AUSTRALIA'S POPULATION PROBLEM

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HE Australian Commonwealth comprises the island continent of Australia, with an area of 2,948,366 square miles, and the island of Tasmania, the total area of the Commonwealth being 2,974,000 square miles. This vast area is nearly equal to that of continental United States, 3,027,000 square miles. The interior of the island continent contains large tracts of land that are considered unsuitable for occupation by white settlers—there are about 1,067,000 square miles over which the annual rainfall is less than 10 inches—and white settlement has been concentrated chiefly on the eastern and southeastern seaboards and a small part of the western seaboard.

The peopling of Australia by settlers of European origin began in 1788, and by 1850 the colonists had increased from 850 to 405,000; though the rate of increase was high the numbers were small. In 1851, however, an event occurred which, it has been said, "precipitated Australia into nationhood"; large deposits of gold were found, and a gold rush began. By 1860 the population had increased to 1,145,000. In 1938 it was estimated at about 6,930,000.

Though Australia is thinly peopled, the population has increased at a high rate. During the forty years 1881-1920, the average annual rate of increase, 22 per 1,000 population, was higher than that of any other country except New Zealand, which had a rate of 23 per 1,000. In the period 1921-1926 Australia's rate of increase was the highest in the world, and in 1926-1931 it was exceeded only by that of Canada.

Since the decade 1851-1860, which saw the beginning and end of the mid-century gold rush, the population has grown chiefly by excess of births over deaths. From 1861 to 1938 the increment of

¹ Official Year Book of the Commonwealth of Australia, 1939. These figures do not include the aborigines.

population increase due to net immigration was 1,332,000, or 23 per cent of the total increase. After the war of 1914-1918 immigrants arrived in considerable numbers, but with the onset of the economic depression the flow of migration was reversed; in the three years 1930-1932 there were more emigrants than immigrants. In 1933, however, the tide began to turn; there was a slight excess of immigrants. After a setback in 1935, the movement broadened, and in 1938 the net immigration rose to 9,137.

About 98 per cent of Australia's population is of British origin, and many Australians hold that Australia is the most British country in the world. Australians have no colour problem, and are unanimous in their resolve not to have any. The aborigines, who for the most part live in areas remote from white settlement, number no more than 52,000; there are only about 25,000 Asiatics; and in pursuance of the White Australia policy, on which Australian public opinion is united in a solid block, the general practice is not to permit Asiatics or other coloured immigrants to enter Australia for the purpose of settling permanently in the country.

Australia is highly urbanized; the urban areas contain 64 per cent of the total population. More remarkable, however, is the large aggregation of people in the six metropolitan cities: Sydney, Melbourne, Brisbane, Adelaide, Perth, and Hobart. These cities contain 47 per cent of the total population. Sydney, with 1,289,000 inhabitants, has the largest white population of any city, except London, in the British Commonwealth. The Australian cities are, however, laid out in streets that are between two and three times wider than the height of the houses; and the typical dwelling of the Australian city worker, skilled or unskilled, is a one-storied house, with a verandah, standing in its own garden, back from the street. It is said that the Australian instead of going into the country to live has brought the country into his cities. About 43 per cent of the houses are owned by their occupiers, and another 13.5 per cent are occupied by purchasers on the installment system. The standard of

living is high. Leisure is devoted chiefly to physical exercise, the most popular sport being surf-bathing, and at cricket, the British national game, Australia with her scanty population has for over sixty years held her own with the mother country. Material comfort has not made young Australians soft. Though no war has been fought on Australian soil, Australians have in many campaigns shown that they can wage war with an endurance and efficiency never excelled in the world's history. During the war of 1914-1918 the Australians serving overseas numbered 330,000, of whom 59,300 died.

In Australia, as in other countries of recent settlement, the age structure of the population has been favourable to high fertility. During the decade following the mid-century gold rush, the birth rate was over 42 per 1,000; and though the rate declined as the immigration of young adults slackened, it remained about 35 per 1,000 until 1888. In the following year a spectacular descent began, and by 1903 the rate had fallen to 25.5 per 1,000.

The decline was preceded by events similar to those preceding the decline in the English birthrate. In England the birth rate began to go down shortly after the prosecution, conviction, and successful appeal of Charles Bradlaugh and Annie Besant had given an enormous publicity to birth control propaganda. The defendants were prosecuted for selling an American book on contraception, Knowlton's Fruits of Philosophy, and their trial, which continued over four days, was widely reported and, as the present writer well remembers, roused intense public interest. The trial was one of four anti-contraceptions prosecutions occurring in 1876-1878. It was not initiated by the government; and the Lord Chief Justice, who heard the case, said in his address to the jury that "A more ill-advised and more injudicious proceeding in the way of a prosecution was probably never brought into a court of justice."

