, to some of
Morning came, but his continued
as it was supposed that he had got
as to be unable to return home. As
of his appearance, a neighbour w
public-houses whether he had bee
any of his usual haunts, nor had a

at whatever the cause may be the
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shed building and the land which
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endeavouring, by exertion, to extricate himself from the difficulties which began to surround him, he plunged yet deeper into a life of dissipation, frequenting the purlieus of the tap both day and night. His inevitable ruin became soon so apparent that his creditors resolved no longer to brook delay; he was accordingly arrested and lodged in jail, at the instance of one of their number, for a debt of £150.

Although Fisher had been weak enough to allow the bad example of others to lead him astray, he was yet far from having reached the pitch of depravity which many of his associates had attained: although he had neglected his business, and spent in dissipation those means which ought to have been applied to the liquidation of his debts, he had yet sufficient moral principle remaining, to shudder when one of his drunken associates, named Worral, suggested the expediency of entering into a scheme to defraud his creditors by making over to him the whole of his property which yet remained; making at the same time a private engagement that it should be restored to him as soon as he was permitted to leave jail.

The persuasions of Worral, who represented to him the ease and safety with which he might thus revenge himself on his creditors and regain possession of his property, without any incumbrance, soon overcame the feelings of repugnance which he had first felt, and he consented to make the transfer of all he possessed to Worral, under these conditions. Mr. P. at whose instance Fisher had been incarcerated, finding that he was not the owner of the property he had supposed, consented, after some time, to his liberation, as the only means by which he was likely ever to recover the amount of his claim. Fisher, immediately on his release, returned to Campbelltown, exulting in the success of his scheme.

About a week after Fisher's return, he left his house one evening with the intention, it was supposed, of resorting, according to his usual custom, to some of the neighbouring ginshops. Morning came, but his continued absence excited no surprise, as it was supposed that he had got so drunk the previous night, as to be unable to return home. As the day wore on, and no signs of his appearance, a neighbour went to inquire at the various public-houses whether he had been there. He had not been at any of his usual haunts, nor had any person seen him since the

previous evening. Many conjectures were made as to the cause of his protracted absence, but no feasible reason could be adduced until the afternoon, when Worral returned from Sydney, whither he said he had on the previous evening, accompanied Fisher, who had sailed early that morning for England in order to avoid the importunities of his creditors, who had lately been rather troublesome to him, some of them having even threatened to lodge him again in jail. This was corroborated by the fact that a vessel did sail for England on that day.

Worral's statement set completely at rest all the conjectures which had previously been afloat as to the cause of Fisher's disappearance, and he was allowed to take undisputed possession of the property on producing Fisher's conveyance. Time wore on, and Fisher's name was almost forgotten or never alluded to, except by the deluded creditors.

About six weeks after Fisher's disappearance, Mr Hurley, a respectable settler in the vicinity of Campbelltown, was returning thence to his residence; he had long been acquainted with Fisher, and it is by no means improbable that his mind reverted to his sudden disappearance when passing the place where he had so long resided; be that as it may, however, no doubt as to Worral's statement ever entered his mind. It was about ten o'clock at night when he left Campbelltown; the moon had risen, but her brilliance was obscured by clouds.

After he had passed the late residence of Fisher, about from five to eight hundred yards, he observed the figure of a man sitting on top of the fence on the same side of the road as the house. On approaching nearer, what was his surprise to recognize distinctly the features of Fisher, whom he had supposed then far on his way to England. He approached the figure with the intention of assuring himself that he had not been deceived by a fancied resemblance. The ghastly appearance which the features presented to his view on his nearer approach struck such a chill of terror in his heart as chained him motionless to the spot. The figure, as he gazed, rose from the fence, and waving its arms pointed in the direction of a small dry creek, which crossed the paddock at that place, and disappeared gradually from his view, apparently following the windings of the creek. The terror which overpowered the faculties of Hurley at this sight defies all powers of description; in a state of stupefaction he left the

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How he managed to find his way to the house he has no recollection, but just as he approached it his senses totally forsook him. The noise caused by his head striking the door as he fell alarmed the inmates, who on opening it found him lying in a death-like swoon; he was carried into the house, where he lay for a week in the delirium of a brain fever. The frequent mention of the name Fisher in his ravings, attracted the attention of those who attended him, and conjecture was soon busy at work to ascertain what had driven him into such a state; his known character for sobriety, as well as the testimony of those who had parted from him only a few minutes before, forbade the supposition that it had been caused by drunkenness; and rumour, with her thousand tongues, turned the villagers' heads with vain conjectures as to its probable cause. On the morning of the ninth day of Hurley's illness, he awoke after a long and refreshing sleep in the full possession of his senses, and expressed a wish to those around him that the Police Magistrate should be sent for.

William Howe, Esq., of Glenlee, who then filled the situation of Superintendent of Police for Campbelltown and the surrounding districts, was sent for, and came immediately on being made aware of the circumstances. To him Hurley disclosed what he had seen, and the suspicion of Fisher's having met with foul play, which that sight had impressed on his mind. As soon as Hurley was able to leave his bed, Mr Howe, accompanied by a few constables, among whom was a native black named Gilbert, went, conducted by Hurley, to a place where the apparition had been seen. On closely examining the panel of fencing pointed out, Mr Howe discovered spots of blood. An active search was commenced to discover further traces of the supposed murder, but nothing more was observed.

It was thought advisable to trace the course of the creek in the direction to which the apparition had pointed, and in which it had disappeared. Some small ponds of water still remained in the creek, and these Black Gilbert was directed to explore with his spear; he carefully examined each as he approached it, but the shake of his head denoted his want of success. On approaching a larger pond than any of those he had before searched, the

standers-by observed his eyes sparkle, as he exclaimed in a tone of triumph, while yet at some distance from the pool, 'white man's fat sit down here'; as soon as he reached the bank of the pond he thrust his spear into the water, and after some search, he pointed to a particular spot in the water, saying 'white man there'.

The constables were immediately set to work to clear away the water, which was soon effected—and on digging among the sand the remains of a human being in an advanced stage of decomposition were discovered. It became now obvious to all that Fisher (if the remains which had been found were really his) had met with an untimely end. Suspicion alighted on Worral, who was the only person who had reaped any benefit from Fisher's death; and it was remembered also that it was he who had first propagated the story of Fisher's return to England.

Mr Howe caused Worral to be arrested, and the suspicion being confirmed by a body of circumstantial evidence, he was committed to take his trial before the Supreme Court for the murder. The conviction that retributive justice was now about to overtake him had such an effect on his mind that he confessed his guilt. His reason for so barbarous a proceeding arose from the transaction mentioned in the former part of the narrative. Fisher, overjoyed at the success of the scheme by which he had defrauded his creditors, forgot to regain possession of the deed of conveyance by which he had made over his property to Worral. The thought occurred to Worral that, if he could only get Fisher quietly out of the way, he would be able to claim possession of the property in right of that conveyance.

Under the mask of friendship, he was Fisher's companion during the day—and night after night he watched Fisher's motion from the time of his return from jail until the one on which the murder was committed. On that night he was as usual prowling about Fisher's cottage, looking out for an opportunity to attain his ends, when Fisher, tempted by the beauty of the evening, left his house to take a walk, followed at some distance by Worral. At the place where the blood was afterwards discovered, Fisher stopped and leant against the fence, apparently wrapped in deep thought. The assassin had now before him the opportunity he had so long waited for, and taking up a broken panel of fence, he stole quietly behind him, and with one blow of his

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weapon stretched him lifeless on the ground; he carried the dead body from the scene of the murder to the place where it was afterwards discovered, and buried it deep in the sand. A few weeks after he had made the confession he expiated his crime on the scaffold, imploring with his last breath the forgiveness of his Maker.

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Cook had observed but not explored. On 26 January he broke out the Union Jack on the site of Sydney, overlooking sheltered waters he declared to be "the finest in the world, in which a thousand sail of the line may rest in perfect security." Two days earlier, the Comte de Laperouse's ships *Astrolabe* and *Boussole* had arrived off Solander Point. They entered Botany Bay on 26 January, the day Sydney was founded.

Laperouse had sailed from France in August 1785, nearly two years before Phillip and his ships left Portsmouth. The Comte's sailing orders, endorsed by Louis XVI, included an instruction to "take a closer view of the southern coast of New Holland, the greater part of which has never been visited." He had no instructions to visit Botany Bay or the eastern coast of New Holland but repaired there for wood and water. Phillip received the French ships courteously and gave them what assistance he could. They sailed from Botany Bay on 10 March and were wrecked a few weeks later in the New Hebrides, not a man surviving.

There is no evidence that either Prime Minister Pitt or any member of his cabinet thought of Botany Bay as anything more than a convenient place distant enough for the safe disposal of social waste. Governor Phillip had a greater sense of destiny. "As I would not wish convicts to lay the foundations of an empire," he wrote on 28 February 1787, before sailing for Botany Bay. "I think they should ever remain separate from the garrison and other settlers that may come from Europe and not be allowed to mix with them. . . ."

James Matra, who had been with Cook at Botany Bay in 1770, also had intimations of a more glorious Australian future. He saw Australia as another America, a new jewel in the diadem of Empire to replace the one lost when American patriots declared their independence. As a Loyalist, Matra saw New South Wales as a possible "asylum to those unfortunate American loyalists, who Great Britain is bound by ties of honour and gratitude to protect and support. . . ." Matra had problems himself. On his return from Cook's first voyage he had left the navy and obtained appointment as British Consul in Teneriffe. When the American troubles began he returned to New York to look after the family estate, his father having died. It was a time when American patriots regarded an American Tory as "a thing whose head is in England and its body in America, and its neck ought to be stretched between." Matra not only failed to regain his New York estate but complained that he was denied a share of the British allowance granted to Loyal Americans.

On 28 July 1783, he wrote to Joseph Banks asking for particulars of two rumored plans of settlements in the South Seas, one of them in New South Wales. He said he had "frequently revolved similar plans" and sought advice from an influential man who had been Cook's patron and his own fellow-traveler. Encouraged by Banks, on 23 August 1783, Matra submitted a plan to North's Coalition Government for a settlement in New South Wales. He

2 *New Worlds for Old*

Australia's First Fleet, with pioneers far different from the godly Puritans who had founded New England 158 years before, arrived at Botany Bay on between 18 and 20 January 1788. The Governor, Captain Arthur Phillip, R.N., London-born son of a German teacher, was fifty and had been at sea since he was fifteen. He had charge of a company of about fifteen hundred people, more than half of whom were convicts, transported in eleven ships whose combined tonnage was less than that of a modern transatlantic liner.

"The wind was fair, the sky serene, though a little hazy, and the temperature . . . delightfully pleasant," wrote Captain Watkin Tench, of His Majesty's Marines, in his *Narrative of the Expedition*; "joy sparkled in every countenance, and congratulations issued from every mouth. Ithaca itself was scarcely more longed for by Ulysses, than Botany Bay by the adventurers who had travelled so many thousand miles to take possession of it."

The voyage had taken eight months and one day, and the distance sailed was 15,063 miles. Captain Tench's adventurers, who included 191 women convicts, had not sparkled with joy throughout the trip. "The desire of the women to be with the men was so uncontrollable, that neither shame . . . nor the fear of punishment could deter them from making their way through the bulkheads to the apartments assigned to the seamen," wrote Surgeon-General John White in his Journal.

"The damned whores the moment they got below fell a-fighting amongst one another," wrote Marine Lieutenant Ralph Clark, "and Captain Meredith ordered the sergeant not to part them, but let them fight it out . . . They are a disgrace to their whole sex, b—s that they are." Men convicts, who feared the lash, were easier to manage. "I believe I may say," wrote Surgeon Arthur Bowes, "there was never a more abandoned set of wretches collected in one place. . . ." However, Lieutenant Clark asserted that by and large the prisoners "have behaved very well and quiet."

Captain Phillip took one hard look at Botany Bay, which Cook and Joseph Banks had praised, and moved into neighboring Port Jackson, through the gap

Lord Sydney's suggestion to Matra that New South Wales might be "a proper region for the reception of criminals" reflected the persistent and increasing problem brought about by the loss of the American colonies. In mid-1783 a contractor tried without success to induce Virginia and Maryland to take as plantation laborers 150 of the thousand or more convicted felons awaiting transportation. Economic distress and the consequent increasing incidence of crime added to a problem which a fifty percent increase in executions did little to allay. The Government could not afford to await the outcome of deliberations and proposals from jail and penal code reformers such as Howard, Blackstone, Eden and Bentham. Some distant jail had to be found quickly.

As early as 1779, Joseph Banks had told a committee of the House of Commons that Botany Bay would make an ideal site for the reception of convicted felons. Distance and isolation would make escape difficult if not impossible. The natives were few and would be easily cowed. The climate was Mediterranean in comparison with the fever coast of Africa. There were no beasts of prey and sheep and oxen would thrive. There were abundant supplies of wood and water. Seven years passed before Banks's recommendation was adopted. Meanwhile, other influential voices had spoken up in favor of New South Wales rather than Gambia, in West Africa, which Edmund Burke condemned as "the capital seat of plague, pestilence, and famine." When Pitt at last acquiesced, Lord Sydney moved with commendable rapidity in despatching Captain Phillip with eleven ships containing 568 male convicts, 191 female (with 13 children) and four companies of marines, 160 men plus 51 officers and N.C.O.s, 27 with wives.

In due course free settlers arrived but no one among them was inspired to prophesy as John Winthrop had prophesied aboard *Arbella*, bound westward across the Atlantic in the spring of 1630 to found Massachusetts Bay Colony: "Wee shall be as a Citty upon a Hill, the eies of all people are upon us; soe if wee shall deale falsely with our god in this worke wee have undertaken wee shall be made a story and a by-word through the world." However, young James Tuckey, lieutenant aboard the ship which took the first unwilling convict settlers into Port Phillip Bay (the future Melbourne) and Hobart Town in October 1803, was not without dreams for the future.

"I beheld a second Rome," he wrote in his account of the voyage, "rising from a coalition of banditti. I beheld it giving laws to the world, and superlative in arms and in arts, looking down with proud superiority upon the barbarous nations of the northern hemisphere." This was Johnsonian rhetoric rather than serious prophesy but before long colonists and native-born from Sydney Town and Hobart Town were not only competing with Americans in the exploitation of southern seas but thinking of themselves as Australians, with a future more akin to the American future than the commonplace and

subservient role allotted them by the British Government and Colonial Office panjandrums.

Meanwhile, news passed throughout the Pacific, from China to Peru, from Kamchatka to the Falkland Islands, that the British had settled New South Wales. The news was confirmed for Samuel Shaw in Canton when three of the convict transports—*Charlotte*, *Lady Penrhyn* and *Scarborough*—arrived under charter to the East India Company to load tea for England. Shaw did not know that officialdom had decreed that His Majesty's Government intended to prevent by every possible means "every sort of intercourse between . . . Botany Bay or any other place . . . established on the coast of New South Wales . . . and the settlements of our East India Company, as well as the coast of China and the islands situated in that part of the world to which any intercourse has been established by any European nation."

This attempt on the part of the British Government to safeguard the East India Company's monopoly was doomed to failure. As in the American colonies so lately liberated, immediate necessity rapidly swamped long-range policy. Nevertheless, more than four years passed before the first American ship, *Philadelphia*, Captain Patrickson, out of Philadelphia and via the Cape of Good Hope, berthed in Sydney on 1 November 1792, with a cargo that was snatched up by a commodities-hungry settlement. By 1800 British traders, kept away from Sydney by the East India Company monopoly, were protesting that American shippers were monopolizing a market that should rightly belong to British enterprise. By then, the American sealer *Hope* of Rhode Island, Captain Benjamin Page, had landed the first cargo of rum and helped start a process that turned a penal colony into a settlement where military officers, emancipated convicts and one or two enterprising intruders demonstrated the virtues and vices of an unregulated free economy in which the richest were usually the most ruthless exploiters of market opportunities and human weakness.

The myopic gaze of George III and his ministers saw nothing in the sun-dazzled seas of the south except a prison that needed no locks or keys and a possible source of flax and stout-girthed pines to stamp with the broad arrow that meant exclusive use as masts in royal men-of-war. Blinking through salt-rimmed lashes, shrewd eyes that first saw the light in Salem, Marblehead, New Bedford, Rhode Island, Martha's Vineyard and Nantucket, discovered much more than the bare outline of a barren coast. They saw possibilities that King, Lords and Commons, in their corporate capacities, had no eyes to see. There were, however, individuals enough in and out of the East India Company with sufficient nous to see that the two new worlds, that had sprung phoenix-like from the smoldering embers of the old, promised ample warmth and stimulus for those with brains and ability enough to benefit. The past was slowly dying

4 *Wide Open Spaces*

Within Cumberland County, New South Wales, the summer of 1813 was desperately dry. Fires swept the parched herbage and leapt from treetop to treetop in bushland between orchards and grazing paddocks. Farmers and graziers alike faced ruin and looked to the government to save them. Macquarie, who came from the island of Mull and preferred industrious ex-convicts to trading military men or greedy land-owners, decided that the time had come to open up the passage to the west and provide a new field of endeavor for the hard-working. Governor Macquarie, like Matra, Phillip and Bligh before him, had dreams of an Australian Arcady but they were different dreams from those of the colony's Ancient Nobility or, as things turned out, of the authorities "at home."

For Lachlan Macquarie, Australia was a sanctuary in which the outcasts of civilization could begin life anew—under strict Macquarian supervision. Macquarie was at heart a Highland laird and he believed in benevolent autocracy. He had been commissioned ensign in Canada, the year after the Declaration of Independence, and served with the 71st Highland Regiment in New York and Charleston, before returning to Scotland where he found his family struggling with their farm at Oskamull after the hard famine years of 1781-3. After a further seventeen years' active service in India, he had reached Australia as Governor of New South Wales in December 1809.

According to his own account, Macquarie found the colony "barely emerging from an infantile imbecility; the country impenetrable beyond forty miles from Sydney, agriculture languishing, commerce in its early dawn, revenue unknown, famine threatening, and (everything) mouldering to decay." With the help of the talented convict architect Francis Greenway, he transformed Sydney from a few "nasty, dirty-looking houses", a squalid dumping ground for convicts, into a dignified maritime Georgian town where decent men and women could lead decent lives if they had the will to do so. "This country," the Governor wrote, "should be made a happy home to every emancipated convict *who derserves it*. . . ."

comparable with the efforts being made in the United States during the same decade.

Sturt succeeded in knitting together all the threads of a vast river system draining a territory as great as France and Germany combined. When he reached the junction of the Darling and the Murray, he rowed some way up the broad clear river which on his previous expedition, 300 miles upstream, he had found a desolate salt ooze seeping through drought-stricken wilderness. "An irrisistible conviction impressed me," Sturt wrote, "that we were now sailing on the bosom of that very stream from whose banks I had been twice forced to retire. I directed the Union Jack to be hoisted, and giving way to our satisfaction we all stood up in the boat and gave three distinct cheers. It was an English feeling, an ebullition, an overflow, which I am ready to admit that circumstances and situation will alone excuse."

From then on, so far as New South Wales was concerned, explorers and sheepmen simply had to fill in the gaps. Major Thomas Livingstone Mitchell, the colony's Surveyor-General, set out to prove Sturt wrong. Instead, he confirmed the existence of the river-system Sturt had disclosed. He discovered that the succession of salt pools the Darling at first appeared to be, became after a good season, a free-flowing river of sweet water which joined the Murray, as Sturt had claimed. The Darling River Aboriginals proved hostile. "Implacably hostile and shamelessly dishonest" Mitchell called them. Several were killed or wounded in an affray. On his third and most important expedition Mitchell again had trouble with Aboriginals. His party killed seven in an affray near the Darling. On his return journey, south of the Murray, he not so much discovered as revealed the Western Districts of what is now Victoria, calling the area "Australia Felix", so great was the contrast with the watershed of the Darling.

"A land so inviting and still without inhabitants!" he exclaimed in *Three Expeditions into the Interior of Eastern Australia.* "As I stood, the first European intruder on the sublime solitude of these verdant plains, as yet untouched by flocks and herds, I felt conscious of being the harbinger of mighty changes, and that our steps would soon be followed by the men and animals for which it seemed to have been prepared . . . Here was an almost boundless extent of the richest surface in a latitude corresponding to that of China, yet still uncultivated and unoccupied by man. A great reserve, provided by nature for the extension of his race, where economy, art, and industry might suffice to people it with a peaceful, happy, and contented population."

From the top of a high mountain, on his way home, Mitchell saw, in the heat-haze of an Australian summer, what he fancied to be a mirage, "white objects which might have been tents." It was no mirage. The "white objects" were indeed tents, the encampment of John Batman from Van Diemen's Land

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Introduction

by Ross Terrill

Australian-born Ross Terrill is the author of The Australians *and many books on China, including* Mao *and* Madame Mao. *Now an American citizen, he is a research associate at Harvard University's Center for East Asian Research.*

I love Australia for the birds," Rupert Murdoch said to me as we looked up at the rolling green hills on which this media magnate raises sheep and cattle near Canberra. We were cooking steak and sausages over an open fire as swans and pelicans flew overhead. "There are so few birds in America," continued my fellow expatriate, who spends quite a bit of his time in New York. "Coming out here I feel my Australianness again."

For all their cherished "bushman" legend, **however, 80% of the 16 million Australians cluster in the suburbs of the "Boomerang Coast"**—a thin arc stretching 1,000 miles around the southeastern seaboard from Adelaide to Brisbane. Few Australians have visited much of their huge, empty land, yet their souls dwell in the dusty, technicolor outback.

To realize the sparseness of the **sixth largest country in the world,** imagine a land the size of the United States with virtually no people for the first 2,000 miles inland from the West Coast—as if nothing but sand and spinifex lay between Los Angeles and Chicago. **In Australia, sheep outnumber people.**

Despite the immensity of the land, local variations in style, and a sectionalism that often has the six states snarling at one another, **Australia is a nation of one texture.** The same Australian accent flattens the vowels from Cape York to Hobart and puts the same cozy suffixes on words (**"Brissy" for Brisbane**, "Fre-o" for Fremantle) from the Kimberleys in the far northwest to Melbourne nearly 1,800 miles away in the southeast. I once asked Helen Garner, who lives in Melbourne and is the author of *Monkey Grip* and other novels, about Australians' predilection for these suffixes. "I think it's a desperate attempt to drag the place down to a manageable size," she replied.

The harsh yet beautiful land beguiles me as much as anything about Australia after two decades living in the United States. But you don't need to head into the outback to get a sense of the land's enormous power. Whereas in Europe and America, cities intrude upon the countryside, in Australia the country tends to invade the cities. **When the British founded Sydney 200 years ago, they called the area Botany Bay because of the profusion of flowers and trees. Even today, with a population of 3.5 million,** Sydney seems to be, above all, a slice of nature. On hills around a sparkling blue harbor, red-tile roofs are softened by plants and flowering shrubs.

In the large, stately city of Melbourne you find a high, vast sky whose light overwhelms, and a silence that allows you to hear the rustle of a **gum (eucalyptus) tree** as you exit from the airport terminal. With its gray-green acacias and purple-flowering jacarandas, much of Brisbane looks like a horticultural exhibit, and one can become lost in dreams strolling through King's Park in Perth, where a riot of boronia, orchid, and kangaroo paw spreads beneath magnificent gums.

For tens of thousands of years the Aborigines and nature shared this continent together. The Aborigines arrived during the Ice Age, before sea levels rose and isolated Australia from the rest of Asia. Because European ships were better than Asian, the long isolation of the Aborigines was ended by white, not yellow, arrivals. As London sought a site for a prison colony, the British sea captain, James Cook, reached the east coast in the 1770s and claimed Australia for the modern world.

The British took Australia in casual stages, without ever dealing fully with the fact that it had already been occupied by the Aborigines. Some 300,000 Aborigines existed when Captain Cook arrived. As whites caught fish and the new settlements drove away kangaroos and other animals, the blacks lost their sources of food. And while the blacks welcomed some of the accoutrements of the white lifestyle, they could not cope with alcohol, and many thousands died from smallpox, venereal disease, and other infections. The Aborigine was pushed aside and Aboriginal life declined.

The days when Australia was a penal colony are not so far distant. All four of my grandparents were alive in Victoria when the last convict ships reached Western Australia in 1868. Australia's unique origin as a place of crime and punishment haunted Australians for a century and a half. **It was only after World War II that most people could bring themselves to talk about their criminal ancestry. Today, it is fashionable to boast of it.**

I see a legacy of the convict era in some Australian attitudes. This is a society that looks to the government for solutions to its problems. In part, geographic necessity dictates the posture—private enterprise won't build an unprofitable railroad in the sparse north, for example—but it also stems from the nation's origins as a government camp.

Paradoxically, Australians also have an anti-authoritarian streak that seems to echo the contempt of the convict for his keepers and "betters." This attitude, too, has been perpetuated by geographic realities. The farmer in the tough outback was not inclined—and still isn't—to respect the city bureaucrat who does not know how to mend a fence or cook a meal in the desert. **Thus, in one and the same Australian you find both the government-dependent mindset and**

the anti-authoritarian rhetoric. It is appropriate that the historical figure who stands out most clearly as an Australian hero is Ned Kelly, a bushranger (highwayman) who killed policemen.

Possibly as a result of Australia's past and nature's influence, Australians are casual and easy-going. A businessman can sound as folksy as a worker, and an academic can look like a worker as he boozes and barracks at a football game. Some of the rich parade their wealth, but none can parade their status in a land that began as a prison colony. It is still an insult to a cab driver for any man traveling alone to ride in the back seat.

The Australian is off-handed, as if he or she is either uninterested in communicating or unused to it. When a remark is ventured or a question asked, "ye-es" is said so slowly and hesitantly that you sense reticence or apathy. Similarly, a compliment is more likely to embarrass than please an Australian, although abuse is fine if it is not fully meant.

The nation's spirit dwells somewhere within a triangle, the points of which are diffidence, innocence, and skepticism. Aussies can neither be easily fooled nor easily enthused—they like to believe others will be reasonable, but at arm's length many a proposed scheme will seem flawed or not worth the bother. Despite such cynicism, there is a seductive softness to Aussie life. People still say "sorry" if they bump into you on the street, and the word for thank you, "ta," is uttered even after you yourself have said thank you in a shop or restaurant. And whether the topic is the weather, the stupidity of politicians, or the way the world is going to pot, Australians tend to want your agreement.

This desire for affirmation may be due, in part, to the fact that Australians lived in the shadow of Great Britain for so long, during which time they developed something of an inferiority complex. Not so long ago, "a pie and tea" or "fish and chips" were a staple that, in an unspoken way, were defiantly asserted to be adequate "tucker" for any "real Australian." Today it is different, thanks largely to immigration. Although bare-armed and wearing sandals, diners in Melbourne and Sydney will peer lengthily at wine lists, fuss over the right sauce for the duckling, and dispute the most appropriate seasoning for the lamb.

The emergence of an Australian culinary tradition is part of a growing nationalism, in which Australia can be seen to be moving away from Great Britain and forging an identity of its own. Movies of international repute, Aboriginal art, a quality wine industry, and a vibrant theater have given Australians new cultural confidence in themselves.

The most Australian thing you can do is lie on a clean, wide, beautiful beach. The beach possesses the Australian soul because it is an undeniably Australian asset for a people

that until recently were dismissed—even by themselves—as mere derivatives from cold and distant Europe.

It takes time to establish an identity rooted in one's own geographic and climatic experience, however, and Australia can seem quite British at times and somewhat American at others. Political, legal, and educational institutions derive from Britain. Each state capital is named after a colonial politician (Perth, Brisbane, Sydney, Hobart, Melbourne) or a British royal figure (Adelaide). Dry and witheringly hot towns bear names from England's green and pleasant land. Each day in the leading newspapers a "Vice Regal" column lists the activities and visitors at the state and national government houses, where the representative of the English queen is the formal head of the governmental structure. Only since 1984 has it been required that a civil servant in Australia be an Australian—previously it was sufficient to be British.

American influence comes in culture (especially entertainment), technology, defense arrangements, and business. Television channels are well-stocked with American programs, and American popular music and clothing styles attract youth in Sydney and Melbourne, as they do in much of the world. Books from the United States have made a major advance in Australian intellectual circles since the 1960s. American ideas of management and problem-solving are sweeping away many cobwebs as the presence of multilateral corporations grows and the public service sheds its British tradition of amateurism.

There is resistance to American influence, of course, but it has been muted compared with the coolness many Australians feel toward Britain, which they feel has been guilty of condescension. Australia was never really like Britain; it lacked a defeated aristocracy, a dominant middle class, and a respectful working class. The United States and Australia, however, are both young nations and both melting pots. Perhaps for this reason the Australian is generally at ease with the American.

"Aussie-born, eh?" said the immigration officer at Sydney airport as he flipped through my American passport when I arrived for a recent visit. "Yeah," I grunted in my best Australian accent. "Good—there's not many of us left," said the middle-aged officer with a smile.

The changes wrought by immigration impress a returning native son. Nearly half of Australia's population was either born outside Australia or has at least one parent who was. So far, only some 5% of the population is Asian (under 2% are Aborigines), but more than half the immigrants who have arrived in recent years are Asian.

