THE ABORIGINAL POPULATION OF AUSTRALIA

L.R. Smith

ABOR

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L.R. SMITH

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NOTE ON THE SERIES

The Academy of the Social Sciences in Australia is the national organisation of social scientists. Some of its major functions are:

- to encourage the advancement of the social sciences in Australia;
- to act as a co-ordinating group for the promotion of research and teaching in the social sciences;
- to foster research and to subsidise the publication of studies in the social sciences.

To these ends the Academy and its predecessor, The Social Science Research Council of Australia, have sponsored a number of major research projects. The first related to the role of women in public and professional life in Australia and was carried out by Mr Norman MacKenzie. His report, together with the associated study of the legal status of women in Australia by Dr Enid Campbell, was published in 1962 in a book, Women in Australia (F.W. Cheshire Pty Ltd, Melbourne).

The second major project, carried out by a group of economists, was concerned with the Australian taxation structure and under the authorship of R.I. Downing, H.W. Arndt, A.H. Boxer, and R.L. Mathews, the results were published in 1964 in Taxation in Australia: Agenda for Reform (Melbourne University Press, Melbourne).

In 1963 the third and most ambitious major project was launched. This was the Aborigines in Australian Society, with the broad objectives of:

- elucidating the problems arising from contacts between Aborigines and non-Aborigines and formulating policy implications from these; drawing together existing knowledge in various parts of Australia and undertaking such further original research as can be carried out over a period of three years.

In addition to the original research carried out under the Director of the project, Dr C.D. Rowley, which was made possible by the generous support of the Myer Foundation of Australia and the Sidney Myer Charity Trust, the Academy published a number of books where the topic was relevant to its project but where the main support was derived from other sources. The last such book was published in 1976, and it was then felt that this completed the project.

However, in 1979 the Executive agreed with a proposal that a major study of the history of the Aboriginal population from the earliest times by Dr L.R. Smith would be an appropriate addition to the Academy project on the grounds that it supplemented and brought up-to-date the material already published in the study by F. Lancaster Jones, The Structure and Growth of Australia's Aboriginal Population, which was published in 1970, and that it provided a comprehensive appraisal and review of the demography of the Aboriginal people from all known sources since the first white settlement in Australia.

The present study is based on Dr Smith's research for his doctoral thesis and upon his work as Research Fellow, first with the National Population Inquiry 1972-1976, and more recently with the Health Research Project at the Australian National University supported by a grant from the Hospitals and Health Services Commission.

The Academy wishes to express its appreciation of the co-operation of Dr John Deeble and his Health Research Project group at the ANU, and particularly to Mrs Jennifer Hucker in preparing the manuscript; and to Mrs Daphne Freeman of the Department of Demography, ANU, for her generous help in the preparation of tables and diagrams and in seeing the manuscript through the Press.

W.D. Borrie
1980

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List of abbreviations used.

A.A.C.	Annual Aboriginal census
A.B.S.	Australian Bureau of Statistics
A.C.T.	Australian Capital Territory
A.P.B.	Aborigines Protection Board
A.P.P.	Australia. <u>Parliamentary Papers</u>
A.R.	Annual Report
Aust.	Australia, Australian
B.P.A.	Board for the Protection of Aborigines
C.B.C.S.	Australia. Commonwealth Bureau of Census and Statistics
C.P.A.	Chief Protector of Aborigines
N.H. & M.R.C.	Australia. National Health and Medical Research Council
N.S.W.	New South Wales
N.S.W.P.P.	New South Wales. <u>Parliamentary Papers</u>
N.T.	Northern Territory (of South Australia or Australia)
Q., Qld.	Queensland
Q.C.P.A.	Queensland. Chief Protector of Aborigines
Q.D.A.I.A.	Queensland. Department of Aboriginal and Island Affairs
Q.D.N.A.	Queensland. Department of Native Affairs
Q.N.P.A.	Queensland. Northern Protector of Aborigines
Q.P.P.	Queensland. <u>Parliamentary Papers</u>
S.A.	South Australia, South Australian
S.A.C.P.A.	South Australia. Chief Protector of Aborigines
S.A.P.P.	South Australia. <u>Parliamentary Papers</u>
Tas.	Tasmania, Tasmanian
V., Vic.	Victoria, Victorian
V.L.C.V. & P.	Victoria. Legislative Council. <u>Votes and Proceedings</u>
V.P.P.	Victoria. <u>Parliamentary Papers</u>
W.A.	Western Australia, Western Australian
W.A.A.D.	Western Australia. Aborigines Department
W.A.A.P.B.	Western Australia. Aborigines Protection Board
W.A.C.N.A.	Western Australia. Commissioner of Native Affairs
W.A.C.N.W.	Western Australia. Commissioner of Native Welfare
W.A.C.P.A.	Western Australia. Chief Protector of Aborigines
W.A.P.P.	Western Australia. <u>Parliamentary Papers</u>

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1. INTRODUCTION.

