

WACKETT, Sir Lawrence James (1896–1982), aircraft designer, served with distinction in the Australian Flying Corps during World War I. He later established a Royal Australian Air Force experimental station at Randwick, NSW, where he built aircraft known as Wackett Widgeons. He joined the Commonwealth Aircraft Corporation before the outbreak of World War II and supervised the construction of the Wirraway aeroplanes used at first against the Japanese. He was then in charge of producing the Wackett trainer or Boomerang, the Mustang, and later the Avon Sabre jet.

WAKEFIELD SYSTEM This was a body of theory for systematic colonisation which rested upon principles laid down by Edward Gibbon Wakefield (1796–1862). Wakefield believed, first, that crown lands should be sold for a 'sufficient price' to compel labourers to work for landowners until they accumulated enough money to purchase their own land—thereby overcoming the initial problem of scarcity of hired labour and inducing capitalists to migrate and become landowners. Pastoral leases were to be short but renewable until the land was required for agricultural purposes.

Second, the revenue from the sale of crown lands should be used to finance the migration of suitable workers and their families. Men and women should be selected in equal numbers. Third, the educated should be encouraged to emigrate, so that an extension of British civilisation could be successfully established. Fourth, no convicts should be included in colonisation plans. Fifth, self-government should be granted as soon as possible, and sixth, colonies should be self-sufficient, rather than encumbrances upon Britain.

Wakefield first expressed the theory in A letter from Sydney (1829), although he had never set foot in Sydney. The principles were spelt out in an appendix 'An outline of a system of colonization'. Wakefield expanded upon his theory in England and America (1833) and A view of the art of colonization (1849). In 1831, the British government instituted a modified

form of the 'sufficient price' scheme, auctioning crown land in NSW at a minimum price, and applying part of the revenue to finance migration. Between 1832 and 1842, 50000 free settlers arrived in NSW from Britain.

In 1836, Wakefield's principles of land sales and assisted migration were applied in the foundation of SA but with only partial success. Land mismanagement in the colony's early days obliged the British government to lend assistance. In 1838 Wakefield became a director of the Western Australian Company and was involved in the establishment of the settlement Australind. It did not show the Wakefield system to be a success, however, and was abandoned by 1845. Wakefield proposed trying his theory in New Zealand but no further experiments were made, though Wakefield argued that his theory had never been adequately tested.

Further reading P. Bloomfield, Edward Gibbon Wakefield: builder of the British Commonwealth, London 1961; J. Philipp, A great view of things: Edward Gibbon Wakefield, Melbourne 1971.

WALKER, Kathleen Jean (1920–), poet, was born in Brisbane. She was educated at Dunwich Primary School and served in the Australian Women's Army Service from 1941–44. An activist, educationist, and the first Aboriginal writer to achieve publication in English, she has done much to turn attention to Aboriginal culture, achievements and problems.

She was Qld state secretary of the Federal Council for the Advancement of Aborigines and Torres Strait Islanders (1961–70), a member of the Executive of the Queensland Aboriginal Advancement League (1961–70), and has held office in various other Aboriginal organisations. She was a delegate to the World Council of Churches Consultation on Racism in 1969; an official Australian envoy to the International Writers' Conference in 1974; senior adviser and delegate to the Second World Black Festival of Arts in 1975 and 1976; a guest of the Papua–New Guinea government Festival of Arts in 1975; she toured America in 1978–79 as

lecturer under a Fulbright scholarship and a Myer travel grant.

Among her publications are We are going (1964), The dawn is at hand (1966), My people (1970), Stradbroke dreamtime (1972), and Quandamooka: the art of Kath Walker (1985). She is the organiser and director of 'Moongalba', an educational and cultural centre for children of all races in Aboriginal culture in Dunwich, on Stradbroke Island, Qld.

JUDITH WRIGHT

WALLACE'S LINE was the name given by T.H. Huxley to the line drawn in 1863 by Alfred Wallace, a biologist interested in the distribution of animals, to divide the region of Indian fauna from that of Australian fauna. The line originally passed between Bali and Lombok to the north, between Borneo and the Celebes, and then east to the Philippines into the Pacific Ocean. Animals such as monkeys, orang-outangs, elephants, tapirs, sunbirds and cuckoos are found west of the line, while marsupials, birds of paradise, cockatoos and cassowaries are found east of the line.

Further reading W. George, Biologist philosopher, London 1964.

WALSH, Adela Constantia Mary (nee Pankhurst) (1885–1961), activist, was a suffragette with her mother and sisters before coming to Australia in 1914. She campaigned against World War I and conscription and was a founding member of the Australian Communist Party in 1920. She later became an extreme anti-communist and was briefly interned during World War II for involvement with the Australia First Movement. Before her death she converted to Catholicism.

WALTER AND ELIZA HALL INSTITUTE Walter Russell Hall (1831–1911) was a successful businessman who in 1874 married Eliza Rowden nee Kirk (1847–1916). Walter gave generously to institutions and individuals and Eliza developed an interest in social work. On Walter's death in 1911 Eliza made £1 million available for the benefit of the community; a year later the Walter and Eliza Hall Trust was formed, with funds to be spent in NSW, Vic and Qld to help relieve poverty, advance education and the Anglican faith, and help the community generally. In 1916 the Walter and Eliza Hall Institute of Medical Research was established at the Royal Melbourne Hospital.

WAR MEMORIALS Traditionally commemoration of war dead and war service has been a function of a nation's churches but the state has increasingly adopted some form of civic tribute. In Australia some memorials were erected to commemorate those who fought and fell fighting the Boers in South Africa. However, the enormous commitment of troops and resources during World War I prompted the erection of memorials on a much larger scale. It would seem that every municipality, country town or shire commemorated war dead, and often all those who had enlisted from a district, with some form of war memorial. In these, occasionally, religious symbolism was employed but more typically the memorial features an Australian soldier, or employs no

symbolism at all. In addition each state capital city erected a large memorial, such as the Shrine of Remembrance in Melbourne, to serve as the focus of the annual Anzac Day commemoration. It is difficult to know exactly how many war memorials there are in Australia but one estimate puts the number at around 3000. To this figure should be added the many private, church and school honour rolls, halls and memorials to give a more accurate tally of Australia's commemorative effort. Few memorials have been built specifically to commemorate the dead of World War II and later conflicts. Existing memorials have been used to commemorate these men and women.

WARBURTON, Peter Egerton (1813–89), explorer, was born in England and arrived in Adelaide in 1853 where he was appointed commissioner of police. He led several expeditions in SA and the centre. The Warburton River was named after him. He crossed Australia from the centre to the west in 1874.

WARD, Edward John (1899–1963), Labor politician, was the member for East Sydney in federal parliament in 1931 and 1932–63, and was a minister in the Curtin and Chifley governments 1941–49. A forceful speaker, he enlivened many parliamentary debates. He was the central figure in two political controversies that led to royal commissions, in 1943 on the Brisbane 'line', and in 1948 when he was cleared of allegations of accepting a bribe in relation to a timber concession in New Guinea.

WARDELL, William Wilkinson (1823–99), architect, migrated to Vic in 1858, was employed by the government until dismissed with other civil servants on 'Black Wednesday', 9 January 1878, and was based in Sydney for the rest of his life. His many Gothic churches include the Catholic cathedrals of Melbourne and Sydney. Later he designed banks, clubs and other buildings in a variety of styles.

WATER RESOURCES AND CONSERVATION Water conservation is a vital issue in Australia, the driest continent except for Antarctica. The average annual rainfall across Australia is only 420 millimetres, compared with 1740 in the United States, but 68 per cent of Australia's surface area receives less than 410 millimetres—the largest proportion of dry zone of all six continents. The average runoff from all Australian mainland rivers is 342 million megalitres annually (only 16 per cent of that of the Amazon River alone), and only one-quarter of Australia's surface area provides 88 per cent of runoff. Evaporation, moreover, is high, exceeding rainfall across three-quarters of the continent. Many dams and reservoirs have had to be built in Australia to store available waters for irriga-

Managing water resources has been a matter of public concern in Australia since the early years of European settlement. Control of the resources has customarily been decentralised, and by the 1980s it was shared among some 800 state government and municipal agencies. The role of the commonwealth government has been restricted under the constitu-

tion, domestic and industrial use.

tion, which preserves the management of water resources as a state responsibility. Through the Murray River Commission and projects like the Snowy Mountains scheme, however, the federal government has developed interests in water resources, as a result of which it set up the Australian Water Resources Council in 1963. The council brings together federal and state ministers with responsibilities for water resources, and by 1985 it had produced three major reviews of the nation's water resources.

Attempts to conserve water have been varied. Some have involved efforts to reduce evaporation, which causes serious losses from all storages. The roofing of distribution canals and smaller reservoirs reduces evaporation and keeps out debris, but is costly. In the 1950s the CSIRO developed a method for spreading a film of cetyl alcohol across water surfaces which reduced evaporation by 25 per cent—a similar effect

to that gained by floating a reflective film of plastic over a sheet of water. Such techniques are practical only with smaller storages protected from wind.

Limiting consumption has been the most common means of conserving water supplies. Although irrigation uses four-fifths of all water stored in Australia, measures to restrict usage have focused on domestic consumption. Restrictions on consumption during droughts and seasons of peak demand, usually when reservoirs have become seriously depleted, have been a tactic water authorities have used widely in Australia. The restrictions are usually accompanied by pleas to the public to hand-wash clothes and dishes instead of using washing machines, prohibitions on garden watering, and bans on the washing of vehicles. Measures like these cause amusement to rural dwellers, most of whom are unconnected to reticulated water systems and who regard normal urban water consumption as profligate.



Windmills for pumping artesian water are common in rural areas. These are in Penong, SA. Photograph by Reg Morrison.

WELDON TRANNIES

Urban water consumption varies greatly according to geographical factors of location, soils and climate. Drier, windier areas with variable rainfall and porous soils consume more than humid, protected areas with regular, even rainfall and moisture-retaining soils. The trend everywhere, however, has been towards increased consumption. Thus, average per capita daily consumption in NSW's south coast towns rose from 590 to 1135 litres 1965–85, and is expected to rise to 1455 litres by 2000 AD. In Sydney, which is more humid, consumption rates were much lower, rising from 445 to 540 litres per capita daily 1965–85, and are expected to rise to 625 litres by the year 2000.

A doubling of the Australian population after World War II and continued urban growth contributed much to the rising demand for reticulated water. Residential patterns made the demand even heavier: a decline in the number of occupants per housing unit and the continued popularity of the self-contained home ensured the outward sprawl of urban areas. Urban planning philosophy and policy, moreover, required the establishment of spacious urban green belts, and so there were also more parklands and playing fields as well as household gardens and nature strips to be watered.

Changing urban lifestyles also added to heavier demand for water. In the consumer society that developed in Australia after World War II the availability of reticulated water was taken for granted, and many consumer commodities assumed a continuing lavish supply. The automatic washing machine had become almost universal in homes by the 1960s.

Governments and water distributing authorities responded to rising demand for water by building more dams to increase the supply. As the local water resources were developed around some cities, it became clear that such a policy could not be pursued indefinitely: the cost of building reservoirs further afield would eventually rise to prohibitive levels.

Environmental considerations were another reason for limiting new storage development. The drowning of rural and bush land for the storage required to keep ahead of anticipated urban growth, the depleted water flow below storages, and the dubious economic benefits of some dams built for irrigation and hydroelectricity aroused the concern of the environmentalist movement from the 1960s, making dam-building a matter of increasing political controversy.