The approach of a Eurasian Australia has been made possible by some basic changes in Australian policy and behavior. A massive European migration following World

War II accustomed Australians to new arrivals who brought different foods, languages, and values. The long-standing British flavor of Australia became diluted as Greeks, Italians, and Yugoslavs settled in the big cities. Tourist travel by Australians to Southeast Asia and Japan liberalized Australian racial attitudes, as did the presence of thousands of Asian students who have graduated from Australian universities in recent decades. In the 1970s, as the arrival of Vietnamese refugees began an era of Asian immigration, both Labour and conservative (Liberal-National) governments put forward the doctrine of multiculturalism to express a new ethnic pluralism. Having tried to ward off Asia for so many years, Australia has finally begun to accept its geographic location in the world and is realigning itself accordingly. Today, Indonesia (as a defense worry) and Japan (as an economic partner) outweigh in priority any European country in Australia's foreign policy.

Australian urban life has become more cosmopolitan, with Chinese restaurants, Italian coffee lounges, and Vietnamese and Lebanese grocery stores in virtually every suburb. **Greeks and Yugoslavs teach school classes that are half Vietnamese and Chinese—yesterday's students teaching today's—with gum trees outside the window and cricket played during the sports hour.**

Eventually, Australia will complete the transformation from British outpost to Eurasian melting pot. The statistics prove the country's allure: Each year more than 1 million people apply to emigrate to Australia, but less than 10% can be accepted. When I was at college in Melbourne 30 years ago, some feared that Southeast-Asian countries might fail to resist the Communist threat, turning Australia into the "last domino." Today, some fear that the capitalist economies of Hong Kong, Singapore, Korea, and Taiwan might succeed so well that Australia will be left behind as a backwater in a dynamic "yellow sea." In some respects the "lucky country," as Australia is sometimes called, seems out of luck. The farmers are in debt, and industry labors under the disadvantages of a small internal market and high costs. The country's foreign debt is so huge that nearly a quarter of yearly export income goes to pay interest on it, and both the inflation rate (9%) and the unemployment rate (6½%) are very high.

Australia has space but few people. "It's amazing to Japanese," a Tokyo banker based in Perth said to me, "that the flight from Sydney to Perth takes the same time (4½ hours) as the flight from Tokyo to Hong Kong." The territory has to be covered—communities need postal service, water, electricity—but the level of economic activity does not yet exist for it to be done without strain. The high cost of doing business in Australia has been further exacerbated by

trade-union avarice, growing corruption, steep taxes, and a certain "don't care" mentality.

Australia's economic problems have put severe pressure on a social unity that had been taken for granted. Unemployed youth do not like to see Asian immigrants take jobs they feel should be theirs. Special favors for Aborigines, however justified by history and by need, are less widely supported now than during the healthier economic years of the 1970s. Meanwhile, this ancient people's life expectancy is 20 years less than the Australian average, and Aboriginal infant mortality is three times that of non-Aborigines. In many ways, Australia's ancient past and its beckoning multicultural future tug in sharply different directions.

Australia has been kept pleasant and peaceable by a practical, if sometimes hit-or-miss approach to issues, a lack of compelling ideologies, an agreeable climate, and a beautiful landscape. Some Australians wonder if all this will be enough for tomorrow's challenges. A minister of Prime Minister Bob Hawke's government has suggested that Australia should forget about being the "lucky country" and strive to be a "clever country"—competing in Asia through high-tech development, ingenuity, and flexibility.

In the meantime, a young nation with few glorious moments in its past is still crystallizing its identity. An exciting maturation has been occurring as diverse immigration, artistic excellence, and the pleasures of a comfortable, safe, and healthy life all bring a new pride and sophistication to the country.

As a returning native son over recent years, I have found a people who seem to enjoy life considerably more than they admit. Scratch an Australian, and you find in him a deep satisfaction at being where he is. I asked former Prime Minister Malcolm Fraser, who has a large farm near Melbourne, what nationalism means to him. "Simply that Australia is the best country in the world to live in," the 6'5" grazier answered crisply.

On a perfect morning after a recent visit, I flew out from Melbourne's bucolic Tullamarine Airport for California. As the 747 swept down into San Francisco, I felt a ball of satisfaction in my stomach upon regaining a faster lane. Yet I knew I would miss the sincerity and unpretentious **"fair dinkum" character of the Australians.**

Australia at a Glance: A Chronology

c. 28,000 BC First Aboriginal settlers reach Australia—perhaps when it was still connected to Asia.

c. AD 150 Claudius Ptolemy, Roman astronomer and geographer, hypothesizes existence of a southern *"Terra Incognita"* (Unknown Land).

c. 1500 Following rediscovery of Ptolemy's *Geography*, *"Terra Australis"* (Southern Land) appears on some world maps.

1606 Willem Jansz of the Dutch East India Company touches New Guinea and Australia (Gulf of Carpentaria, Queensland), but thinks they are a single land mass; the Spaniard Luis de Torres sails through the strait between Australia and New Guinea, now the Torres Strait, also without recognizing a new continent.

1616–1619 En route to the Dutch colony at Batavia (Indonesia), Dirk Hartog and Jan Houtman discover and explore the southwestern coast of Australia, then known as New Holland.

1642 Commissioned to explore New Holland by Anthony van Diemen, Governor-General of the Dutch East Indies, Abel Tasman sails around Australia without sighting its coast. Instead, he discovers New Zealand and a land mass he names Van Diemen's Land (now Tasmania).

1688 English pirate and adventurer, William Dampier, lands on the northwestern coast. He touches on this coast again in 1699; Swift and Defoe make use of his accounts in *Gulliver's Travels* and *Robinson Crusoe*.

1770 James Cook (1728–1778) anchors HMS *Endeavour* in Botany Bay. He continues north along the coast for several weeks, navigating the Great Barrier Reef and completing the map of New Holland. Claiming the area for England, he calls it New South Wales.

1779 Joseph Banks, who accompanied Cook on the *Endeavor*, recommends to the House of Commons the establishment of a penal colony at Botany Bay.

1788 Captain Arthur Phillip lands the first fleet of convicts at Botany Bay, but finds Banks's account of its salubrious climate to be exaggerated. Nonetheless, he formally takes possession of eastern Australia as the colony of New South Wales and lays out a village to be named Sydney, after Viscount Sydney, the British Home Secretary.

1796 Spanish Merino sheep, with their highly prized wool, are introduced.

1798 Matthew Flinders and George Bass discover that Van Diemen's Land is an island; New South Wales claims it for Britain.

1803 Risdon Cove settlement is established in Van Diemen's Land; settlement at Port Phillip (now Melbourne) is attempted.

1804 Hobart Town and Port Dalrymple penal settlements (united in 1812) are established in Van Diemen's Land, and the Aborigines are gradually wiped out.

1809–1821 Lachlan Macquarie, governor of New South Wales, establishes the basis of the modern city of Sydney with the help of convict-architect Francis Greenway (who earned his freedom through his designs).

1813 Gregory Blaxland, William Lawson, and William Charles Wentworth discover a route through the Blue Mountains, opening the way for westward expansion.

1823 New South Wales is named a Crown Colony.

1824 Moreton Bay Penal Colony (Queensland) was established by Governor Brisbane (for whom the site was later named) to incarcerate the worst convicts from New South Wales.

1825 Van Diemen's Land becomes a separate colony; free settlers begin to arrive.

1829 Western Australia is annexed and becomes Australia's first free colony, but later receives convicts to relieve labor shortage.

1835 John Batman and John Fawkner establish claims at Port Phillip (Victoria).

1836 Melbourne is laid out. South Australia is declared a separate colony.

1839 Captain J. C. Wickham of HMS *Beagle* discovers a harbor on the northern coast, which he names Port Darwin, after Charles Darwin.

1840 Last convicts are sent to New South Wales; free settlers arrive in Queensland.

1842 Copper is found in South Australia.

1849 Last convicts are sent to Queensland.

1851 Victoria is proclaimed a colony; gold is discovered at Ophir in New South Wales. Over the next decade 400,000 settlers flock to New South Wales and Victoria for the Gold Rush.

1853 Last convicts are sent to Van Diemen's Land, renamed Tasmania in 1856.

1854 Miners' rebellion erupts over licensing fees at the Eureka Stockade near Ballarat (Victoria).

1859 Queensland is proclaimed a separate colony.

1868 Last convicts are transported to Western Australia.

1869 Darwin (Northern Territory) is surveyed.

1873 Ayers Rock, the world's largest monolithic rock, is sighted by William Gosse in central Australia and named after the governor of South Australia.

1880 Bushranger Ned Kelly, a notorious highwayman, is captured in a shootout at Glenrowan, Victoria. He is hanged and becomes a folk hero.

1892–3 Gold is discovered at Coolgardie and Kalgoorlie (Western Australia).

1901 Federal Commonwealth of Australia is established; Melbourne becomes provisional capital.

1911 Australian Capital Territory is ceded from New South Wales; Walter Burley Griffin of Chicago wins competition to design new capital city of Canberra.

1914 Australia enters World War I and experiences heavy losses in the Gallipoli campaign (1915).

1920–32 Sydney Harbour Bridge is built.

1927 First Federal Parliament meets in Canberra.

1929 Railroad reaches the town of Alice Springs (Northern Territory).

1939 Australia enters World War II; Darwin is severely bombed by the Japanese in 1941–42.

1950 Australia enters the Korean War.

1966 First contingent of Australian troops arrives in Vietnam.

1967 Prime Minister Harold Holt disappears while swimming off Victorian coast and is believed drowned.

1974 Cyclone Tracy destroys most of Darwin.

1975 Governor General Sir John Kerr, the Queen's representative in Canberra, summarily dismisses Prime Minister Gough Whitlam, provoking a constitutional crisis.

1978 Northern Territory becomes self-governing.

1986 Australia Act ends power of the United Kingdom to affect Australian law.

1988 Australia celebrates its bicentennial.

1990 Prime Minister Bob Hawke wins fourth electoral victory for the Labour Party.

Bush Pubs: A Window onto the Outback

by Tony Horwitz

Tony Horwitz is an American who quit his job as a journalist in Sydney to hitchhike through the Australian outback. In this extract from One for the Road, *a book he wrote about his experiences, Horwitz describes the journey to Alice Springs in the red heart of Australia.*

"I never miss a pub," Bill Gillholey says by way of introduction. "No chance." I am in the Northern Territory, on a motorized pub crawl from Tennant Creek to Wauchope to Tea Tree to Alice. Each settlement a pub, each pub a snort or two of blue [Foster's beer]. Then back on the road, like two men in a canoe, weaving down a river of beer.

"Europe, it has the culture," Bill says, holding the steering wheel in one hand and spilling a beer with the other. "Australia, Australia it has the pubs."

Bill left his native Hungary after the Communist takeover in the 1950s. He opposed the new regime and couldn't find work as a mining engineer. Bill hasn't found engineering work in the Territory either, but he's stayed, laboring as a handyman on outback stations and moonlighting as a pub crawler of Olympian dimension. He even adopted the surname of an Irishman he met over a green can somewhere in Darwin. At the Top End, it seems, beer helps cement the ethnic mosaic together.

Beer is also the lifeblood of the Territory's road traffic. There is one central artery, the Stuart Highway, running from Darwin to the South Australian border. Smaller vessels feed into it all along the way, carrying goods and traffic from the body corporal into the greater flow. It is at the junctions that the roadhouses appear to pump and prime the system with gas and beer.

There is nowhere else to stop along the hot dusty drive down "The Track," as Territorians call the Stuart Highway. So the same faces appear at every pub. Travelers drink and nod at one another, then move in a convoy to the next hotel. By Alice Springs, I will know everybody at the bar.

If I don't lose consciousness. Pub crawling with Bill makes me realize how much I still have to learn about Australian-style drinking. Americans don't necessarily drink less but they do drink differently. A beer or two after work. Cocktails before dinner. Maybe a blow-out at the weekend. Like everything else in the United States, drinking is done at prescribed times, for a prescribed purpose. And there are still "dry counties" in the Bible Belt where drinking isn't done in public, at least not legally. Elsewhere, there is a growing rebellion against anything caloric or intoxicating: "lite beer" and diet cola are the products of a lingering Puritanical strain.


Australia



Australia

This book presents a concise, up-to-date story of the people, history, geography, economy and culture of our country and its relations with the world. *Australia* has been prepared by Overseas Information Branch, Department of Foreign Affairs and Trade, and succeeds *Australia Handbook*, the 24th edition of which was published in 1986. The help received from Australian government departments, associated organisations and other authorities is gratefully acknowledged. Money values are in Australian currency; weights and measures are metric. Unless otherwise indicated, information is current to 31 January, 1990.

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(Cover) Aboriginal artist, Darby Jampijinja Ross, at Jukayuka, an area west of Yuendumu, Northern Territory. Darby is custodian of this area.

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Metric equivalents

Mass

1 gram	*0.0353 ounce*	*g*
1 kilogram	*2.20 pounds*	*kg*
1 tonne	*0.984 ton*	*t*

Volume

1 litre	*1.76 pints*	*L*
1 megalitre	*219 969 gallons*	*ML*
1 cubic metre	*35.3 cubic feet*	m^3

Temperature

0 degrees Celsius	*32 degrees Fahrenheit*
0_C	0_F

Length

1 millimetre	*0.0394 inch*	*mm*
1 centimetre	*0.394 inch*	*cm*
1 metre	*3.28 feet or 1.09 yards*	*m*
1 kilometre	*0.621 mile*	*km*

Area

1 square metre	*10.8 square feet*	m^2
1 hectare	*2.47 acres*	*ha*
1 square km	*0.386*	km^2

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East Macdonnell Ranges, Northern Territory

Australia — an outline

When one of Australia's authors dubbed his homeland 'the lucky country' he was right in many respects, but its luck has not been unmixed. Its isolation over millenniums gave it many advantages but its size and its low, erratic water supplies counter them.

The way its people have met their country's challenges is outlined in this booklet.

The world's smallest continent and largest island, Australia was once part of prehistoric Gondwanaland, which divided into Africa, India, South America, Antarctica and the Great South Land.

A land 'bridge' between Australia and Asia may have provided access 40 000 years ago for Australia's first immigrants, the Aboriginals. They were its sole inhabitants until two centuries ago.

Indonesian traders probably visited Australia's north-west but it was unknown to the rest of the world until the 1600s. A huge south land appeared on maps before 200 AD but its existence was not confirmed until the 17th century when Portuguese, Spanish and Dutch merchants ventured into Asia.

The first European settlement of the continent — by the British — began in 1788, on the site now occupied by Sydney, Australia's largest city.

There were then about 1500 Europeans and perhaps 300 000 Aboriginals in Australia. The population had reached 2.25 million by 1881, 5.44 million by 1921 and 7.4 million by the end of World War II (1945). It increased sharply, partly because of a large postwar immigration program, and reached 16 million in the late 1980s, despite a decline that began in the 1970s in natural increase and net immigration. The rate of population increase in the 40 years after World War II, about two per cent, has halved.

The scale of the immigration program became large in the late 1940s and, in the ensuing four decades, more than four million people from 120-plus countries settled in Australia. Britain and Ireland contributed 1.79 million and 1.5 million came from Italy, Greece, Yugoslavia, The Netherlands, Germany, New Zealand, Poland, the US, Vietnam and Lebanon. Australia has become a multicultural society.

Australia has a land area of 7 682 300km^2 and its coastline is 36 735km long. It is the world's driest inhabited continent; vast areas are arid or semi-desert, and virtually uninhabited. Most of its population lives on the coastal fringe.

Ranking about 20th in the world in the value of its overseas trade, Australia exports goods worth more than $40 000 million each year and imports goods to much the same value.

Its population has a high standard of living by world standards and most families own or are buying their own houses.



Its flag is the only one to fly over a whole continent. Until Australia's six

colonies federated in 1901, Britain's Union Jack was its official flag but the new nation chose a new design. It has a blue field with the Union Jack in the canton (the upper quarter next to the flagpole). The seven-pointed star in the lower hoist represents the states and territories. In the fly are the five stars of the constellation Southern Cross.

Australia's national anthem is a revised version of a late 19th-century patriotic song, *Advance Australia Fair*. The words are:

Australians all let us rejoice,
For we are young and free;
We've golden soil and wealth for toil;
Our home is girt by sea;
Our land abounds in nature's gifts
Of beauty rich and rare;
In history's page, let every stage
Advance Australia Fair.
In joyful strains then let us sing,
Advance Australia Fair.

Beneath our radiant Southern Cross
We'll toil with hearts and hands;
To make this Commonwealth of ours
Renowned of all the lands;
For those who've come across the seas
We've boundless plains to share;
With courage let us all combine
To Advance Australia Fair.
In joyful strains then let us sing,
Advance Australia Fair.

The anthem is used on all official and ceremonial occasions. It became the anthem in 1984, replacing *God Save the Queen*, known since then as the royal anthem. Both anthems are played on royal occasions.

Australia's coat of arms is a shield containing the badges of the six states, enclosed by an ermine border signifying federation. The crest is a seven- pointed gold star on a blue and gold wreath. The supporters are Australian fauna — a kangaroo and an emu. Usually the arms are depicted with an adornment (not part of the arms) of wattle and a scroll bearing the word 'Australia' under the arms.

Although Australia has never adopted formally any official motto or floral, faunal or bird emblem, the motto 'Advance Australia' appeared for many years on unofficial coats of arms, even before federation. By tradition, the golden wattle, kangaroo and emu are widely regarded as national floral, faunal and bird emblems.

Green and gold have been used traditionally by Australian Olympic and other sporting teams for most of the 20th century but they did not become the national colours formally until 1984.

Australia has no official or traditional national costume.

The official language is English — by usage, not law. It has its own colloquialisms and slang but does not differ importantly from the modern mother tongue or the English spoken elsewhere, except in accent. Spelling generally follows the British form.

January 26, the date of the first European settlement of the continent in 1788, is Australia's national day.

Of the other days observed nationally in Australia, two evoke great fervour and throw a curious sidelight on the national character:

- Anzac Day, April 25, on which Australians honour their war dead and those who fought and survived. The date chosen is the anniversary of the greatest military defeat Australia has suffered.
- The first Tuesday in November, when Australia's world-famous horse race, the Melbourne Cup, is run. In its home city, Melbourne, it is a holiday; and all work ceases across the nation while the race is run.

International relations

Well into the 20th century, Australia's ethnic background was overwhelmingly English and Irish and many of its citizens still called the British Isles 'home'.

As the 21st century draws near, 'home' to most Australians is Australia and 'the old country' for those actually born elsewhere might be of more than a hundred parts of the world.

Furthermore, despite Australia's western traditions and orientation, it is geographically part of South-East Asia and is a middle-level world power.

As the Minister for Foreign Affairs and Trade, Senator Gareth Evans, said in his address to the Australian National University's Strategic and Defence Studies Centre Bicentennial Conference in Canberra on 6 December 1988, Australia's national interests can be divided into three groups:

- geopolitical and strategic interests in defence of Australian sovereignty and political independence;
- economic and trade interests; and
- those interests involved in being a good international citizen.

Australia's relationships with Britain, the US and Western Europe, forged by history, are important factors in Australian policy. However, its growing awareness of the importance of the politically, economically and strategically significant countries of Asia and the many newly independent nations of the South Pacific has led Australia to foster friendly and cooperative relations with them. Australia is keen to ensure the stability and security of the region and to develop mutually profitable trade, investment, technological exchanges and cooperation in development.

Relations with China, Japan, ASEAN (the Association of South-East Asian Nations), New Zealand, Papua New Guinea and other South Pacific states are of significance to Australia. Similarly, in the Indian Ocean, Australia has important political, strategic and economic interests and observes and considers carefully the issues of the region. This is true particularly in the development of relations with the ocean's island states, including Mauritius, Madagascar and the Maldives, and with East African states.

Australia pursues issues internationally that reflect its people's attitudes and concerns: disarmament, the plight of refugees, human rights, the easing of East-West tension, the abolition of chemical weapons and international trade liberalisation.

It has developed constructive, progressive policies and has assumed a practical and active posture in the pursuit of world peace. It has become a leader in the movement toward a comprehensive nuclear test ban treaty and has long maintained an Ambassador for Disarmament.

The United Nations has had no more consistent supporter than Australia for its charter and the work of its specialised agencies. It participates in many UN activities and has served on many of its bodies, including the Security Council.

Among the specialised agencies and subsidiary bodies Australia supports are

those assisting in development, food security, children, drug control and human rights. It has served for a number of years on the Commission on Human Rights, has provided money, personnel and equipment for almost all major UN peacekeeping activities, contributes its assessed share of the costs of all UN operations and makes additional contributions. It is fully involved in UN disarmament, arms control and outer space work. Australia accepts the jurisdiction of the International Court of Justice and is active in the development of international law. It has been a member of the Organisation for Economic Cooperation and Development (OECD) since 1971.

The Commonwealth of Nations brings together about a quarter of the world's population and Australia takes part in the broad range of its activities.

The growing interdependence of economic and foreign policy, Australia's increasing dependence on international trade and the effects of world economic conditions on its domestic economy has led to a sharpened focus on international trade issues in the pursuit of its foreign policy.

Australia's economic and political future is linked closely with those of its Asian and other Pacific neighbours.

Progress made by ASEAN and its contribution to regional cooperation are sources of satisfaction to Australia, which has an interest in helping to ensure ASEAN's success in generating economic growth and political stability. Australia has a program of economic cooperation with ASEAN through which it supports important regional projects. It also contributes significantly toward easing the burden of Indo-Chinese refugees in member countries.

Australia takes the view that peace and prosperity in the Asia-Pacific region depend on the ability of the region's countries to cooperate to maintain economic growth and political stability. Such cooperation, it believes, ensures that no major power, regional or otherwise, can exert undue influence. Australia has long involved itself, therefore, in regional organisations such as the UN Economic and Social Commissions for Asia and the Pacific, the Colombo Plan and the Asian Development Bank.

Japan is Australia's largest trading partner and relations are based on complementary interests and shared perceptions of international issues. Cultural, scientific, sporting and other relations are fostered by both to improve mutual understanding.

Australia's relations with China have been marked since diplomatic links were established in 1972 by regular, reciprocal, high-level visits. China is a significant market for Australia and the relationship is underpinned by agreements and institutional arrangments (culture, science and technology, agriculture, civil aviation, education, and the Australia-China Council). A technical cooperation program, designed to help China's development, includes activities in education, energy, forestry, health and industrial technology.

As a result of the 1989 Tiananmen Square massacre and the suppression of the pro-democracy movement in China, the Australian Government reviewed carefully its relationship with China.

Australia's relationship with the Republic of Korea has developed significantly in recent years. Korea has emerged as a major economic power in its region and has become one of Australia's more important trading partners.

Friendly relations, including development assistance programs, exist with Myanmar (formerly Burma) and Laos, and a constructive political dialogue with Vietnam has developed. This has been important to Australia's efforts to seek a just, lasting and peaceful settlement in Cambodia.

In the Pacific region, Australia promotes stability, welfare and economic development. It has friendly relations with the island countries in the South and Central Pacific and has a number of diplomatic missions in the area. Its aid programs in the region cover all aspects of social and economic life in those countries.

History has created a special and close relationship between Australia and Papua New Guinea. Since Papua New Guinea achieved independence in 1975 the relationship has encompassed a broad range of government and non-government activities.

As a foundation member of the South Pacific Commission, the South Pacific Forum and the South Pacific convention which established the Forum Fisheries Agency, Australia takes an active part in them and in many other regional forums on a broad range of issues, including development of an environmental protection convention. It provides substantial financial support for programs developed in the South Pacific, such as the South Pacific Regional Environment Program, a regional network of climate-monitoring stations and the Regional Civil Aviation Project, and it has established a fund to preserve and develop Pacific cultures. With New Zealand it has entered a non-reciprocal preferential trade agreement in favour of South Pacific Forum states — the South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA).

It has a close relationship with New Zealand. The 1983 Australia New Zealand Closer Economic Relations Trade Agreement aims to remove barriers to trans-Tasman trade.

There has long been a close relationship with the United States. Government-to-government relations are only part of an interaction born of common experiences, culture and language. The US is an important trading partner despite the development in recent years of differences between the two over trade policies, particularly as they affect agriculture.

Canada is closely comparable to Australia in its history, institutions, traditions, land area, economic standing and international outlook. The goodwill between the two allows them to cooperate on a range of objectives without affecting individual national interests or commercial competition.

Australia is concerned at the debt problems of Latin America and the Caribbean region, the human-rights records of some Latin American governments and tensions in Central America. It has supported efforts to find peaceful solutions to these problems.

Friendly relations with Western European countries and the European Community (EC) are of considerable importance to Australia. Bilateral

relations with individual Western European countries are based on shared cultural and historical links and reinforced by the presence in Australia of large numbers of their former citizens and by significant economic ties.

The EC is an important trading partner and a major source of investment funds and scientific and technological expertise.

Australia has a keen interest in a balanced East-West relationship. It has diplomatic contacts with the Soviet Union and Eastern Europe. Eastern European markets have significant potential for Australian exports, particularly commodities, and trade relations have been expanding. In Australia, large ethnic groups from Eastern Europe have substantial links, notably cultural, with their countries of origin.

The value Australia places on its long-standing relations with the Arab nations and Israel is high. It supports the efforts of parties to the Middle East dispute to find a just, lasting and peaceful solution, although its ability to influence settlement is limited. Australian trade with the region's countries is significant.

Australia pursues friendly relations with independent African states. It has formal relations with South Africa but has been prominent in opposing apartheid and has actively encouraged the process of transition to independence and self-government in Namibia. Australian assistance to African countries includes project support, food aid and training. Australia has always moved quickly and effectively to bring relief aid to the victims of disasters in Africa.

Nuclear policies in Australia are based on strong support of the Nuclear Non-Proliferation Treaty. Its policy on the sale of its uranium includes a condition that it will not be used for military or explosive purposes and that buyers accept International Atomic Energy Agency safeguards. Agreements have been signed with Britain, Canada, Egypt, the European Atomic Energy Community, Finland, France, Japan, the Philippines, the Republic of Korea, Sweden, Switzerland and the US.

Australia has been prominent in promoting the concept of a nuclear-free zone in the South Pacific.

Australia took part in the Law of the Sea Conference, the largest and potentially the most important conference in the history of the UN, involving major strategic, economic, transport, scientific and environmental issues.

Proximity and long association with Antarctica underpin its importance to Australia, which maintains three permanent bases in the Australian Antarctic Territory at Casey, Davis and Mawson. One of the original signatories to the Antarctic Treaty, Australia has important scientific, environmental and security interests there. It believes the Treaty system has kept Antarctica free from contention and provides the best means of managing Antarctica effectively in the future.

The Australian Government took a leading role in efforts to have Antarctica declared a world park to protect its fragile environment.

The Department of Foreign Affairs and Trade conducts an overseas cultural exchange program in cooperation with the Australia Council and other cultural bodies. The program includes the performing and visual arts, film-making,

literature, and academic and sporting exchanges. Australia has cultural agreements with China, France, Greece, India, Indonesia, Iran, Italy, Japan, the Republic of Korea, Malaysia, the Philippines, Romania, Singapore, Thailand, Yugoslavia, and the Soviet Union.

Australia's overseas aid program aims to promote economic growth and social advancement in developing countries. All of Australia's aid (more than $1000 million a year in recent years) is given in grant form.

Papua New Guinea is the main recipient of Australian aid as budget support.

Aid to other countries is tied to specific development projects and its major recipients are the developing countries of South-East Asia and the South Pacific. Australia supports development programs in about 40 countries, ranging from large rural projects to village-level activities.

Countries in South Asia and Africa and Indian Ocean states also receive Australian help. Programs in these areas are aimed at the rural poor. Food security, clean water, improved animal husbandry, rural infrastructure and transport projects are supported.

One of the world's largest providers of food aid to developing countries, Australia is committed to supplying 350 000 tonnes of wheat, or its equivalent, each year. Most of this aid goes to African countries facing particularly severe food shortages, or countries (such as Bangladesh or Pakistan) with emergency needs resulting from severe crop failure, natural disasters, or refugee flows. Direct food support is complemented by programs aimed at improving longer-term food security.

Australia contributes to the education of about 18 000 students from developing countries, mostly at tertiary level. The Australian International Development Assistance Bureau (AIDAB) pays about $80 million a year to subsidise this program. A new education policy based on merit and equity is providing more opportunities for students from poorer and isolated developing countries.

A major part of Australia's support for the education of foreign students is the full cost of studies for about 1000 of them and support for the Australian Universities International Development Program.

Non-government organisations, including the International Red Cross, contribute significantly to Australia's aid effort and the Government supports their activities, including programs under which Australian volunteers work in developing countries.

The Australian Centre for International Agricultural Research supports research into the agricultural problems of developing-countries. It commissions research by Australian agricultural institutions in partnership with developing country research groups. The main beneficiaries of the research are Australia's near neighbours in South-East Asia, the South Pacific and Papua New Guinea.

Environment

The wellbeing of the environment was for decades the concern of the few. They, dedicated to halting what they realised was a potentially catastrophic neglect, waste or destruction of the globe's resources and recovery mechanisms, became 'radicals'. But because they were right, the majority came to accept their cause as just and, later, that their air of urgency was justified. Australia was neither slower nor quicker than other industrialised nations to come to that realisation.