In 1967, when the first preliminary tabulations were released showing details of the Aboriginal population enumerated at the 1966 Census, the Bureau of Census and Statistics was able to claim that for the first time at an Australian census, the coverage of Aborigines - and hence of the Australian population - was 'virtually complete'.#1 At that stage it was still held, as it had been since 1901, that the Australian Constitution required that 'full-blood' Aborigines be excluded from published population statistics, and the Bureau had taken great care to distinguish them in its analysis.

However it soon became clear that the problems involved in enumerating the Aboriginal population were not yet solved. For a start, the Census Bureau found that the preliminary figures released showing 'full-bloods' separately did not appear to relate to the same population as the 'full-blood' figures from earlier censuses, and as a result they withdrew the tables and issued an amended series of State totals using a composite population (persons stated to be of 50% or more Aboriginal descent) which it was hoped would provide some comparability with previous censuses.#2 Unfortunately it also prevented the calculation of the total population of Australia, even though this was possible for the first time.

But when more detailed tabulations were released some time later,#3 no real continuity could be demonstrated, despite the altered population base, and the figures also contained internal puzzles and contradictions; as a result, the Bureau decided to introduce an entirely new question on race for the 1971 Census, which simply identified 'Aborigines' without further qualification. But the results obtained in 1971 were equally problematic, although in a rather unexpected way,#4 and there is no strict continuity between the Aboriginal populations revealed at the three most recent censuses.

This is not basically an enumeration problem, nor a result of the changes in the form of the question used; these first complete enumerations of the Aboriginal population have merely made it possible to see clearly the continuation of a sociological process that is discernible in all post-war censuses, but which the incomplete data had hitherto partly obscured. The explanation of both the instability of the Aboriginal population, and the inadequacy of the data, is to be found in the Australian race relations situation.

#1

Census 1966. Special statement - Full-blood Aborigines. States and Territories of Australia. 11 August, 1967.

#2

Census 1966. The Aboriginal population. (revised statement). States and Territories of Australia. 27 November, 1967.

#3

Census 1966. The Aboriginal population of Australia. Summary of characteristics. 16 April, 1969.

#4

Census 1971. The Aboriginal population.

F.L. Jones, author of most of the existing papers on Aboriginal demography, has described the Aborigines as 'Australia's demographically retarded minority'.#5 Exact counts of the non-Aboriginal population of Australia and full records of its births, deaths and marriages, have been sought since 1790 (albeit with varying success), and reasonable census coverage of Aborigines was obtained in the settled districts of South Australia, Western Australia and Victoria in the 1850s. But for Australia as a whole it was not until 1966 that a complete enumeration of all people of Aboriginal descent was even attempted, and Aboriginal vital events, which until comparatively recently did not even have to be registered (and which were excluded from vital statistics even if they were) are still not in general distinguished from those of the rest of the population.

What reasons are given for this shortage of hard data about the Aboriginal population, and the unknown reliability of that which is available? A long series of Commonwealth Statisticians have seen no contradiction in justifying the exclusion of 'full-blood' Aborigines from the census both on the grounds that it was required by the Constitution, and because of the practical difficulty of enumerating those in remote areas who are tribal, nomadic, wandering, out of contact, or not living in the manner of Europeans.#6 But while there may indeed be intractable problems in the collection of certain types of information about Aboriginal people even today—for instance, ages of older people, as F.L. Jones has demonstrated#7 the 'practical difficulties' of one era are the result of the lack of official interest in earlier years. There is no doubt, for instance, that a reasonably complete enumeration of the Aboriginal population would have been possible at the first Australian census in 1911. But the effort was not made, and the coverage was not even as good as at earlier State or Colonial censuses.#8 The very fact that census controllers have considered it beyond their capacity to obtain individual enumerations of some Aboriginal groups tells us a great deal about the nature of race relations in Australia; in the final analysis it was social, or ideological, rather than practical difficulties which prevented the collection of Australia-wide Aboriginal census data until this late stage. Such factors as statutory definition of who is or is not an Aborigine, and the rights or otherwise of those so defined, as well as preconceived popular and official views about the eventual fate of the Aboriginal people, and of their place in a white Australia, have combined to affect the degree of commitment of those nominally responsible for collecting Aboriginal population statistics, and the extent to which it was considered worth-while, appropriate, or even advisable to do so.