Water management agencies therefore began trying to change water consumption patterns to reduce waste. They consequently paid greater attention to public consumer education programs, policies such as 'user pays' rating, and encouraging the use of time-clock and drip-irrigation garden watering systems.

IAN HOWIE-WILLIS

Further reading Australian Water Resources Council, Australian water resources review 1965, and also 1975 and 1985, Canberra 1965, 1975, 1985; B.R. Davidson, Australia wet or dry?: the physical and economic limits to the expansion of irrigation, Melbourne 1969; C.H. Munro, Australian water resources and their development, Sydney 1974.

WATERSIDE WORKERS' FEDERATION OF AUSTRALIA The WWF formed in 1902 from the NSW and Victorian Wharf Labourers' Unions, founded in 1882 and 1885, and has a history of militancy. These forerunners of the WWF were prominent in the struggle for the eight-hour day, which was granted in 1886 by the first decision of an arbitration tribunal in Australia. The WWF led the 1917 and 1928 strikes and suffered victimisation after its defeat. In 1938 it struck against the export of pig-iron to Japan; despite the union's defeat this was a significant political strike, attracting widespread support. Increased mechanisation on the wharves severely affected the WWF from the 1950s but the union was a pacesetter in better wages and conditions throughout the 1970s and took action against the Vietnam War, apartheid and the Indonesian invasion of East Timor.

WATSON, John Christian (1867-1941), compositor and politician, arrived in Sydney from New Zealand in 1886 and joined the Typographical Union. By 1890 he was president of the Sydney Trades and Labour Council. He represented Young in the legislative assembly from 1894-1901 and worked for the eighthour day, slum clearance and the 'White Australia' policy. In 1901 as a member for Bland in the House of Representatives he was elected leader of the Labor party. In April 1904 he became prime minister, leading the first federal Labor government, and treasurer. He resigned in August over the rejection of the conciliation and arbitration bill which was to give preference to unionists. However, he offered his party's support to Deakin and from 1905 to 1907 had considerable power. He resigned his leadership in 1907 and his seat (South Sydney since 1906) in 1910. Subsequently he accepted directorships of a number of companies and was instrumental in founding the NRMA. He was chairman of Ampol at the time of his death.

WAVE HILL, a cattle station once occupying 15 800 square kilometres on the Victoria River, NT, 600 kilometres south of Darwin, was founded in 1883 and later taken over on a 99-year lease by Vesteys Ltd, the British meat firm. The Aboriginal land rights movement is said to have started there in August 1966, when 200 stockmen of the Gurindji people, the original occupants of the area, went on strike for better pay and working conditions. They later walked off the job and squatted within the station property at Wattie Creek. Their protest soon developed into a demand for the return of the portion of the property they regarded as their tribal heartland. With the support of Aborigines elsewhere, and of prominent whites such as the novelist Frank Hardy and the economist H.C. ('Nugget') Coombs, they stayed put despite federal government attempts to move them. In 1972 two small parcels of this land were excised from the property and passed over to them, but they regarded these as insufficient. Soon after its election that year, the Whitlam government asked the Gurindji to identify their traditional land. After this had been done, the government (through its Aboriginal Land Fund Commission) in 1975 purchased a further 3237 square kilometres of the station, and passed it over on leasehold to a Gurindji company that had been incorporated in 1971. After a successful claim under the Aboriginal Land Rights (Northern Territory) Act, by the traditional owners, the government in May 1986 gave the Gurindji inalienable freehold title to this property, known as Daguragu, except for a small area surrounding the Wave Hill settlement.

WEATHER MAPS Australia's first newspaper weather map was published in the *Sydney Morning Herald*, 5 February 1877, after which it became a daily feature. It was prepared by H.C. Russell, NSW government astronomer and meteorologist, who used information supplied by telegram from 77 locations in eastern Australia. Vic's first weather map was prepared by the Victorian government astronomer, R.L.J. Ellery, and published in the *Argus* in September 1881.

WEEDS are plants that interfere with our ability to utilise efficiently natural resources such as land and water.

The Aboriginal people of this continent, even though they may have introduced plants when first migrating to Australia, did not have problems with weeds. They did not manage particular plant species to produce food. Importation of European agricultural methods after 1788 first drew attention to the problem of weeds. Agriculture provided ideal conditions for the spread of weed species in packing material, stock feed and contaminated crop seeds. Plants such as common prickly pear (Opuntia stricta) were introduced as agricultural plants, only to become major weed problems. Ornamental garden plants have also become problem species, for example common lantana (Lantana camara). Changed environmental conditions may also cause increased growth of native species which affect agricultural productivity, for example galvanised burr (Sclerolaena birchii).

Among other weeds that have become a serious problem in parts of Australia are wild turnip (Brassica tournefortii), skeleton weed (Chondrilla juncea), curled dock (Rumex crispus), common bracken (Pteridium esculentum), variegated thistle (Silybum marianum), water hyacinth (Eichornia crassipes), Bathurst burr (Xanthium spinosam), blackberry (Rubus fruticosus aggregate), serrated tussock (Nassella trichotama) and English broom (Sarothamus scoparius). All states have developed noxious plant legislation to control such plant pests and to force landholders to adopt eradication control measures. Controls range from removing plants by mechanical means and the use of herbicides to various forms of biological control using parasites and pathogens. Supervision of noxious plant control is the responsibility of state departments of agriculture, lands or local government. C.S. RIPPER

Further reading L.G. Holm, et al, The world's worst weeds, Honolulu 1977; C. Lamp and F. Collett, Weeds in Australia, Melbourne 1976; D.S. Mitchell, Aquatic weeds in Australian inland water, Canberra 1978.



Souvenir of Adelaide's record heatwave of January 1939. Rain in Adelaide on 15 January brought relief to eastern Australia, but not before 71 people died in Victorian bushfires and over 100 from heat exhaustion in outback New South Wales. The News, 16 Jan 1939.

WEIR, Peter Lindsay (1944–), film maker, became an independent film director in 1974 after working in television and the commonwealth film unit. He subsequently made a series of successful feature films, including The cars that ate Paris (1974), Picnic at Hanging Rock (1975), The last wave (1977), Gallipoli (1981), The year of living dangerously (1982), and, in Hollywood, Witness (1984).

WENTWORTH, William Charles (1790–1872), landowner and politician, was born in 1790 on board a ship of the second fleet. His parents were Catherine Crowley, who was being transported for seven years, and D'Arcy Wentworth, who was to become principal surgeon and superintendent of police in NSW.

William Charles was educated in England between 1803 and 1810. On his return to Sydney he was anxious to obtain an official position in Macquarie's administration, but was not successful. He then sought an outlet for his restless and adventurous spirit as an explorer with Blaxland and Lawson in crossing the Blue Mountains in 1813, and on an unsuccessful sandalwood voyage to the South Seas. Seeing no scope for his ambition under existing colonial conditions, he returned to London in 1816 to study law, with the objective of equipping himself to serve his native land. He was admitted to the Bar in 1822.

Wentworth continued to dream of some official appointment, hoping that his book, A statistical, historical and political description of New South Wales, published in 1819, in which he argued that the colony should be given control of its own affairs through an elected assembly, would advance his prospects. Following the granting of a nominated legislative council in 1823 he abandoned the quest for an official position and embarked on a campaign for self-government.

Returning to Sydney in 1824, Wentworth inaugurated the *Australian* newspaper with Robert Wardell, a fellow lawyer, in which he agitated for trial by jury and an elected legislature, as well as attacking the exclusives for their repressive stance on the legal and political rights of emancipists. However, his pleas for representative government via the press and public meetings received only nominal support. His proposals were premature, but he was intent on sustaining the role of foremost protagonist of a free government. He became a leading barrister and used supreme court actions and the notorious Sudds—Thompson case to bolster his image as the champion of colonial liberty.

The imminence of a partly elected legislature in the late 1830s and early 1840s caused Wentworth to modify his constitutional ideas. He was now a leading squatter and believed that the progress of the colony depended on the pastoralists. Alarmed at the political expectations of the rapidly increasing urban working-class migrants, he modified his earlier demands for a large assembly in favour of a small legislature and a high franchise to protect the pastoral interest by restricting voting rights to those with some property.

As an elected member of the enlarged legislative council established in 1842, Wentworth became the leading opponent of the administration of Gov Gipps, and persistently demanded greater colonial control of revenue and land policy. In the 1840s he urged the reintroduction of transportation to meet the labour needs of the pastoral industry. Through this issue and his outspoken opposition to urban demands for a more liberal constitution he became the most prominent conservative in the legislature.

The great influx of population with no permanent stake in the colony during the gold rushes strengthened Wentworth's antipathy to liberal reform. When the British government finally invited the legislative council to prepare a new constitution to include full responsible government, he was instrumental in producing a bill to maintain the political dominance of the pastoralists. He was bitterly disappointed when the House of Commons deleted restraints on alteration to his constitution in 1855 and so opened the way for almost universal suffrage in 1858. Wentworth went to England in 1854 to watch over the passage of the constitution bill, and he and his family remained there except for a visit to Sydney in 1861-62. He died in Dorset on 20 March 1872 and his body was returned to Sydney for a state funeral on 6 May 1873.

Wentworth was a dominant figure in colonial affairs for 30 years through force of character, ability as an orator and dedication to the idea of self-government as enshrined in the British constitution. He was motivated by a mixture of personal ambition and an inherited tradition of public service, but many of his actions were dictated by a passionately vindictive nature, most in evidence in his relations with Darling and Gipps. Despite his excessive concern for the pastoral interest and the eclipse of his suggested constitution, his sustained and forthright advocacy of colonial rights indelibly stamped his personality on the politics of the period.

D.E. FIFER

WEST, John (1809–73), Congregationalist clergyman and editor, arrived in 1838 and worked as a minister in Launceston until 1854. He was the principal figure behind the formation of the Australian Anti-Transportation League in 1851. In 1852 he published a two-volume history of Tas, and in 1854 he became editor of the *Sydney Morning Herald*, a position he held for the next nineteen years.

WEST, Morris Langlo (1916–), writer, was born in Melbourne and educated in Melbourne and Hobart. He joined the Catholic teaching order of Christian Brothers and taught in NSW before leaving the order. He served in the AIF and worked as a radio producer before becoming a full-time writer. A prolific author, he achieved international acclaim with a number of his novels, including Children of the sun (1957), The Devil's advocate (1959), The shoes of the fisherman (1963) and The ambassador (1965).

WESTERN AUSTRALIA Western Australia's history is largely the story of efforts to overcome the handicap of isolation. Given a bad name by seventeenth century Dutch navigators, the western third of the Australian continent remained unannexed by European powers until the activities of French explorers and American whalers provoked the British to send a small garrison to King George Sound (Albany) on Christmas Day 1826. In March 1827 Captain James Stirling examined the Swan River, praising its fertility and potential on dangerously slender evidence. His approbation stimulated the British government to create a new colony with Stirling as governor. Returning with the first white settlers in June 1829 Stirling soon met opposition from Aboriginal groups whose prior occupancy of the land for over 40 000 years received no acknowledgment. After the treacherous killing of a notable leader, Yagan, in 1833 and the battle of Pinjarra in October 1834 the resistance of the coastal Aborigines was broken, but a century of conflict on the pastoral frontier was to follow.