In 1888 a similar train of events occurred in Australia. Early in that year Mr. Collins, a Sydney bookseller, was prosecuted for sell-

ing Mrs. Besant's Law of Population, a book she wrote after she and Bradlaugh had successfully appealed against their conviction in the Court of Queen's Bench in 1877. Collins was convicted and fined five guineas, but he appealed to the Full Court of New South Wales, which in December, 1888, by a majority of two to one allowed the appeal. Justice Windeyer, in giving the decision of the Court said:

All prosecutions of this kind should be regarded as mischievous, even by those who disapprove the opinions sought to be stifled, inasmuch as they tend more widely to diffuse the teaching objected to. To those, on the other hand, who desire its promulgation, it must be a matter of congratulation that this, like all attempted prosecutions of thinkers, will defeat its own object, and that truth, like a torch, 'the more it's shook, the more it shines.'2

Extracts from this judgment were reprinted by birth control propagandists and distributed widely, not only in Australia and New Zealand but in Great Britain. In commenting on this case, the New South Wales Royal Commission on the Decline of the Birth-Rate in that State, observed that the "remarkable coincidence between the promulgation in 1888 of the views expressed in this judgment and the sudden fall of the birthrate in 1889 could not be considered fortuitous." The Royal Commission was appointed by the government of New South Wales in 1903 shortly after the publication of a remarkable monograph by Sir Timothy Coghlan, the State statistician, who pointed out that in Australia the number of legitimate births per 1,000 married women under 45 years had fallen from 328.8 in 1888 to 235.3 in 1901, and concluded that a further decline was probable. The Commission, which, so far as the present writer is aware, was the first body appointed by any government to study the decline in the birth rate, issued its report in 1904,

² Ex parte Collins, Law Reports, New South Wales, Vol. IX. 1888.

⁸ Coghlan, Timothy: The Decline in the Birth Rate in New South Wales. Sidney, W. A. Gullick, 1903.

and found that the decline was due to the deliberate interference with the function of parenthood, chiefly by contraception, but also to a considerable extent by abortion. The Commission was unable to trace the prevalence of family limitation to definite economic causes, but reported that most of the witnesses examined attributed it to "an increasing love of luxury and of social pleasures" and "a dislike of the interference with pleasure and comfort involved in child-bearing and child-rearing." The Commission's report ended with the following warning:

In whatever way the waning birthrate in New South Wales is viewed . . . it is seen as a grave disorder sapping the vitals of a new people, dispelling its hopes, blighting its prospects, and threatening its continuance. . . . It is the duty of the present generation of Australians to see to it that their patriotism is not impugned in time to come; and that the loss of this fair heritage of the British race, which, under existing conditions, the philosophy of history foretells, is not made attributable to them by those who may, in the days to come, have to sacrifice their blood and treasure in the vain hope of defending it.

In 1904, when the report of the Royal Commission was published, the Australian birthrate was 26 per 1,000. After a slow rise to 28.5 in 1912, the rate entered upon another period of decline, and in 1934 it reached the lowest figure yet recorded—16.39 per 1,000. The gradual rise to 17.7 in 1939 was doubtless due to the increase in marriages that accompanied the gradual recovery from economic depression; the marriage rate rose from 7.03 in 1933 to 9.05 in 1938.

Since 1909 the particulars required to be registered by the Australian birth registration system have included the age of the mother at the birth of the child and the order of birth, and it has been possible to compute gross and net reproduction rates on Australian data from that year. Between 1909 and 1912 the gross reproduction rate rose from 1.662 to 1.781, accompanied by a rise in the crude birth rate, and fell gradually to 1.047 in 1932-1934, a drop of 41

⁴ Report of the Royal Commission on the Decline of the Birth Rate in New South Wales. Sydney, W. A. Gullick, 1904, p. 54.

Number of Children in Family	1909–1913	1929–1931
I	58	65
2	75	157
3	104	155
4	117	139
5	117	113
6	104	93
7	102	72
8	8 0	60
9	68	48
10	61	31
II	43	24
12	29	16
13	20	12.
14 and Over	24	13

Table 1. Number out of every 1,000 children born belonging to families of different sizes according to the fertility of 1911 and 1931.

per cent. In 1935-1936 the rate was 1.048; in 1937 it rose to 1.076, and in 1938 it was 1.069.5

The changes in Australian fertility since 1909 have been studied by Dr. Enid Charles, who concluded that the decline in fertility between 1911 and 1931 was due in about equal measure to an increase in the proportion of childless women and to a reduction in the number of large families. She estimated that the proportion of childless women was 10 per cent in the period 1909-1913 and 26 per cent in 1929-1931. The changes in family size between the two periods are of special interest. There was a slight increase in the proportion of only children, a large increase in the proportion of two-children families, and a reduction in the proportion of families of five and more children, the reduction being more and more marked with the increase in family size. The figures in Table 1 show the proportion of only children and of children from families of different sizes out of every 1,000 children born according to the fertility rates of 1911 and 1931.