Having done so, however, Australia has moved to the vanguard of nations that have accepted their responsibility and taken action to halt and, where feasible, reverse the effects of all three.

Australia has been concentrating on key environmental issues such as soil erosion, landscape-quality preservation, water-quality improvement, chemicals control, including hazardous-waste handling and disposal, "greenhouse-effect" climatic change, depletion of the ozone layer, assessment of the impact of the full range of human activity on the environment and the preservation of the nation's heritage.

All levels of government are involved in and responsible for the multitude of Australian concerns in environmental matters. The Federal Government assigns responsibility for its role to a Minister and a department, commonly one with other responsibilities having a bearing on those concerns.

Australia was one of the first countries to ratify the World Heritage Convention, the aim of which is to promote co-operation among nations to protect those things of such universal value that their conservation is of concern to all people.

It is the only country to have enacted legislation specifically to carry out its responsibilities under the convention: the World Heritage Properties Conservation Act 1983.

On a national level, it has established the Australian Heritage Commission, one of the main functions of which is the preparation and maintenance of a Register of the National Estate.

This register lists all parts of Australia's natural, historic and Aboriginal heritage that should be kept for future generations.

Well over 8 000 such places are on the register.

The main federal program backing this commitment to preserving Australia's heritage is the National Estate Grants Program, established in 1983 to provide financial assistance to serious efforts to preserve it. More than 3000 grants have been made to state and territory governments and conservation bodies under this program.

The specific spheres of concern under the general heading of the environment are so numerous that, while they require mention, their treatment in a document of this type must be confined to a simple list — although notes on some of the more prominent subjects are necessary. These subjects include: land use, Antarctica, coastal management, the sea, forests, unspoiled areas, mining, primary industries, tourism, bushfires, wetlands, endangered species, land degradation,



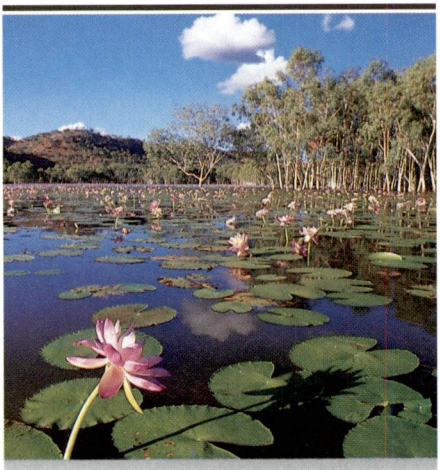
Rainforest, southwest Tasmania

soil salinity, dumping of wastes at sea, sea installations, the great barrier reef, the greenhouse effect, marine matters generally, flora and fauna, trees, specifically rainforests, specifically, hazardous chemicals, specifically agricultural chemicals, the ozone layer, recycling of all forms of waste, ionising radiation, noise, lead and other heavy metals, air quality, national parks.

All Australian states have legislation or procedural arrangements to provide for environmental factors to be taken into account in decision-making, particularly when land development or industrial activities are involved. The federal and state governments have agreements for cooperative environmental assessments.

Uranium mining proceeds only under the most rigid controls and in a severely limited set of circumstances. Sales of uranium are controlled even more rigidly; details appear elsewhere in this booklet.

Virtually all of the Great Barrier Reef is part of a marine national park.



Water-lilies, Lake Waggaboonyah, Queensland

The Federal Government regulates dumping of wastes at sea in accordance with the London Dumping Convention. In collaboration with state authorities, it has a national air-quality program which collects and analyses data.

The first laws to protect scenic areas in Australia were passed in Tasmania in 1863. In 1879, the Royal National Park of 7284ha was established south of Sydney. This was Australia's first national park, and the world's second.

Now more than 40 million ha, or a twentieth of Australia's total land area, is reserved for national parks and other types of conservation reserves. Australia now has more than 2000 national parks, conservation parks, reserves and refuges and the area set aside for conservation is increasing. National parks and wildlife services exist in all states to manage state national parks and reserves.

Native fauna in Australia are protected and managed by state and territorial governments, while the Federal Government's concern is mainly the control of international import and export, international treaties and conventions pertaining to nature conservation.

Australia's approach to kangaroo conservation and management has two main objectives — to maintain populations of kangaroos over their natural range and at the same time to contain their harmful effects on other land-management practices.

Legislation passed in 1981 prohibits killing, capturing, injuring or interfering with a whale, dolphin or porpoise in the 200-mile Australian fishing zone and by Australian vessels and aircraft beyond the 200-mile zone.

States and Territories

Australia has six States: New South Wales (NSW), Victoria (Vic), Queensland (Qld), South Australia (SA), Western Australia (WA) and Tasmania (Tas). It also has three internal Territories (the Northern Territory (NT), the Australian Capital Territory (ACT) which includes the Jervis Bay Territory and seven external Territories.

The external Territories are: Norfolk Island; the uninhabited Coral Sea Islands in the Pacific Ocean; the Cocos (Keeling) Islands; Christmas Island; the uninhabited Ashmore and Cartier Islands Territory in the Indian Ocean; the Territory of Heard Island and the McDonald Islands in the sub-Antarctic; and the Australian Antarctic Territory.

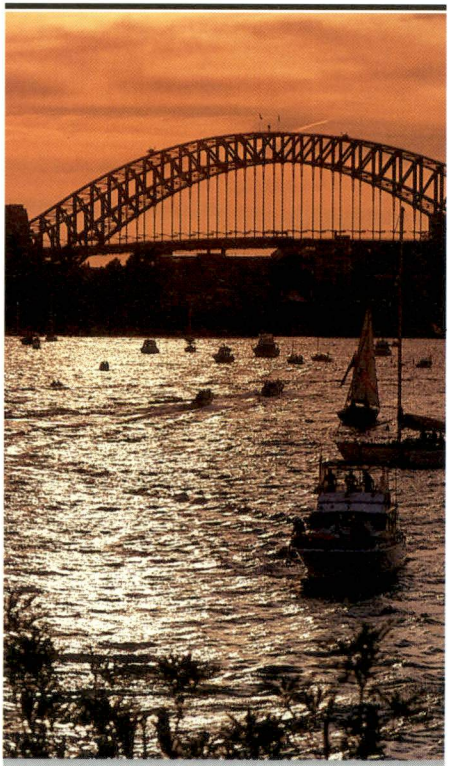
NSW, in the south-east, was the first colony Britain established in Australia and is now the most populous (nearly six million) and heavily industrialised state in Australia. It is highly urbanised. Sydney, its capital, is Australia's largest city (population more than 3.5 million) and one of the world's great seaports.

Agricultural and pastoral industries, broadly based manufacturing, ample energy raw materials and highly developed service industries are the basis of its economy.

South of NSW, Victoria drew its first permanent European settlers from its island sister colony, Tasmania, attracted by the rich soil and grasslands. The nucleus of Melbourne, its capital, was established in 1835. Victoria's population is approaching 4.5 million, of whom a little more than three million live in Melbourne.

Its economy is based on agricultural and pastoral industries (it produces about a quarter of Australia's rural output), secure energy resources, a broadly based manufacturing sector and highly developed service industries.

European settlement in Queensland began in 1824 when a group of convicts and their guards landed near the mouth of the Brisbane River to begin a penal settlement. Free settlement began in earnest in 1842.



Sunset on Sydney Harbour

The second-largest State in area and the third-most-populous, it has nearly three million inhabitants, of whom more than a million live in Brisbane, the capital. Queensland accounts for a fifth of Australia's agricultural and mining production and about a quarter of the value of its exports.

South Australia was founded in 1836 by the London-based South Australian Company. Among its pioneers were Germans, victims of religious persecution, who began to arrive about three years later.

It has an area of 984 000km² and a population of about 1.5 million, of whom just over a million live in Adelaide, the capital.

For its first century the State survived mainly on agriculture. Such produce is still its most important export (though its climate limits agriculture to a tenth of its area) and represents about a third of Australia's agricultural exports. In the last 40 years secondary industry has come to employ three times as many people — a fifth of its workforce.

In 1829, the British sea captain James Stirling established a colony, now called Perth, on the banks of the Swan River in the south-west corner of the continent. By 1989, Perth's population had grown to more than a million and that of the State, Western Australia, to about one and a half million. Its area, a third of the continent, is 2 525 500km² and its coastline 12 500km.

Its mineral wealth is enormous and, although it has only a twelfth of Australia's population, WA accounts because of its mineral exports for about a quarter of its income.

The first major mineral discovery, in the 1890s, was gold, which it still produces. It has become the largest diamond-producing state in the world and has developed rich mines of iron, nickel, bauxite-alumina, uranium, oil and natural gas, mineral sands, coal, salt, copper and other minerals. Iron ore is its biggest income earner.

Its farm production is mainly wheat and sheep.

Tasmania, the smallest State (68 331km²), is an island about 240km south of the mainland's south-east corner. The capital, Hobart, was established in 1803.

About 40 per cent of its population (approaching 500 000) lives in and around Hobart.

Farms cover a third of its area but it also has more than 500 factories producing foodstuffs, textiles, clothing, footwear, wood and paper products, chemicals, metals, transport equipment, industrial machinery and household appliances. By turnover, its major industries are foodstuffs, basic metals, paper and wood, wood products and textiles.

When the States federated at the turn of the century they wrote into the Constitution that there would be a national capital on federal territory. In 1911, 2359km² of land 320km south-west of Sydney was designated Australian Capital Territory (ACT).

The national capital, Canberra, was built in the ACT and its population is approaching 300 000. More than half its wage and salary earners are employed by government departments or agencies. Until 1989, when it achieved limited self-government, the ACT had been administered by the Federal Government. In March 1989, it elected a



Melbourne, capital of the State of Victoria, a business, cultural and sporting centre

17-member House of Assembly which has powers far beyond those of a city council but not as wide as those of a sovereign State. The Australian Capital Territory elects two members to the House of Representatives and two Senators.

The Territory of Jervis Bay, on the NSW coast east of Canberra, occupies 7360ha, two-thirds of it a declared public park. Administratively it is part of the ACT and satisfies a constitutional requirement that the ACT have "access to the sea".

The Northern Territory covers 1 346 200km^2 — nearly a fifth of the continent. More than twice the size of France and as far from north to south as London to Lisbon or New York to Miami, most of it is in the tropics.

It achieved limited self-government in 1978. The areas of responsibility transferred from the Federal Government, and its powers within them, are much the same as those enjoyed by the states. There is an administrator instead of a governor and a chief minister instead of a premier.

The Territory's parliament is the Legislative Assembly, of 25 members elected for a four-year term.

Mining is the territory's main industry, the most important products being uranium, manganese, copper, gold, bismuth and bauxite. Others are tin, silver, lead and zinc. Second to mining is tourism, which is growing rapidly. Beef cattle production is a major rural industry. Agriculture has been diversifying in recent years.

Norfolk Island, 1676km east-north-east of Sydney, became a Territory of Australia in 1914. Originally a convict

settlement, established in 1788 (the same year as Australia's first colony), it was abandoned in 1814 and resettled in 1825. The last convicts were removed in 1855. Accepting an offer made to them by Queen Victoria of England, 194 descendants of the mutineers of the Bounty were taken from Pitcairn Island to Norfolk Island in 1856. Today their descendants number half the permanent population of about 1400.

In 1979, Norfolk Island achieved elected, responsible legislative and executive government, and runs its own affairs to the greatest practicable extent by the Legislative Assembly and by an Executive Council comprising the executive members of the Legislative Assembly, who have ministerial-type responsibilities.

The Territory of Cocos (Keeling) Islands lies in the Indian Ocean, 2768km north-west of Perth. Twenty-seven coral islands, forming two atolls, make up the territory and have a combined land area of 14km^2.

The islands are believed to have been discovered in 1609 by Captain William Keeling of the British East India Company. The first permanent settlement was established in 1826 on the main atoll by an Englishman, Alexander Hare. In 1827, Captain John Clunies-Ross, a Scottish seaman and business associate of Hare, formed a second settlement to which be brought Malay labourers. The islands were inadvertently declared part of the British dominions in 1857 by Captain Stephen Grenville Fremantle. In 1886, Queen Victoria granted all land on the islands to George Clunies-Ross and his heirs in perpetuity, subject to future Crown requirements. By mutual agreement between the British



Central business district of Perth, capital of Western Australia

and Australian governments confirmed by complementary legislation in 1955, the islands became an Australian territory. In 1978, the Australian Government bought Mr John Clunies-Ross's interests in the islands except for his residence and associated buildings.

About 600 people live in the Territory. Nearly all 400-plus permanent residents are descendants of the people, predominantly Malays, brought to the islands by Hare and Clunies-Ross as indentured labour. With few exceptions, Cocos Malays living there are now Australian citizens.

In 1984, in a United Nations-observed Act of Self-Determination, the Cocos-Malay community voted for integration with Australia. The Australian Government is represented by an Administrator.

The Coral Sea Islands Territory, a group of islands scattered over about 780 000km² east of the Great Barrier Reef, are uninhabited except for a manned weather station on Willis Island. Automatic lighthouses and weather stations operate on other islands, most of which are breeding grounds for sea birds. Australia asserted its sovereignty over them in 1969.

The Ashmore and Cartier Islands Territory's four uninhabited islets are 350km north-west of Western Australia's coast. Ashmore Reef was declared a national nature reserve in 1983.

The 135km² Territory of Christmas Island is in the Indian Ocean 2623km north-west of Perth. The island was uninhabited until annexed by Britain in 1888 after the discovery of phosphate rock there. After phosphate mining ceased in 1984, more than half the inhabitants resettled, some in Singapore and most of the rest in Australia. Most of its 1300 present occupants are of Chinese or Malay origin. The Australian Government is represented by an Administrator.

The Government is pursuing the development of alternative industries for the island.

Australia has been active in research and exploration in the Antarctic since the early 1900s. British sovereignty, proclaimed by Sir Douglas Mawson during his 1929–31 expedition, was transferred later to Australia. Called the Australian Antarctic Territory (AAT), it covers 6.1 million km², more than two-fifths of the Antarctic continent, and includes all lands, except Terre Adelie, south of 60°S latitude and between 160° and 45°E longitudes.

Australia also has sub-Antarctic possessions — Macquarie Island and the Territory of Heard Island and the McDonald Islands.

Scientific programs in the AAT sub-Antarctic islands and Southern Ocean are carried out by various research organisations, one of which is a division of a Federal Government department. This division organises and supports the expeditions and stations — one on Macquarie Island and three (Casey, Davis and Mawson) on the Antarctic continent.

Australia is a signatory to the Antarctic Treaty and collaborates with other treaty parties in many of its scientific activities in the region. The Commission for the Conservation of Antarctic Marine Living Resources, established by the Antarctic Treaty parties in 1982, has its headquarters in Hobart.

Trade

Australia is a key supplier to the world of many important commodities; has a sound mix of exports; and has a generally solid balance of imports and exports.

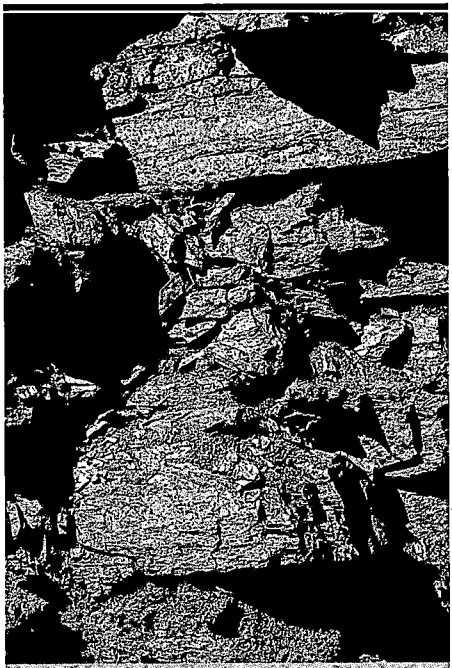
The exports in which it leads the world are alumina, wool, beef and veal, coal, mineral sands, live sheep and goats and refined lead. Other important commodities of which it is a key supplier are wheat, sugar, iron ore, bauxite, nickel, and zinc and its ores.

A middle-level trading nation (about 20th in the world in value of imports and exports), Australia has seen a distinct change in the pattern of its international trade in the last quarter-century. Major trends have included a decline of the rural sector's share of total exports, from three-quarters to about a third, and an increase (from about a tenth to half) in that of the minerals, fuels and metals sector; a growth in Japan's importance as a trading partner and a decline in Britain's; and a deliberate and successful diversification, not only of range of products but of export markets, into the western Pacific region and the Middle East. Over all, Australia's trade is growing rapidly.

The relative decline of the rural sector's share of the export market masks the fact that it has grown in absolute terms, though more slowly than others. A major reason for sluggish growth has been its original heavy dependence on the slow-growing British market — and that market's decline when Britain joined the European Community — and a long-term fall in wool's share of the world textile market.

The diversification of Australia's products and markets has been achieved partly as a result of Australia's rapid economic and industrial growth and partly because of private-sector and government initiatives in export development programs and other promotional activity. Government participation includes trade missions at various levels, publicity campaigns, participation in trade fairs and the like.

The Australian Trade Commission (AUSTRADE) plays an important role in the development of the export trade by providing market intelligence, financial



Export coal at Newlands open-cut mine, Queensland

and insurance support and employing a network of trade commissioners worldwide.

The manufacturing sector's share of overall exports grew strongly after World War II, reaching almost a quarter in the early 1970s. It declined steadily for a decade after that but vigorous encouragement since then has stabilised it at about a fifth.

Elaborately transformed manufactured products, in particular, account now for more than half the exports of manufactured goods.

The shifts in relative significance of Australia's trading partners has been substantial. Japan's role as a customer grew sharply from the early 1960s and, by the mid-1970s, it was buying a third of Australia's exports. Its share has stabilised at a little more than a quarter; it buys about a fifth of Australia's rural exports; two-fifths of its minerals, fuels and metals (including natural and manufactured gas); two-thirds of its iron ore and more than half of its coal.

At the same time Britain, having joined the EC, bought less of Australia's exports. The buyer of a tenth of those goods in the early 1970s, it now buys about a twenty-fifth. Developing countries, on the other hand, have become important to Australia, particularly those of South-East Asia. Such countries bought less than a fifth of Australia's exports in the 1950s but now account for more than a third.

Australia's import pattern is unusual for an industrialised country — it imports a lot of capital equipment and relatively little food, fuels and lubricants.

An important aspect of government involvement in trade has been its emphasis on developing Australia's manufacturing base and making it more competitive in the export field. This has included liberalisation of regulations and the gradual elimination of protective barriers, including tariffs. The result is that Australia has one of the lowest levels of across-the-board protection among the industrialised nations.

However, Australia still has a system of tariff preferences for developing countries, to help them compete on the Australian market against developed suppliers. It also gives advice to developing countries and those with centrally planned economies on how to market products in Australia.



Rough cut diamonds, a growing export item



Natural gas for overseas markets is carried in this giant tanker ship

America and Japan are Australia's largest suppliers of imports, accounting for about one fifth each. Britain, which supplied two-fifths of Australia's imported goods in the late 1950s, now sells it about a twentieth.

The developing countries' share of Australia's import market has grown from less than a sixth to nearly a quarter, largely because of the increase in petroleum imports.

Australia is committed to working for a fairer and more open world trading system, particularly in agricultural and natural-resource-based products.

Australia has two types of bilateral trade agreements. The first, preferential, provides for the exchange of special tariffs and other treatments which are not extended to third countries. The second, most-favoured-nation agreements, generally accord the same treatment to each other as to third countries. Australia's trade relations with most other major trading partners, including the US and the EC, are governed by common membership of GATT.

Under the 1983 Australia-New Zealand Closer Economic Relations trade agreement, tariffs on most goods traded across the Tasman began to phase down by at least five per cent a year, resulting in duty-free treatment for most goods by January 1, 1988. Provision has been made for the gradual liberalisation of import restrictions until they are eliminated by 1992.

Labour and industrial relations

The vast majority of Australians live and work in cities and towns and go to their workplaces by public transport or car. In the main they work seven to eight (daylight) hours a day, Monday to Friday, and take four weeks' paid leave a year — and many have a 17.5 per cent loading on their holiday pay.

The workforce is divided broadly into commercial (workers in shops, offices) and industrial (labour, services and factories). The former usually begin their working day at 8.30am to 9am and the latter between 7am and 8am, although many work in two or three shifts a day. The terminology is drifting now into disuse, but the commercial workers have been known for decades as white-collar workers and the industrial as blue-collar.

For more than a century, Australian women have been asserting their right of entry to virtually any occupation, more vigorously in recent years. Although their occupational profile is changing steadily, their numbers are still concentrated in teaching, nursing, clerical and sales jobs in the manufacturing, wholesale and retail trade and finance and business-services industries.

They constitute about two-fifths of the workforce; two-thirds are married.

Australia workers are highly unionised. The conciliation and arbitration system, which has encouraged this, operates on the premise that employers and employees will be represented before tribunals by registered organisations. About one in two employees belongs to Australia's 300-plus trade unions.

The main central organisation is the Australian Council of Trade Unions. It has an affiliated membership of more than 150 unions representing about three million workers.

The Confederation of Australian Industry has a membership of 35 employer organisations covering a wide range of industries. Its main objectives are to promote industry, trade and commerce and to encourage a united approach by employers to matters of common interest.

Working conditions are regulated by legislation and by industrial "awards", which have much the same function as collective agreements in other countries. The Constitution limits the power of the Australian Parliament in this sphere to legislation to prevent and settle (by conciliation and arbitration) industrial disputes extending beyond state limits. States, too, can regulate industrial relations, but do so only on matters within their own jurisdictions.

Federal legislation has established the Australian Industrial Relations Commission, which can intervene in interstate industrial disputes by request or of its own volition, and the Labour Court. The commission's members are arranged in panels, each to deal with disputes in a specific industry or group of industries.

If parties in dispute agree on settlement, they can ask the commission to certify the agreement or make an award giving it effect. Such agreements

and 'consent' awards have the same effect as arbitral awards.

The Federal Government and all state governments have departments concerned with labour and industrial relations, which administer legislation which regulates safety and physical working conditions. Each state government has an industrial court or commission to hear state award matters and wages boards and tribunals to set general wage rates in industries for which they are responsible.

Federal and state tribunals set rates of pay (fixed without regard to the sex of the employee) and conditions of employment for seven out of eight Australian employees covered by awards, determinations or industrial agreements. Most are minimum rates, and employers often pay above-award rates.

In recent years, general pay increases have been given in return for unions' co-operation in restructuring and modernising their awards as part of a program to encourage the development of skills.



Rest facilities for workers

The Racial Discrimination Act 1975 prohibits discrimination in employment on the grounds of race, colour, descent or national or ethnic origin.

An agreement, known nationally as the Accord, reached in 1983 between the Federal Government and the Australian Council of Trade Unions, established an agenda of reform and consultation in wage fixing. It is an integral part of the Government's economic policy.

In return for the unions' cooperation in implementing the Government's employment and anti-inflation policies, it undertook to help unions maintain their members' living standards and improve them over time.

Federal, state, and local governments employ about a quarter of the employed work force, excluding the Defence Force.

Australia's labour force is about two-thirds of the civilian population aged 15 or more. Four-fifths of the employed labour force works full-time and about half of these are in manufacturing, wholesale and retail trade, construction, hospitality and community services. Since 1968, employment in manufacturing and agriculture has declined but it has increased in community services, personal services, finance and other service industries. This pattern is in line with that of other industrialised countries and is expected to continue.

Part-time work has risen significantly in the last two decades, accounting for two-fifths of the total increase in the employed labour force.

Defence

Although Australia's relations with countries in its region remain sound, it accepts that it must be able, from its own resources, to defend itself and its direct interests.

Self-reliance is pursued within a framework of alliances and arrangements with countries of its region.

The defence task is made daunting by the country's size, vast coastline and relatively small population. To be feasible the task requires careful integration of intelligence and surveillance, maritime patrol and response and rapid mobile reaction ground-force capabilities.

The strategy of defence in depth relies on that integration.

Defence planning is based on a realistic assessment of the levels of force that could be brought against Australia if strategic circumstances should change. It requires the Australian Defence Force to be able to respond effectively to the lesser threats that could arise in the shorter term.

At the same time Australia sets out to create an environment in which the likelihood of either kind of threat is minimised.

To this end it has long supported the efforts of the ASEAN states, Papua New Guinea and the island states of the south-west Pacific to develop their economic and political resilience and strengthen their mutual cooperation in defence. It does so via a program of civil and military cooperation and assistance. At the same time it maintains its involvement in the Five Power Defence Arrangements with Malaysia, Singapore, New Zealand and Britain.

Of even longer standing has been Australia's cooperation with the United States and New Zealand in the ANZUS Alliance. Despite differences that have arisen in recent years between the US and New Zealand about visits by US warships to New Zealand, which have seriously affected their cooperation, the ANZUS Alliance itself remains, Australia-US defence cooperation is undiminished and Australia maintains close defence ties with New Zealand.

The ANZUS Treaty expresses Australia's continuing support for broader Western security interests and provides a basis for cooperation in the deterrence of global conflict and support for arms-control proposals.

Australia's total defence outlay is about a tenth of federal expenditure.



Air and ground military forces on exercise

The Navy, Army and Air Force retain individual identities but are trained and commanded as arms of one national Defence Force. The combined strength of the Defence Force, including reservists, is about 100 000.

The Royal Australian Navy (RAN) is modern. Its front-line fleet comprises three guided-missile destroyers, four guided-missile frigates, five destroyer escorts and six Oberon-class submarines. Eight frigates and six submarines (Kockums type 471) will have been added to it by about the turn of the century.

Thirteen Fremantle-class patrol boats perform surveillance and fisheries-protection tasks. Two others are used for fleet support and training, and three Attack-class patrol boats are also used for Reserve training.

The RAN also has two supply vessels, one training ship, an amphibious heavy-lift ship, six heavy landing craft, three oceanograph-hydrographic ships and three mine-counter-measure vessels. The Fleet Air Arm uses only two fixed-wing aircraft (electronic warfare HS748s) and 31 helicopters, including 16 Seahawk S-70B-2 anti-submarine and surveillance helicopters.

The Army is an all-volunteer force of regular and reserve components organised on a command system comprising:

- Land Command — units formed within a divisional structure of three brigades, with combat and logistic support units;
- Logistic Command — general-support logistic units and installations in Australia;
- Training Command — training units and installations throughout Australia.

There are seven military districts, the boundaries of each of which approximates a state or territory.



Soldiers at Canberra Army Memorial ceremony

The Royal Australian Air Force is organised on a command system comprising:

- Air Command — responsible for the command of operational units and conduct of their activities;
- Support Command — responsible for the training of personnel and supplying and maintaining equipment.

The flying establishment comprises training units and operational squadrons. Two operational squadrons are equipped with F111C strike/reconnaissance aircraft, two with McDonnell-Douglas F/A-18 tactical fighters, and two with Orion maritime reconnaissance aircraft. Two medium-range transport squadrons and a medium- and long-range special transport squadron are equipped with Hercules C130 and Boeing 707 aircraft. Two tactical transport squadrons have Caribou aircraft. A special transport squadron operates BAC-One-Eleven, Mystere 20 and HST 718s and is re-equipping with Falcon 900s.

Training aircraft include piston-engined CT4 air-trainers and PC9 prop-jets for pilot training, as well as HS-748s for navigation and air-electronics training. Lead-in fighter training is done in Aeromacchi jets.

Civilian officers play an important role in formulating policy for strategic planning, force development and analysis, conditions of service, and financial planning as well as the design, acquisition and maintenance of equipment, training, and research and development. They work closely with the Australian Defence Force Headquarters and officers of the individual services.

The secretary of the Department of Defence and the Chief of the Defence Force are responsible jointly for the general administration of the Defence Force.

The Chief of the Defence Force exercises command through the three service chiefs of staff and is principal military adviser to the Minister for Defence. The secretary is the principal civilian adviser to the minister and, in particular, advises on general policy and on the management of resources.

The Defence Science and Technology Organisation (DSTO) in the Department of Defence has 1100 scientists and engineers and a total staff of about 4400, conducting research, in response to the Defence organisation's requirements. These range from major equipment to meet the unique demands of the region, such as the Jindalee over-the-horizon radar to monitor the northern approaches, to maintaining or adapting equipment and solving operational problems or analysing requirements for optimum purchase or use of military equipment.

DSTO has an extensive scientific and technological base and undertakes joint research with tertiary-education institutions, allied defence scientists and industry. It earns part of its income from industry and has contributed to technological knowledge in such fields as materials and equipment life extension, infra-red imaging, signal processing, diamond-hard lens coating and a range of laser applications.

'Outrider' organisations of the Department of Defence include the Natural Disasters Organisation (civil defence), the Joint Intelligence Organisation and the Defence Signals Directorate.

Health

Health care in Australia relies largely on a meshing of private and public facilities: a predominantly private medical profession, private and public hospitals and private and public health financing. In recent years, the system has been diversifying to include community health centres (which often have salaried medical staff) and, increasingly, home care.

Most primary health care is provided by private practitioners, who charge their patients directly and set their own fees. Some is provided by the staff of health centres and public hospitals, who may also exercise their right to practise privately.