Calamitously inadequate preparations nearly stifled the Swan River colony and by 1832 only 1500 of 4000 settlers remained; but a capital, Perth, and other small towns were founded, land allocated to favoured officials and investors, and the crossing of Darling Range opened the fertile Avon valley. Too small a local market to generate economic activity, too far behind thriving competitors in eastern Australia to attract migrants and investment, WA's growth was also hindered by ignorance of the country, want of skilled labour and, after 1831, by policies from London forbidding free land grants. Wool exports began only in 1836. Between 1839 and 1842 the prospect of Wakefieldian settlement at Australind near Bunbury generated some hope, and in 1841 a local bank was established. During the 1840s export income came from whaling, woolgrowing and sandalwood, all on a small scale. Humanitarianism was represented by a Wesleyan mission to the Aborigines, followed in 1846 by the Spanish Benedictine missionary Rosendo Salvado, founding abbot of the New Norcia mission and abbot for over half a century. From 1846 the Sisters of Mercy in Perth provided culture and education; in the 1860s the Anglican Bishop Hale conducted a school which gave opportunity to the first generation of colonial-born males. Generally WA remained one of the most isolated, impoverished and insignificant corners of the British Empire.

Landowners agitating for cheap labour secured the introduction of convict transportation between 1850 and 1868. During that period nearly 10 000 convicts arrived and the white population quadrupled to 24 000. The convict establishment, sustained by British government investment, provided a market for farmers and labour for pastoralists, and grazing extended into the Geraldton district and the northwest. Timber and pearlshell were added to the colony's exports. WA's first major roads were constructed and the towns acquired their first substantial buildings, including the Perth Town Hall and Fremantle Gaol. Convictism brought social problems: an imbalance of the sexes, increased crimes of violence, a deepening of the communal inferiority complex. Ex-convict radicals and Fenians lampooned but never threatened the colonial gentry frequenting the new government house. When in 1870 a mainly elective legislative council was set up its members came exclusively from the pastoral and mercantile oligarchy.



This 1940s souvenir bookmark was used to attract visitors to Australia's west.
BOOROWA PRODUCTIONS

Despite agricultural recession, in the 1870s the colony was linked to eastern Australia by telegraph, the first railways were initiated and the Forrest brothers led several inland expeditions, advancing the pastoral frontiers into the Kimberleys. Following the tracks of overlanding cattlemen, prospectors stimulated WA's first but abortive gold rush to Halls Creek in 1886. Meanwhile, in the 1880s, two investing syndicates were authorised to build railways in the southwest on the land grant principle. Albany was linked to the Perth system in 1889 and Geraldton in 1894, but neither scheme fulfilled hopes of substantial immigration. Parallel with these developments came a demand for self-government. In 1890 the British government somewhat reluctantly yielded authority to the adult males among the colony's 46 000 white inhabitants, though only after seriously considering the excision of the northwest, partly because pastoral WA had a deplorable reputation for Aboriginal maltreatment. Instead, WA was obliged to devote 1 per cent of annual revenue to Aboriginal purposes-a responsibility that was abandoned in 1897.

Annual revenue was booming thanks to a series of gold rushes between 1888 and 1891 in the Pilbara, Yilgarn and Murchison districts, followed in 1892-93 by the greatest of all, the Eastern Goldfields based on Coolgardie and Kalgoorlie. British capital poured in and migrants swarmed to the diggings, mainly from depressed Vic and SA. Between 1890 and 1904 the population increased fivefold to 239000. This good fortune combined with his own astuteness and prestige kept the first premier, locally-born explorer-surveyor Sir John Forrest, in office for ten years. An ambitious developer, Forrest was ably served by the engineer C.Y. O'Connor in building railways to the goldfields and a pipeline, then the longest in the world, to carry water from the coastal scarp to Kalgoorlie. O'Connor's other major work, the construction of an artificial harbour at Fremantle, centralised WA's transport and communications and thus ensured that, as elsewhere in Australia, the metropolitan area would dwarf the rest of the state in terms of population and growth.

Regarding gold as a temporary boost, Forrest sought to encourage yeoman farming through homestead legislation in 1893 and the creation in 1895 of the Agricultural (now the Rural and Industries) Bank. Goldfields liberals, however, challenged the political grip of 'sandgroper' conservatism, demanding parliamentary reform and reductions in the food tariffs protecting farmers and graziers. Partly to counter their influence, Forrest introduced votes for women in 1899. By then the goldfields were solidly behind the federation movement, threatening to secede from the rest of WA to join the new commonwealth. Forrest, himself a federalist, bargained for a staged redirection of Western Australian tariffs and a transcontinental railway, but many old colonists remained unreconciled to federation when a 70 per cent majority voted 'Yes' at a 1900 referendum. Manufacturing in WA was severely discouraged by federation. As early as 1906 the state parliament passed a resolution in favour of secession, but nothing came of it.

Gold production peaked in 1903, then gradually declined. Of the state's other industries, timber was thriving and a prosperous pearling industry was at its zenith in Broome. Wheatgrowing was to become the staple, adapting Farrar's development of dry wheat and fertilised by superphosphate. Between 1905 and 1910 the frontier of WA's wheatbelt advanced 250 kilometres. Many of the farmers were former goldminers; others were migrants from Britain, SA and Vic. Successive governments provided rural finance lavishly and constructed light railways to most of the wheatbelt, though neglecting to provide suburban lines in the Perth metropolitan region where already half of WA's population lived and worked. The wheat farmers suffered through the 1911 drought, which helped to sweep the state's first majority Labor government to office. A second drought in 1914 saw the rise of a Country party, the first in Australia, which by 1916 held the balance of power and usually, though often without unanimity, sided against Labor. The droughts also virtually eliminated the small Aboriginal farming community. Under legislation passed in 1905 to protect Aborigines in the pastoral north, many southwest families were committed to reserves and their children denied schooling.

Prompted by influential women's organisations, social legislation between 1900 and 1920 tended to

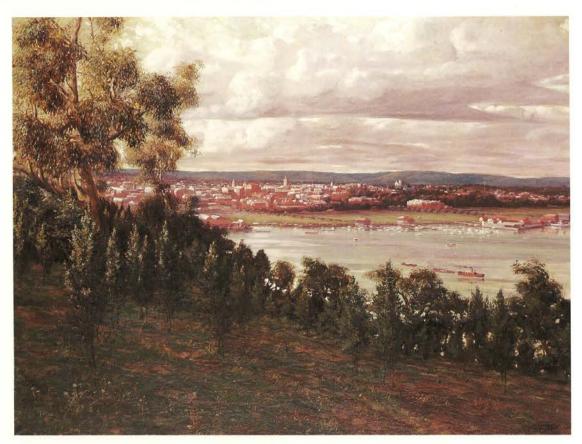
focus on public health and child welfare measures, reflecting a trend towards the conventional Australian model of family life after the high masculinity ratios of the convict period and the gold rushes. Trade unionism, fostered after 1900 by an arbitration system, was based on the pastoral and mining sectors and on industries servicing transport, such as the wharf labourers, railwaymen and Collie coalminers. Usually moderate, the Western Australian labour movement was reluctant to split over conscription during World War I, understandably since WA, with its high percentage of recent British migrants and young single men, sent proportionally more recruits to the first AIF than any other state and returned the highest 'Yes' vote for conscription. Following the split, union militancy was stimulated by the Hughes government's policies, culminating in a waterfront strike in 1919 in which one unionist was shot dead. These troubles may have reflected diminishing isolation. The west was at last connected by rail to the rest of Australia in 1917 and in 1921 the first aviation services began, though a regular link with Adelaide did not come till 1929.

Calm soon returned. Sir James Mitchell (Nationalist premier 1919–24 and 1930–33) zealously promoted the settlement of British migrants through co-operative 'group settlements' for dairy farming, but at



End of the day, Swan River, W.A., oil by James Walter Robert Linton, c1911, shows the view from South Perth towards the city.

THE ROBERT HOLMES À COURT COLLECTION



Winter evening, King's Park, Perth, oil by Walter Paterson Meston, 1910.
THE ROBERT HOLMES A COURT COLLECTION

human and financial cost because much of the land was unsuitable and the settlers inexperienced. However, his development policies were maintained by the moderate Labor governments that ruled for three-quarters of the period from 1924 to 1959, though often frustrated by a malapportioned and reactionary legislative council. During the 1920s WA returned the first woman to sit on an Australian legislature, and subsequently the first Labor woman. They were followed in 1943 by the first female federal senator and in 1947 by the first female state cabinet minister. Men continued to dominate politics nevertheless.

Consensus seemed paramount in the 1929 centenary celebrations. Then came the 1930s depression. Falling wheat and wool prices forced many farmers to quit their land. Others survived only through years of indebtedness. In the city an estimated 30 per cent of trade unionists were unemployed in 1932. Many were placed on sustenance work in bush camps. The unemployed demonstrated several times in Perth in 1930–32, the wheatgrowers formed a union which unsuccessfully tried to withhold the 1932 harvest, and in 1936 dairy farmers resisted the garnisheeing of the cream cheques. Relatively few took to communism or radicalism. Communal anger found expression in the sudden upsurge of a secession movement. At a

1933 referendum, over two-thirds voted to quit the Australian commonwealth, but when this proved constitutionally difficult the movement folded.

Economic recovery was under way from 1933, led by the goldmining industry which absorbed many unemployed, though not without a violent antiforeign riot at Kalgoorlie in 1934. Dairying recovered modestly, but drought hindered the pastoralists' recovery and wheatfarming remained depressed throughout the 1930s. For Western Australians in regular work, the 1930s, like the decades before and after, were in fact a period of modestly improving real living standards. The use of telephones, motorcars and refrigerators became more common in middle-class households. For many, however, regular employment was not ensured until the war of 1939–45.

For Western Australians 1942 was the war's critical year, with the arrival of numerous refugees from the Japanese advance, the bombing of Wyndham and Broome, and discussion of the 'Brisbane line' which would have abandoned the west to an invasion. Four Western Australian members of the Australia First movement were charged with sedition. The employment of Aborigines by the armed forces in the northwest created expectations which led in 1944 to the first legislation making citizenship rights available, and in

1946 to an effective strike by Aboriginal pastoral workers in the Pilbara district out of which an autonomous co-operative movement grew. WA was knitted more firmly into the commonwealth by uniform taxation, the extension of federal social services, the wartime beginnings of industrialisation and national respect for John Curtin, WA's only prime minister, under whom the state returned, for the only time, a 100 per cent Labor representation to Canberra at the 1943 elections. The work of integration continued after peace in 1945. Two airlines linked Perth and the east after 1946 and in 1948 WA entered and immediately won the interstate Sheffield Shield cricket competition.

Postwar prosperity was supported by strong demand for primary exports, but diversification was sought. In 1952 investors agreed to build an oil refinery and steel rolling mill at Kwinana, and in 1953 oil was found at Exmouth Gulf, but it proved uncommercial. With the use of trace elements marginal wheatlands were brought into production in the 1950s. In the hope of encouraging tropical agriculture the state government, with federal funding, dammed the Ord River during the 1960s, but failed to produce a commercial crop. Woodchipping, initiated in 1972, provoked much controversy over its environmental impact but became a mainstay of the southwest as fruitgrowing and dairying declined. In all this growth migrant labour participated strongly; postwar WA had the highest proportion of migrant-born inhabitants of any state.