Despite the lack of Australia-wide census and registration statistics however, Europeans since colonization have made a great variety of official and unofficial estimates and partial enumerations of the Aboriginal populations of particular States, regions, communities and tribal groups. But in addition to the normal

#5

F.L. Jones (1963). A demographic survey of the Aboriginal population of the Northern Territory, with special reference to Bathurst Island Mission.

#6

See the Statistician's Reports for censuses from 1911 to 1961, especially 1954:1 and 349-50, and also the Australian Yearbooks from 1908 to 1966.

#7

In the 1963 monograph and also in F.L. Jones (1970a) The structure and growth of Australia's Aboriginal population.

#8

See Census 1911. Bulletin No.1. Population of States and Territories:1.

problems of the reliability of figures not based on nominal identification, the collection of these statistics was often affected by ideological consideration such as whether people were 'really' or 'legally' Aborigines. Moreover, Aboriginal people themselves have been affected by considerations of this kind, so that even when they have been in a position to identify their race themselves, the response has been influenced by their perception of whether they were being asked if they were 'officially' Aborigines.

At a general level, it is no exaggeration to say that the basic problem in Aboriginal population studies is to penetrate the mythology and ideology that surround the subject in order to discover what the real facts are; Australian native administration has been influenced by, and has also produced, a series of myths which have been promoted, accepted, and discarded as the needs of the majority society changed. As we shall see, changes in official and other statistics have routinely followed the changes in the myths. For instance, when the Aborigines were held to be a dying race and no-one was really interested, population figures showed a steady decline until the late 1930s; even minor technical adjustments to estimated numbers were hailed as evidence of the 'black's tragic decline'.^{#9} Then, coincidentally, numbers began to increase as the new official policy of preservation and protection as a prelude to assimilation gained acceptance. It now appears distinctly possible that no overall decline occurred this century at all, and that official statistics merely reflected Government and community convictions that the Aborigines were destined, whether by destruction or absorption, to disappear from the face of the earth.

Today we have a new set of myths. It has been said that there is now an Aboriginal population explosion, with the highest rate of increase, the highest birth rate, and the highest infant mortality in the world; there is as little solid evidence for this as there was for the 'black's tragic decline' two generations ago.

The study of this process of myth-building and its relationship to the prevailing political and sociological context is important in itself, but it is not the aim of this study. Nor is it my aim to treat these and other myths as serious hypotheses to be tested by the narrow application of circumscribed empirical data to crucial deductions from them. Instead, what I have tried to do is to collect and evaluate all the information available, in order to build up as complete as possible a picture of the history of the Aboriginal population, its present structure and future potential. Curiously, the first thing that emerges is that the alleged lack of Aboriginal population data is itself one of the myths. There is an enormous uncollected body of material available in the literature, and I have in fact been forced to restrict the scope of the collection as a result. This is a study of the Aboriginal population of Australia. But because the Australian Constitution preserved the administration of Aboriginal affairs as a State matter until 1967, most of the useful statistics apart from the Commonwealth censuses are only available on a State basis. It has consequently been necessary to investigate each State and Territory in turn, in order to compile a picture for Australia as a whole.

Records of Aboriginal births and deaths are, in general, only available for specific Aboriginal communities or groups, so it has been necessary to go to such local levels in order to gain some insight into the parameters of the Aboriginal demographic transition. But again, this is only done for the light it sheds on the situation in the States and Australia; an examination of local ethnographies and genealogies, and of changes in size, composition and location of all tribal and community groups is a task that desperately needs to be undertaken, but it is quite beyond the scope of this study.

#9

Sydney Morning Herald, 21 May 1934.

At the level of generality at which I am aiming, I hope I have been able to provide some broad answers and to set limits to the possibilities. However at the detailed level many more questions are raised than are answered; some may be resolved by the results of future censuses and surveys; others require further investigation using the methods of historical demography.