⁵ League of Nations Yearbook, 1939-1940.

⁶ Charles, Enid: The Changing Structure of the Family in Australia. Political Arithmetic, edited by L. Hogben. London, Geo. Allen and Unwin, 1938.

It will be seen that while in 1909-1913 more children came from families of four or five children than from families of any other size, in 1929-1931 the two-children family had made a rapid advance in public favour and had in fact become more popular than any other pattern, with the three-children family as a close competitor. It is noteworthy, however, that although in 1929-1931 the small family had become more generally favoured by parents, no less than 62 per cent of all the children born were found in families of four or more children. The Australians of the future were still springing mainly from the larger families, though the proportion of such families had been considerably reduced.

The effect on population growth of the decline in fertility has been masked by Australia's exceptionally low mortality. In the five years 1934-1938, the mean annual death rate per 1,000 population was 9.45. The age composition of the population, which still contains a large proportion of young adults, accounts in part for the low level of the crude death rate, since the corrected death rate computed from the mean expectation of life at birth, which in 1932-1934 was about 65 years, was 1,000/65=15.38. But the high expectation of life, and, consequently, the low corrected death rate, which was lower than that of any other country except New Zealand and Holland, is evidence that the low level of the crude death rate must be attributed largely to the favourable hygienic conditions under which Australians live. Additional evidence is afforded by the low rate of infant mortality. In 1934-1938 the number of deaths of children under one year per 1,000 births was 40.17—a rate lower than that of any country except New Zealand. The unusually low mortality rate has retarded the descent of the net reproduction rate, which in 1911 was 1.39. In 1921 it had fallen to 1.30, and in 1931 to 1.03. In 1932 the rate appears to have fallen below unity; in 1932-1936 it was 0.95. In 1938 it rose to 0.98, still below replacement level.

The descent of the net reproduction rate below the level required for maintaining a stationary population has incited Australian de-

Number of Estimate	Maximum Population	YEAR IN WHICH MAXIMUM REACHED	Population in the Year 2003
I	7,875,000	1977	7,632,000
2.	7,420,000	1957	5,513,000
3	8,940,000	1981	8,462,000

Table 2. Future population of Australia according to three estimates.

mographers to examine the prospects of further population growth in their country. Mr. S. H. Wolstenholme of Sydney University has published three estimates of Australia's future population up to the year 2003.7 The first assumes that natality and mortality will remain at the 1932-1934 level, when the net reproduction rate was 0.95. The second assumes that mortality will remain at the 1932-1934 level, but that natality will decline until 1963 at a rate equal to one-half of the rate of decline experienced during 1925-1930, so that by 1963 the net reproduction rate will fall to 0.69. Both these estimates assume that there will be no migration. The third estimate assumes that mortality and natality will be as in the second estimate, but that the population will be continuously replenished by immigration of the same volume and sex distribution that obtained during the peak pre-depression years. On this assumption the annual number of male and female immigrants would be about 27,000 and 18,000 respectively. The results of the three estimates are given in Table 2.

According to all three estimates the population of Australia will reach its maximum size within the next forty years, and will begin to decrease before the end of the century. On the assumptions of the second estimate the decrease some 50 years hence will be rapid. Even on the assumption that migration on a large scale will be maintained, the population will diminish unless the tendency of natality to decline is arrested.

⁷ Wolstenholme, S. H.: The Future of the Australian Population. *Economic Record*, December, 1936.

	Total Population			
Years	Estimate A (Thousands)	Estimate B (Thousands)	Estimate C (Thousands)	
1950	137,084	140,561	141,645	
1960	139,457	146,987	149,372	
1970	138,455	151,170	154,969	
1975	136,680	152,433	156,977	
1980	133,993	153,022	158,335	

Table 3. Growth of the population in the United States from 1950 to 1980 according to three estimates.