The mineral boom of the 1960s stimulated a major inflow of foreign capital. Several massive deposits of iron ore were developed in the Pilbara, nickel was mined at Kambalda and bauxite in the Darling Scarp. Large American, Japanese and British companies were persuaded to build several new railways and towns, and after 1965 WA became a major supplier of mineral exports. Subsequently diamonds were mined in the Kimberleys and new goldfields were opened. The first mineral boom eventually overheated with the Poseidon speculation of 1969-70, but it stimulated the rapid growth of the city of Perth whose population doubled to one million between 1965 and 1985. Liberal governments ruling for all but three years from 1959 to 1983 gained credit from the boom, which enabled WA to escape the status of a claimant state and to defy Canberra on many issues, though stopping short of secession. Affluence was widespread and several 'new millionaires' emerged, of whom Robert Holmes à Court, practitioner of takeovers, and Alan Bond, financier of the much publicised America's Cup victory of 1983, were the best known.

Even after Labor's recovery of office in 1983 WA earned little note as a laboratory of social experiment. Innovative in neither environmental management nor the recognition of women's rights, WA was the last state to abolish capital punishment, maintained criminal laws against homosexuality and for some years restricted the right of public assembly. Having gained notoriety in 1980 for the coercion of Aborigines at Noonkanbah over mining on sacred sites, WA refused

to pass land rights legislation, although it became in 1986 the first state to appoint an Aboriginal cabinet minister.

Culturally WA was escaping from provincialism. Where in the 1920s Katharine Susannah Prichard was restricted by isolation and in the 1950s Randolph Stow felt obliged to turn expatriate, writers in the 1970s and 1980s such as Elizabeth Jolley, Fay Zwicky and Nicholas Hasluck formed a distinctive regional group whose work was marked by intellectual and emotional subtlety. In 1979 and again in 1984 an Indian Ocean arts festival attracted participants from southeast Asia, the Indian subcontinent and east Africa. This event, no less than WA's changing trading patterns, suggested that a location midway between Sydney and Singapore held positive advantages and need not be seen as a stultifying isolation. The tyranny of distance was losing its grip. G.C. BOLTON

Further reading C.T. Stannage (ed), A new history of Western Australia, Nedlands 1981.

WHALES AND WHALING By the early 1800s whaling in the southern waters of Australia was developing into an important industry for the Australian colonies, whale oil being the main export until 1833. The whales most commonly sought off the Australian coast were the southern right whale, the ht mpback and the sperm whale.

There were two methods of whaling: bay whaling and deep-sea whaling. Bay whaling was pioneered by William Collins in Van Diemen's Land in 1806, and involved whales being taken by boats working from shore stations. Bay whaling was the most popular method in the early years, but by 1850, when deep sea whaling was almost at its peak, bay whaling had all but ceased. Whaling continued into the twentieth century but became less important as an export earner. Concern over the dwindling numbers of whales resulted in the formation in 1946 of the International Whaling Commission to regulate the industry. An enquiry into whaling in 1977 recommended that Australia ban the practice. A year later the last whaling station, at Cheynes Beach in WA, was closed, and since 1980 whaling has been banned in all Australian

WHEAT INDUSTRY Australia's first wheat crop was planted at Farm Cove in 1788 soon after the arrival of the first fleet. Further crops were planted there and at Parramatta; but as Sydney's coastal hinterland was unsuited to wheatgrowing the results were indifferent. Wheatgrowers experienced greater success when the opening up of the inland plains made cultivation possible there, but poor soils and a harsh, dry climate were serious obstacles; and because openrange sheep grazing remained the focus of inland settlement, large-scale wheatgrowing began only in the 1860s, when the land acts began opening the large pastoral holdings to closer settlement and agriculture. By this time the repeal of the British corn laws (1846) and rising population from the gold rushes had given growers the inducement of expanding domestic and overseas markets to increase production, while



Harvesting wheat on Canning Downs station near Warwick, Queensland, 1894.
NATIONAL LIBRARY

the extension of the railways was easing transport problems.

From about 1860 the wheat industry passed through four phases. The first, roughly 1860–1900, was characterised by a fivefold increase in the area cultivated (from about 0.34 to 1.66 million hectares), but also by seriously declining yields (from an Australiawide average of 1.07 tonnes per hectare in 1860 to 0.49 in the 1890s). The further extension of the railways, faster shipping on sailing clippers and ingenious local inventions like R. B. Smith's stump-jump plough (1876) and H. V. McKay's combine harvester (1885) made possible the huge expansion of the area cultivated. However, wheatgrowers' unfamiliarity with low rainfall and short growing periods, the rapid loss of initial fertility in virgin soils and fungal diseases, particularly 'rust', contributed to declining yields.

During the second phase, 1900–30, the area cultivated almost trebled (to 4.57 million hectares) and yields increased to a national average of 0.76 tonnes per hectare. Factors in the improvement were the widespread use of 'Federation', the disease-resistant, fast-growing wheat strain developed by William Farrer in the 1890s; the adoption of dry-farming methods; the increasing application of phosphate fertilisers; and the use of livestock in the cropping-fallowing cycle.

The third phase, 1930–50, was one in which the industry's growth levelled off: both area cultivated and yields were only slightly higher than two decades previously. Better yielding wheat strains had come into cultivation and mechanisation advanced, but over-cropping had reduced soil structure and nutrient content, erosion was becoming serious, and weeds were a mounting problem.

The fourth phase, from the 1950s, was one of steady increase as wheatgrowing methods advanced rapidly. The area cultivated expanded to 13 million hectares by 1983–84, and yields rose to a national average of 1.71 tonnes a hectare. Wheat was by far the most important crop in Australia: the gross value of production exceeded \$3408 million, while wheat and

flour exports, valued at \$1836 million, ranked fourth among Australia's export earners after coal, iron and steel, and wool. Previous problems with soil were overcome: soil loss was halted, soil fertility restored and heightened, and soil structure improved as crop rotations including fallow under pastures of nitrogenfixing legumes became general. These gains together with new high-yielding wheat strains and increasingly sophisticated mechanisation meant that Australian wheatgrowing was becoming more intensive, with greater potential for increased productivity than ever before.

Despite these advances, Australia remained a relatively small producer by world standards, averaging about 16 million tonnes annually during the 1980s, by contrast with the 80 million tonnes produced by the leading wheatgrowers, China and the Soviet Union. Australia had nevertheless become a significant wheat exporter, having about 13 per cent of the world export market. Indeed, two of its principal customers were China and the Soviet Union, each of which were buying up to 1.5 million tonnes of Australian wheat per year in the early 1980s.

In the postwar decades the industry became more highly organised and more market-oriented. It was controlled by the Australian Wheat Board (AWB), a commonwealth agency established in 1939 as the sole authority for acquiring and marketing Australian wheat. From 1956-57 a levy on the volume of grain wheatgrowers delivered to the AWB supported research into soils, plant breeding, wheat diseases, cereal pests, legume pastures and weed control, enabling the industry to adapt itself better to the Australian environment. Refinements to the system of classifying Australian wheat from the mid-1950s enabled growers to adjust to demands for quality from international customers and the upgrading in technology by the domestic milling and baking industries. Australian wheat consequently earned a reputation for being sound in grain, clean, free from insect infestation, and low in moisture. A shift to bulk handling occurred as all phases of production from harvesting to shipment were mechanised, the annual crop flowing smoothly from farms to customers via railway, storage silos and overseas shipping terminals. The AWB closely supervised marketing under joint commonwealth-state legislation guaranteeing wheatgrowers a minimum price.

By the mid-1980s the industry was highly efficient. Its problems arose mainly from external factors related to the world economy. The trading policies of its main competitors, the United States and the European Economic Community, which were pursuing protectionist policies while subsidising their own wheatgrowers, had helped produce a world glut of wheat at a time of declining world demand. This was placing increasing financial pressure on wheatgrowers, particularly those with heavy debt commitments.

Further reading T. Connors, The Australian wheat industry: its economics and politics, Armidale 1972; E. Dunsdorfs, The Australian wheat-growing industry 1788–1948, Melbourne 1956.

WHITE, Sir Cyril Brudenall Bingham (1876–1940), soldier, was chosen in 1906, after serving in the Boer War, to attend the British staff college for further training. When he returned to Australia in 1911 he became director of military operations. As chief of staff in 1914, White was responsible for the landing at Gallipoli and, later, the successful evacuation. He went on to supervise Australian troops in France and Flanders and was knighted in 1918. After the war his skills were frequently called upon in the organisation of, among other things, royal tours.

WHITE, Patrick Victor Martindale (1912–), novelist, was born in London on 28 May 1912 to Victor Martindale White and Ruth White, nee Withycombe, who returned to Australia from a tour of Europe later that year. White was educated at Cranbrook School and Tudor House School, Moss Vale, and from the age of thirteen to sixteen, at Cheltenham College, England. This incarceration was relieved by one parental visit, rare trips to London and Paris and to the theatre; he wished to be an actor.

In 1929, White returned to Australia and worked on family properties at Walgett and on the Monaro; he wrote, at night, by kerosene lamp. The experience is movingly described in *The Twyborn affair* (1979). In 1933 he entered King's College, Cambridge, to study French and German. He continued writing, enjoyed connections with Bloomsbury literati, and travelled in Europe. After he graduated BA in 1935, White's father financed him to write in London. He produced plays, poetry and revue scripts, which developed his satirical skills.

After a long visit to New York, where the novel Happy valley was published in 1939, White returned to London. In 1941 The living and the dead was published, an autobiographical, self-mocking work which heralded a preoccupation with separating 'emotionally commonplace' from spiritually perceptive characters and showed his flair for transforming concrete detail into startling paradox and poetic image.

In 1940 White had joined the Royal Air Force as an intelligence officer. In Alexandria he met Manoly Lascaris, a gregarious Greek officer, fluent in five languages, who became his life companion. From that time on, Greek characters embellished his fiction.

White and Lascaris decided to settle in Australia, despite White's finding it artistically barren, and they bought Dogwoods, near Castle Hill on Sydney's outskirts, where they bred goats and dogs, and grew vegetables and flowers. In 1948 White's favourite novel, *The aunt's story*, appeared, but his use of symbol, fantasy and ambiguity, and of truncated dialogue, made it difficult for many to read; it was poorly received and White despaired.

He abandoned writing till bronchial asthma and associated inactivity led him to start the unusual pioneering novel *The tree of man* (1955) that revealed the inner dimensions of ordinary lives by describing the rhythmic beat of reality lit by imagination. Welcomed overseas, the novel provoked some caustic Australian reviews, notably that of A.D. Hope—who concluded that it was 'illiterate verbal sludge'—in the

Sydney Morning Herald. White was wounded. He describes his early Australian critical reception as a time of dingoes howling. There were always appreciative, even sycophantic critics. Among other awards, he won Australian Literary Society gold medals for Happy valley and The tree of man. Voss (1957) was a best-seller.

Riders in the chariot was published in 1961. Now famous, White farmed less and wrote more. In 1963 he and Lascaris travelled in Greece and Britain, and in the following year they sold Dogwoods and moved to a large house near Centennial Park, Sydney.

In 1973 White demonstrated dazzling versatility—'I try to persuade myself I can experience all by efforts of will or imagination'—with The eye of the storm, which uses the dying hallucinations of senile Elizabeth Hunter (based on his mother) to explore her past and pysche. Moral issues are handled subtly: characters behaving despicably are treated compassionately. In that year he won the Nobel prize for literature: for his articulation of 'the most inexpressible, fleeting and quintessential'. With the prize money he established the Patrick White Literary Award, for Australian writers deserving greater recognition.

A short story collection entitled *The cockatoos*, appeared in 1974, and his autobiography, *Flaws in the glass* (1981), illumines this humane, depressive genius, a company of actors inside one suit, who maintains his

daunting facade of lofty irony.