PART I

DEFINITIONS AND SOURCES

2. WHAT IS THE ABORIGINAL POPULATION?

Nowhere is the effect of the ideology and practice of race relations more pervasive or more disruptive than in the definition of 'who is an Aborigine'. From the point of view of human biology, the people who occupied the Australian continent and the island of Tasmania were a heterogeneous population even in pre-European times.^{#1} But although some early settlers speculated about the origins of the native people of Australia such subtleties did not weigh heavily on the minds of the white colonists. It was only after a few generations of Aboriginal accommodation to European domination, when a substantial 'mixed-blood' or 'half-caste' population was becoming visible, that the question 'who is an Aborigine?' began to pose a problem for the authorities and community alike.

In Australia, unlike many areas of British colonial rule, no attempt was made to promote the 'coloureds' as a special, intermediate class between rulers and ruled. Commercial or exploitative interests dominated internal development, and there was simply no demand for Aboriginal labour in the early period of a convict colony. On the other hand, there was an insatiable demand for Aboriginal land; and these factors in conjunction resulted in the development of a policy of laissez-faire extermination, justified by a philosophy sometimes explicitly genocidal, sometimes only so in effect.^{#2}

But even as the Aboriginal people were being decimated by starvation, murder, disease and induced tribal wars, an increasing number of Aboriginal women were bearing children whose fathers were white men; and although some Europeans married Aboriginal women or at least acknowledged their children, it is clear that from the earliest times the majority of children of mixed unions, if they survived, became the responsibility of their mothers and were raised as Aborigines. This pattern continues to the present day.

In addition, people of mixed descent also of course had children with each other, full blacks or Europeans, and the result was that in Victoria, for instance, on stations controlled by the Board for the Protection of Aborigines 'half-castes' outnumbered 'full-bloods' by the 1880s.^{#3} These 'part-Aboriginal' people living as Aborigines caused grave concern at a time when the myth of the Aborigines as a dying race was firmly established and the colonies had begun to fix their gaze upon the prospect of a white Australia.

#1

Whether as a result of selection, genetic drift, or the mixing of several immigrant groups. See for instance A.G. Thorne's 1971 review 'The racial affinities and origins of the Australian Aborigines' in D.J. Mulvaney and J. Golson (eds) (1971) Aboriginal man and environment in Australia.

#2

See C.D. Rowley (1970a) The Destruction of Aboriginal society for a complete and appalling documentation of this.

#3

Report of the Board for the protection of Aborigines 1889. (V.P.P. 1889 No.129). D.E. Barwick has also explored this situation, in 'Changes in the Aboriginal population of Victoria, 1863-1966', a paper in Mulvaney and Golson's 1971 collection.

Isolated attempts had been made to 'rescue' half-caste children (particularly girls) from the blacks' camps, but it was the Victorian ACT of 1886#4 which set the pattern for the solution of the 'half-caste problem' throughout Australia, by simply declaring - in the name of economy and of the peoples' own best interest - that persons of mixed descent were not Aborigines, and were not entitled to live on stations or receive aid as a right. With certain provisos, they were required, upon reaching maturity, to leave the reserves and become members of the general community, to 'make their own way, with occasional assistance from the Board'.#5

As Barwick has noted, the development of shanty settlements was a direct consequence of this forcing of 'part-Aboriginal' people into a community that was totally unwilling to accept them. But although initially the Boards in New South Wales and Victoria were concerned to force some people off the reserves, the exodus seems to have gathered a momentum of its own, so that even when the Victorian Board was enabled in 1910 to give assistance to people other than those of full descent, few chose to return to the stations, though most were living in poor conditions outside. Similarly in New South Wales the Board, which from 1910 to 1920 had been active in removing people of 'less than half-caste' 'who are not Aborigines' from the reserves, found cause to complain during the 1920s that large numbers of Aborigines were leaving the stations of their own accord to live in unsupervised camps, and that the Board had no power to control them.#6