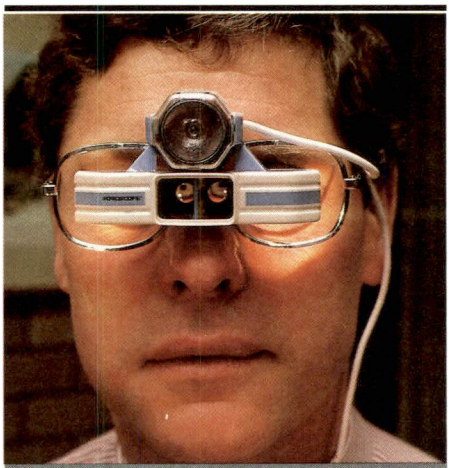
Patients receive hospital care in either private or public hospitals. The choice is theirs, although most rely heavily on the advice of their medical practitioners.

Medicare, the universal national health-insurance system, is funded in part by a special levy on income and in part by general taxation. It provides access to public-hospital services and benefits for out-of-hospital medical expenses, equal to 85 per cent of a specified fee. This gap (between fee and reimbursement) and the system provides that the gap will not exceed $20 for a single service provided the specified fee has been charged. Charges beyond the specified fee are the patient's responsibility. Similar benefits apply to optometrical services.

Under Medicare, public hospitals are funded by the Federal Government and state governments. All Australian residents and certain categories of visitors have access, without direct charge, to public-hospital accommodation and to inpatient and outpatient treatment by doctors appointed by the hospital concerned.

If a patient in a public hospital specifies treatment by a specific doctor (that is, not a hospital appointee), he or she is treated as a private patient and is charged for accommodation. The chosen doctor charges independently for services rendered (and the patient is reimbursed under Medicare, but only to the level of 75 per cent of the specified fee).

Private hospitals charge for their services and are funded from the revenue thus generated. Private insurance is available to cover most of their charges. Doctors treating patients in private hospitals charge them independently and



Surgeon's periscope views body cavities

the same benefits apply to such charges as in the public-hospital situation.

Private health-insurance organisations offer a range of benefits to cover hospital charges. They also offer benefits for ancillary services not covered by Medicare, such as dental, physiotherapy and chiropractic treatment. They are not permitted to offer medical-treatment cover for other than the 25 per cent gap for inpatient services.

Australia has more than 1000 hospitals — excluding psychiatric hospitals and nursing homes — most of them public. There are about six hospital beds per 1000 population.

Health-program grants are paid to organisations that provide health services approved by the Federal Government, such as family planning associations.

There are more than 30 000 practising doctors. Of the 20 universities, 10 have medical schools whose undergraduate courses last five or six years. Nearly half the practising doctors are general practitioners, about a third specialists in private practice and the rest salaried.

About 140 000 professionally registered nurses provide care in hospitals, nursing homes and home-nursing, occupational-health, and school and community health services. Authorisation to practise is controlled by governments.

Australia has more than 6000 dentists, most in private practice. Five universities provide five-year undergraduate courses. All states and territories operate school dental services, mainly to primary-school children.

Water supplies are fluoridated in most parts of Australia to prevent dental decay.

Public health services are provided by all levels of government. While they are the constitutional responsibility of state and local governments, the Federal Government is involved in setting national policies, which cover preventive medicine, communicable diseases, legal and illicit drugs, environmental hygiene, food nutrition, poisons, and pesticides. It also funds family planning, Aboriginal health and arbovirus disease control.

Organisations receive federal funds for national projects under the Community Health Program. The largest is the family medicine program of the Royal Australian College of General Practitioners, which provides vocational training for young doctors who intend to enter general practice.

Much of the identifiable health research is funded annually by the Federal Government on the advice of the National Health and Medical Research Council. Indirect federal medical-research funding includes grants to research institutes, universities and groups engaged in special investigations. Other funds are provided by state governments and non-government organisations.

The National Health and Medical Research Council is recognised as the authoritative body in Australia in matters of general health, public health and medical research.

Family-planning associations provide free teaching, counselling and related services. They receive specific funding from the Federal Government.

Aboriginals have the same entitlements to health services as all other Australians but many do not use them, partly for sociocultural reasons and partly because the general services are not equipped to deal with the severity of Aboriginal



Keeping fit and healthy aerobically

health problems. In an effort to overcome this problem the Federal Government funds Aboriginal-controlled health centres ranging from full-scale medical, dental and welfare units to smaller referral units with perhaps one doctor or nursing sister and some Aboriginal health workers. The Government also provides funds to states for such special health services as mobile medical teams or special treatment and/or preventive programs.

Health care for Aboriginals is primarily the responsibility of the state and territory health authorities.

The Federal Government has a national program of disease control aimed at all arboviral diseases.

The Royal Flying Doctor Service, begun half a century ago by the Reverend John Flynn, of the Presbyterian Church, serves people living in isolated places. In an emergency, a caller can be speaking to a doctor by radio within two or three minutes, 24 hours a day. There are 12 main bases, so few patients are more than two hours from medical help. The service includes regular clinic visits to all remote communities, visits by specialists and, in some areas, by dentists.

State education authorities use the Flying Doctor Service radio network for the 'School of the Air', which supplements the children's formal, state-run correspondence-course education. The service, registered as a charitable organisation, receives money from the Australian and state governments and from private donors.

The Red Cross Society is the official auxiliary of the medical services of the Australian Defence Forces. Apart from its relief activities, the society provides an almost universally used blood-transfusion service. Its cost is shared by the society with the federal, state and territory governments.

Drug education

Australia shares with many countries some of the problems and all of the concerns related to drug abuse.

The approach to the problem adopted in Australia relies, for its long-term effectiveness, on education. Providing education programs on drug abuse is principally the responsibility of the individual states and territories but their governments collaborate with the Federal Government to achieve a coordinated and cost-effective approach.

Two national campaigns — the National Campaign Against Drug Abuse and The Drug Offensive — are conducted on this issue. The former, involving direct federal funding and cost-sharing arrangements with state and territory governments, pursues general community education (including the use of the media), drug-education programs for parents and children, and training for professionals, including physicians, corrective-services personnel and teachers. The latter has had success in making the public aware of the extent and costs of drug abuse and of specific issues.

Per-capita consumption of total absolute alcohol rose by 48 per cent between 1963 and 1974 (from 6.6 litres to 9.8) but between 1978 and 1987 fell by 11 per cent to 8.7. Australia ranks about fifteenth in the world in alcohol consumption and is the tenth-largest consumer of beer. In recent years, low-alcohol beers have achieved significant market penetration.

Emphasis is being given now to making the community aware of the dangers of excessive drinking, and to making health professionals aware of the likelihood that much ill-health is related to alcohol misuse. The incidence of alcohol-related deaths has been falling in recent years.

Continuing efforts by health authorities seem to be reducing the incidence of smoking.

History

In the second century AD the Greek geographer Ptolemy sketched a map of the known coasts of Asia, showing the Indian Ocean as a vast lake and a big unknown land, called Terra Incognita, to its south. European merchant ships, visiting Asia, found it there 1500 years later.

In 1606, Luis Vaez de Torres sailed through the strait (since named after him) which separates Australia and Papua New Guinea. Months later Willem Janszoon sailed into the Gulf of Carpentaria and, 17 years later, Jan Carstensz charted and named the main features of the western coast of Cape York. His writing on the terrain lacked enthusiasm.

By that time other Dutch navigators had reached parts of the northern and western coast. Dirck Hartog examined the west coast near Shark Bay in 1616. Abel Tasman visited and named Van Diemen's Land, now Tasmania, in 1642 and, two years later, charted roughly the coast from Cape York to the Ashburton River, Western Australia. The Dutch called the continent New Holland.

The first English visitor was William Dampier, a buccaneer, who landed near King Sound, on the north-west coast, in 1688. He came back 10 years later in the Royal Navy ship Roebuck to continue exploring, but the first to see the east coast was the British Royal Navy's Captain James Cook, in 1770. Having visited Tahiti to make astronomical observations he sailed south-west in Endeavour, circumnavigated New Zealand and headed west. He sighted land near Cape Everard, in the south-east corner of Australia. He turned north, charting the coastline as he went, and landed at Botany Bay, which he named for the variety of plant life there.

Cook continued north nearly 3000km until his ship struck a coral reef near Cooktown, Queensland. After two months' repair work he sailed north and, after passing through Torres Strait, landed on an island 3km off Cape York. Naming it Possession Island, he raised the British flag and took formal possession of the eastern part of the continent.

Cook's account of his discovery aroused much interest in England but Britain did not try to colonise Australia until its American colonies achieved independence. Britain then needed new places where it could transport its criminals.

Eleven ships commanded by Captain Arthur Phillip left England in May 1787 and reached Botany Bay on January 18, 1788. They left eight days later because of the bay's poor soils and openness, and settled instead at Port Jackson, a few kilometres north. The ships landed 1373 people, including 732 convicts. The settlement became Sydney.

On January 26, 1788, Phillip took formal possession of the whole eastern part of the continent, including Tasmania.

For a few years the colonists depended for food almost entirely on imported supplies but better soils were found at nearby Parramatta and they became more self-sufficient. Exploratory coastal voyages were made, the most important that of Captain Matthew Flinders who, in 1802–03, circumnavigated the continent.

The Blue Mountains, part of the Great Dividing Range extending almost unbroken down the east coast of Australia, prevented westward expansion of the settlement until 1813,

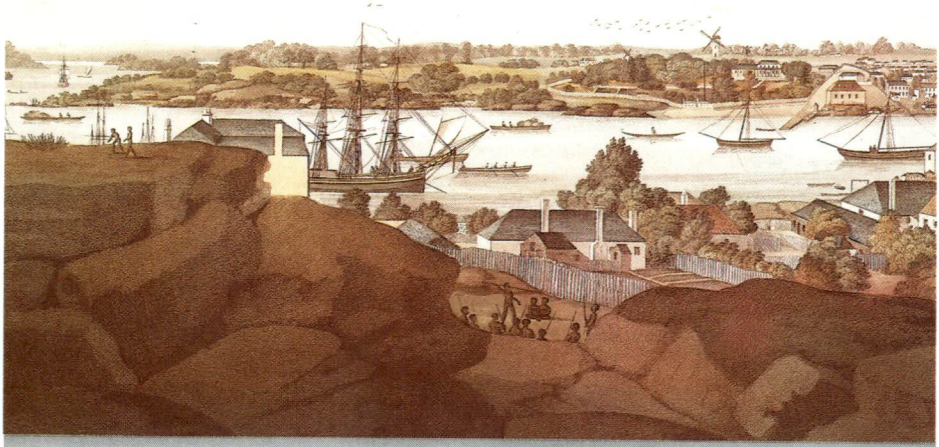
when a way was found over them by Gregory Blaxland, William Wentworth and William Lawson. Then exploration went ahead although, for many years, only a few expeditions went west.

Allan Cunningham, a botanist, discovered the rich Darling Downs of southern Queensland, and John Oxley, a surveyor, found the Brisbane River. Hamilton Hume, the son of an agriculturist, and William Hovell, a trader-settler, went south and reached the Southern Ocean, west of Melbourne's present site.

Captain Charles Sturt, who arrived in 1827, traced the Lachlan River and others flowing inland from the coastal mountains, reaching the Darling in 1829, and found that many other known rivers were its tributaries. Major Thomas Mitchell, the surveyor-general, went overland to Cape Northumberland in south-eastern South Australia in 1836 and returned through Victoria as far east as Port Phillip Bay.

Settlements were established at Hobart in 1803; on the Brisbane River in 1824; and on the Swan River in 1829. Melbourne was established on Port Phillip Bay in 1835, and Adelaide in 1836. These settlements became the capital cities of five states.

Early governors were able to grant land free to anyone — emancipated convicts,



View of Sydney Cove, an aquatint from a painting by John Eyre c.1771–1812. National Library of Australia.

free settlers, marines and officers of the garrison — willing to employ, feed and clothe convicts. The free population increased rapidly, as did the colonies' herds, and settlement spread to the western plains. The settlers needed a staple trading industry, as the early whaling, sealing and subsistence agriculture were to be short-lived solutions. In the late 1700s Captain John Macarthur and others began experiments in breeding fine-wool sheep using Spanish merinos from Cape Province, South Africa, and others from the royal flocks at Kew, England. These experiments at Camden, near Sydney, laid the foundations of the country's economic development. The merino was transformed gradually into a superior woolgrowing animal. Accustomed to the dry Spanish plains, merinos adapted well to the climate. The wool industry flourished and the population grew from 34 000 in 1820 to 405 000 in 1850.

Public agitation forced an end to convict transportation to the mainland in 1840 and to Tasmania 13 years later. By then, 100 000 of them had arrived. Western Australia, which had not received convicts previously but was very short of labour, elected to receive quotas between 1850 and 1868.

Gold was discovered in 1851 at Bathurst, New South Wales, then at Ballarat and Bendigo, Victoria, and people rushed to these gold strikes from many parts of the world. As the richest of the alluvial goldfields were worked out and companies began to mine gold-bearing reefs, many individual miners took up farming.

The colonies were widely separated and far from the motherland, and governing them was administratively impracticable. Self-government became an objective and, in 1823, New South Wales was granted the first constitutional charter by a British law authorising creation of a council with limited legislative power. Two years later Tasmania, which had been tied to NSW, formed a similar council. Western Australia and South Australia, politically distinct from New South Wales since settlement, formed such councils in 1838 and 1842. In 1842 Britain extended the New South Wales Legislative Council's powers and allowed two-thirds of its membership to be elected on a restricted franchise. Queensland (the Moreton Bay District of New South Wales) and Victoria continued to be represented in the Legislative Council of New South Wales.

The British Government's Australian Colonies Government Act 1850 empowered the colonies to establish legislatures, determine the franchise and frame constitutions. In 1851, Victoria gained its legislature under the Act.

New South Wales was the first to draft a new constitution, in 1855. All other colonies except Western Australia became self-governing in 1859. Western Australia's decision to become a penal colony in 1850 delayed responsible government until 1890.

The need to protect or promote common interests led to a series of intercolonial conferences of premiers held at irregular intervals from 1863.

A draft federal constitution was drawn up in 1891 at a convention sponsored by the Premier of New South Wales, Sir Henry Parkes. A further convention in 1897-98 turned it into the Australian Constitution. The Commonwealth of Australia — a federation of the six former colonies as states — came into being on January 1, 1901.

Primary industry

Australia, whose first European settlers in Australia had to import virtually all their food for many years after they arrived, has become one of the world's major exporters of agricultural products. It is the world's largest producer of wool and exports large quantities of cereals, dairy produce, meat, sugar and fruit.

Its 170 000-plus agricultural and pastoral properties cover about two-thirds of its land area. More than nine-tenths of the land is used mainly for light grazing. The rest is cultivated for agriculture and intensive grazing.

Lack of water is the main factor limiting agricultural production. Only about a fifth of the continent, mainly in the northern and eastern coasts and in Tasmania, receives an annual rainfall of 600 mm or more. Other limiting factors are fragile and relatively infertile, nutrient-deficient soils and difficult terrain.

Despite such limitations, rural output has increased substantially since the early 1950s, mainly because of advances in agricultural technology and science, a big increase in farm mechanisation and expanding markets for several major products.

Today, the agricultural sector accounts for less than a twentieth of gross domestic product but still accounts for about a third of export income.

Australia has about a sixth of the world's sheep and produces a third of the world's wool. Wool production has reached about 1000 million kilograms, coming from the predominant merino breed.

The wool-growing industry is among Australia's rural export leaders. Wool export earnings commonly eclipse all others, running at about $6000 million a year. Most of Australia's wool is exported, mainly to Japan, Western Europe, the Soviet Union and China, and provides nearly three-quarters of the world's apparel-wool exports.

Second only to New Zealand in the export of sheep meat, Australia nonetheless consumes about two-thirds of its own production. It leads the world in the export of live sheep for slaughter at



Golden wheat ready for harvest

destination. In the late 1980s it was selling seven million head a year to the Middle East, and North African markets were beginning to develop.

The proportions are reversed for beef and veal, even though domestic consumption of these meats averages about 40kg per capita and production runs at 1.3 million to 2 million tonnes a year. Nearly two-thirds of it is exported. The United States is by far Australia's largest overseas customer, followed by Japan.

Almost all of Australia's substantial production of pig and poultry meat is sold on the domestic market.

The dairy industry is mainly in the south-eastern coastal region of the mainland and in northern Tasmania, where rainfall is ample and reliable. Whole-milk production is more than 6000 million litres, valued at more than $1600 million. About a quarter is sold domestically as whole milk (including flavoured and Ultra High Temperature) and the rest is used in butter, cheese,



Colourful display of vegetables grown on Australian farms

condensed milk products, milk powder, casein and cream. About half these products are exported.

Egg production is around 200 million dozen a year. Very few are exported.

Australia produces between 25 000 and 30 000 tonnes of honey a year and exports nearly half.

Wheat production averages about 15 million tonnes a year. Most of it is exported, making Australia the world's fourth-largest wheat exporter.

The largest export markets are Iran, Iraq, Egypt, China and Japan. Important regular markets include the Middle East, South-East Asia and the Pacific region. The domestic requirement, including that for seed and feed, is about three million tonnes a year.

Barley, oats, sorghum, maize and triticale are the main coarse-grain crops, and small crops of rye and millet are grown. Production varies considerably from year to year according to seasonal and market conditions. Barley is grown for stock feed and for malt. The other coarse grains are used mainly for compounding into stock feed.

Annual rice production has varied from 519 000 tonnes from the drought-affected 1982–83 crop to a record 864 000 tonnes in 1984–85. Nearly all is grown in southern NSW and the rest in northern Queensland. A large proportion of the crop is exported, mainly to Papua New Guinea, Hong Kong, the Pacific islands and the Middle East.

Oilseed production has grown about fivefold since the early 1970s. NSW and Queensland produce nearly all of it (mostly cottonseed and sunflower), satisfying more than half the country's vegetable-oil requirements.

Grain-legume production has increased sevenfold and more since the early 1980s. About half is exported, mainly to the European Community, India and Japan. Lupins and field peas are predominant and lupin exports to the EC for animal- feed production are the largest single item.

Cotton is grown in north-western NSW and southern and central Queensland, mostly on irrigated plantations. In recent times production has grown from being barely adequate for local spinners' needs to the point where nearly all of it is exported. The major markets are Japan, Taiwan Province, Republic of Korea and Yugoslavia.

All Australia's sugar is produced in the coastal north-eastern regions of Queensland and northern NSW. Important milling by-products include bagasse (fibre), molasses, ash and filter mud. The yield is usually about three million tonnes of raw sugar, four-fifths of which is exported. Japan is the main export market and other major customers are Canada, Republic of Korea, Malaysia, China and Singapore.

Australia's wide climatic variations allow the cultivation of many types of tropical and temperate fruit. The most important are grapes, citrus, apples, bananas, pears, peaches and pineapples.

Commercially, apples are one of the most important fruits grown. Exports of fresh apples range from 25 000 to 30 000 tonnes a year and the other 90 per cent are consumed domestically. Victoria produces four-fifths of the country's pears; annual exports of fresh pears (about a quarter of the crop) have averaged 37 000 tonnes in recent years.

More than three-quarters of Australian citrus is grown in the irrigated inland areas of NSW, Victoria and South Australia. Production has averaged about 600 000 tonnes in recent years and fresh exports about a tenth of that.

Northern NSW and Queensland are the main banana-producing areas. Australia's banana production has averaged 145 000 tonnes in recent years. Pineapple production, almost entirely in Queensland, has averaged 135 000 tonnes.

Canning of apricots, peaches and pears, four-fifths of which is done in Victoria, averages about 90 000 tonnes. More than half is exported.

Dried-vine-fruit production runs at about 84 000 tonnes, most of which is exported. The main buyers are the Federal Republic of Germany, Canada, New Zealand, Britain and Japan.

Australia's average annual wine output is about 400 million litres, most of it consumed domestically. Exports are increasing as its reputation spreads and now constitute about a tenth of production. By volume, Sweden is the main buyer, followed by the United Kingdom, New Zealand, Japan and Denmark. More than half Australia's wine is produced in South Australia.

The wide range of climates and soils in Australia enables most types of vegetables to be grown. Potatoes are most widely cultivated, followed by peas, tomatoes, pumpkins and beans. About a million tonnes of potatoes are grown each year.

Australia's forests are managed for timber production, water catchment, flora and fauna protection and public recreation.

Key forestry objectives are the efficient and sustainable development of resources and the promotion of environmentally sensitive management practices — a sound balance of resource use, preservation, conservation and development.

The extensive forests in the higher rainfall zones of eastern and south-west Australia are highly productive. With plantations of exotic and native species, many of these forests are the resource base for major industries.

Native forests cover nearly 41 million ha, three-quarters of which are dominated by eucalypts. Plantations for timber production total about a million ha. A further 65 million ha are classified as eucalypt woodland, mainly tropical, sub-tropical and semi-arid. Native forests are predominantly hardwoods but include some conifers.

The turnover of the forest products industry runs at more than $7000 million a year.

Commercial fish production has been fairly stable in recent years. The most important commercial fish are tuna and salmon for canning, and table fish such as mullet, shark, whiting, snapper and gemfish. Exports average about $600 million a year.

Prawns and rock lobsters are Australia's most valuable fishing resources and the main seafood export earners (17 000 and 15 000 tonnes a year respectively). Almost all abalone (annual catch about 6600 tonnes) is exported. The scallop catch is about 9000 tonnes.

Resources and energy

When the extent of Australia's arid area — most of the interior — and remote and rugged regions became known in the 1800s, settlers living in the coastal colonies could have been forgiven for despairing of its long-term future.

Many parts of what the colonists saw as barren, useless land have been yielding wealth beyond anything they could have imagined, as minerals and energy resources no-one in the world of those days had heard of.

One example was bauxite, a mineral discovered lying on and in the ground by the thousand million tonnes. Australia is now the world's largest bauxite (from which comes alumina) and alumina producer, the largest alumina exporter and a major exporter of bauxite, and still has vast reserves.

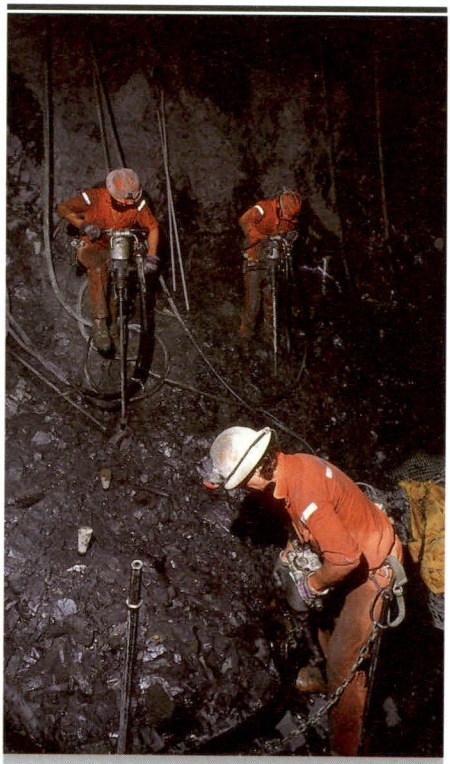
Australia has become one of the world's major producers of minerals and metals. It has major deposits of black and brown coal, mineral sands, gold, lead, zinc, iron, copper, nickel, manganese, uranium and diamonds.

A major producer and exporter of energy resources and one of only five net energy exporters in the OECD, Australia is the world's largest exporter of coal and a major exporter of uranium, and exports significant quantities of light crude oil (although it imports heavy crude). It exports increasingly large quantities of liquefied natural gas.

Crude oil and natural gas

Substantial oil and gas discoveries have been made in Australia in the last three decades. There is good potential for more, as many sedimentary basins have been explored only lightly. Discoveries in recent years in the Timor Sea and off Western Australia underscore this potential and tests of new exploration concepts are encouraging.

Australian demand for petroleum products is satisfied mainly by domestic refining capacity, using both domestic and imported crudes. Domestic refining capacity is modern and second only to Singapore's in the South-East Asian region.



Miners drill at Mt Isa silver-lead-zinc mine

Australia exports refined petroleum products to meet regional requirements, particularly in the South Pacific.

Total proved and probable reserves of Australian crude oil and condensate exceed 1600 million barrels.

Coal

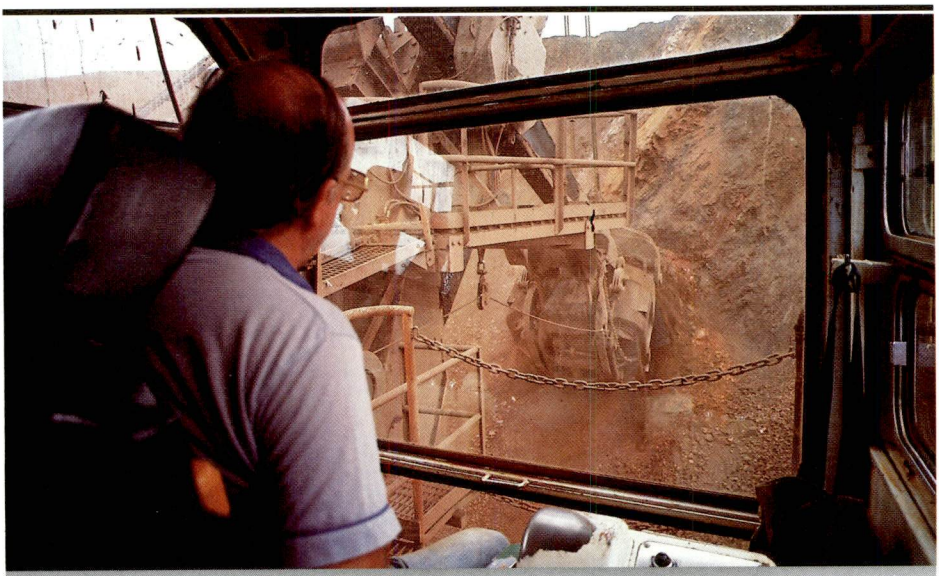
The world's largest exporter and seventh-largest producer of black coal, Australia has estimated reserves of more than 500 000 million tonnes, about two-thirds of which is considered recoverable. About a tenth of it comes under the heading of demonstrated, economically recoverable resources. Almost all of it is in NSW and Queensland.

About half Australia's coal exports in recent years have gone to Japan but sales to other Asian countries and Europe are increasing.

Uranium

Australia's reasonably assured uranium resources represent nearly a third of the Western world's uranium resources. The major deposits are in the Northern Territory, South Australia and Western Australia.

Uranium mining and export are permitted from only the Ranger and Nabarlek mines in the Northern Territory and the Olympic Dam mine in South Australia and are subject to stringent safeguard requirements. Nabarlek finished processing its high-grade ore in 1988. Ranger produces about 3000 tonnes of uranium oxide a year, but could double production. The Olympic Dam copper-uranium-gold project began commercial production of uranium concentrates in 1988 at about 1500 tonnes a year of uranium oxide.



Iron ore mining at Pilbara region, Western Australia, using a giant mechanical shovel

Iron ore

The world's second-largest exporter of iron ore, Australia produces about 100 million tonnes a year and has demonstrated economic resources of more than 15 000 million tonnes of high-grade ore. Western Australia, which has mines that are among the world's largest, produces most.

Bauxite/alumina/aluminium

The largest producer in the world of both bauxite and alumina, Australia is also the third-largest producer of aluminium and exports three-quarters of its output. Australia also exports three-quarters of its alumina, accounting for about half the world's alumina trade.

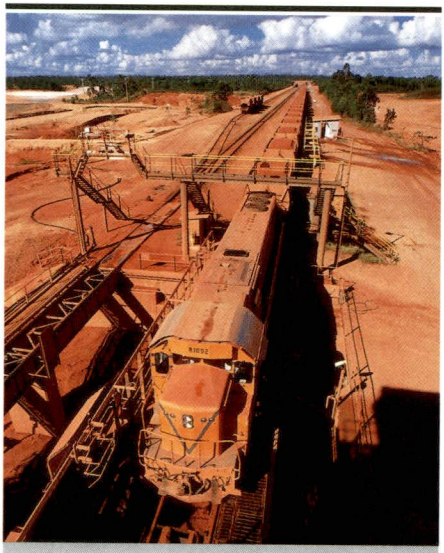
Lead and zinc

Australia has substantial resources of lead and zinc and is one of the world's major producers and exporters. Lead and zinc are mined mainly in NSW, Queensland, Tasmania and Western Australia.

Lead refinery-smelters operate in Queensland, NSW and South Australia. The Port Pirie (South Australia) smelter is the largest in the world. One of the world's major zinc refineries is at Risdon, Tasmania.

Copper

Demonstrated economic resources of copper in Australia are large, several major deposits having been discovered in the 1980s. It is mined in all states except Victoria and refineries operate in Queensland, NSW and South Australia. More than half the country's output of refined copper — about 250 000 tonnes — is exported.



Bauxite arrives by train at refinery at Weipa

Nickel

Australia ranks third in world mine output of nickel, and exports nearly all of it. In Western Australia, where economic resources of nickel sulphide ore are large, the ore is processed to nickel matte and metal for export. Nickel laterite ore mined in Queensland is processed into nickel oxide but is nearing exhaustion.