White writes screenplays and is a comical dramatist; his *The ham funeral* (1946) employed absurd theatre. In 1986 an opera based on *Voss* was produced, and a further novel *Memoirs of many in one* appeared.

He has entered public controversy: against his old friend, painter Sir Sidney Nolan, against censorship, the governor-general's dismissal of the Whitlam government in 1975, and conscription for the Vietnam War, and in support of conservation and nuclear disarmament. He is a considerable philanthropist. White's candour, his novels' emphasis on characters privileged to see beneath the surface, his mastery of local themes and his unique style have influenced many Australian writers.

SUZANNE EDGAR

Further reading J. Colmer, Patrick White, London 1984; B. Kiernan, Patrick White, London 1980.

'WHITE AUSTRALIA' POLICY When the first federal elections were held in 1901, all three parties were committed to the concept of a 'white Australia'. Legislation was soon passed to secure this goal, which became hallowed as a settled policy of the new commonwealth. It consisted of the Pacific Island Labourers' Act, which was designed to enforce the removal of 'kanakas' (Melanesian labourers) who had been brought to Australia to work in tropical agriculture, and the Immigration Restriction Act, aimed at excluding non-European immigrants, which used the device of a dictation test in a language foreign to the migrant, that was usually applied only to non-white migrants.

Implicit in the idea of a 'white Australia' was the continued decline and eventual extinction of the Aborigines, to fulfil the expectations of the Social

Darwinists that only the fittest races and nations survived in this competitive world. Within a few decades, however, Aboriginal numbers began to recover from the decline that had marked 150 years of white settlement.

The exclusionist legislation of 1901 was a product of many elements: the old imperial habit of justifying conquest and occupation in terms of English or white superiority; an experience of conflict within Australia when large non-white minorities such as the Chinese became established; and an observation of the troubles encountered by countries that had significant racial divisions. Debates over racial issues in Australia were conducted by people who were aware of the carnage of the American Civil War and of the diplomatic and social dangers posed by the presence of Japanese and Chinese minorities in California.

An ingredient of Australian racial exclusiveness was trade unionist concern to protect workers from

WILL THE DOOR BE SHUT IN TIME?

Cartoon comment on the 'White Australia' policy from the Brisbane labour newspaper the Worker. During the 1870s migration to Queensland increased dramatically, especially among the Chinese, after the discovery of rich goldfields. The labour movement in Queensland took an increasingly aggressive nationalist stand. Worker, 22 May 1897.

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unfair competition. Yet 'white Australia' had wide appeal, because few whites doubted the superiority of what Sir James Stephen had called the 'noble European race', or the wisdom of protecting the national arteries from an infusion of Asian or African blood.

Until the 1890s the Australian colonies were content to legislate only against Chinese migration. This changed with the rise of Japan as a commercial and military ally of Great Britain. After Japan's defeat of Russia in 1905, Australians saw Japan as a new 'yellow peril'. This fear was to some extent realised in the Pacific war of 1941–45.

Though World War II gave a terrible thrust to Australian racial fears, it contributed to processes that caused the slow abandonment of the 'white Australia' policy. Of these processes, decolonisation, the rise of China, and the movement for racial equality have been the most profound.

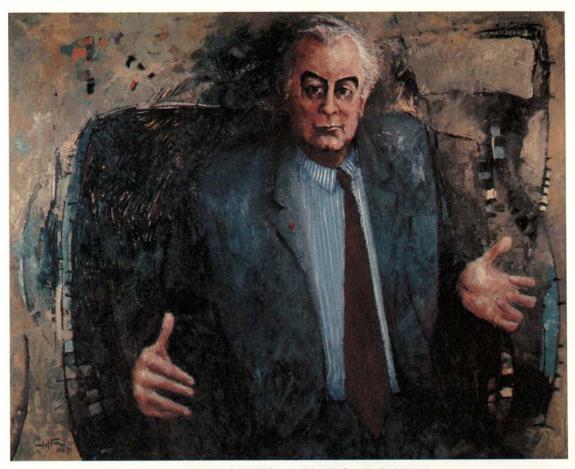
Although small numbers of non-white immigrants had continued to settle in Australia despite the racially restrictive legislation, it was not until the late 1960s that the policy was progressively dismantled as successive governments adopted criteria other than race as the basis for immigration policy. A.T. YARWOOD Further reading C.A. Price, The great white walls are built: restrictive immigration to North America and Australasia 1936–1888, Canberra 1974; K. Rivett (ed),

built: restrictive immigration to North America and Australasia 1936–1888, Canberra 1974; K. Rivett (ed), Australia and the non-white migrant, Melbourne 1975; A.T. Yarwood, Asian migration to Australia: the background to exclusion, Melbourne 1967 (1964) and Westport Connecticut 1984; A.T. Yarwood and M.J. Knowling, Race relations in Australia: a history, Sydney 1982.

WHITELEY, Brett (1939–), artist, studied at the Julian Ashton Art School, and won an Italian travelling scholarship in 1960. The following year he represented Australia at the Young Painters Convention, UNESCO and won the international prize at the Paris Biennale. He has held exhibitions in England and Australia and is the winner of many prizes and awards including, in 1976 and 1978, the Archibald Prize.

WHITLAM, Edward Gough (1916–), politician, was born in Melbourne. He graduated in Arts and Law from the University of Sydney and served in the Air Force in 1941–45.

Elected to the federal parliament for the outer southwestern Sydney seat of Werriwa in 1952, Whitlam rapidly established a reputation as a parliamentary performer and a potential leader of the Australian Labor Party. He narrowly won the deputy leadership in 1960. An uneasy but initially effective partnership with party leader Arthur Calwell brought Labor within two seats of victory in the 1961 federal elections. Whitlam's support for the principle of state aid for Catholic and other private schools led to a nearly successful attempt, engineered by Calwell, to expel him from the Labor party in February 1966. On 8 February 1967, almost exactly one year later, after a crushing electoral defeat for Labor, Whitlam was elected leader. Whitlam enunciated a six-year strategy for victory, involving reform of the ALP internal



The Hon. E. G. Whitlam, oil by Clifton Pugh, 1972. HISTORIC MEMORIALS COLLECTION

machinery and structures with full representation of the parliamentary leadership on its governing bodies, a radical rewriting of ALP policies, and the broadening of its electoral appeal, to be aimed especially at the younger middle class of the new outer metropolitan areas. By 1969 Whitlam had been largely successful in achieving all these objectives. In the 1969 federal election he won for the Labor party a spectacular swing of 7 per cent. This election reflected the ascendancy Whitlam was able to establish, through his parliamentary, public and television performance, over the successive Liberal prime ministers he faced-Holt, Gorton and McMahon. The three strands of his 1967 strategy-'party, policy, people'-came together triumphantly with Labor's first federal victory for 23 years on 2 December 1972.

Whitlam set out to implement his reform program at a dazzling pace. Acting as his own foreign affairs minister, Whitlam recognised the People's Republic of China, ended Australia's involvement in Vietnam, and set 1975 as the date of independence for Papua New Guinea. By the end of 1973 his reform programs for schools, free universities, cities, universal health insurance, family law, the status of women, Aborigines and arts funding were well under way. He relied on

the extensive use of tied grants to state governments to involve the national government in the provision of a wide range of community services previously the sole responsibility of the states or local government.

The momentum of reform slowed as all western economies went into recession and inflation mounted in the wake of the 1973 oil crisis. The Whitlam government's economic difficulties were compounded by its lack of a majority in the Senate. The legitimacy of the Whitlam government was never fully accepted by its conservative opponents, despite the renewal of its mandate in the double dissolution forced on it by the Senate in May 1974. A series of political and economic crises racked the government throughout 1975, culminating in October with the refusal of the senate opposition to pass the budget. A four-week contest of will between the House of Representatives and the Senate ensued. Whitlam needed at least two opposition Senators to vote with the government to pass the budget; four of them have since stated publicly that they were within 48 hours of doing so. On the verge of success for Whitlam's strategy, the governor-general, Sir John Kerr, without warning or discussion, abruptly ended the crisis, the contest and the Whitlam government, by dismissing the prime minister and dissolving both houses of parliament on 11 November. The Labor party was crushingly defeated in the

ensuing election.

Whitlam remained leader of the opposition until December 1977 when, after another heavy electoral defeat, he resigned, having been the longest-serving leader of the Labor party in its federal history. In May 1983, the new Labor prime minister, Robert Hawke, appointed Whitlam Australia's ambassador to UNESCO in Paris, a post which Sir John Kerr had held briefly after relinquishing the governor-general-ship prematurely. Whitlam published extensively on political and constitutional matters and contributed The truth of the matter and The Whitlam government 1972–75 to the constitutional debate.

GRAHAM FREUDENBERG

Further reading G. Freudenberg, A certain grandeur, Melbourne 1977.

WILLIAMS, Frederick Roland (1927–82), artist, trained at the National Gallery School, Melbourne and later at the Chelsea Art School and the Central School of Arts and Crafts, London. His early works were mostly etchings which won him great public acclaim. From the early 1960s he turned to landscape painting and produced intensely evocative oil paintings of the Australian bush in rich tonal colours. His last Pilbara series (1979–81) paintings show the artist at the peak of his creative genius.

WILLIAMS, John (1941–), guitarist, began playing the guitar at the age of seven. His parents took him to London in 1952 and at the Spanish guitarist Andres Segovia's suggestion he studied with him in Italy for five years. Since his London debut in 1958 Williams has appeared in Europe, Japan, the USSR and the United States, and taught in England and Spain. Williams has also played jazz and popular music, most notably with the group Sky.

WILLIAMS, Sir Richard (1890–1980), air marshal, was commissioned in the Australian army in 1912, joining the Australian Flying Corps in 1915. After distinguished war service he became Chief of Air Staff in the new Royal Australian Air Force in 1921. In 1939, after exchange service with the Royal Air Force, he was made Australia's first air marshal. From 1946 to 1955 Williams was director-general of civil aviation, and he was knighted in 1954.

WILLIAMSON, David Keith (1942–), playwright, lectured in mechanical engineering and in psychology before becoming a professional playwright, coming to prominence with *The removalists* in 1972. His sharp, witty plays have been commercial and critical successes in Australia and England, and often satirise the concerns of the affluent middle class. Several of his plays have been made into films, and Williamson has written film and television scripts.

WILLIAMSON, James Cassius (1845–1913), actor and theatre manager, was born in Pennsylvania, United States, the son of James Hezlep Williamson, and Selika, nee Campbell. He embarked on an acting

career with the reluctant consent of his guardian, J.C. Campbell, establishing a reputation as a character actor with Wallack's Theatre, New York. From 1871 he worked with the California Theatre, San Francisco, before touring Australia with his first wife, the comedienne Maggie Moore (Margaret Virginia Sullivan) in 1874 at the invitation of actor-manager George Coppin.

Five years later Williamson settled permanently in Australia, where he produced melodrama, comic opera and the Gilbert and Sullivan repertoire for which he held exclusive Australian performance rights. He also introduced the bio-tableau, a primitive forerunner of the cinematograph, to Australia. He entered into a financially successful but stormy partnership with Arthur Garner and George Musgrove in 1882. By 1889 the partnership had dissolved, and Williamson continued presenting his limited repertoire of overseas successes, finally establishing 'The Firm' in 1907, a company in which his financial share gradually diminished. Theatre's prime artistic objective was, for Williamson, to enchant rather than to enlighten the audience, so that elaborate scenic designs, elegant and expensive costuming and the magnetism of imported performers, rather than the promotion of the indigenous product and the classical repertoire, characterised his operations.