It is interesting to compare Wolstenholme's figures with three estimates of future population growth in the United States made by Warren S. Thompson and P. K. Whelpton for the National Resources Committee.8 All three estimates assume that mortality will decline until in 1980 the expectation of life at birth will be 68.8 years for males and 71.2 for females. As to fertility, Estimate A assumes that the specific fertility rates will decline until in 1980 there will be about 1,500 births per 1,000 women living to age 50. Estimate B is based on somewhat higher fertility rates. It assumes that the rates will decrease by about 13 per cent during the fifty years after 1930-1934, so that by 1980 one thousand women living through the child-bearing period will give birth to about 1,000 children, this being approximately the 1930 rate in Massachusetts, Connecticut, Washington, and Oregon. Neither estimate makes any allowance for the highly uncertain factor of migration, but a third estimate— Estimate C—was prepared based on the assumption that, while fertility and mortality will decline at the rates assumed in Estimate B, there will be a net immigration of 100,000 persons annually. Table 3 shows the growth of the population of the United States from 1950 to 1980 according to each of these three estimates.

According to Estimate A the population of the United States will reach its maximum number about 1960, and will then decline at a rate that will become well marked about forty years hence. Wol-

⁸ National Resources Committee, Problems of a Changing Population. 1938. Pp. 22-24.

stenholme's second estimate shows a similar movement of the Australian population, and the results of his first and third estimates are not unlike those emerging from Thompson and Whelpton's Estimates B and C respectively.

Wolstenholme's estimates afford food for thought, especially when it is borne in mind that Australia's area is nearly equal to that of the United States. Opponents of the White Australia policy, who, though practically non-existent in Australia are numerous and vocal elsewhere, lay stress on the contrast between Australia's vast area and scanty population. But large parts of the "vast unpeopled spaces" of which so much has been made are desert. What proportion of the total area can be made suitable for white settlement is a question on which widely differing opinions are held. Some eminent authorities hold that the continent when fully developed would be capable of supporting 100,000,000 persons; others contend that the maximum number would be reached if the present population were doubled; and between these limits various additional estimates might be cited." Though Australians differ on the question of the maximum population their country could support without any reduction in the present standard of living, they agree that it would at least be twice the size of the present population. They are also unanimous in their agreement that however desirable it may be to increase the number of Australia's inhabitants, it must not be done by permitting immigration of coloured races and, consequently, creating a colour problem in Australia. No measures have been adopted for the express purpose of checking the decline in fertility.

The disparity between Australia's resources and population is viewed with apprehension by some Australian writers, who deplore the decline in the birth rate as an influence tending to make a vain thing of any hope that Australia may take that place in the world to which from her past achievements and the high qualities of her

⁹ Wadham, S. M. and Wood, G. L.: Land Utilization in Australia. Melbourne, Melbourne University Press, 1939.

people she might reasonably aspire. This view has been effectively put forward by Mr. Paul McGuire in his recent book, Australia: Her Heritage, Her Future. There are other writers, however, who hold a different view, who see no convincing reasons why Australia should desire a large population. They contend that the quality of a population is more important than its quantity, and that a rapid increase in population, whether by immigration or excess of births over deaths, would imperil the high standard of living that Australians have achieved and mean to maintain. This view has been expressed by Mr. W. G. K. Duncan, Director of Tutorial Classes, Sydney University:

Only the vulgar-minded confuse mere size with greatness. Australians may be genuinely patriotic, and even enthusiastic about the future greatness of their country while admitting that our population will never be immense. Ancient Athens and modern Sweden show what can be done by people whose standards are higher than those of the ant heap. ¹⁰

The significance of the decline in Australian fertility was first indicated by Sir Timothy Coghlan in 1903. He saw nothing incongruous in the declining fertility of old countries, especially those "afflicted with the incubus of militarism," but that fertility should rapidly decline in a new country seemed to him "novel and astonishing" and to call for the deepest attention. Nearly forty years have gone by since this eminent demographer warned his countrymen of the menace of depopulation, and fertility in his country has continued to decline until the net reproduction rate has sunk below the rate required for population replacement. Declining fertility has appeared in other countries; in the United States, as in Australia, it has brought the net reproduction rate down below replacement level. We know now that declining fertility is as char-

¹⁰ Duncan, W. G. K.: The Census and Migration. What the Census Means. Edited by G. V. Portus. Adelaide, F. W. Preece and Sons. 1936. p. 33.

¹¹ Coghlan: Op. cit.

acteristic of new as of old countries. We know also that it cannot be attributed to the presence or absence of "militarism," since it has appeared not only in heavily-armed and warlike countries but in countries that have pursued policies of unarmed peace. It has appeared in democratic and in totalitarian countries. It is characteristic generally of the modern development of Western civilisation.

It has created problems which, though of major importance, have hitherto received but little attention from the general public. Various solutions have been put forward, but it seems that what is chiefly needed is more research into the causes and consequences of the decline, and a much wider appreciation of the momentous issues involved.