Gold

There has been a significant upsurge in gold exploration since the early 1980s, placing Australia third among the western world's producers and its gold in third position also among Australia's export-income earners.

There are substantial demonstrated economic resources and most is produced in Western Australia and Queensland. The development of technology

permitting low-cost recovery of low-grade ore and tailings abandoned years ago as uneconomic has stimulated an increase in production.

Mineral sands

Australia is the leading producer of rutile, zircon, monazite and alluvial ilmenite. All of these minerals have high-technology applications in aerospace work, advanced ceramics, lasers and fibre optics. The industry has been developing projects for further processing — producing, for example, titanium dioxide pigment, high-purity zirconia and rare earths.

Other minerals

The manganese mine on Groote Eylandt, in the Northern Territory, is one of the world's largest mines and Australia is one of only three major world exporters of the mineral. Ore and refined forms (ferro-alloys and electrolytic manganese dioxide) are also produced. Tin ore is another mineral produced, most of it exported to Malaysia for refining.

Australia is also the world's largest producer by volume of diamonds and the world's leading producer of sapphires and opals.

Electricity

Each state has its own pattern of electric power development. Electricity is generated mainly by burning coal; natural gas and hydro-electric power are other sources of electricity.

While hydro-electric energy accounts for about a ninth of all electricity generated in Australia, the Snowy Mountains hydro-electric scheme in south-east Australia remains one of the country's greatest engineering undertakings and one of the world's larger irrigation and power projects. The scheme, which diverts water inland from coastal watersheds, has seven power stations, a pumping station, 16 large and many smaller dams, 145km of tunnels and 80km of aqueducts, and took 25 years to build. Its generating capacity is 3740 megawatts.

Energy policy

Energy policy in Australia is formulated to be consistent with major economic, industrial and social objectives and its key goals are:

- security of overall energy supplies;
- development of the energy exports sector; and
- efficiency in the domestic energy sector.

The policy is intended to provide the right framework to ensure that Australia has access to the appropriate mix of energy supplies to meet its changing needs.

The nation is committed to continued research into and development of renewable energy, energy conservation, efficient energy use and alternative fuels. It maintains a major geological and geophysical research and investigation program.

Australia is an active member of the International Energy Agency and other international organisations.

Domestically, there is considerable consultation on energy matters. The main advisory and consultative bodies are: Australian Minerals and Energy Council, National Energy Consultative Council, National Energy Research, Development and Demonstration Council and the National Oil Supplies Advisory Committee.

Manufacturing industry

Australia is a dynamic economy, enjoying political stability, generous natural resources, a skilled workforce, steady population growth and substantial domestic and foreign capital investment.

For a number of years the Australian economy has been undergoing a major restructuring, the goal of which has been the greater flexibility and efficiency needed for Australian industry to compete successfully in global markets.

The country has a broad industrial base, able to produce manufactured goods ranging from fashion garments to food, complex electronic devices to household appliances, base metals to precision instruments, through to oil refining and plastics.

Although it has a relatively small domestic market, it has the advantage of being geographically part of the Asia-Pacific region, which is developing into a major centre of economic activity.

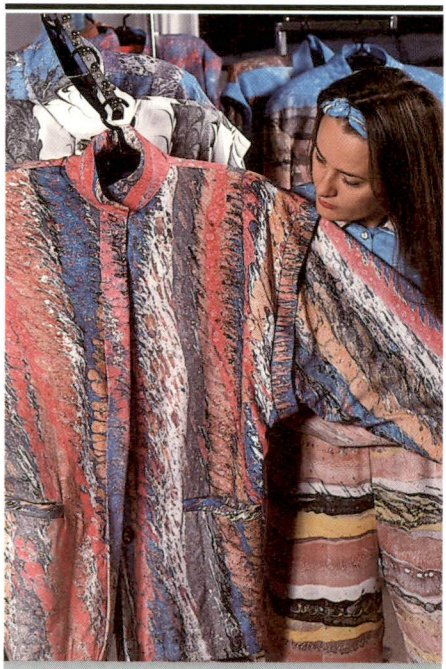
A high level of capital investment has been a significant factor in the growth of Australian manufacturing. Overseas capital has been important to expansion, particularly in the motor-vehicle, chemical and oil-refining industries, but most funds have been generated domestically.

Many Australian companies manufacture under licence from overseas, but there has been much domestic innovation — mainly in manufacturing — which has resulted in overseas licensing of many Australian-devised products and processes.

Manufactures represent more than a quarter of Australia's total exports.

The tertiary or service sector is the largest segment of the Australian economy and has been growing in importance relative to the other major sectors. Services employ about three-quarters of the workforce and contribute about two-thirds of the gross domestic product.

The retail and wholesale trades are the largest employers, followed by community services and construction. Other major employers are transport, communication, financial and business services, energy and water reticulation, entertainment, recreation and personal



Retail display of designer clothing

services, public administration and defence. The sector's share of the gross domestic product is around 60 per cent.

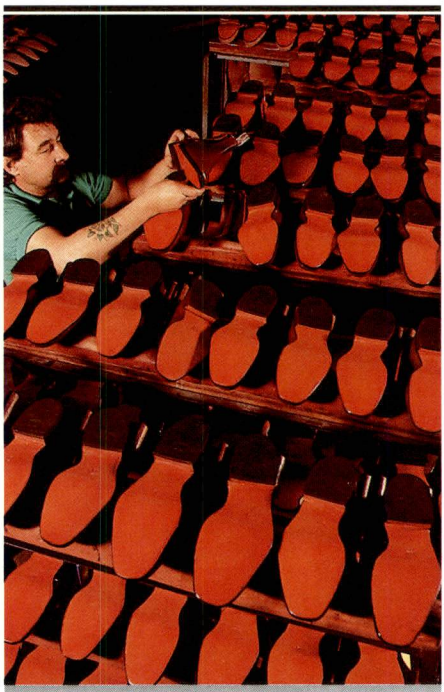
Small business, numerically about 96 per cent of private-sector, non-agricultural enterprises, is dynamic and healthy in Australia and it employs nearly half the non-farm workforce.

About 80 companies, employing about 12 000 people, are involved in the Australian aerospace industry. Most of the industry's $900 million turnover is generated by 10 manufacturers, which design, manufacture and assemble a range of air platforms and components and undertake major repair and overhaul of engines, airframes and avionics. Exports represent about a third of the industry's turnover.

The chemicals and plastics industries use local and imported raw materials to produce a wide range of intermediate and final products. Major groupings in the industries include petrochemicals, fertilisers, plastics, pharmaceuticals, agricultural chemicals, soaps and detergents.

Australia manufactures chemical fertilisers, plastics, synthetic rubber, agricultural and veterinary chemicals, explosives, paint, dyes, textile fibres, adhesives, pharmaceuticals, detergents and solvents. The major plastics are polyethylene (high and low density) polyvinyl chloride, amino resins (urea and melamines), alkyd resins, polystyrene and its copolymers, polypropylene and polyurethane.

There are about 1300 plastics-processing establishments producing a wide range of plastic products such as packaging materials, automotive components, pipes and fittings, household wares and building materials.



Making boots for export

Imported drugs and materials are combined with local products to produce patent medicines, ethical preparations and biological substances such as vaccines. Processing conforms with international technology.

The Australian electrical industry meets a substantial part of the local demand for domestic and industrial electrical products, particularly household appliances. Australia produces a wide range of electric motors, control gear, switch gear and electric wire and cables. The transformer industry supplies almost all the needs of the Australian market.

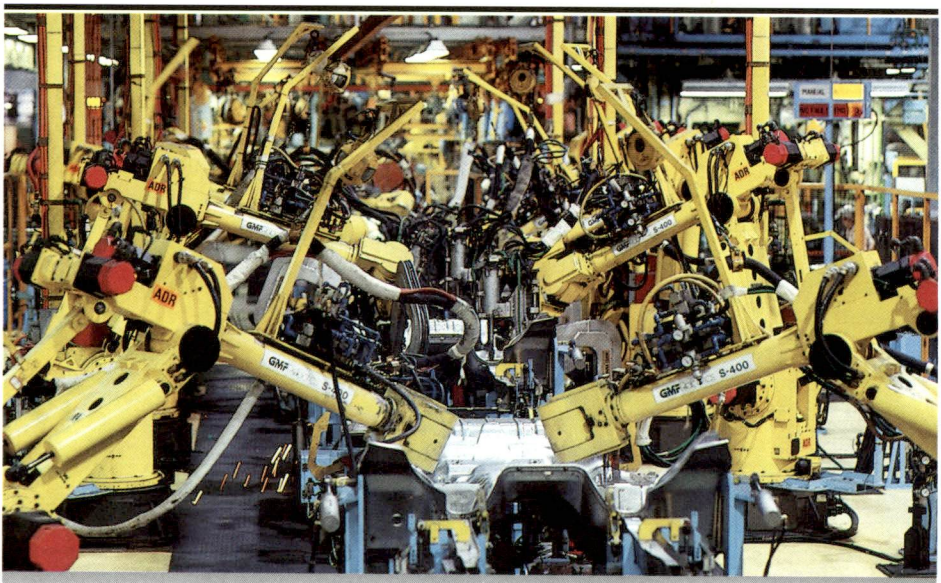
The Australian electronics and information-based industries supply most of the local market for telecommunications equipment and have considerable strengths in software development and the design and production of advanced medical, scientific and defence equipment and specialised electronic components, small computers and terminals.

Australia's engineering industries produce a wide range of hand and machine tools, metalworking machinery and materials-handling equipment. Light-engineering industries make such varied products as roller bearings, die castings, forgings, many types of measuring and recording instruments, valves and control equipment, television antennas, pumping, ventilating and heating equipment, fasteners such as nails, nuts, bolts and rivets and many other metal products.

Complex heavy-duty and automatic machines of many types and sizes are made, including railway rolling stock, diesel-electric locomotives, pumps, passenger and commercial motor vehicles, and earthmoving and excavating equipment, agricultural equipment and tractors.

There is extensive construction of small to medium-sized ships, including small trading vessels and specialised vessels such as tugs, dredges, barges, fishing boats, passenger ferries and oil-rig service boats.

Australia is a major and efficient producer of a diverse range of agricultural products of the highest standard, much sought after by food manufacturers worldwide.



Car bodies are assembled at motor vehicle manufacturing plant

The Australian food-processing industry is the largest manufacturing sector, supplying almost the entire domestic market, and exporting goods worth more than $1000 million a year.

The Australian food-processing industry comprises a number of major international corporations using Australia as a base for supplying the Asia-Pacific market.

There is massive potential for the processing in Australia of its agricultural products and there is general acceptance that the industry will develop into a major supplier of such products to the growing international market.

The industry is innovative and a world leader in important aspects of food technology.

Australia's abundant mineral resources and competitive energy prices contribute to the expansion of further processing of minerals and metals. In recent years, mineral-sands processing and aluminium production have been prominent in this expansion and there have been large increases in research and development in minerals-processing technology. Important new resource bodies have been found in the same period.

A long-established domestic industry supplies most of Australia's manufactured tobacco — virtually all cigarettes, a quarter of cigars, cigarillos and cheroots and more than half the other products.

The motor-vehicle industry comprises five manufacturers — General Motors Holden's Automotive, Ford Australia, Toyota Motor Corporation of Australia, Mitsubishi Motors Australia and Nissan Australia — which supply four-fifths of Australian demand (more than 300 000 passenger vehicles a year) and export vehicles and components worth more than $600 million a year.

Oil refining is of great significance to the Australian economy. Most manufacturing industries and commerce depend on its products and refineries are located in each mainland state, some with associated petrochemical complexes.

The main products from Australian oil refineries are motor spirit, automotive distillate, fuel oil (including bunkers), liquefied petroleum gas, aviation turbine fuel and industrial diesel fuel.

Thirty-four establishments manufacture pulp, paper or paperboard in Australia and supply about three-quarters of domestic requirements.

The textile and clothing industries process natural and synthetic fibres to produce many apparel and textile goods. Australia produces most of its natural fibres. The textiles industry produces yarns, fabrics and most finished textile products, including wool, cotton, synthetic fibres and mixtures. Finished textile fabrics produced in Australia include carpets, domestic textiles (such as bed linen and curtains) and industrial textiles.

Most of the footwear industry is in Melbourne and Sydney. Australian manufacturers produce a wide range of footwear using a variety of materials, including leather, textiles and plastics, and account for half the domestic market.

Education

Each state and territory of Australia has its own primary and secondary education system. Standards, however, are high and reasonably uniform.

Within each state and territory system there are two main types of school — government and non-government. In the former, attended by about two-thirds of children, tuition is free. Of the latter, run mostly by religious bodies, about three-quarters are Catholic. Most non-government schools charge fees.

Throughout Australia, schooling is compulsory between the ages of six and 15 years (16 in Tasmania). However, most children begin school earlier than the law requires, generally in pre-schools run by the organisations that administer the mainstream schools.

Primary schooling lasts six to seven years and the curriculum is similar across the nation. Studies begin with basic language and mathematics and the fundamentals of inquiry, and social, health and creative skills are taught. Before reaching secondary level, children are learning English, mathematics, elementary science, social studies, music, art, craft and physical education. Optional subjects such as religion, languages and music are common.

Secondary schooling begins at year seven or eight and goes typically to year 12. More advanced levels of the same subjects are taught, plus technical and commercial ones. The typical secondary school is the co-educational comprehensive or multi-purpose high school, offering a wide range of subjects. Some states have separate high schools and colleges specialising in technical, agricultural, commercial and other fields. Their curriculums include general academic subjects and practical training.

Major examinations, or other formal assessments occur after three or four years of high school and at this point most students are old enough to leave the system. Another two years' study is available, however, and many keep going to the end — year 12. In most parts of Australia, certificates are issued at each of these levels, called commonly the School Certificate (at or about year 10) and the Higher School Certificate (year 12). The latter is normally required for university or higher-education college entry.



Primary school learning takes in many skills

The entire system is matched by correspondence courses for pupils prevented by illness, disability or residential isolation from attending schools. There are also "schools of the air", which use existing two-way radio networks to provide "classroom" experience to students in very isolated places.

Transport to most schools is either free or at reduced rates. In some states, children living too far from a secondary school to travel daily may live in hostels funded or subsidised by the government.

Although most Aboriginal and Torres Strait Islander students use the general school system, special programs exist to cater for the special qualities of their cultural heritage. Within these programs, Aboriginal teaching assistants, special advisers and resource teachers are employed and special curriculums, including bilingual programs, are developed.

Special programs exist also to help Aboriginal students to continue into higher education. They provide for living allowances, extra student places and other forms of support.

Special educational services are provided to integrate into classrooms children with disabilities attending special and mainstream schools. They are designed to accommodate the special needs of children with intellectual, physical, sensory, emotional, social or learning disabilities.

A nationwide program exists in schools designed to increase students' sensitivity to the Australian population's many different cultural backgrounds and to help ethnic communities maintain their languages and cultures.



Pre-school (kindergarten) children play in sandpit

Students from non-English-speaking backgrounds are helped to develop competence in English, to enhance their equality of opportunity in education and participation in society. Educational materials developed under federal initiatives are made available to schools to meet the language needs of these children.

State departments responsible for various aspects of education provide English-language classes, where necessary, for immigrants. Technical and evening colleges also offer literacy and secondary-level courses for adults preparing for matriculation and other public examinations.

The Federal Government provides financial help for students, including postgraduate awards, tertiary-education assistance, and secondary allowances and assistance schemes for Aboriginals. It also helps children who must live away from home or study by correspondence, and adult students returning to school to complete secondary education. Some allowances are subject to a means test on family income.

Pre-school and primary teachers, who usually teach the whole school curriculum, must complete three years of training in a college of advanced education.

Secondary teachers usually complete a degree course and professional training, acquiring a diploma of education or similar certificate. There is a trend toward integration from the outset of the professional and the degree studies. Specialist teachers (physical education, music, art) train for three to four years, either wholly in a teacher-training institution or partly at another specialised institution.

Annual federal-government education expenditure at present exceeds $6000 million and has grown in recent years at about 10 per cent a year in dollar terms.

Post-secondary education in Australia occurs in universities, colleges of advanced education (CAEs) and colleges of technical and further education (TAFEs).

Although both universities and CAEs offered higher education (degree courses etc) before 1989, they had differing emphases. Both offered courses and undertook research in a range of academic and professional disciplines but the work in CAEs had a greater emphasis on vocation and CAE research programs were mainly in applied science and technology.

From 1989 the Federal Government removed formal distinctions between the two, expecting that mergers would reduce the total number of institutions eventually from 72 to about 35.

Although the states and territories are responsible for all education, the Federal Government provides most funding for higher education. In 1989, it set up a system under which both undergraduate and postgraduate students must make a financial contribution toward the cost of their study.

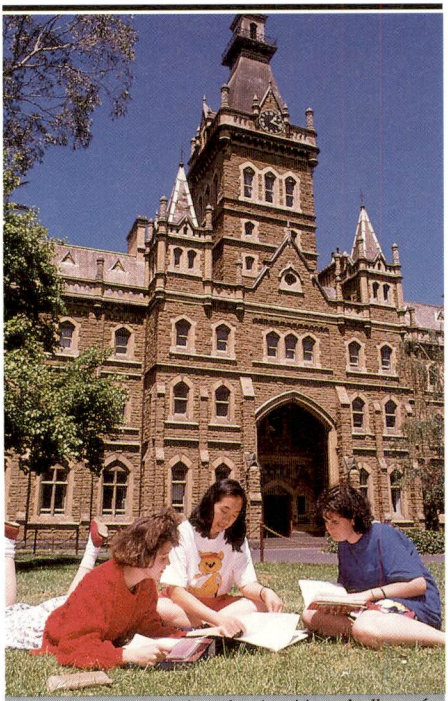
There are a few privately funded higher-education institutions, imcluding the Bond University of Technology, which took its first fee-paying students in 1989, three teachers' colleges and others, including theological colleges.

In the technical-education field, too, there are a few private colleges, but most of Australia's approximately one million

TAFE students attend its 215 state-administered colleges, undertaking pre-vocational, vocational, educational and recreational studies at levels ranging up to the para-professional. The vast majority study part-time.

TAFE colleges cover all major skills in a wide range of industrial, commercial, artistic and domestic occupations. They offer apprentices', trade, post-trade and technicians' courses, as well as commercial and general courses to certificate and diploma level.

The Federal Government is encouraging the entire secondary and post-secondary education sector to improve credit transfer between its parts.



Tertiary education is through universities and colleges of technical and further education

It is giving priority also to increasing the involvement of industry in education.

Adult education (also called continuing education) includes vocational and non-vocational courses. TAFE colleges provide both and most universities offer non-degree continuing-education programs. Some states fund councils or boards responsible for continuing education and, because of the growing demand for such education, voluntary bodies have become significant tuition providers.

Students and specialists are helped to study in Australia under international plans and scholarships; others study privately at Australian institutions. Tens of thousands of foreign students study in Australia each year at universities, colleges, secondary schools and private institutions.

The Australian National Commission for United Nations Educational, Scientific and Cultural Organisation (UNESCO) advises the Federal Government on Australia's participation in its programs, and supports its objectives. Its national committee has a network of advisory groups specialising in education, natural sciences, social sciences, culture and communication, and is responsible for a wide program of activities, including organising national and regional seminars.

Areas of university research and development include the humanities; the social, physical, biological, earth and applied sciences; engineering, agriculture, astronomy and medicine.

As a member of the OECD, Australia is able to exchange information about education and training with the 23 other industrialised member countries.

The legal system

Australia's system of law was inherited from, and resembles closely, the British system. Several important differences exist, however, mainly because Australia has a written constitution and a federal form of government.

It is administered in two "streams" — the statute law (including the "criminal code"), enacted by legislatures, and the common law, developed by the courts — and both evolve by interpretation in the courts, which often consider precedents set in earlier decisions.

The laws exist to protect and govern the community but of great importance under Australian law are the rights of the individual.

Lesser criminal matters are heard by magistrates or justices of the peace, who have power to convict and impose penalties.

Courts are usually open to the public but may be closed — to protect national security, for example, or the interests of young persons.

Juries, usually of 12 people in serious criminal cases and fewer in civil actions, are chosen randomly from the adult population and must possess certain qualities, such as having no criminal record. They decide questions of fact only, although in some civil jurisdictions they also assess damages. Judges decide questions of law only.

Only judges and magistrates (and sometimes justices of the peace) impose sentences. Although maximum criminal penalties, and often minimums, are specified, considerable discretion may be used to take account of specific circumstances.

Serious crime usually results in imprisonment or fines, or both. Capital punishment has not been practised in Australia for more than 20 years and has been generally abolished.

Australian statute law is created by parliaments, state and federal, and legislative assembles in the two main territories. Commonly these laws either embody or make provision for subsidiary legislation, called regulations or rules, which have the same authority, to be made by authorised individuals.

The common law is reasonably uniform in its basis but, in practice, significant differences exist because of laws enacted by state and territorial parliaments, none of which is subordinate to another.

Conditions of entry to the Australian legal profession are governed by federal, state and territory laws and rules. Requirements vary but, generally, at least five years' study and, thereafter, experience, is usual.

Judges, magistrates and others who preside over courts are government-appointed and those of the superior courts are chosen from the legal profession's ranks. Judges have security of tenure until their (fixed) retiring age and are free, by convention, from political interference.

Each of the states and territories has its own court system, and a federal system exists to deal with matters over which the national parliament has jurisdiction. Still, while the two levels are independent of one another, they are interdependent to an extent, partly because of the need for a

measure of uniformity of law and order at the time of federation and partly because of legal and administrative convenience.

Under the Constitution, the judicial power of the Federal Government is vested in the High Court of Australia and any other courts the Federal Government creates. Two such are the Federal Court and the Family Court, which deal with specialised areas of federal law.

The High Court is at the apex and may deal with federal and state matters. It has original jurisdiction in important areas, including interpreting the Constitution and determining legal disputes between the Federal Government and state governments, litigation between state governments and claims between citizens from different states. It is the final court of appeal in Australia from both federal and state courts. The Chief Justice and six other justices preside over it.

The Federal Court, one of the specialised courts, deals with federal law in such areas as copyright, industrial law, trade practices, bankruptcy and administrative law, and appeals from cases decided by territory supreme courts and from other courts and tribunals administering federal laws.

The other specialised federal court, the Family Court, deals as far as the Constitution permits with divorce, custody of children and maintenance and associated property disputes. It is less formal than other courts.

All states and territories have supreme courts and magistrates' courts and several have intermediate ones called district or county courts. They are concerned mainly with state laws but have delegated power to deal with some federal matters, including those involving taxation and most federal criminal offences.

The supreme courts in each perform much the same roles at a state level as the High Court does federally. The district or county courts in most states are presided over by judges and determine most serious criminal matters as well as civil litigation up to certain monetary limits.

The magistrates' courts are presided over by magistrates and deal summarily (without a jury) with most ordinary offences — traffic infringements, minor assaults, street offences and the like — and preliminary hearings to decide whether prima-facie grounds exist in more serious cases for trial before a judge and jury. They also deal with lesser civil litigation for such things as debt recovery.

The Australian Capital Territory and the external territories of Norfolk Island, Christmas Island and the Cocos (Keeling) Islands have court systems similar to those of the states.

At both federal and state levels there exists the office of ombudsman, the occupants of which deal with a wide range of citizens' complaints against government administration.

There has been increasing emphasis in Australia for the last two decades on the protection of human rights and the elimination of inequalities in society. In 1973 Australia ratified the International Labour Organisation Convention on Discrimination in Employment and Occupation, and national and state committees were formed to investigate complaints of breaches of it. Since then anti-discrimination and other human-rights legislation has been enacted by the Federal Government and the govern-

ments of most states. Regulatory agencies have been set up to pursue complaints about breaches of such legislation.

The federal Human Rights and Equal Opportunities Commission, set up in 1986, can review legislation, investigate complaints, undertake research and conduct educational programs relating to human rights as set out in the International Covenant on Civil and Political Rights, the Declaration of the Rights of the Child, the Declaration on the Rights of Mentally Retarded Persons, the Declaration on the Rights of Disabled Persons and the International Convention on the Elimination of all Forms of Racial Discrimination. The commission also administers the Racial Discrimination Act 1975 and the Sex Discrimination Act 1984.

Law enforcement in Australia is handled by federal, state and territory police forces. Each is independent and all cooperate closely. The ratio of police to population nationally is about 1:550.

The Australian Federal Police (AFP) is the Federal Government's primary law-enforcement body. It has headquarters in Canberra and regional offices in each state. It enforces federal laws, including those against illegal drug importation, terrorism and breaches of currency regulations, and in Canberra it provides a full range of traditional community police services.

The AFP's officers serve in liaison posts in South-East Asia and the Pacific, Hong Kong, Singapore, Pakistan, North and South America and Britain. A contingent serves in Cyprus as part of the United Nations Peace-Keeping Force.

All states and the Northern Territory have police forces. All have specialised squads, in addition to traditional traffic and on-the-beat police, to cover specific fields — homicide, drugs, armed hold-ups and fraud. Other specialist squads are the water police and rescue squad.

Australia's police forces cooperate at various levels, notably through the Australian Police Ministers' Council, comprising all ministers responsible for police affairs. The council oversees common national police services in areas such as criminal intelligence, research and training facilities. These include the Australian Bureau of Criminal Intelligence, the National Police Research Unit and the Australian Police Staff College.

The charter of the National Crime Authority (NCA), set up in 1984, requires it to identify areas of (usually organised) crime and gather evidence to prosecute those involved. It cooperates with other law-enforcement agencies. In pursuit of a federal or state reference it has special powers, including those to hold hearings, issue subpoenas and compel witnesses to testify.

Australia has participated for decades in the international effort to curb drug abuse and trafficking. As a member of the United Nations Commission on Narcotic Drugs, it trains narcotics-control officers for countries in South-East Asia and the Pacific. In recent years the results of its efforts in this field have been very good.

Federal and state agencies such as the Australian Customs Service, the AFP, the NCA and state police forces share the task of battling illegal drug importation and trafficking. The Australian Bureau of Criminal Intelligence collects and disseminates information in this field and there is a high level of federal-state cooperation.

Government

The Commonwealth of Australia is a federation formed on January 1, 1901, of six states, by the Commonwealth of Australia Constitution Act. Each state has its own constitution and parliament and governs itself. The federal and state constitutions complement one another and the Federal Government and Parliament (a bicameral legislature having upper and lower houses) are responsible for all matters of national interest.

All states have bicameral legislatures except Queensland.

The Northern Territory and the Australian Capital Territory are also largely self-governing.

Australia is independent but retains constitutional links with Britain. Britain's monarch is also formally Australia's and is represented in Australia by the Governor-General and six state governors, each of whom is head of state and formally chief executive. The powers and duties of each include summoning, proroguing and dissolving parliament, assenting to legislation, appointing ministers, setting up government departments and appointing judges. The Governor-General is commander of the armed forces.

By convention, governors and governors-general act only on the advice of their governments on virtually all matters. They are selected by the Queen on the advice of their governments.

The Australian Constitution can only be changed by referendum and then only if a majority of voters in a majority of states, as well as an overall majority, approves. Normally, a proposal to change it must first pass each house of the Commonwealth Parliament with the support of an absolute majority of each house. However, a proposal may be submitted to the electors by the Governor-General if one house has passed it twice and the other has twice rejected it. Only eight of 42 proposals for change have been approved by referendum since 1901.

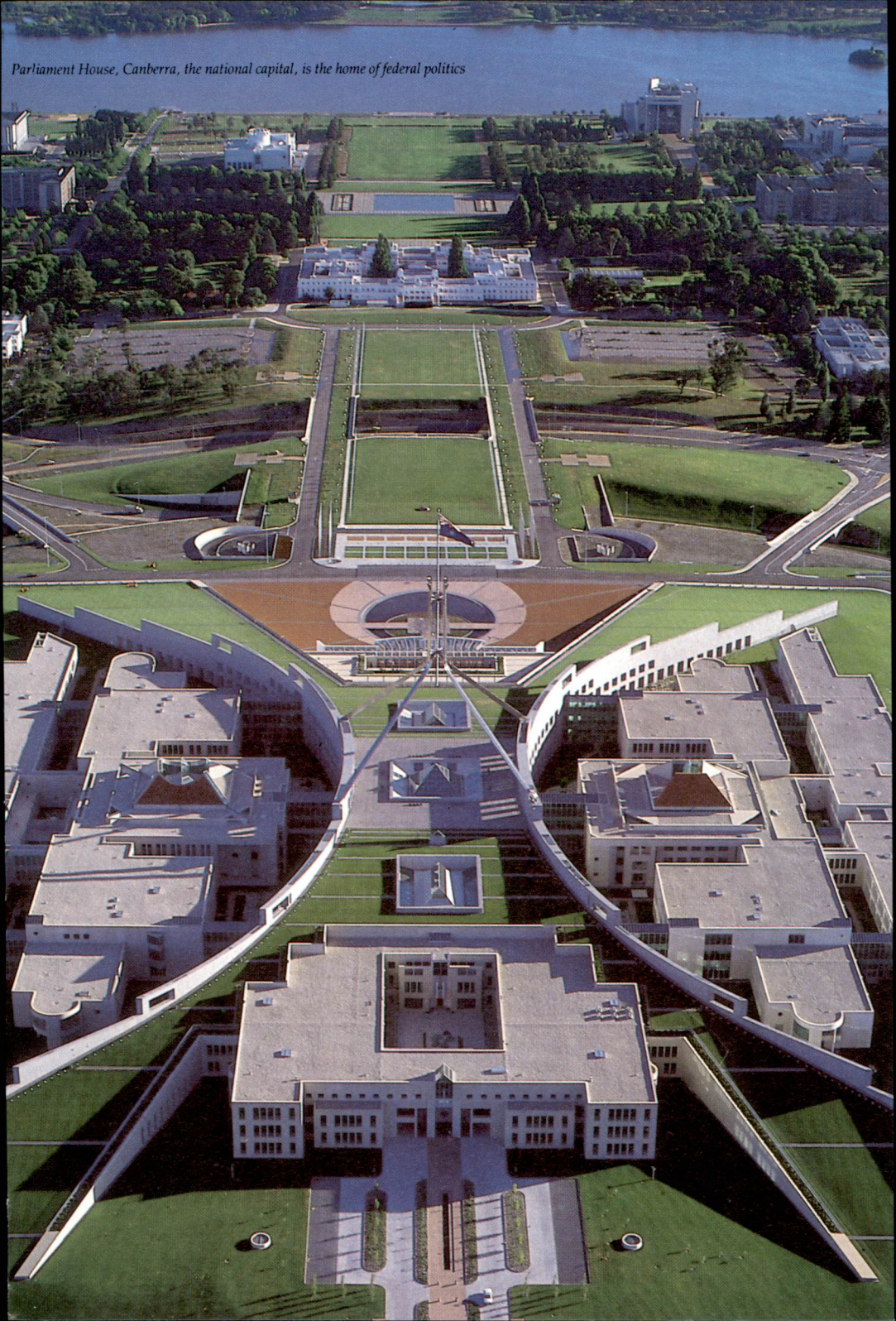
Changes to the states' constitutions do not require referendums.