JOHN ANDREWS

Further reading I. Dicker, JCW: a short biography of J.C. Williamson, Sydney 1974.



Front cover, J. C. Williamson Ltd magazine, 1927. BOOROWA PRODUCTIONS

WILLIAMSON, Malcolm Benjamin Graham Christopher (1931–), pianist, organist, and composer, became an international concert performer after studies at the NSW Conservatorium, playing in many countries in Europe, North America, Asia and Africa as well as in Australia. He has lived chiefly in England since 1953. In 1975 he was appointed Master of the Queen's Music.

WILLS, William John (1834–61), explorer, arrived in Vic from England in 1853. After working as a shepherd and assistant to his father, a doctor, he studied surveying and was appointed to the Melbourne observatory. Robert O'Hara Burke selected Wills to be third in command of his ill-fated attempt to cross Australia in 1860. When George Landell was dismissed he became second in command and accompanied Burke to the Gulf of Carpentaria. They both died on the return trip and their remains were brought back to Melbourne for a public funeral.

WILSON, Sir Roland (1904–), economist, went to Oxford as Tas's Rhodes Scholar in 1925. His distinguished government career has included the posts of commonwealth statistician (1936–40 and 1946–51), head of the commonwealth department of labour and national service (1940–46) and secretary to the treasury (1951–66). He has written several books, and since his retirement has directed many companies, including Qantas.

WILSON, William Hardy (1881–1955), architect, set up in practice in Sydney in 1911 after extensive travels in Europe and America. Although he designed few buildings in his sixteen years of practice, Wilson had a major influence on Australian domestic architecture through his writings on old colonial styles. His two most notable houses in Sydney are 'Eryldene' (1913) at Gordon and his own house, 'Purulia' (1915) at Wahroonga.

WINDEYER, William John Victor (1900–), soldier and judge, lectured at Sydney Law School from 1929 to 1940 before commanding AIF infantry battalions in Egypt, New Guinea and Borneo during World War II. From 1958 to 1972 he sat on the high court bench.

WIRTH, Philip Peter Jacob (1864–1937), circus proprietor, toured NSW and Qld in 1878 with his father and brothers as a 'Star Troupe of Varieties'. After visiting Sydney in 1881, the circus travelled abroad to New Zealand, South Africa and England. On his return to Melbourne, Wirth established a permanent home for the circus, which soon became an Australian institution.

WOLSELEY, Frederick York (1837–99), inventor, revolutionised the Australian wool industry through his invention in 1885 of a shearing machine. In 1894 his partner in England, Herbert Austin, designed and made the first Wolseley motor car.

WOMEN, until recent years, have fared poorly in the recording of Australian history. They have been regarded as having little historical, social or economic significance. If considered at all, they comprised the shadowy background, described in sentimental and often patronising terms as domestic heroines, wives, mothers and helpmates to the pioneering men who made Australia's history. Women whose lives were neither bound by nor reducible to such domestic roles were either ignored by historians, or, if they entered the public domain, treated as exceptional.

Australia's small population and the extreme scarcity of women in the early nineteenth century, coupled with the reverse conditions in Britain, led British and colonial governments to encourage female emigration to Australia. From the 1830s young British and Irish working-class women were induced to emigrate by the provision of free passages, and thousands availed themselves of this opportunity. Authorities hoped that this female addition to a harsh, penal, predominantly male society would be a virtuous and civilising one. In 1835 the NSW Legislative Council, in supporting the system of assisted female immigration, declared its preference that the women should not work in Australia, beyond a short stint as domestic servants, but should marry and raise large families, restore the equilibrium of the sexes, raise the value of female character and produce virtuous homes for the labouring classes. Unfortunately, many female assisted immigrants did not accord with this ideal of women. Invariably working-class, usually impoverished and generally poorly educated and trained, many of them Irish Catholics, the women were judged harshly to be lacking in refinement and respectability and economically and industrially useless. They were, as were their female convict and ex-convict contemporaries, the victims of a British, bourgeois ideal of women against which they were judged and found wanting. They were equally victims of a colonial economic environment which provided few opportunities for women to work outside the home or beyond the farm, other than in low paid and low status domestic service, and later in manufacturing. The avenues of alternative female employment were few. Lacking education, skills, capital or political influence at a time when women also lacked basic political and legal rights (the vote, and married women's property rights for example), most women sought marriage as the only socially sanctioned career for a 'respectable' woman.

Many women succeeded in their socially prescribed career, and lived stimulating and satisfying lives, often as part of a family economic unit in which they produced and prepared a range of essential goods for their family's use and comfort, and in many instances, especially in rural areas, a surplus for sale. Other women more grudgingly adapted to this circumscribed role and sphere; public hostility and resistance greeted those who tried to break into the public, political or economic domains. (Public philanthropic and charitable work for middle-class women was acceptable; remuneration for their work was not.) Numerous women, ranging from widows and deserted wives, single women lacking family support, to working-class married women forced to seek



Monday morning, oil by Vida Lahey, 1912. Women engaged in the drudgery of hand-washing laundry.

QUEENSLAND ART GALLERY

paid employment to supplement a meagre family income, found colonial life materially precarious, employment opportunities limited and poorly paid, and social welfare provisions for the disadvantaged

and destitute pitifully inadequate.

At the end of the nineteenth century, most Australian women married, raised large families, and performed a myriad of economically valuable, generally unremunerated tasks in homes and on farms. Their hard physical labour provided the material needs of their families in an era before electricity, laboursaving domestic appliances, or the mass production of relatively cheap household goods and services. Wealthier women employed female domestic servants; many families could not afford the luxury. Poorer women entered the limited areas of the labour market open to women, or embarked on a range of homebased economic activities to produce or supplement their family's income; some took in lodgers, others washing and sewing, and others became sweated labour as outworkers for the clothing and textile industries. In rural Australia poorer women marketed the products of their kitchens, dairies and orchards.

At the turn of the century, by which time traditional Aboriginal society had been devastated and largely destroyed, Aboriginal women living in urban areas faced even greater difficulties than poor white women. Some survived by using their traditional skills to produce artefacts such as handwoven baskets for sale. As a means of survival when women's labour was generally poorly paid, prostitution proved a relatively viable if socially unacceptable occupation for

many young and not so young women, irrespective of race.

It was not until World War II that there was a widespread call to Australian women to enter the full-time workforce, to fill the places vacated by men joining the armed forces. Many conventions, particularly of gender relations, were overturned as women donned overalls to work in munition factories and other warrelated industries, to operate trains, trams and buses and to work on the land as part of the newly established Women's Land Army, as directed by the wartime conscriptor and allocator of female labour, the Women's Employment Board.

The period since World War II, paradoxically, has been one of profound change but also of continuity for Australian women. A sustained period of buoyant economic growth, structural changes in the economy, and a continuing decline in the birthrate have combined with women's needs and preferences to bring about an expansion of their own lives and roles. Their participation in the workforce has accelerated to historically high levels. Tertiary, service and manufacturing industries have welcomed the growing ranks of female teachers, nurses, clerical workers, shop assistants and factory workers. To a limited extent women have also entered previously 'male' occupations in the professions, sciences and skilled trades. Wage differences between the sexes have narrowed. These differences were extreme in the late nineteenth and early twentieth century, with most women being paid less than two-thirds of the average male wage. Throughout most of the twentieth century federal and state wage-fixing bodies had awarded men, whether married or not, a 'family wage' sufficient to maintain a household of dependants—a wife and two or three children-while all women were paid a minimum wage barely adequate to maintain in frugal comfort a single woman without dependants. By the 1960s and 1970s the material basis of this system of wage determination-men as breadwinners and women as dependent domestics-had been so heavily undermined by changing social and economic realities that it was formally abandoned. Female full-time average weekly earnings had stabilised at approximately 82 per cent of average male earnings by the mid-1980s, notwithstanding the landmark 'equal pay' decisions of 1969 and 1972.

Yet this picture of gradual female emancipation conceals many continuing inequalities and injustices. Although women's employment expanded dramatically, it was in the relatively low paid, less skilled and low status areas of the workforce, heavily concentrated within 'feminine' areas in the service and welfare industries, and in manufacturing as cheap, unskilled labour. In the 1980s female self-employed and business people have represented no appreciably greater proportion of the employed population than earlier in the century; indeed, the ranks of all wage labourers had grown, at the expense of all self-employed or employers. In the political sphere active participation by Australian women has increased only slowly throughout the twentieth century. In the 1980s the

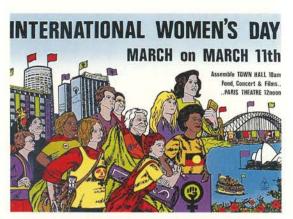
prospect of female politicians does not arouse dismay, disgust and disdain as in previous decades, yet there are still few females in politics, and they must still contend with the criticism that they are abandoning their proper familial role, and usurping the rightful role of men.

The feminist movement, which from the late 1960s grew large and vociferous in its demand to extend women's choices and rights, has aimed to change Australian women's social, economic and political roles. The 'first wave' of feminists of the late nineteenth century had generally confined its efforts to gaining female suffrage and to enhancing rather than expanding women's domestic and familial roles. By contrast, the new wave of feminists, their elementary political rights assured, and raised in an era of increasing educational opportunities and rising expectations, demanded much more: complete equality in employment, income and education, access to childcare, and the right to their own bodily autonomy (as expressed in the campaigns for safe contraception and abortion on request). Modern feminists thus called for an end to the previous demarcation between production and reproduction, and women's relegation to the latter sphere.

The combination of the economic recession of the 1970s, rising unemployment in the 1980s and an increasingly conservative political and economic climate produced a backlash against such demands. Anti-feminist women's groups, often but not always acting in concert with conservative organisations such as the Liberal and National parties' right wings and the Catholic Church, attacked the feminist claims and demands. These groups complained that feminists were threatening the sanctity of 'the family' ('the family' being a euphemism for the sexual division of labour and for women's domestic and familial role). Feminists, it was alleged, were attempting to unsex women, usurp men's rights and masculinity and destroy the stable Judaeo-Christian, family-based structure of Australian society. A number of Australian newspapers articulated this conservative reaction in articles examining women's rights and duties, particularly the right of married women to employment. Lamenting the growth of male and youth unemployment, an Australian editorial in 1979 declared that Australia could no longer afford equal rights for the sexes, and that in an era of increasing poverty and unemployment, married women were encroaching on the rights of men and boys (girls tended to be added as an afterthought) in their quest for employment and economic independence. Feminists were blamed for this trend: according to one journalist, Douglas Wilkie, working mothers had been 'blarneyed by Women's Lib . . . cramming the workforce and neglecting their children'.

By the mid-1980s, recent equal opportunity and sex discrimination legislation was beginning to influence the lives of many Australian women. Such measures reflected an increasing demand for an end to the exploitation of women through their use as unpaid labour within the home and as cheap labour in the

workforce. The demand was also for an end to Australian women's historical confinement to wifehood, motherhood and socioeconomic dependence within the family. The conservative reaction reflected the feminist movement's success in bringing about very real changes to reduce women's subordination. The debate over the role of women continued as the nation approached the bicentenary of European settle-



This poster advertises Sydney-based activities for International Women's Day, observed each year with world-wide celebrations and demonstrations.

ANU WOMEN'S ARCHIVES

ment. A new generation of feminist historians was steadily re-interpreting the role of women in the nation's history, restoring them into their rightful place within it. Others lamented this trend, fearing it would lead further to the 'de-domestication' of women, and their expanding spheres of action outside the family in the public, political and economic domains. Conservatives in particular feared that such developments would erode what they believed were the 'core' institutions of Australian society—the family, the free enterprise economic system, Christianity and the British inheritance.

KATRINA ALFORD

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WOMEN'S ELECTORAL LOBBY, a non-party lobby group, was formed following a meeting of ten women at the house of Melbourne feminist Beatrice Faust on 27 February 1972. Its purpose was to promote feminist values and support the entry of women into politics. The organisation rapidly expanded to all states and territories. Its initial action was a nation-wide survey of the attitudes of all candidates at the 1972 federal elections to the issues of family planning, abortion, childcare, social welfare, divorce, women in education and in the workforce. The results were widely publicised and considered damaging to many

conservative candidates who had previously ignored the concerns of women voters. Delegates to the WEL's first national conference in January 1973 adopted a loose co-ordinating structure with a commitment to consensus decision-making, radically different to the operation and structure of male pressure groups.

WEL helped politicise many Australian women and stimulated the emergence of women's networks within existing political parties. It has been more successful in promoting the entry of women into public life than into parliament, where the percentage of women has risen from 2 per cent in 1972 to only 8.5 per cent in 1985. In conjunction with other feminist groups it continues to influence government policy towards women.

MARION K. STELL

WOMEN'S REFUGES In the early 1970s the women's movement began actively promoting public recognition of male physical violence and abuse of women and children within the family. In March 1974 a group of Sydney women occupied a run-down house in an inner city suburb and established the Elsie collective, the first feminist-run women's refuge in Australia. Soon after, Warrina Women's Refuge was set up in Fremantle, Western Australia. In mid-1975 the federal government funded twelve new refuges, and within a few years over a hundred women's refuges had been set up in cities and towns throughout Australia. They were not designed, as charitable institutions in the past had been, to preserve the status quo. They lobbied to change the sexist basis of society, to empower women and to have the assault of women in the home recognised as constituting a crime. The number of women from all classes and backgrounds forced to use women's refuges has continued to grow, and many are turned away due to lack of space and funding cuts. One practical solution being explored is the removal of the violent man, not the battered woman and children, from the family home.

MARION K. STELL

WOODWARD, Roger (1944–), pianist, after studies at the NSW Conservatorium completed his training in Poland with Zbigniew Drzewiecki. Woodward performs throughout the world and is particularly noted for his playing of Beethoven and Chopin. With Bernard Heinze he founded the Sydney Piano Competition in 1969. His interest in promoting contemporary music led to the establishment of the London Music Digest.

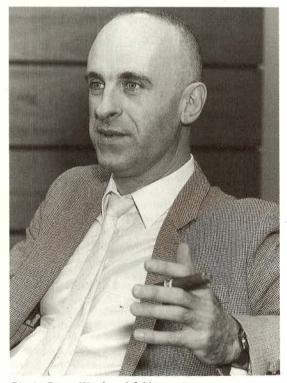
WOOLLEY, John (1816–66), professor and clergyman, was ordained in Oxford in 1841 and became headmaster of Hereford Cathedral School. In 1852 he was appointed professor of classics at the new University of Sydney and retained this position for the next twelve years.

WORK A mixture of technological, organisational, social and cultural changes have contributed to the dramatic transformation in the Australian people's experience and assessment of work during the past 200 years. Though it has been said that the convicts'

distaste for work eventually became a national characteristic, Australians on the whole have worked hard to develop their country, and work has been an important foundation of social stability and personal satisfaction.

For almost one hundred years from the time of the first settlement, the typical Australian worker engaged in hard physical pursuits. The pioneers—farmers, timber-getters, building workers, road builders and menders, miners, railway navvies and shearers—had to be strong. Bullocks were vital in haulage and ploughing, and in the colonies' few mills and small factories the power of wind and water turned the primitive machines, but most workers used only muscle power, their tools and equipment being mainly the adze, axe, pick, hammer, shovel, hoe, plough or windlass.

The gold rushes of the 1850s prepared the ground for some notable changes in the 1880s, by which time the workforce was accustomed to full employment and high wages. New technologies had begun to change some work processes beyond recognition. In mining, for instance, ladders were replaced by fast-moving safety cages; powerful pumps drained the workings; and mechanical drills were replacing hand-hammers. In the rural areas, too, hundreds of labour-saving devices, from post and rail fences, which replaced the shepherds, to new double-furrow ploughs, strippers and mechanical harvesters which



Pianist Roger Woodward fields questions at a press interview on his arrival at Mascot airport in Sydney, 1986. Photograph by Barry Chapman. FAIRFAX PHOTO LIBRARY

eased the farm worker's burden, were transforming the working environment, while releasing labour for other work.

It was in the continually expanding capital cities, which by 1890 housed 36 per cent of the population, that some of the most exciting changes were taking place. The employment structure of the cities substantially reflected a high standard of living typical of a society that has undergone an industrial revolution. The service sector, most of it urban, already employed one-third of the labour force in food processing, retailing, transport and communications, office work and building. It was in the cities, too, that Australia's infant manufacturing industry was at last emerging as the new factories and mills began applying steam power to machinery. Work in the cities also brought Australians face to face with new forms of discipline. The dictates of the clock, like those of the machine, began to replace the natural seasonal rhythms of rural life. Generally, technological progress tended to take place fastest when labour was scarce (for example, at shearing time), or expensive (for example, in the metal trades), and to lag where labour was cheap and plentiful (for example, unskilled work in factories and building). Yet for all the growing complexity of industry, Australian workplaces were usually small, which meant that workers and employers worked in close proximity, and workers generally saw the production process through from beginning to end.

The sexual division of labour had by now become a social convention. Most women worked at home, where their duties were not commonly regarded as work, because they did not earn a wage. Women working at home worked hard, however: domestic tasks such as cooking on a wood stove, beating rugs and carpets, washing clothes in a copper or tub, carrying water to the bath, cleaning saucepans, and ironing clothes with a flat iron, called for stamina and strength. In the country women might also take the place of horses to pull heavy loads, where horses were scarce, or carry water from the rivers in buckets suspended from a wooden yoke.

During the twentieth century the cities expanded dramatically, through immigration, natural increase and by drawing in labour from their hinterlands. Growing numbers of people, including young women, found new forms of employment in city services, especially in offices and shops, though the majority of women were still employed in domestic service. Far-reaching technological and organisational changes came in manufacturing. These included the development of assembly-line procedures, as in automobile construction, and generated new industries and jobs that helped lead the nation out of the depression. The journey to work, first transformed by the development of tramways during the 1880s, was changed further by the advent of electric railways and then the motor car in the 1920s and 1930s. The inner suburban working class still mostly walked or cycled to work, but more modern transport enabled the suburbs to spread outwards, commuting became part of life for more people.

Even greater changes took place in the years following World War II. The 1950s and 1960s were buoyant years of full employment, falling hours of work, and rising real incomes. The Australian workforce grew from 2.27 million in 1947 to 6.64 million in 1980. Meanwhile technological changes were altering work experience and the composition of the workforce. Workers were progressively pushed out of the rural sector; it employed only 6 per cent of Australians by the 1980s. The small proportion of the labour force employed in mining, only 2 per cent in 1947, also fell, dropping to 0.4 per cent in 1984; increased mining activity, was based on complex and expensive technologies with a low demand for labour.

The postwar expansion of the Australian economy confirmed the dominance of the capital cities. The number of workers employed in the manufacturing sector, which the war effort had boosted from 19 to 28 per cent of the labour force between 1939 and 1945, remained more or less constant until the mid-1970s. These were decades of unprecedented capital absorption and concentration, and the use of mass production processes and complex, expensive capital equipment spread throughout the sector, generating thousands of skilled and unskilled jobs. As in mining, construction and rural work, workers were relieved of arduous physical labour as machines such as the forklift truck, the power-drill, the mechanical shovel and the bucket dredge were introduced. Service sector employment grew the fastest in the postwar decades. By the 1980s services absorbed some 70 per cent of the



One kind of women's work in the early 1950s. Edgell factory, Bathurst, New South Wales, 20 Feb 1951.

workforce, and the typical Australian was a whitecollar worker in a large bureaucracy. The number of workers with specialised skills had increased greatly to meet the demands of developing technologies.

Some three million migrants came to Australia between 1945 and 1975; many worked in manufacturing. Those from northwestern Europe were usually skilled; those from elsewhere in Europe, the Middle East or Asia mostly did the unskilled jobs which others would not do. Changes in the sexual composition of the labour force accompanied structural and technological change. Female workforce participation increased greatly, as married women especially



A row of bootblacks in Sydney's Park Street ply their trade, c1895. Postcard.

NATIONAL MUSEUM OF AUSTRALIA

took up jobs to the extent that by 1980 almost half were in employment. Women gained access to some male-dominated occupations and achieved equal pay in 1972. However, few entered the upper levels of most occupations; equal pay proved easier to legislate for than to achieve in fact; and in the 1980s women were still overwhelmingly employed in traditionally 'female', jobs like clerical work, retailing, light industry, nursing and teaching.

By the 1980s technological progress was enabling many workers to enjoy greater leisure than ever before, and to retire earlier. New forms of part-time and flexible employment suited women with children in particular. Yet sceptics argued that technological change had also incurred special costs that balanced the benefits. Thus about 200 000 jobs had been lost in manufacturing between 1974 and 1984, and technological change was substantially to blame. Many traditional skills had been lost forever owing to the introduction of new technology. Fewer workers than before see ned to understand the totality of the work processes in which they were involved; fewer could experience the pleasure of craftsmanship by seeing the production process through from beginning to end. Routine, subdivided labour processes had replaced much of the old skill, first in manufacturing, and later in white-collar work. In offices and banks, for example, computerisation from the 1960s had been removing the tedium from routine work, but had also reduced many composite skills to fragmented, repetitive processes. The gap between those who made and those who carried out decisions widened; and everywhere there was speed as computers increasingly set the pace. By the 1980s, pressure of work and how to cope with it physically and mentally had become common topics of conversation. Perhaps the highest cost was the increasing gulf between those who controlled and understood the new technologies and those who did not. The threat of further increases in unemployment also perturbed those who pondered the effects of technological change on Australian society.

G.F.R. SPENCELEY

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WORKERS' COMPENSATION is the financial settlement an employee may claim from an employer when the latter has been liable for injury suffered on the job. Workers in Australia had long been entitled under British common law to sue employers for damages in such cases, but no statutory law existed to cover these until 1902, when the WA parliament passed the country's first workers' compensation act. In succeeding decades all other states and the commonwealth enacted similar legislation. The consequent litigation opened new fields of industrial law, and insurance. Subsequent legislation and case history extended the meaning of terms like 'workplace' (to include travel to and from the job) and 'injury' (to include complaints like stress), and eventually compensation in most cases became an automatic entitlement.