A valid federal law overrides any state law inconsistent with it.

The federal houses of parliament are the House of Representatives (constitutionally the "lower" house), of 148 members, in which the majority party or coalition forms the government and selects the Prime Minister (usually from among its own number), and the Senate (the upper house), required by the Constitution to have about half the number of members of the lower house.

The lower house is elected, at least once every three years, from single-member constituencies under a preferential voting system. The party forming the government by reason of its majority in this house does not depend for its authority on a majority in the upper house. All ministers are members of parliament.

A government that loses the confidence of the lower house, by losing its party majority or otherwise, must resign or advise the Governor-General to dissolve the house to permit a general election.



Parliament House, Canberra, the national capital, is the home of federal politics

The people of each state and territory vote as a single electorate for its senators, using a proportional-representation system, and those chosen serve for either six years (for their states) or a maximum of three (territories). Territory senators' elections coincide with those of the lower house while elections for state senators are staggered so that half of them retire each three years.

The Senate's powers match those of the lower house except in relation to certain financial legislation.

Australia pioneered secret ballots in parliamentary elections and has used the system universally since 1879. Such voting is generally compulsory (although not invariably in local government elections). The franchise extends to everyone over 18 years except criminals and the insane.

There are many political parties in Australia. The largest, in no special order) are the Liberal Party, the National Party (both broadly conservative in philosophy), the Australian Labor Party (broadly socialist) and the Australian Democrats (not, by declaration, of either persuasion). All have similar structures and operate in all states and all support parliamentary democracy and its fundamentals.

Policies at the federal and state levels are decided by each government's cabinet, comprising senior ministers and the Prime Minister (Premier in the case of a state). Cabinets meet regularly in private and the only public records of their proceedings are statements by their leaders or authorised ministers. Government decisions requiring a legal basis (such as to make regulations under an existing law) require approval by executive councils, which comprise the Governor-General (or governor) and ministers.

At both federal and state levels there are career public services, most staff of which are recruited as permanent officers by open competition and win promotion on merit. Each public service is divided into departments, for each of which a minister is responsible to parliament. The head of each department, usually a career public servant, is responsible to the minister.

Departments at both federal and state level administer portfolios covering such affairs as education, the law and associated responsibilities, transport, science and technology, finance, trade, foreign relations, primary and secondary industries, tourism, health, social security and so on.

Freedom-of-information legislation came into effect in Australia in 1982, giving citizens and other accepted permanent residents freer access to certain federal government information. Its scope was widened the next year.

The functions of local government, the third tier, which generally derives its powers from state legislation, are specified normally by state legislation and vary from state to state.

Local government is financed by rates (taxes) and the state and federal governments and normally controls town planning, road construction and maintenance, water provision and wastewater disposal, building, weights and measures and other matters of local concern. Some local-government bodies operate public businesses in such industries as transport and energy.

The land

Australia is an island continent and lies between east longitudes 113° 9′ and 153°39′ and between south latitudes 10° 41′ and 43° 39′. Almost 40 per cent is north of the Tropic of Capricorn.

On its western coast is the Indian Ocean and on its east the Coral and Tasman Seas of the South Pacific Ocean.

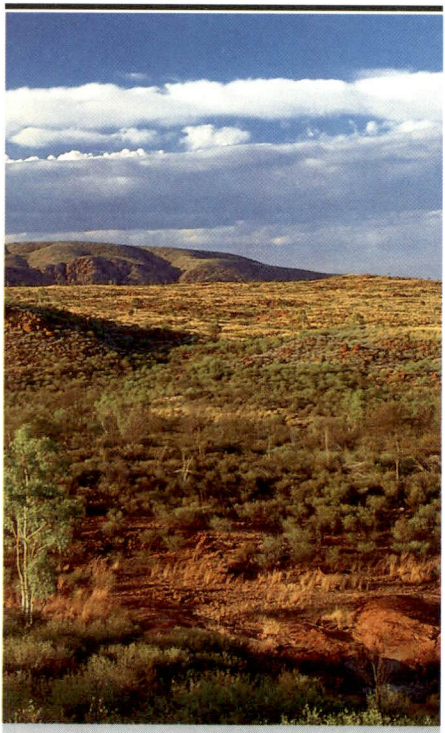
Its area, 7 682 300km², is about the same as the mainland United States excluding Alaska; or one and a half times that of Europe excluding the Soviet Union; or about 25 times that of Britain and Ireland; or about twice that of the combined areas of India and Pakistan.

Its coastline is 36 735km. The continental shelf extends north to Papua New Guinea and south around Tasmania, varying in width from about 30km to more than 240km. Just off the eastern coast the Great Barrier Reef extends north for 2000km from southern Queensland to the Gulf of Papua. Enclosing about 207 000km², the reef is an important marine ecosystem, a complex of islands and coral reefs containing many rare life forms.

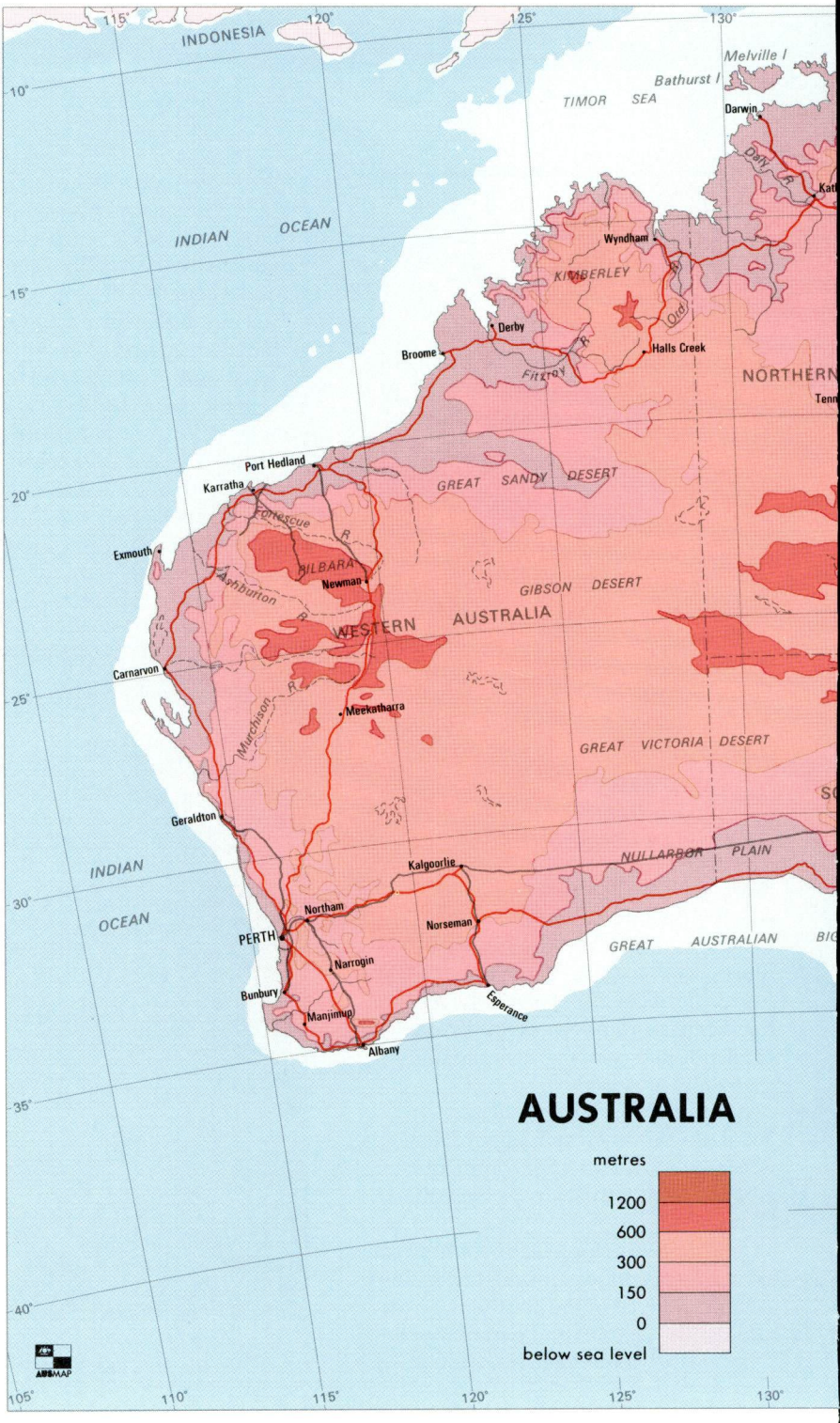
At an average elevation of less than 300m (the world mean is about 700m), Australia is the flattest of continents. About a twentieth of it rises more than 600m.

The main structural feature, the Great Western Plateau, covers most of Western Australia, much of the Northern Territory and South Australia and part of western Queensland. Its average elevation is about 300m. Outcrops are significant mainly as geological phenomena and include Ayers Rock, a monolith 8km in circumference rising 335m above the central Australian desert.

East of the plateau, extending from the Gulf of Carpentaria in the north to eastern South Australia and the western Victorian coast, is the great lowland belt known as the Central-Eastern Lowlands. The belt's average elevation is 150m and, at Lake Eyre in South Australia, it falls to nearly 12m below sea level. These lowlands probably formed the floors of seas comparatively recently, geologically. Parts are rich in cretaceous aquatic fossils.



Rugged landscape near Alice Springs, Northern Territory


INDONESIA
115°
120°
125°
130°
Melville I
Bathurst I
TIMOR SEA
Darwin
Daly R.
Katherine
INDIAN OCEAN
10°
15°
Wyndham
KIMBERLEY
Ord R.
Derby
Broome
Halls Creek
Fitzroy R.
NORTHERN
Tennant
Port Hedland
Karratha
GREAT SANDY DESERT
20°
Fortescue R.
Exmouth
PILBARA
Ashburton R.
Newman
GIBSON DESERT
WESTERN AUSTRALIA
Carnarvon
25°
Murchison R.
Meekatharra
GREAT VICTORIA DESERT
Geraldton
INDIAN OCEAN
Kalgoorlie
NULLARBOR PLAIN
30°
Northam
Norseman
PERTH
GREAT AUSTRALIAN BIGHT
Narrogin
Bunbury
Esperance
Manjimup
Albany
35°
40°
105°
110°
115°
120°
125°
130°
AUSTRALIA
metres
1200
600
300
150
0
below sea level
ABSMAP


ARAFURA SEA
PAPUA NEW GUINEA
Nhulunbuy
Weipa
CAPE YORK PENINSULA
GREAT
Groote Eylandt
GULF OF CARPENTARIA
Mornington I
Mitchell R
Cairns
CORAL SEA
BARRIER REEF
Normanton
Flinders R
Burdekin R
Townsville
Mount Isa
Charters Towers
Georgina R
Hughenden
Mackay
Diamantina R
Belyando R
QUEENSLAND
Longreach
Emerald
Rockhampton
THE CHANNEL COUNTRY
Dawson R
SIMPSON DESERT
Bundaberg
Maryborough
Fraser I
Warrego R
Charleville
Roma
Cooper C
L Eyre
Cunnamulla
St George
Toowoomba
BRISBANE
GOLD COAST
Moree
Inverell
Grafton
Darling R
Bourke
Armidale
Leigh Creek
Broken Hill
Cobar
Tamworth
Macquarie R
Port Augusta
Whyalla
Port Pirie
Dubbo
Taree
Port Macquarie
NEW SOUTH WALES
Lachlan R
Orange
NEWCASTLE
ADELAIDE
Mildura
Griffith
SYDNEY
Murrumbidgee R
Goulburn
WOLLONGONG
Murray Bridge
Swan Hill
Murray R
Wagga Wagga
ACT
CANBERRA
Horsham
Bendigo
Albury
Bega
VICTORIA
Mount Gambier
Ballarat
MELBOURNE
GEELONG
Sale
Warrnambool
King I
BASS STRAIT
Flinders I
TASMAN SEA
Burnie
Devonport
Launceston
HOBART
TASMANIA
SCALE 1 : 20 000 000
Km 100 0 100 200 300 400 Km
140°
145°
150°
155°
160°
10°
15°
20°
25°
30°
35°
40°

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The eastern highlands, better known as the Great Dividing Range, follow the eastern coast south from far northern Queensland to southern Tasmania, never more than 400 km from the coast and sometimes forming part of it. Their average altitude is less than 910m, although peaks exceed 1800m in the rugged south- eastern area, called the Australian Alps. The Alps' highest point is the summit of Mount Kosciusko (2228m).

Nearly a third of Australia (about half of Queensland and Western Australia and most of the Northern Territory) is north of the Tropic of Capricorn and the rest is in the temperate zone. It is is less subject to climatic extremes than regions of comparable size elsewhere in the world because it is surrounded by oceans and has no extensive high mountain masses.

Clear skies and low rainfall are characteristic of the weather on most of the continent. In mid-summer (January), average temperatures range from 29°C in the north to 17°C in the south. In July, average temperatures range from 25°C in the north to 8°C in the south.

The coldest regions are the highlands and tablelands of Tasmania and the south-eastern corner of the mainland, where the only regular snowfalls occur.

Summer is from December to February; autumn March to May; winter June to August; and spring September to November. For most of the country, the hottest month is January.

Australian soils generally do not show a correlation with climate, mainly because of the persistence in certain regions of leached soils formed in earlier, wetter climatic cycles. These soils, and many in the higher-rainfall areas, are of low fertility, often needing trace elements as well as phosphorus, nitrogen and sulphur. Artificial fertilisers can allow these soils to support highly productive pastures which have potential for mixed farming. Research for tropical pastures is being done on the leached, porous yellow and red earths and grey and brown clays in northern Australia.

The sub-humid and semi-arid zones have large areas of less-leached and more-fertile soils such as red-brown and black earths, which are important to Australia's wheat industry. Seventy per cent of the continent is arid, so the better-quality soil types are grazed extensively.

Australia is the driest inhabited continent and its rainfall varies extremely in both the geographic and seasonal senses. Mean annual rainfall is 465mm. Rainfall varies from less than 150mm over the centre of the continent to more than two metres in parts of the tropics and western Tasmania. The average annual surface runoff, about 440km^3, represents only 12 per cent of total rainfall. Evaporation accounts for most of the rest.

As a yardstick: Africa's annual runoff is 18 times Australia's (38 per cent of total rainfall); Europe's nearly six times Australia's (39 per cent); Asia's about 30 times Australia's (48 per cent) and North America's 16 times (52 per cent).

The continent's interior has few permanent watercourses. More than half the nation's runoff is from drainage regions remote from the major population centres. The Murray River and its tributaries are Australia's largest system, having a catchment of 1.06 million square kilometres in southern Queensland, New South Wales and



Tropical beauty of Lawn Hill Gorge, Queensland

The arts

Many aspects of the arts in Australia have their roots in Europe, but Australia's own history and culture and the influence of its Asian neighbours have made an impact. Distinctively Australian trends are developing, and the vigour and originality of the arts in Australia often surprises visitors.

In the late 1970s and early 1980s the great problem facing the arts was one familiar in other nations — rising costs and a decline in government financing — but increasing public interest provided the momentum to carry them through difficult times. The Australian Government's funding agency for the arts is the Australia Council, which spends more than $50 million a year. More is spent by state governments.

The Australia Council boards support specific art forms and central council programs support research, education, multicultural arts and other "trans-art-form" areas.

A big role in music and drama is played by the federally-funded Australian Broadcasting Corporation. State governments and municipal councils also support the arts.

Australian painting developed distinctive characteristics toward the end of the 19th century in the work of such artists as Tom Roberts and Frederick McCubbin.

Several living Australian painters have world-wide reputations. In recent years the names of John Olsen and Brett Whiteley have been added to the longer-established names of Sidney Nolan, Arthur Boyd and Albert Tucker. More sculptors, painters and craftspeople are living by their creativity than ever before.

The Australian National Gallery in Canberra is known worldwide for its collection of Australian art, particularly Aboriginal art. The National Gallery of Victoria holds works by Rembrandt, Titian, Tiepolo, Turner, Rubens, Van Dyck, Reynolds, Gainsborough, Corot, Modigliani and Pissarro. The Art Gallery of NSW in Sydney has a representative collection of works by Australian painters and sculptors. Another important Sydney gallery is the Power Gallery of Contemporary Art.

Several valuable art awards are offered in Australia, including the annual Archibald Prize for portraiture, the Wynne, Sulman and Blake prizes, and the annual Britannica awards. Business organisations have sponsored many travelling exhibitions and are important buyers of Australian works.

The Sydney Biennale is now part of the international art calendar and Australian artists participate in biennales, exhibitions and arts festivals in other countries.

The Visual Arts/Craft Board of the Australia Council makes direct grants to help artists and craft workers and helps them indirectly via commissions, acquisitions, exhibitions and artist-in-residence projects. It also encourages a greater awareness of contemporary Australian works and helps across the artistic spectrum.

The crafts flourish in Australia; increasing numbers of people make a living from them and people can work

toward a career in crafts just as in any other branch of the arts. The Visual Arts/ Crafts Board encourages improvement in the quality of crafts, provides greater opportunities for craftspeople to further their professional development, fosters wider community access to the crafts and assists in creating an awareness of Australian crafts overseas and of work from other countries in Australia. Special attention is given to training and workshop experience, and increasing contact between craftspeople and community groups.

Artbank was established in 1980 to stimulate a wider appreciation of Australian art and to help Australian artists by buying their works, which it hires out to government offices, overseas missions and corporate clients.

The Federal Government also encourages major foreign and Australian touring exhibitions of art and cultural property.

After a promising start in 1896, the Australian film industry experienced widely varying periods of prosperity and popularity in the early 1900s and 1940s.

Since 1969, it has had a resurgence, Federal Government support providing the mainspring. In 1973, the Australian Film, Television and Radio School was established. Trainees and graduates have had a significant impact in all areas of film and television production. Two years later the Australian Film Commission



Aboriginal artists, Dan Tjungurray and Paddy Carroll Tjungurray

was created to support development and encourage distribution and broadcasting of film productions. It makes grants and loans for these purposes and has a special fund to help innovative and less commercial projects and new talent. In 1981 the Government introduced generous tax concessions to encourage private investment in films and in 1988 established the Australian Film Finance Corporation to provide the industry with direct support by equity participation.

Australia's history of film, television, radio and recorded sound is reflected in the National Film and Sound Archive's vast collection of films, television productions, photographs, posters, sound recordings, radio programs, equipment and other related materials. Its collection ranges from what is believed to be the world's first feature film, *The Story of the Kelly Gang*, made in 1906, to contemporary works. The sound collection covers the earliest music cylinders, such as recordings of Nellie Melba and Peter Dawson.

The country found its first lyric poet in Henry Kendall, who wrote of the gentler aspects of the Australian landscape. Kendall's contemporary, English-born Adam Lindsay Gordon, was the forerunner of the school of bush balladists, including A.B. "Banjo" Paterson and Barcroft Boake.

Some of the early traditions of Australian writing were born of the work of Henry Lawson, whose poems and ballads had wide popular appeal. Between the wars Kenneth Slessor introduced into Australian poetry the English modernism of T.S. Eliot. He was followed by others who looked to their native roots for inspiration.

Since World War II, writers have been concerned with social problems and universal themes and a lively school of contemporary experimental stylists has emerged.

The short story has always played a significant part in Australian literature. Henry Lawson was acclaimed for his poetry but it was his short stories which most clearly depicted the Australian's relationship with his environment. Among prominent present-day writers are Frank Moorhouse, James McQueen, Peter Carey, Michael Wilding and Vicki Viidikas.

Lawson was followed by many social-realist writers, including Joseph Furphy, Vance Palmer, Katharine Susannah Pritchard, Xavier Herbert, Dymphna Cusack and Kylie Tennant.

In fiction, the convict and bushranger novels of Australian writers Marcus Clarke (1846–1881) and Rolf Boldrewood (1826–1915) have been followed by many books diverse in period, style and subject. Their authors include Henry Handel Richardson, Louis Stone, Patrick White, Hal Porter, Dame Mary Gilmore, Thea Astley, Thomas Keneally and Peter Carey (1982 and 1988 Booker Prize winners), Morris West, Colleen McCullough, Elizabeth Jolley, David Malouf, Beverley Farmer and Kate Grenville.

Australia has strong traditions in children's literature and some of the most prominent modern writers are Ivan Southall, Patricia Wrightson, Colin Thiele and David Martin.

The Literature Board of the Australia Council encourages creative writing by making grants to writers and by subsidising publication of their works.

The Government funds the Public Lending Right Scheme to recompense authors and publishers for the use of their books by public lending libraries.

The National Library of Australia holds millions of books and more than 100 000 titles of periodicals and newspapers from many parts of the world and an extensive microfilmed collection of rare and significant printed items. Its departments cover oriental studies, music manuscripts, maps, rare books, pictorial history (paintings, drawings, prints and photographs), area studies, oral history and films. It operates extensive computer services, including the Australian Bibliographic Network.

Australia has eight large professional orchestras, six of which — one in each state capital — are run by the Australian Broadcasting Corporation (ABC). The Elizabethan Philharmonic Orchestra in Sydney and the State Orchestra of Victoria work with the Australian Opera and the Australian Ballet. The ABC Sinfonia trains postgraduate musicians for a career in the symphony orchestras.

The Australian Opera (AO), based in the Sydney Opera House, is the national opera company. Some states have small professional opera companies. The AO tours regularly and also reaches wide television and radio audiences.

Musica Viva Australia operates one of the largest ensemble music concert networks in the world. In addition to its main concert series of international groups and artists, it organises overseas tours for Australian ensembles and commissions works by Australian composers.

Jazz musicians are receiving more grants and commissions, and jazz-group tours are included in Musica Viva's program. Australian pop artists are well known internationally.

The Performing Arts Board of the Australia Council extends opportunities for musicians, to stimulate composition and to encourage diversity in music training, and supports many performing companies. Distinctive Australian drama is written by playwrights such as David Williamson, Dorothy Hewett, Jack Hibberd, Alex Buzo, Barry Oakley, John Romeril, Stephen Sewell, Steve Spiers and Louis Nowra.

The board and state governments support regional and community theatres and smaller companies which work mainly in schools or community venues. Commercial theatre organisations are important in the country's theatrical life.

The National Institute of Dramatic Art, Australia's major theatre school, has about 120 students in acting, technical production and design. There is a one-year postgraduate directors' course.

The national ballet company, the Australian Ballet, tours state capitals, while regional companies supported by state governments and the Australia council perform mostly in their own capitals and provincial centres. The Council also promotes the development of dance, drama, puppetry, mime and youth theatre.

In recent years, Aboriginal arts have attracted unprecedented attention and consolidated their position in the Australian arts spectrum, stimulated in part by official encouragement. Much of this encouragement has been channelled through the Australia Council, which helps Aboriginal communities to maintain and develop traditional cultural



Australian Ballet's Lisa Pavane as Nikiya and David McAllister as Solor in "La Bayadere"

activities, and generate new artistic expression. The Australian National Gallery has been instrumental in changing perceptions of Aboriginal Art from primarily anthropological to artistic.

The Community Cultural Development Committee of the Australia Council helps foster broader community involvement in the arts, responding to ideas that involve arts activities in a community context. It favours programs initiated in the community that reflect local needs and interests and demonstrate community support and participation in decision-making and activities.

The number of museums in Australia has increased dramatically in recent years, reaching more than a thousand. Many use new display techniques, which are attracting increasing numbers of visitors.

Owned by the Commonwealth and states, regional authorities and private individuals, they acquire and preserve Australia's cultural heritage including, among many more specialised classifications, works of art, documents and scientific and historical material.

The most important of the nationally owned museums are the National Museum of Australia, the Australian National Gallery, the National Library of Australia, the Australian War Memorial, the National Film and Sound Archive and the National Science and Technology Centre, all located in Canberra, and the Australian National Maritime Museum, in Sydney.

Australia has legislation designed to protect its most important cultural heritage material from indiscriminate export. This law also provides for protected objects, obtained illegally in foreign countries and imported to Australia, to be returned.

The people

Australia's population, about 17 million, occupies a 7.7-million- square-kilometre continent, giving the impression of extremely sparse settlement — two people to the square kilometre.

In fact, only 15 per cent of Australians live in rural areas. The vast majority live in the cities and the bulk of the population is in the south-eastern corner, as much of the rest of the continent is too rugged or arid for close settlement.

The population has more than doubled since 1945 and much of the increase has resulted from a migration program so vigorous that today about a quarter of the population is foreign-born. Both net migration and natural increase began falling sharply about 20 years ago.

Culturally, Australia is part of the West; its lifestyle is like those of Western Europe and North America.

Most members of the labour force work for wages or salaries, generally five days a week, and have a month's paid leave and about 10 paid public holidays a year. Most people retire at the age of 60 or 65.

The "average" Australian female lives for 78 years and her male counterpart for 72. Most Australians marry in their late 20s.

Couples have 2.1 children. Most couples own or are buying houses, all but a few have refrigerators and colour television sets and most have telephones and at least one car (about a third have two). Nearly half have freezers; one-fifth have dishwashers.

There is one chance in three that the male in the household will have a trade certificate or tertiary qualification and about one in five in the case of the female. Women comprise about 40 per cent of Australia's total workforce. In the 1980s, the average annual household income reached about $30 000.

European settlement devastated the Aboriginal population of Australia. Not much more than a century after the first Europeans arrived, the Aboriginal population had fallen to about 70 000 — the lowest it reached. This figure is approximate and depends on such factors as the then official definition of an Aboriginal, the reliability of the censuses



Enjoying a picnic on Sydney Harbour foreshores

and official knowledge of the existence of remote tribal groups.

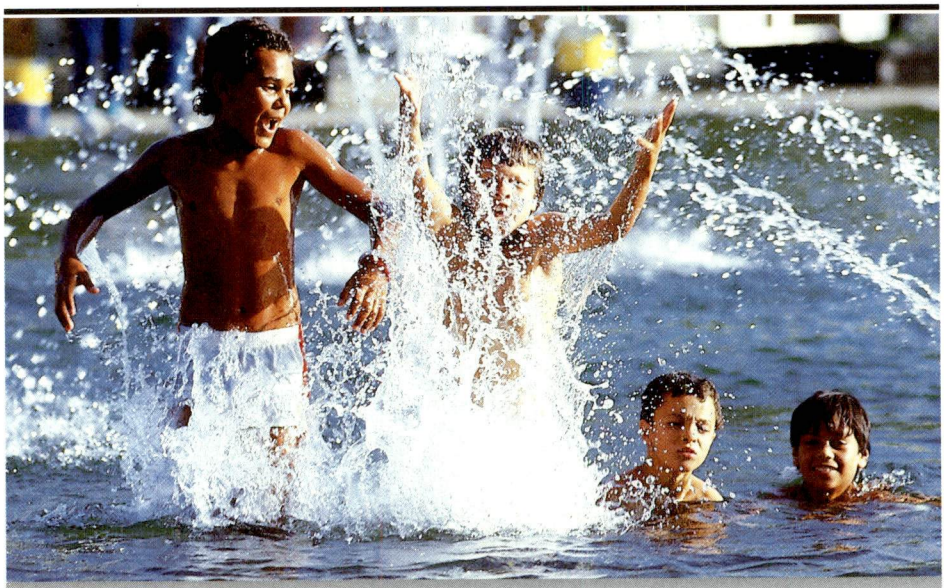
The 1986 census results were that there were nearly 228 000 Aboriginals and Torres Strait Islanders, 68 000 more than five years before.