WORLD SERIES CRICKET (WSC), an unofficial international cricket competition sponsored by the firm PBL Marketing, ran for two seasons (1977-79) in opposition to the official matches run by the Australian Cricket Board (ACB). The firm was one of the companies controlled by Kerry Packer, chairman of the Consolidated Press media group. Offering large payments, it recruited most of Australia's leading players, and also attracted many of the top English, West Indian, South African, New Zealand and Pakistani players. Televised on Packer's Channel 9 network, WSC relied on various American-style promotional innovations, including night cricket, colourful uniforms and the song 'Come on Aussie', to win new supporters for both the game and Packer enterprises. After small crowds at earlier games, WSC attracted crowds of over 50 000 and began eroding attendances at official matches. With the public suffering from a surfeit of cricket, PBL Marketing and the ACB in 1979 reached an agreement that left the official body in control of Australian cricket but gave Channel 9 exclusive rights to televise one-day games, which were proving highly lucrative. In the long term WSC made cricket more commercial, and oriented it more strongly towards one-day games rather than test matches.



Few diggers would have recognised this version of the landing at Gallipoli. Sydney Mail, 23 Apr 1919.

WORLD WAR I (1914–18) Britain's declaration of war on Germany on 4 August 1914 meant that Australia was automatically at war, too. Most Australians enthusiastically supported Britain. Thousands promptly joined the Australian Imperial Force (AIF) to fight by Britain's side. A small force occupied German New Guinea at little cost in September, and in November the German cruiser *Emden* was outfought by HMAS *Sydney* and forced to beach on Keeling Island, in the Cocos group. On 25 April 1915 ANZACs landed on the Gallipoli Peninsula. Recruiting boomed in Australia after news of this fighting. When the ANZACs were evacuated in December they joined thousands of new recruits in Egypt.

The Australian Light Horse spent the rest of the war as an important part of the British force fighting Turkey, recording victories at Romani, just east of the Suez Canal (August 1916), and at Beersheba, in Palestine (October 1917). By October 1918 Turkish forces in Palestine had been defeated, and Turkey surrendered.

The other men of the AIF were formed into five infantry divisions which, from April 1916, were moved to the western front. They experienced the full horrors of trench warfare. In an attack at Fromelles on 19 July the 5th Division suffered 5500 casualties in a day. Further south, as part of Britain's massive offensive in the Somme valley, east of Amiens, three AIF

divisions (1st, 2nd and 4th), against fierce resistance, pushed a narrow salient three kilometres deep into the German line at Pozières and Mouquet Farm. No other part of the earth is as soaked in the blood of Australian sacrifice: the AIF sustained 23 000 casualties, killed, wounded and missing.

These losses persuaded W.M. Hughes, Labor prime minister, of the need to enlarge the AIF through conscription. At a referendum on 28 October the voters narrowly rejected conscription, after a bitter campaign which split the Labor party. Hughes and some of his colleagues left the Labor party and joined the Liberals to form a National party. Hughes remained prime minister.

Following a terrible winter the AIF resumed heavy fighting early in 1917. After Bullecourt (April and May) the Australians fought in Belgium, at Messines (June) and Passchendaele (August to November). At Menin Road, Polygon Wood and Broodseinde the AIF gained its best victories so far on the western front; but casualties in 1917 were as heavy as in 1916. Hughes's second attempt to enlarge the AIF with conscripts was defeated at a referendum on 20 December 1917.

In 1918, its year of glory, the AIF benefited from the carnage of 1916–17, which had worn down the German army more than that it had the Allies. The German offensive of March, which broke through the British line in the Somme valley, had lost its impetus when the AIF arrived from Flanders. The AIF in some brilliantly skilful battles helped stabilise the front. Then, from May, the AIF was to the fore in a great sequence of Allied victories, including the moment-



Gunner Athol Lanagan, of Warialda, NSW, saw action with the field artillery at Ypres and Passchendaele. After the war he returned to Warialda and worked as a stock and station agent. Photograph, 1917.

LANAGAN COLLECTION

ous attack near Hamel on 8 August, 'the black day of the German army'. After almost seven months in the front line the AIF was rested on 5 October, when the German army was near defeat. The armistice followed on 11 November.

Of the 331 000 Australians who served overseas, about 60 000 died. The AIF had played a significant role in helping defeat Germany, it had brought Australia attention on the world stage, and it had created a proud martial tradition.

JOHN ROBERTSON

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WORLD WAR II (1939–45) On 3 September 1939 R.G. Menzies, the prime minister, announced that Australia was at war because Britain had declared war on Germany as it persisted in its invasion of Poland.

More than 900 000 Australians served in the forces during this war, almost three times as many as in World War I. War-related deaths exceeded 37 000, including the deaths of 8000 prisoners of the Japanese. Australians fought in much more widely scattered and episodic campaigns than in the Great War. The army was the biggest and most important of the services, but significant roles were played by the air force and navy.

Before the Japanese attack (8 December 1941) most Australian fighting was against Germany and Italy in the Mediterranean basin. The navy's contingent of a cruiser and five old destroyers fought skilfully in the Mediterranean. HMAS Sydney recorded the navy's biggest success of the war on 19 July 1940 when it sank the Bartolomeo Colleoni, an Italian cruiser. In mid-1942 there were 3000 Australian airmen serving in the Middle East, but the most significant Australian contribution to the British Empire's forces in the theatre was three divisions of the 2nd Australian Imperial Force. The 6th Division helped force back the Italian army in north Africa from Bardia to Benghazi (3 January to 7 February 1941), but in April and May it sustained heavy losses when Germany overran Greece and Crete. The 7th Division helped secure Syria for the Allies and the 9th Division, besieged in Tobruk, was crucial in preventing a major victory by German and Italian forces in mid-1941. The 9th Division stayed in the Middle East in 1942, and took the lead in the decisive victory at El Alamein (October-November). Australian airmen fought in all the British campaigns against Germany and Italy until the war's end, their heaviest losses being sustained in the bombing offensive against Germany.

Soon after Japan attacked, the 6th and 7th divisions were shipped to the new war theatre in the Pacific. Henceforth, most of the Royal Australian Navy's fighting was to be against the Japanese; the 9th Division returned to Australia in February 1943.

In the first three months of the Pacific war the Japanese conquered Malaya, Singapore and the Dutch



Australian prisoners of war used in the building of the Burma—Thailand Railway. Thousands of Australians endured the horrors of Japanese imprisonment but they had a better survival rate than other Allied prisoners. This photograph of the interior of a typical 100-metre atap-roofed hut illustrates the cramped sleeping space for each man—usually not more than 76 centimetres.

East Indies, and seized Rabaul in New Guinea. The Japanese captured the 8th Division and overwhelmed those Australian naval and air forces they encountered. Australia seemed threatened with invasion. John Curtin, the prime minister, appealed to the United States for help. America sent reinforcements, and Gen Douglas MacArthur took command of Allied (including Australian) forces in the region (southwest Pacific area). In the Papuan campaign (July 1942-January 1943) Australians inflicted the first defeat of the war on Japanese soldiers, at Milne Bay and on the Kokoda Trail. From September 1943 to April 1944 the army defeated the Japanese on the Huon Peninsula and in the Markham-Ramu valley, so clearing the way for MacArthur's rapid advances, using American troops, along the north coast of New Guinea and to the Philippines.

In October 1944 the army began campaigns on New Guinea, New Britain and Bougainville against bypassed Japanese garrisons, and from May 1945 the 7th and 9th divisions fought in three separate areas of Borneo. The campaigns from late 1944 had no bearing on the duration or outcome of the war, and have been criticised as being unnecessary and launched for political reasons.

Although it depended on the US for survival, Australia was rightly proud of its war record. Although the navy lost three of its six cruisers and several smaller

warships and, because of poor leadership, the air force performed below expectations, the courage, selfsacrifice and fighting skill of Australian servicemen contributed to the defeat of the Axis powers.

JOHN ROBERTSON

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WRAN, Neville (1926-), politician, grew up in the then-working-class suburb of Balmain and studied law at Sydney University. He entered politics via the NSW upper house in 1970, moving to the lower house in 1973, just three months before becoming leader of the Labor opposition in December. He was premier of NSW from May 1976 to July 1986, the longest-serving premier in the state's history. His career seemed to have stalled in June 1980, when he lost his voice after an operation on a benign growth in his throat. Despite his voice, which remains slightly impaired, he returned to the round of political speechmaking, only to be caught up in a series of allegations about corruption in the NSW criminal justice system. In April 1983, allegations that he had been involved in 'fixing' a fraud commital hearing against Kevin Humphreys, former president and executive director of the NSW Rugby League, prompted a royal commission. At the state ALP conference held during the proceedings Wran, who had stood down as premier, made an emotional address saying, 'Balmain boys don't cry'. He was cleared of involvement by the Street royal commission in July 1983. In 1986 he was charged with contempt of court for protesting the innocence of Lionel Murphy during proceedings against the high court judge, who had been charged with attempting to pervert the course of justice. The Wran government's notable achievements were in the areas of environmental protection, anti-discrimination legislation and transport. It did not deliver expected reforms in the police force, prisons or freedom of information legislation. Wran resigned in July 1986.

WREN, John (1871–1953), businessman, was born into a Collingwood working-class family on 3 April 1871. Through successful gambling and an illegal totalisator operation begun in 1893, he established a sports promotion empire based initially on proprietary racecourses.

From 1915, through Stadiums Ltd, Wren gained a virtual monopoly of boxing and wrestling promotion in Brisbane, Sydney and Melbourne, the basis for subsequent business expansion which made him one of Australia's wealthiest men by the time of his death on 26 October 1953. His Collingwood tote's reputation for fairness, and its fourteen-year defiance of Melbourne police and Protestant church moral reformers, gave Wren the status of a hero among his

working-class clientele. To others, however, his tote and his close association with the Labor party and Archbishop Mannix made Wren a shadowy, conspiratorial figure. He became a focus and symbol of the religious and class antagonisms of early twentiethcentury Australia.

Wren's controversial life formed the basis of an equally controversial novel, *Power without glory*, written by Frank Hardy in 1950.

JOHN O'HARA

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WRIGHT, Judith Arundel (1915-), poet, was born near Armidale, NSW, into a pioneer pastoralist family. Wright grew up on the family property, Wallamumbi, in the heart of the New England tablelands, where she developed a deep love for the countryside and its people. Her love of poetry was fostered by her parents and from early childhood she wrote many poems. This talent was later encouraged by her English teacher at an Armidale boarding school. After graduating from the University of Sydney (1936), Wright visited England and Europe (1937-38), then returned to Sydney where she did secretarial work and market research in order to live and write. In 1941 she returned home to assist her father in running the property. This three-year period provided an opportunity for reappraisal of her attachment to the country and led to her first intensely creative period of writing. Much of the material for this writing was gleaned from the tales of an old stockman and from her grandfather's diaries. Several fine poems about the war-'The trains', 'The company of lovers', and otherswere written at this time. In 1944-48 Wright worked at the University of Qld and was involved with the production of the Meanjin papers. While there, she met and married J. P. McKinney, philosopher and writer, whose interests in the development of western thought complemented her own and greatly influenced her writing.

Since the publication of *The moving image* (1946), which brought immediate recognition, Wright has been a prolific poet, literary critic, anthologist, editor, fiction writer, historian and conservationist. She has received honorary doctorates of letters from four Australian universities, and been the recipient of the Grace Leven Prize for poetry (1949 and 1972), the Australia–Britannica Award for literature (1964), and other awards. Judith Wright has long been recognised as one of Australia's outstanding poets.

WYNNE PRIZE First awarded in 1897 and funded from a bequest by Richard Wynne of Mount Wilson, NSW, the prize is for Australian landscape painting in oil or watercolour or for a figure sculpture in any medium. It is judged by the trustees of the Art Gallery of NSW simultaneously with the Archibald and Sulman prizes. In 1986 the prize was \$10 000.