This apparently startling population growth rate is explained mainly by the fact that, in 1986, more people of Aboriginal descent chose to identify themselves as such, and also by the fact that more effort was devoted in 1986 to obtaining reliable figures in this category. There was also some natural population growth.

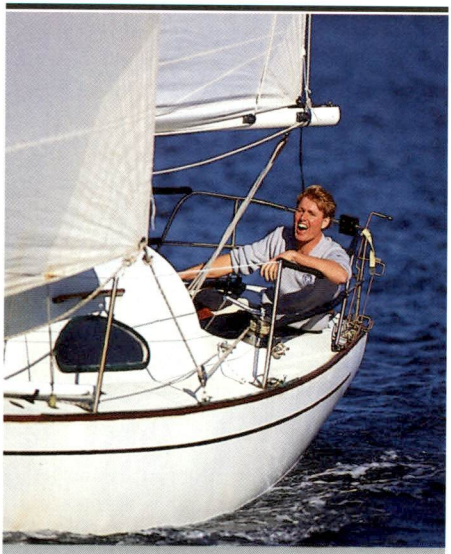
Modern Australia's efforts to encourage Aboriginal self-determination is based on making their participation in decision-making as wide as possible. The Australian Government helped set up the National Aboriginal Conference (NAC) as a forum for Aboriginal views and policy development at local, state and national levels. The NAC advises the Government on long-term goals and programs to achieve them, and reviews existing programs' effectiveness. The Aboriginal Development Commission (ADC) was set up in 1980 to further the economic and social development of Aboriginals.

Four million migrants from most parts of the world have arrived since World War II, when the population was 7.4 million. The largest source has been Britain, and Europe, Asia and Oceania are the main regional sources. The largest intake was 185 000 in 1969–70. Many Asian newcomers are Indo-Chinese refugees.

Migrants are accepted who have close family ties in Australia; capital and business expertise; skills, qualifications or



A cooling swim on a summer day



Sailing is a popular recreational activity

qualities needed in Australia; or refugee status. Others qualify under special humanitarian programs.

A party to the UN Convention and the Protocol Relating to the Status of Refugees, Australia has long been seen as a haven by many of the world's persecuted and dispossessed. It maintains its traditional humanitarian stance on refugees, who are selected individually from all parts of the world. Increasing attention is being paid to Latin America, the Middle East and Africa as well as eastern Europe and Indo-China.

Of 11 000-plus refugees accepted in 1986–87, about half were from Asia, which brought Australia's total refugee intake since World War II to nearly half a million.

Australia's adult-migrant education program includes English classes and a range of courses, services and programs to help migrants adjust to their new country.

A free telephone interpreter service operates 24 hours a day and there is another service to translate documents relating to individuals' settlement. Many federal departments provide interpreting and translation services to inform settlers about government matters and some issue information documents in many languages.

Each year, substantial numbers of students are brought to Australia for long-term formal education and specialised training.

Australian citizenship can be acquired by birth in Australia, by being born of an Australian parent outside Australia, by grant, or by adoption in Australia on or after November 22, 1984. It is not acquired automatically by someone who marries a citizen.

Foreigners who have settled permanently in Australia may be granted citizenship after two years' residence if they have a basic knowledge of English, know enough about the responsibilities and privileges of citizenship and are of good character.

There is no discrimination on the basis of sex, marital status, national origin, race or religion and the law provides for appeals against decisions to deny or remove citizenship.

About three-quarters of Australians profess Christianity. Of these about a third are Catholics and another third Anglican. Many non-Christian faiths are followed including Judaism, Buddhism and Islam. Australia's tradition of religious tolerance is evidenced by a wide distribution and variety of places of worship.

Science and technology

The need to improvise and innovate in pioneering days nurtured an interest in research and invention that has grown into a vibrant scientific and technological community.

Australia's progress in technology and the natural and social sciences has been rapid since World War II and has accelerated sharply in the last two decades. Significant advances have been made in water research, specialised surgery, veterinary medicine and nuclear-waste disposal.

Progress in technology and the natural and social sciences has been rapid since World War II and has accelerated sharply in the last two decades.

Much of the Australian Government's research funds are spent in its own agencies — notably the Commonwealth Scientific and Industrial Research Organisation (CSIRO), the Australian Nuclear Science and Technology Organisation, the Department of Science, the Institute of Marine Science and the Department of Defence — but large sums go also for research in universities, research institutes, industry and the like. Most state-government funding for research and development is spent within state agencies, mainly to advance agriculture and mining.

For many decades the country's reputation for innovation was based on advances in agriculture, mining, science and medicine but, in recent years, it has widened to embrace other fields. More recent developments have been as diverse as an internationally accepted aircraft-landing system, a vastly superior diamond-tipped cutting tool and a way to mass-clone genes for cancer research.

They derive from a research base that is sound by any standard, and a national technology strategy designed to make the country's manufacturing and tertiary industries technologically competitive. Its goal is to strengthen all aspects of Australia's science and technology and its thrust is three-pronged — research and development, education and training, and technological exchange and interaction.

A Commission for the Future works to raise community awareness of the social and economic impacts of technological change, particularly in areas some people, especially the unskilled, see as threatening — robots, computers, artificial intelligence. A corollary of the threat is addressed also: the availability of jobs in a technological society.

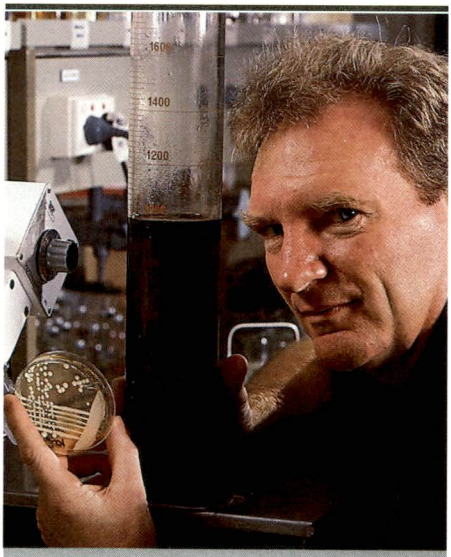
The Federal Government is encouraging the development of a high-technology industry sector based on research in such fields as biotechnology. It gives high priority to promoting business-funded research and development, particularly in the manufacturing, service and information industries. It funds the Australian Industrial Research and Development Incentives Board's grants program and has enhanced the financing capacity of the Australian Industry Development Corporation for export and technology. It funds fellowships to place post-doctoral researchers in industry and has a scheme to place young graduates in industry to help integrate university and industry research.

Its own major research facilities — in the higher education system and the CSIRO — are available to industry, and 150 per cent of expenditure on research and development (not otherwise funded by Government) is tax-deductible. A Federal Government department is responsible for coordinating technology policy.

State governments also encourage high-technology industries.

The CSIRO is Australia's main scientific research body. Its program covers all fields except defence, nuclear energy and clinical medicine and it employs about 7000 people in about 100 laboratories and field stations. Divisions are grouped into institutes that concern themselves with the needs of major industry and community sectors — animal production and processing; industrial technologies; information and communications technologies; minerals, energy and construction; natural resources and the environment; and plant production and processing. CSIRO collaborates with industry in joint research and commercial ventures to introduce new technology in Australia.

The Australian Centre for Remote Sensing receives and processes data from the Landsat series of earth-resources satellites and also from the Japanese marine observation satellite MOS1 and the French earth observation satellite SPOT. It has a data-receiving station at Alice Springs, in the centre of the continent, and a processing centre in Canberra to convert the data into photographs and computer-compatible tapes for analysis by resource managers worldwide.



CSIRO scientist develops pollution-fighting bacteria

The Australian Space Office manages — for the US National Aeronautics and Space Administration (NASA) — the Canberra Deep Space Communication Complex (space tracking station), at Tidbinbilla in the Australian Capital Territory, and its mobile laser tracking facility at Yarragadee, Western Australia.

The NASA space tracking stations in Australia have supported virtually all NASA non-military space missions and those launched by NASA for other countries. They have played a major communications role in the manned landings on the moon, the manned Skylab earth-orbiting space station, the Viking project in search of life on Mars, the Voyager missions to the outer planets, and space-shuttle missions.

The Tidbinbilla station tracks and communicates with spacecraft on planetary and interplanetary missions,

earth-orbiting scientific satellites and space-shuttle missions and the laser tracking facility provides voice links with space-shuttle astronauts as well as tracking laser-reflecting satellites.

The joint geological and geophysical research station at Alice Springs, managed jointly by the Federal Government and the US Air Force, is one of several such stations in the world which monitor the limited test-ban treaty to which the Australian and US governments are signatories.

In the Antarctic and sub-Antarctic, Australia maintains scientific stations at Mawson, Davis, Casey and Macquarie Island, organises annual Antarctic expeditions and conducts research in Antarctic marine science, cosmic-ray and upper-atmosphere physics, glaciology and biology and investigations in medical science. Australian research organisations also conduct programs there in the Southern Ocean. Australia cooperates with nations active in the Antarctic Treaty.

The Bureau of Meteorology operates the World Meteorological Organisation's Melbourne world weather watch centre — the other two are in Moscow and Washington — and a regional centre in Darwin. The centres collect and analyse data and make their information available to all countries requesting it.

The Patent, Trade Marks and Designs Office, with about 22 million patent documents from many countries, has offices in all capitals and acts as an international searching and preliminary examining authority under the Patent Cooperation Treaty.

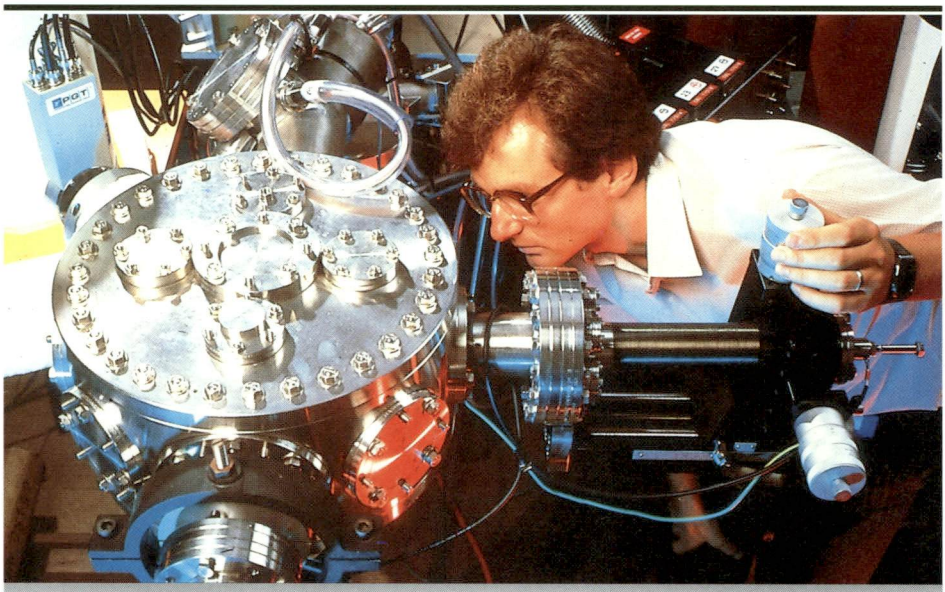
The Australian Nuclear Science and Technology Organisation (ANSTO), a statutory body, helps develop Australia's uranium resources and its use of various forms of nuclear energy. ANSTO's research establishment, the major centre for peaceful nuclear research in Australia, is part of the Lucas Heights Research Laboratories, about 30km south-west of Sydney, NSW. It operates Australia's two nuclear reactors, used only for research.

Major parts of the research program are projects on the impact of uranium mining on the environment, the use of radio-isotopes to study hydrology and sedimentation, the immobilisation of radioactive wastes in SYNROC, waste repositories and radionuclide migration, the medical applications of radio-isotopes and radiation, radiation biology, industrial applications of radio-isotopes and radiation, radiation sterilisation and disinfestation of foods, radiation standards, nuclear safeguards, fusion, and a range of underlying research and scientific services.

ANSTO has a strong commitment to international collaboration, technical assistance, training, and commercial services (mainly sales of radioisotopes). It supports the Australian School of Nuclear Technology and collaborates with most Australian universities through the Australian Institute of Nuclear Science and Engineering.

More than 200 technical and professional associations and societies are involved in the development and organisation of specific sciences. The Australian Academy of Science is the senior national institution covering the physical and biological sciences.

Formal bilateral agreements exist between Australia and the US, India, the Soviet Union, the Federal Republic of Germany, China, Japan and Mexico. A



Electronmicroprobe analyses mineral ore

scientific exchange program exists between the Australian Academy of Science and the Academia Sinica of Beijing.

The 3.9m Anglo-Australian telescope, one of the world's largest, operates at Siding Springs Mountain, NSW, and, with the associated laboratory in Sydney, is used for original investigations in astronomy and astrophysics.

The Australian National University in Canberra operates telescopes at Siding Springs Mountain and at Mount Stromlo, near Canberra. Mount Stromlo has 10 instruments, of which the largest telescope is the 1.9m reflector, used mainly for spectroscopic investigations. Siding Springs has 2.3m and one-metre telescopes, a 40cm reflector and a 60cm reflector designed for studying starlight polarisation.

The Australia Telescope was inaugurated in September, 1988. It consists of a 64m-diameter steerable parabolic reflector near Parkes, NSW, six steerable and moveable 22m antennas at Culgoora, NSW, and a steerable antenna at Siding Springs.

Used to study radio emissions from Milky Way galaxy objects and to observe many galaxies beyond, it is run as a national facility by a team supported by CSIRO through its Division of Radiophysics.

The Parkes dish has operated in its own right for many years. It relayed the images of man's first steps on the moon and, in 1986, supported NASA's Voyager fly-by of Uranus and the European Space Agency's Giotto satellite encounter with Halley's Comet. In August 1989 it helped Voyager again in its fly-by of Neptune.

Transport and communications

Among the most daunting challenges Australia presented to its inhabitants was the creation of efficient transport and communications systems.

Without both, the nation's political and commercial viability would never have matured; but Australia's size, almost empty interior and small population made their creation difficult, slow and expensive.

They were created, however, and rank now with those of other industrialised nations.

On a tonne-kilometre basis, road, rail and coastal shipping share domestic freight almost equally. On tonnage alone, however, road transport carries nearly 80 per cent. Passenger travel, too, is dominated by road.

Australia's transport system includes nearly 840 000km of roads, 240 000km of unduplicated air routes and 40 000km of government railways.

The Federal Government owns a number of major transport and communications businesses: Qantas, the national overseas airline, and Australian Airlines, the domestic one; the Australian National Line (shipping); Australian National Railways; Telecom (internal telecommunications); OTC Limited (overseas telecommunications); AUSSAT Proprietary Limited, which administers the nationally owned space satellite system, AUSSAT; Australia Post and the Federal Airports Corporation.

From the late 1980s, programs have been under way to improve the efficiency and commercial performances of all these enterprises. They include processes of deregulation.

Australia's overseas trade is served mainly by foreign-flag vessels, most of them bulk carriers. Although liner shipping carries only a very small proportion (by weight) of goods, its share by value is more than a third of total exports.

The largest Australian-flag operators are the Australian National Line (ANL) and the Broken Hill Proprietary Company (BHP). The ANL operates 14 vessels (10 in the overseas trade) and BHP 17 vessels, 11 in the overseas trade.



New AUSSAT satellite to be launched in 1991

Australia has about 70 ports of commercial significance. The main ones serve state capitals and industrial and mining centres.

The Federal Government is responsible for operational and regulatory maritime matters for shipping in the international and interstate trades, oil-pollution control and the safe construction, crewing and operation of ships. It also provides marine navigational aids and co-ordinates maritime search-and-rescue services.

Australia's railways are mainly government-owned and-operated. States have their own systems. The Australian National Railways Commission, a statutory authority, operates non-urban services in South Australia and Tasmania.

The railways' main tasks are to haul long-distance freight, bulk minerals (particularly coal in Queensland and NSW), grain and petroleum products, and to carry suburban and inter-urban passengers.

Three gauges are used: 1067mm, 1435mm and 1600mm, but the mainland capital cities are connected by a standard-gauge (1435mm) line, except for Adelaide- Melbourne. Each state has privately owned railways serving mining, agricultural and industrial areas. The largest serve iron-ore mining developments in the north-west of Western Australia. Queensland has an extensive tramway network to supply mills in sugar-producing areas.

Australian roads are funded approximately equally by all three tiers of government. The 16 000km National Highway System, which links all capitals, is a federal responsibility.

Federal road programs have been funded since the early 1980s from the excise levied on petrol and diesel fuel. More recently, additional funds have been allocated to the states and territories for public transport, road safety research and rail systems.

In 1988, there were three road deaths for every 10 000 registered vehicles in Australia. This index has declined by more than two-thirds from the 1960 figure, 9.3. The 1988 total was 2888 deaths. That year was the eighteenth consecutive one in which the total number of deaths had remained below the 1970 peak, despite a population increase of 2.1 million and growth by 4.1 million in the number of vehicles.

Trucks carry about four-fifths of domestic freight. The trucking industry is diverse and very competitive, comprising small and large operators using vehicles ranging from small vans to road freighters and "road trains" — articulated trucks with one or more trailers.

Regulation of trucking operations is primarily a state responsibility. The Federal Government helps to develop co-ordinated transport policies and uniform approaches to the fostering of safety and responsiveness to economic and social needs.

Transport uses about three-quarters of all vehicle fuel. Since 1979, incentives have been offered for the conversion of vehicles to liquefied petroleum gas, and many government and private fleet vehicles have been converted, particularly taxi-cabs.

Federal authorities are responsible for promoting safety and efficiency in civil aviation, traffic control and navigation networks at airports, airworthiness

regulations and negotiating air traffic agreements with other countries.

Thirty-six international airlines, including Qantas, operated regular services to Australia in 1988–89. They were: Aerolineas Argentinas, Air Caledonie International, Air China, Air India, Air Nauru, Air New Zealand, Air Niugini, Air Pacific, Air Vanuatu (operated by Australian Airlines), Alitalia, All Nippon Airlines, British Airways, Canadian Airlines International, Cathay Pacific Airways, Cook Islands International (operated by Polynesian Airlines), Continental Airlines, Flying Tigers (cargo only), Garuda Indonesian Airways, Hawaiian Airlines, Japan Air Lines, JAT Yugoslav Airlines, KLM, Lauda Air, Lufthansa German Airlines, Malaysia Airlines, Merpati Nusantara Airlines, Olympic Airways, Philippine Airlines, Polynesian Airlines, Royal Brunei Airlines, Singapore Airlines, Solomon Island Airlines (operated by Air Pacific), Thai Airways International, United Airlines and UTA French Airlines.

Qantas operates a fleet of 25 Boeing 747s and 11 Boeing 767s (at 30 June 1989) to 23 countries. Qantas services operate to 10 Australian airports — Adelaide, Brisbane, Cairns, Darwin, Hobart, Melbourne, Perth, Port Hedland, Sydney and Townsville.

It carries more than three million passengers a year to and from Australia — more than 40 per cent of the total carried by all airlines serving Australia. Australia has air-service arrangements with 34 countries.

Scheduled domestic airlines carry about 13.5 million passengers a year, representing about 13 250 million passenger-kilometres a year.



Maintaining national airline QANTAS aircraft

There are 430 licensed aerodromes used for civil operations in Australia. Twenty-three, including those in the major capitals, are controlled by the Federal Airports Corporation (FAC). Forty-four are owned and controlled by the Federal Government.

The major internal airlines are Australian Airlines and Ansett Airlines of Australia, the chief operating division of Ansett Transport Industries Limited, a diverse company engaged in tourism, road and air travel, freight, hotels, manufacturing and television. Other Ansett-owned airlines operate regional services throughout the country.

Australian Airlines operates on all main interstate routes and on intrastate routes in Queensland. It owns Australian Regional Airlines Pty Ltd and has a major interest in Eastern Airlines Pty Ltd.

Between them, the major internal airlines have 108 aircraft — three Airbus

A300s, three Airbus A320–200s, a Boeing 727–100, 21 Boeing 727–200s, 30 Boeing 737–300s, five Boeing 767–200s, 15 Fokker F28s, 11 Fokker F27s, 10 Fokker F50s, five DC9s and four BAe 146s.

The approximately 50 commuter operators in the Australian aviation industry use about 220 aircraft with 38 or fewer seats or payloads up to 4200 kg and about 240 airports. They carry about 1.3 million passengers a year.

There are about 900 commercial operators using 8267 aircraft. General aviation includes all non-scheduled operations, such as charter, training, agricultural and other specialised work.

Communications

The main communications systems — posts, telegraphs and telephones — were established by the colonial governments and are now operated by businesses owned by the Federal Government. The first postal service began in NSW in 1809 and the first telegraphic service in 1854. Four years later, Sydney, Melbourne and Adelaide were linked by telegraph. Sydney and Brisbane were linked in 1861. In 1878, two years after Bell invented it, the telephone was introduced in Australia.

Postal, telegraph and telephone services became a national responsibility in 1901 when the colonies federated. Responsibility for them is vested in four corporations owned by the Commonwealth Government.

Australia Post (the Australian Postal Corporation) employs about 35 000 people and handles about 10 million postal articles a day.

Telecom Australia (the Australian Telecommunications Corporation), employs more than 90 000 people and operates more than seven million telephone services, most through automatic exchanges. Direct subscriber dialling accounts for most outgoing overseas calls. There are large networks of telex, data, value-added, facsimile, broadband and mobile-telephone services.

Telecom's network of large-capacity broadband trunk systems uses microwave radio, coaxial cables and optical-fibre transmission systems.

OTC Limited controls telephone, telex, telegram, facsimile, leased circuit, audio broadcast, electronic mail and data transmission, which are by submarine cable, satellite and short-wave radio. Television relay and video-conferencing are by satellite. OTC also controls communications with ships at sea.

OTC is the world's third-largest investor in, and user of, INTELSAT. Through OTC, Australians can use the world's largest direct-dialling telephone network for access to nearly 200 other countries.

AUSSAT Proprietary Limited owns and operates the Australian National Satellite Communications System. It is extending and improving communications around Australia and providing high-quality radio and television services to remote areas and neighbouring regions. Three identical satellites form the first-generation system and will be replaced, in time, by a second generation of two upgraded satellites.

The economy

The complexion of Australia's economy has changed in less than 50 years from one which relied mainly on primary production to a mature, diverse one in which nearly three-quarters of production is in the services (tertiary) sector.

The demands of World War II and a strong postwar immigration program spurred a rapid expansion of secondary industry, diversification and overall economic growth. At the same time, massive investment occurred in export-oriented mining and energy projects.

Although rural industry accounts for only a small fraction of Australian production, its exports compose about a third of total exports. Australia leads the world in wool production and is a major supplier of wheat, meat and sugar.

In the mining sector, too, production is a small part of the total but energy and mineral products account for more than a third of total exports. Australia is one of the world's largest coal exporters and a major supplier of iron ore, gold, bauxite and alumina.

This heavy reliance overall on mining, energy and agricultural exports sets the Australian economy apart from almost all other Western economies.

Australia has shared with other industrialised countries relatively high inflation and unemployment rates since the mid-1970s. An admixture of fiscal and monetary policies with a carefully developed prices-and-incomes policy and continuing structural reforms have had significant success against both problems.

After growing at solid rates in the late 1970s and early 1980s, the Australian economy fell into recession in 1982–83. Since then it has been generally buoyant and has had strong increases in both output and employment.

Australia has a central wage-fixing system. From 1983 to 1986 the wage-fixing principles provided for wages and salaries to be indexed to movements in the Consumer Price Index. Since then they have been linked with improved efficiency and productivity and involve the removal of restrictive work and management practices and other institutional barriers to labour-market flexibility.

The centralised system is part of a Prices and Incomes Accord reached in 1983 by the Federal Government and the Australian Council of Trade Unions, providing for a wages-and-taxes trade-off resulting in improvements in real disposable incomes and, at the same time, moderated increases in labour costs.

The Prices Surveillance Authority was established in March 1984 as part of the prices and incomes policy. Its function is to encourage price restraint to match wage restraint. It concentrates on areas in which effective competition is lacking and in which price or wage movements are pervasive in the economy, an approach which recognises that competition is usually an effective constraint on price.

In late 1989 the Commonwealth Government created the Industries Commission as an independent analytical

body to advise it on, among other things, the need for structural change. The Government's broad objective was to make the best use of the nation's resources and expand its productive potential. Its terms of reference cover many aspects of Australia's important industries.

Over the 1980s, Australia's current-account deficit averaged 4.5 per cent of gross domestic product, about twice the average of the previous two decades.

This was the result of high domestic demand (relative to that of the rest of the world) and a lack of international competitiveness because of high inflation and inflexible labour markets in the early 1980s; depreciation of the Australian dollar between 1984 and 1986, which increased interest and dividend payments abroad; and the collapse in 1985-86 of the terms of trade, which decreased export receipts relative to import payments.

Australia took firm action to remedy these problems and improvements continue to be apparent.

Most exchange controls were abandoned by Australia in 1983 in line with the decision to "float" the $A. The value of the $A, expressed in $US, fell sharply from mid-1984 to a low of 57.95 US cents in July 1986. Despite occasionally quite severe fluctuations, it rose again fairly quickly and has remained broadly stable (generally at or above 75 US cents for several years.

Australia's foreign-investment policy seeks to encourage long-term direct foreign investment consistent with the community's needs. The Foreign Investment Review Board examines proposals for new-business establishment involving investments of $10 million or more, takeovers of Australian businesses with assets of $5 million or more and most real-estate acquisitions. In all but a few sectors the guidelines for approval are quite liberal.

Foreign investment is restricted to varying extents in civil aviation, the media, banking, uranium and developed residential real estate. Australian equity-participation guidelines (50/50) apply to new projects in the non-oil and non-gas mining sector and to acquisitions of developed commercial real estate. The guidelines are administered flexibly.

The Federal Government presents its Budget in August each year to cover from July 1 of that year to June 30 of the next.

Federal Government outlays represent about a quarter of Australia's gross domestic product, while state, territorial and local government outlays represent about a fifth. Because of transfers between these sectors, public-sector outlays as a whole represent about a third of GDP. Excluding transfers to other levels of government, the Commonwealth accounts for about half of total outlays.

About three-quarters of total public-sector revenue is raised by the Federal Government. More than a quarter of total outlays are payments to state, territory and local governments and half of these consist of untied budgetary assistance. The vast bulk of this assistance varies in per-capita terms from state to state, recognising differences in their revenue-raising capacities and their costs of providing services.

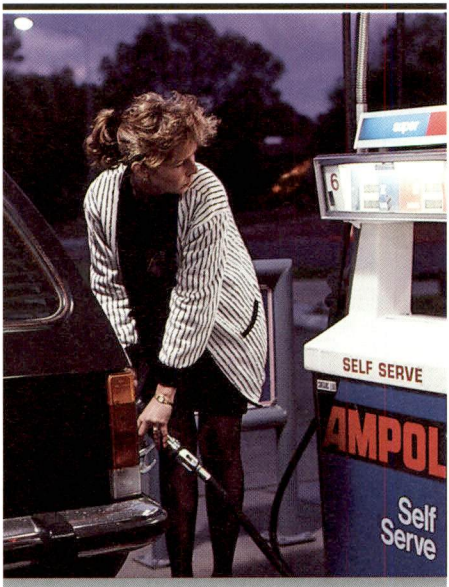
The remainder of federal payments to the states and territories are for specific purposes such as education, health,

housing and transport. The states raise about half their revenue from their own sources, mainly from taxes and other charges.

Local-government outlays are equivalent to about two per cent of GDP. About three-quarters of local-government revenue comes from the sector's own sources (mostly property rates and taxes). The rest is transferred from the federal and state governments.

The federal and state governments are members of the Australian Loan Council, which co-ordinates all government and semi-government borrowings. All forms of such borrowings have "global" limits, reached by negotiation within the Loan Council.

Taxes are levied at all levels of government. The division of taxing powers stems from the Constitution and arrangements made in response to economic and social factors.



Fuel tax is a revenue source

Only the Federal Government can impose customs and excise duties, including most forms of general sales taxes. All other types of taxation are available also to the states but in practice there is little duplication. For nearly half a century only the Federal Government has levied income taxes on companies and individuals. The states' revenue comes from such levies as payroll tax, taxes on property and financial transactions, motor-vehicle and franchise taxes and financial assistance from the Federal Government.

Australia has comprehensive agreements for the avoidance of double taxation with Britain, the US, Canada, New Zealand, Papua New Guinea, Singapore, Japan, the Federal Republic of Germany, the Netherlands, France, Belgium, the Philippines, Switzerland, Malaysia, Sweden, Denmark, Ireland, Norway, the Republic of Korea, Malta, Italy, Finland and Austria. Agreements with other countries are negotiated continually and come into force from time to time. Limited agreements dealing with airline profits have been concluded with France, Italy, Greece and India.

The banking system comprises the Reserve Bank of Australia (the central bank) and 35 banks or banking groups operating under its supervision. Some banking services to corporate and commercial customers are also provided by about 120 money-market corporations (which are also known as merchant banks and include a large number of subsidiaries of foreign-owned banks), and by other non-bank financial institutions including finance companies,

pastoral companies and general financiers. Household customers can have transaction and savings accounts not only with banks but with building societies and credit unions, and flexible investment vehicles for household savings are available also through insurance companies and cash management trusts.

The Reserve Bank's functions and powers are similar to those of other central banks. It regulates the monetary and payments system, manages the note issue, performs banking and other services for the government, and acts as banker to the banks.

The Australian financial environment has undergone considerable change in the 1980s as the Government progressively removed regulatory controls over financial intermediaries. These steps included the floating of the exchange rate of the Australian dollar in December 1983; the abolition of exchange controls; the removal of controls on interest rates on bank deposits and lending; the authorisation of 16 new foreign-owned banks, including subsidiaries of many of the world's leading banks; and the removal of restrictions on foreign participation in non-bank financial intermediaries. As a result of deregulation and changes in technology and customers' attitudes, the activities of banks and other categories of financial institutions overlap extensively.

Deregulation has allowed the domestically owned banks to compete more effectively with more specialised non-bank financial institutions, and to extend their operations internationally in competition with foreign banks. The range and volume of financial services available to both business and household customers has increased considerably.

Financial deregulation and technological developments have prompted a number of changes in the stockbroking industry.

In April 1987 the six major capital-city stock exchanges merged into a single national stock exchange, the Australian Stock Exchange Limited (ASX). Each became a subsidiary.

The ASX has responsibility for listings on its main board while the subsidiaries have retained responsibility for listings on their secondary boards.

The ASX has created a National Guarantee Fund out of the subsidiaries' fidelity funds. The fund provides for increased investor protection by guaranteeing transactions on the exchange and by compensating investors for losses resulting from defalcation or insolvency of stock-exchange members.

These developments have produced a more efficient framework for trading securities and raising capital in Australia. They have also facilitated the introduction of technological innovations in securities trading and settlement of transactions.

Insurance

Life-insurance companies, through premiums paid on policies and by interest earned on accumulated funds, account for substantial savings each year.

Tourism

A series of geological and historical accidents has made Australia one of the world's most attractive countries from the tourist's viewpoint. The vast movements of the earth's crust made it large, isolated it and positioned it across the tropical and temperate climatic zones. Among the results are a small population, which has left enormous areas unspoiled; an astonishing variety of environments, from desert to rainforest, from tropical beach to snowfield, from big, sophisticated cities to vast uninhabited areas; a wide array of unique and intriguing animals and flora; a comfortable and sunny climate; and an interesting, cosmopolitan and friendly people.

Many of its world-renowned attractions are specific, if large, like the Great Barrier Reef, Ayers Rock, and Kakadu National Park; others are general, like its thousands of kilometres of superb beaches and large skiing resorts.

Tourism is the largest industry in Australia, representing about six per cent of the gross domestic product and providing, directly or indirectly, more than 400 000 jobs.

More than two million tourists visit Australia each year, spending about $3500 million.

Australian promotes itself as a tourist destination through offices in Auckland, Chicago, Frankfurt, Hong Kong, London, Los Angeles, New York, Osaka, Singapore, Tokyo and Toronto.

Nearly 840 000km of roads make most of the continent accessible by surface vehicle. Domestic airlines link the cities, towns and resort areas. Major centres are connected by 40 000km of railways.

The two major domestic airlines have "See Australia" fares that offer substantial savings to visitors travelling on return international promotional fare tickets.

Trains are modern and air-conditioned and have sleeping compartments, dining and lounge cars. The rail system includes some of the best long-distance passenger trains in the world.

Coach companies offer tours ranging from the camping variety to those involving full (in many cases, luxurious) accommodation and from part of a day in one locality to weeks, covering much of the continent. Express coaches commute between capital cities and major towns, many as feeder services to the air and rail networks. Passes are available enabling low-cost travel on national networks. Car-rental companies deliver to airports, hotels and motels.

Notes for visitors

There are official tourist offices in all capitals and some regional centres, providing a full range of usual services for visitors. Many smaller towns have their own such offices.

Entry requirements for tourists are as simple as possible, but all visitors except New Zealand citiziens must have visas and all must have current passports, valid for three months longer than the intended stay. Applications for visas can be made at Australian Government offices overseas. A return or onward-



Snorkelling under the Great Barrier Reef

passage ticket or evidence of enough funds for the period of intended stay may be required. On arrival in Australia, visitors are asked to produce completed incoming passenger cards (which are usually distributed aboard aircraft and ships), passports and visas. Visitors may not take jobs or enter formal studies and are expected to leave at the end of their authorised stays.

A wide range of hotel, motel and apartment accommodation is available in most cities and major resorts and many rural areas. There are also camping parks, many with on-site caravans or cabins. Hotel and motel rooms normally have telephone, private bathroom, television, refrigerator and tea- and coffee-making facilities. Check-out time is usually 10am-11am. The main difference between hotels and motels in Australia is that hotels must provide a public bar. "Private" hotels and guest houses do not have permits to serve liquor. Many country properties offer holidays which include participation in farm activities. Tourist offices provide details and can arrange bookings.

Visitors tend to underestimate distances and travelling times in Australia. Australia is 25 times the size of Britain and Ireland combined and examples of its longer distances are: Perth to Sydney (3315km — 3 hr 55 min by air); Brisbane to Darwin 2887km (3 hr 45 min) and Melbourne to Perth 2871km (3 hr 40 min).



Darling Harbour, Sydney, is a popular venue for residents and visitors alike

A yellow-fever vaccination certificate is required from travellers one year of age and over coming from infected areas.

Visitors can bring their personal effects into Australia without paying duty, including, for those 18 years old and older, 250 cigarettes or 250g of cigars or tobacco and one litre of alcoholic liquor, provided it is carried with them. Dutiable goods to the value of $400 ($200 for visitors aged under 18), included in personal baggage, are also duty free.

Quarantine: Australia is free from many insect pests and diseases, so the importation of fruit, vegetables, seeds, animals and plants or animal or plant products is controlled strictly. The interiors of all aircraft arriving in Australia from overseas are sprayed to control flying insects which could introduce diseases.

Post offices are generally open from 9am to 5pm Monday to Friday. Stamps are often available at front desks of hotels and motels.

Australia has a modern automatic telephone system.

Shops are generally open from 9am to 5.30pm weekdays and from 9am to noon Saturdays. Most shops are closed on Sunday. Some cities have night shopping on specific days of the week and on Saturday afternoons and, in major tourist centres and resorts, it is common for shops to be open at night, on holidays and at weekends.



Getting away to a remote river

There is variety of restaurants to suit all tastes and pockets, from top-class restaurants with international cuisine to small coffee shops serving snacks. All cities have a range of restaurants of virtually every ethnic origin. Virtually all restaurants have liquor licences — "full" (permitting the storage and sale of liquor) or "BYO" ("bring your own"). Some provide for both.

Standards of hygiene are high in the preparation of food for sale to the public and tap water is safe to drink in any Australian town. Fresh food is plentiful at shops and markets. Sea foods and all meats, fresh fruit, salad and vegetables are of high quality and quite safe to eat. Australian wines and beer compete with considerable success in international markets.

Australia uses the metric system of weights and measures. Speed and distance are in kilometres, goods in kilograms and litres, temperature in Celsius (the same scale as Centigrade).

Australian currency is decimal: 100 cents = $1. No other currency is legal tender. Exchange facilities are available at international airports, banks and major hotels. Current exchange rates are available from banks. Travellers' cheques (ideally in Australian dollars) are accepted at banks and major hotels. Their acceptance elsewhere depends on the policy of the individual trader.

Bank trading hours vary, but banking facilities are usually available from 9.30am to 4pm Monday to Thursday and 9.30am to 5pm on Friday. The commonly accepted international credit cards include American Express, Diners Club, Carte Blanche, Visa and MasterCard.

No service charges are added to accounts by hotels or restaurants. Tipping is neither encouraged nor routine, although visitors may reward special service if they wish, in which case 10 per cent of the bill is adequate. At any time, tipping is optional. Taxicabs and porters have set charges and do not expect to be tipped.

The electrical current in Australia is 240/250 volts AC, 50 cycles. The Australian three-pin plug is unlike those of many other countries' (and is extremely safe) and adaptors are usually required for shavers or hairdryers. However, universal outlets for 240V or 110V shavers are usually available in leading hotels.

Visitors may bring up to four weeks' supply of prescribed medications. For larger quantities, a doctor's certificate is needed. It is wise to carry a doctor's prescription which, on endorsement by an Australian doctor, will permit a pharmacist to provide further supplies in Australia.

Visitors who are covered by Australia's national health-insurance scheme, Medicare, are those who are residents of one of the five countries with which Australia has reciprocal health-care arrangements — the United Kingdom, New Zealand, Italy, Malta and Sweden.

Before leaving Australia, every person over 12 years of age must pay a $10 departure tax (exemptions apply to 48-hour transit passengers and some multi-departure passengers). Departure-tax stamps are bought at airports with Australian currency or by American Express, Diners Club, Visa, Mastercard or Bankcard.

Social services

Australia has a well-earned pioneering reputation in social services.

Its action in 1909 — only eight years after federation — in funding pensions for the aged, was radical at the time, as were similar pensions for invalids, introduced the following year and, only two years later, maternity allowances (an early attempt to encourage population growth).

The main components of today's social-security programs are pensions for the aged, invalids and sole parents; unemployment, sickness and special benefits; additional amounts for children; sheltered employment and rehabilitation allowances; and allowances for families with children. Such social-security and welfare programs account for about a quarter of GNP. They are non-contributory and usually paid direct to the recipient. The emphasis is on income support, based on need. Eligibility for most pensions depends on an income or means test.

Voluntary organisations are important adjuncts to welfare schemes. Traditionally, charitable organisations have supplemented social services, often as pioneers.

The Federal Government helps people whose source of income has ceased, because of invalidity or retirement, for example, or has been interrupted by unemployment, sickness and the like. Most payments are made under the Social Security Act from consolidated revenue. Administrative and capital costs are paid from separate annual appropriations.

Age pensions are paid to people of limited means; men must be at least 65 and women 60. Invalid pensions are payable to people aged 16 and over who are permanently incapacitated to a specified degree. The spouse of either class of pensioner may be eligible for a pension if he or she is not otherwise entitled to one.

A sole parent's pension is available to single people caring for children under 16 years of age or children entitled to the child-disability allowance. A pension is also available to certain older women who are widowed or divorced. Income and assets tests apply to those seeking age, invalid and sole parents' pensions.

People who qualify for pensioner concessions are entitled to free



Care and facilities for the disabled

pharmaceuticals and some optometrical services. Concessions on government transport fares and telephone rental are available. Other concessions vary from state to state.

A family allowance is paid to eligible parents or guardians with one or more children who are under 16, or are full-time students aged between 16 and 25 and not receiving an education allowance. Families with very low incomes may receive a supplement.

Pensions for war/defence widows comprise a basic pension and domestic allowance. Payments to each dependant are paid without a means or assets test.

Free hospital, medical, dental, optical and legal services are also available to such widows and their dependent children.

A child-disability allowance is payable to parents or guardians of a child whose physical or mental disability requires constant care and attention in the family home.

Benefits are available to people who, through unemployment, sickness or injury, are temporarily unable to work.

A discretionary payment (called a special benefit) may be made to people who are not eligible for other forms of assistance and are not able to support themselves.

Disabled people employed in sheltered workshops may be paid an allowance equal to the invalid pension.

A mobility allowance may be paid to disabled people who are employed or engaged in training and are unable to use public transport because of their disabilities.

Social workers and welfare officers are located in nearly 200 regional offices. Aboriginal liaison officers and welfare officers are employed to work with Aboriginal communities and organisations. Migrant services units across Australia monitor and review services to migrants and refugees and liaise with ethnic and voluntary groups.

Grants are made also to non-profit community-welfare agencies so they can give emergency relief by cash or food vouchers. Non-profit organisations and local-government bodies may receive grants for providing accommodation.

The federal and state governments fund jointly a wide range of welfare services based on home care for aged and disabled people and families.

About 1500 nursing homes and 1000 hostels receive federal financial support, to provide residential care for frail aged people. About a fifth of these are state-operated nursing homes.

The Federal Government's Disability Services Program funds organisations to provide services that will help people with disabilities maintain their independence and achieve their full potential. Services include competitive employment training and placement, supported employment, respite care, accommodation support, recreation, advocacy and information.

The Commonwealth Rehabilitation Service employs teams of medical specialists, therapists, trade instructors, teachers, social workers and vocational counsellors to work with disabled people, without charge, to help them return to economic and social independence.

Sport

Almost all Australians, regardless of social position, income or age, have a sporting interest of some kind, and the variety of such interests available to them is extremely wide. It can be anything from a full-time occupation for an Olympics-bound athlete, through a weekly social cricket match, to watching horse races on television.

Australia has more than 130 national sporting organisations and thousands of state, regional and club bodies. More than half the population, according to an authoritative estimate, is registered to participate in sports. Many more indulge in non-competitive activities like fishing, bushwalking, boating, horse riding and fitness programs.

Children lean mainly toward cricket, swimming, Australian Rules football, baseball, rugby, netball, softball, soccer, hockey, basketball and tennis. Australia's Little Athletics organisation has 70 000 members aged between five and 12 years.

About a million girls and women compete regularly in various sports and there has been a sharp increase in recent years in organised events for older competitors.

Watching also qualifies as a form of sport. It is common for more than 100 000 people to attend the grand final of the Australian Rules club competition in Melbourne and large numbers in all cities, all year round, watch major sporting events.

Although Australia did very well for decades in international competition without the sophisticated training techniques available in countries in which athletic endeavour was heavily supported financially, its approach to competitive sport has changed in recent years.

On one hand, governments have taken a much larger hand in the development of sporting expertise and encouraging the talented and, on the other, there has been a spectacular increase in commercial sponsorship.

This has stemmed largely from increased television coverage of sport and has prompted sponsors to increase prize money. In total, businesses are investing many millions of dollars a year in direct subsidies and as much again in promotion, marketing and other support.



Australian Rules football draws big crowds



Athletes compete in international trials

Cricket, football, tennis and racing have benefited most. Prizemoney for the Melbourne Cup, Australia's richest horse race, reached $1 million in 1985. Ten years earlier, it had been $156 700. Commercial sponsorship for many sports, and at most levels, has also increased sharply.

The Federal Government has a ministerial portfolio specifically concerned with sport and, through it, allocates large sums to its development.

In 1980 it established the Australian Institute of Sport and, four years later, the Australian Sports Commission. The institute, its headquarters in Canberra, has a large staff including highly qualified specialised coaches. It has more than 300 students in many disciplines, including basketball, diving, gymnastics, hockey, netball, rowing, soccer, squash, swimming, tennis, track and field, water polo and weightlifting. It has specialised outrider units in several states.

The institute's headquarters are integrated with Canberra's National Sports Centre, which has world-class facilities including a 25 000-capacity stadium, a 5000-seat indoor arena and major facilities for many Olympic sports, both indoor and outdoor. The 1985 Athletics World Cup was held there.

The Australian Sports Commission (ASC) is an independent body funded by the Federal Government. It coordinates sports development policies and programs in Australia and its main objectives are to sustain and improve Australia's level of achievement in international sporting competition and to

increase the level of participation in sport by all Australians. The commission is responsible for administering the Sports Development Program, one of the most important continuing government support schemes for sport.

The National Sports Facilities Program encourages construction of modern sports facilities throughout Australia. It is funded on a dollar-for-dollar basis by the federal, state and territory governments.

Other programs funded by the ASC include:

- The National Coaching Accreditation Scheme (NCAS), aimed at increasing the proficiency of coaches by introducing uniform standards of instruction for each sport.
- Aussie Sports, designed to offer children in their last three years of primary school the opportunity to build a wide base of basic sports skills by experience. Involving children in more than 30 modified sports, such as Kanga Cricket and Minkey (hockey), it had reached more than 500 000 children by the end of the 1980s.
- The Disabled Sport Program (DSP), which funds national sporting organisations for the disabled in a way comparable to that in which organisations for able-bodied people are funded through the Sports Development Program. DSP also provides funds to promote integration of sporting activities for able-bodied and disabled people. Its objectives are:
  - — to encourage people with disabilities to participate in sport and to provide them with opportunities to do so at their desired level and to achieve their personal goals regardless of sex, race, age or level of disability; and
  - — to encourage the integration of sporting activities of people having disabilities with those of the able-bodied.
  - — The Women's Sport Promotion Unit (WSPU), established by the ASC to promote women in sport and promote sport to women.
  - — The Anti-Drugs Campaign, which discourages the use of drugs in sport to create a fair, competitive sporting environment in Australia.

The campaign maintains close liaison with international organisations to ensure a unified approach. It involves a program of independent testing of athletes during training and at competitions.

The National Sports Information Centre collects and disseminates Australian and overseas sporting information of value to athletes and coaches, sports science and sports medicine specialists, sport administrators and the general public.

State governments provide strong financial support for sport at state and club levels in two main categories — facility development and sports development. These funds are used to hold state titles, in coaching and administrative training schemes, to supply equipment, in school and junior coaching clinics, and in specialised coaching for individual athletes. State funds also help send teams to Australian championships.

Although the Australian Government generally welcomes and encourages sporting contact with other nations, it has signed the Gleneagles declaration and will not allow tours by teams and individual amateurs from South Africa.

Visits by Australians to South Africa for sport are discouraged.

Australia allows visits by Taiwanese sporting teams, groups, individual and sports officials on the basis that they are representatives of Taiwan Province.

Local, state and national sporting associations undertake responsibility for the development of sport at each level. This includes conducting competitions, developing coaching, and selecting and training representative teams.

National organisations established to administer specific aspects of sports development comprise representatives of state organisations and include the Australian Olympic Federation, the Australian Commonwealth Games Association, the Australian Sports Medicine Federation and the Australian Council for Health.

Physical Education and Recreation.

Most national sporting organisations are affiliated with the Confederation of Australian Sport, a national forum, while the Sport and Recreation Ministers' Council (SRMC) is the main mechanism for liaison between governments on these matters. Its membership is apparent from its name.

Australia has long participated in international sport and has built a fine record, particularly when the size of its population and its geographic remoteness from other centres of competition are considered. It is one of only three nations (Britain and Greece are the others) to have competed at every modern Olympics and has competed in all 12 Commonwealth Games. It hosted the 1956 Olympics and the 1938, 1962 and 1982 Commonwealth Games. Australians have won 67 Olympic gold medals, mostly in swimming, and 304 in Commonwealth Games.

The country's enormous coastline and numerous waterways are used by swimmers, surfers, 150 000 competitive yachtsmen and large numbers of power-boat enthusiasts, and surfboard and sailboard riders. Most Australians learn to swim before they are 10 years old. A survey indicated a few years ago that fishing — including underwater fishing — was Australia's most popular outdoor activity. Australia has more than 1000 public swimming pools and probably more than a million private ones.

If swimming has done most to bring Australia international sporting acclaim, tennis is its nearest rival. Squash, cricket, golf, rugby, hockey, netball and track and field follow. Between 1950 and 1969, Australia won the Davis Cup 15 times, and again in 1973, 1977 and 1983. Between 1952 and 1971, Australian men won the Wimbledon singles title 14 times and Australian women won the women's singles five times between 1963 and 1980.

Horse racing was one of the first sports properly organised in Australia. The first official race was run near Sydney in 1810, only 22 years after the first colony was established, and the Sydney Turf Club was formed 15 years later. Today, racing is extremely popular and a major industry. The Melbourne Cup, a handicap race over 3200m, is the country's richest race and best-known sporting event, having been run every year since 1861 — which makes it the oldest event on Australia's calendar. The day on which it is run, the first Tuesday in November, is a public holiday in



Thoroughbred horseracing is a popular sport

Melbourne, and work ceases throughout Australia when the horses jump at 2.40 pm.

Gambling on horse racing is heavy and is done through on-course bookmakers and off and on course through the Totalisator Agency Board. The board's turnover exceeds $4000 million.

Cricket is Australia's most played and watched summer team sport. It has an estimated 500 000 registered players. Test matches and one-day internationals played between teams of Commonwealth nations sometimes attract crowds of 80 000. The game in Australia underwent a revolutionary change in 1977 when a commercial organisation, World Series Cricket, entered full-scale promotion of international matches (in opposition to the Australian Cricket Board). It signed most top Australian cricketers as well as leading players from Pakistan, England and the West Indies. Some of its innovations were immediately successful and have been retained, including games under lights, coloured clothing and white balls. After two seasons, the promoter withdrew and the board once again controls all first-class cricket.

Australians play and watch four codes of football — Soccer, Rugby Union, Rugby League and Australian Rules, a game devised and played only in Australia (although it is similar in some respects to Irish Football). It is the most popular code in Victoria, Western Australia, South Australia, Tasmania, southern NSW, the Australian Capital

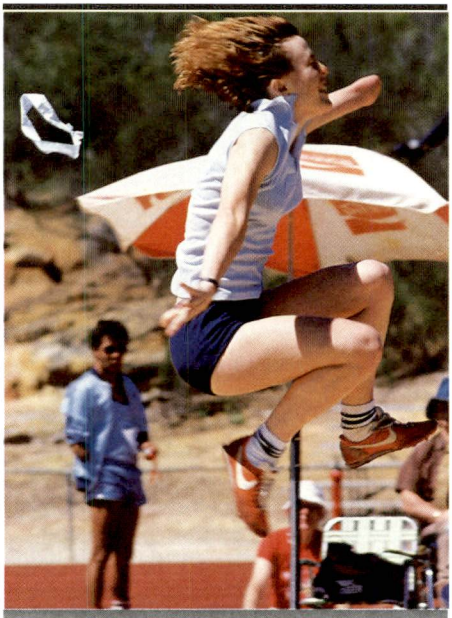
Territory and the Northern Territory. Perhaps 500 000 people play the fast-moving game and it attracts far more spectators than any other event. Soccer (460 000 registered players) gained in strength and popularity with the post-war influx of European migrants and since 1977 has had a national league. Rugby Union (100 000 players) and Rugby League (154 000) have their strongest following in NSW and Queensland. Australia is generally considered the world's leading Rugby League nation and it is ranked highly in Rugby Union.

Most of Australia's population lives within 100km of the coast and there has always been a keen interest in sailing. Australian designers have created several internationally recognised classes of craft, including the Australia-type catamaran and the Australian 18-footer, one of the fastest and most exciting open racing yachts in the world.

The nation's international yachting reputation leapt when, 1983, Australia II became the first foreign yacht in 132 years to win the America's Cup. Australia first accepted the America's Cup challenge in 1962 and has engaged the United States in most of the finals since then.

The most famous yachting event on the Australian calendar is the Sydney-to-Hobart race, which has been run annually since 1945. It is a handicap race over 630 nautical miles and attracts entries from many parts of the world. Australia's yachtsmen compete regularly in the Admiral's Cup at Cowes, Britain, and have won twice — in 1967 and 1979.

The diversification of Australian society in the past 50 years has stimulated interest in a wide range of other sports,



Disabled athletes compete

including basketball, baseball and volleyball, bocce (so soundly transplanted from Italy that Australia hosted the world titles in 1981), orienteering, ice hockey and, in the high country in the south-east corner, alpine and cross-country skiing attract about 300 000 regulars.

Australian disabled athletes are making their presence felt internationally sportscene, and performed exceptionally well at the 1984 International Games for the Disabled, held in the USA and Britain, winning 46 gold medals, 54 silver and 47 bronze and setting 30 world records. The Federal Government provided substantial funding to assist the Australian team prepare for and compete in these games.

The media

Most Australians have daily contact with the mass communications media — newspapers, magazines, radio and television.

Research shows Australians read more newspapers per head of population than any other nationality, and as a result, newspapers in the nation's capital cities enjoy large circulation figures.

There are two national daily newspapers — *The Australian*, printed simultaneously in Sydney, Melbourne, Brisbane and Perth, and *The Australian Financial Review*.

Each state capital has at least one morning and one afternoon daily newspaper (Sydney has three morning and one afternoon). While carrying national and international news, there is a strong local identity in their news coverage. There are also many suburban weeklies in the capital cities. Larger regional cities have daily newspapers while smaller population centres are served by weekly newspapers. All told about 600 newspapers are published in Australia, more than half of them outside the capitals.

Australia's oldest newspapers are: *The Sydney Morning Herald*, 1831; *The Herald* (Melbourne) and *The Geelong Advertiser* (Victoria), 1840; *The Examiner*, (Launceston, Tasmania), 1842; and *The Mercury* (Maitland, New South Wales), 1843.

There is a flourishing periodical press with large circulation: general and women's-interest magazines, business and specialty magazines covering almost every interest. An active foreign-language press caters to settlers of many different origins. There are 150 publications in about 40 languages.

Most major newspapers are owned by a small group of proprietors for whom print-media interests are only part of larger and diverse business empires. Changes to legislation governing media ownership introduced cross-media legislation which prevents owners of radio and television stations from owning another media outlet in the same market.

Radio and television

Radio and television broadcasting services are provided by national, commercial, multicultural and public organisations.

National (non-commercial) services are provided by the Australian Broadcasting Corporation (ABC), a nationwide radio and television service. The ABC has an overseas service, Radio Australia. The Special Broadcasting Service (SBS) provides non-commercial, multilingual radio and multicultural television services and financial and program support to public broadcasters presenting multilingual programs. The ABC and SBS are solely responsible for their program material.

Most of the ABC's capital and running costs are funded by the Federal Government, which makes an annual budget contribution of about $500 million. The ABC supplements its budget through the sale of its programs domestically and abroad; book, cassette and record sales; and publication of three monthly magazines.

There are ABC symphony orchestras in all six states and a national training orchestra, the Sinfonia, making the ABC the world's largest entrepreneur in the orchestral field. It runs concerts featuring local and overseas artists.

The ABC's radio and television programs range through music, news, light entertainment, drama, documentaries, rural, religion, children's and education programs. It maintains a nationwide independent news service producing and broadcasting 100 000 radio bulletins and 5900 TV bulletins a year. It has its own journalists in all capital cities and major regional cities and in 15 cities in 12 other countries.

Radio Australia is the international shortwave service of the ABC. It broadcasts in English 24 hours a day and for varying periods in Indonesian, Mandarin, Cantonese, French, Japanese, Neo-Melanesian (Pidgin), Thai and Vietnamese.

Commercial radio and television stations operate under licences from the Australian Broadcasting Tribunal. The tribunal has powers to hold public inquiries into the granting, renewal and transfer of commercial and public broadcasting licences as well as into such matters as setting standards of broadcasting practice. The tribunal is assisted by the Children's Program Committee made up of people with expertise, background or interests that enable them to advise the tribunal on programs suitable for "C" classification and inform the industry and public about developments in children's television. The Australian Broadcasting Tribunal has quasi-judicial powers.

There are more than 170 commercial radio stations, most broadcasting on the AM band and a growing proportion — now about a quarter — on the FM band.

Australia's public broadcasting stations are non-commercial, catering for education, community or special interests. More than 70 such stations are on the air, nearly all on the AM band. They obtain their funds from a variety of sources, including government grants, public subscription and sponsorship announcements.

Commercial television began in Australia with Sydney commercial station TCN9's regular transmissions in 1956. Now there are more than 250 stations and hundreds of relay stations.

Formal regulation is confined to:

- licensing radio and television stations;
- limiting the degree of ownership or control individuals or corporations may aggregate;
- setting standards governing the proportion of advertising;
- classifying films and television programs;
- setting the proportion of local content, including advertising, to guarantee a reflection of the Australian way of life and promote employment opportunities for Australian writers, artists, producers and others dependent on the broadcasting industry.

Although major newspapers, radio and television networks maintain overseas news bureaus in many parts of the world, the leading source of overseas news for the Australian media is Australian Associated Press (AAP) which has been a part owner of the international newsagency Reuters since 1946. AAP's Sydney headquarters has satellite,



Producing a television commercial

microwave and cable links with the world's major news centres. Its national communications network includes telegraphic data, microwave and news picture circuits. It receives the news services of Reuters, Associated Press, Agence France-Presse, Press Association of Britain, *New York Times* and *Chicago Daily News*. It has domestic news-gathering bureaus in all state capitals, Canberra and Darwin, and bureaus in London, Wellington, Port Moresby and Jakarta.

There is no media censorship other than a system of "D-notices" which media proprietors have agreed to observe on matters affecting national security. The main restraints on publication are the laws of libel and other laws and regulations protecting the authority of the courts and the rights of those appearing and/or named in the courts.

The Australian Press Council sets out ways of dealing with breaches of ethical standards of the press in its booklet *Aims, Principles, Constitution and Complaints Procedure*. The council has an independent chairman, 11 industry members, one editorial member not allied to any publishing group, two journalist members and eight public members.

The council has no legal powers and is financed by contributions from its constituent bodies. The council also reviews developments likely to restrict the supply of information of public interest and importance; reports publicly on developments in press ownership and control; publishes statistics and makes representations to governments, public inquiries and organisations in Australia and overseas on freedom of the press.

Australia's journalists, artists and photographers in print media, radio and television are members of the Australian Journalists' Association (AJA). Many members also work in government departments and in public relations firms. The AJA represents them industrially and oversees compliance with its code of ethics, breaches of which may lead to stringent penalties.

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