The reasons for this flight from the reserves are not difficult to determine. Firstly, it was the only method of family reunification possible when some members were expelled. But there were more compelling reasons for escaping from the control of the Board. Forcing people to leave their family and home at adulthood may seem drastic enough; but so important was the distinction between Aborigines and 'part-Aborigines' held to be, that special inspectors were routinely employed to seek out light-coloured infants living on reserves and remove them from their mothers to be raised in State or Church homes. Duncan (1969) has recorded descriptions by Aboriginal people of the activities of one Donaldson, a particularly notorious N.S.W. Board inspector in the 1920s. They recalled hiding their children when he approached, as he was prone to decide at a glance that the child was of less than 'half-caste' and have it removed to an institution.#7 This method of assimilation by the legislated separation of children from their parents, has been used at one time or another all over the continent; a similar system prevailed until comparatively recent times in the Northern Territory. As with all assimilation legislation, the entire burden of 'adjusting' was placed upon the blacks; needless to say it has profoundly affected the Aboriginal people and their relations with white Australia.

#4

The Aborigines Protection Act 1886, described in the 1887 Board report as 'a measure for merging the half-castes among the general population of the colony'.

#5

A phrase repeated with some variation in the Board's reports in the late 1880s and 1890s.

#6

Reports of Aborigines Protection Board, 1912 to 1921-22.

#7

A.T. Duncan (1969) A survey of Aboriginal education in New South Wales. M.Ed. Thesis, University of Sydney.

But it was not enough simply to leave the reserves. To avoid the application of these and other restrictive laws, or to find a better life-style than that available in the shanty settlements, one had also to virtually leave the Aboriginal population as well. Some people, perhaps mainly those who did not look Aboriginal, did just that, in the sense that they lived like, associated with and possibly married Europeans. They may also have ceased to call themselves or even associate with dark people. Most were therefore not included in State or census Aboriginal populations. However this process is dependent upon the legal, social and demographic climate prevailing at the time; it becomes clear in the later sections that many never ceased to consider themselves Aborigines, and where once they or their parents migrated socially out of the identified Aboriginal population, they now form part of a reservoir of 'invisible' Aborigines from which migration is occurring into the identified or acknowledged Aboriginal population. And, again reflecting changing circumstances, where once State administrations welcomed and promoted their disappearance, they now seek to emphasize their existence and perhaps even exaggerate their numbers. The Queensland Department has claimed that since 1956 for instance there are over 20,000 such people in the State.^{#8}

CONTEXT
FIS
VISIBILITY

Mention must also be made of the Torres Strait Islanders. The distinction between these people and the mainland Aborigines has been central to Queensland native administration since 1939, and anthropologists and the general public have also accepted that there is a sharp cutoff between the two. We are in the realm of mythology again here: just as modern critical thought questions the biological and cultural discontinuity,^{#9} it also becomes clear later that when people are asked to identify which group they belong to, the boundary is somewhat blurred psychologically as well.

In another context it has been claimed by C.N. Perkins (1966)^{#10} that there are at least 300,000 people of Aboriginal descent in Australia, a figure higher by 150,000 than even the somewhat high population claimed in total by the State. The figure of 300,000 quoted is a guess at the total number of persons of any Aboriginal ancestry at all. It refers to people identifying as Aborigines, and also to those persons who have in their own lifetime passed into the white community. But it also includes several other groups of 'invisible' Aborigines. For instance, there are those, generally perhaps descendants of people of mixed descent who married into the European community in a much earlier period, who simply do not know of their Aboriginal heritage. Then there are others who have been passive social migrants - the children of people who have ceased to identify as Aborigines. Some of these may grow up without ever learning of their descent; some who know of their ancestry may later reject it; others may wish to reassert it.

People who positively reject their Aboriginal ancestry may still change their minds; and someone who only learnt of his Aboriginal descent by having his genealogy researched could possibly value and assert his Aboriginality. But there

^{#8}

Reports of the Director of Native Affairs 1957 to 1965; Reports of the Director of Aboriginal and Island Affairs 1966 to 1970. This figure has now been reduced to 15,000 (information from D.A.I.A.)

^{#9}

See J.P. White's (1971) 'New Guinea and Australian prehistory: the 'neolithic problem'' in Mulvaney and Golson (1971).

^{#10}

In I.G. Sharp and C.M. Tatz (eds) (1966) Aborigines in the economy.

can be no doubt that some people, actually of Aboriginal descent, are permanently lost to the Aboriginal population, as were their descendents. The total Aboriginal population which Perkins' figure refers to is an idealized one; it will never be fully revealed.

3. THE CENSUS ABORIGINAL POPULATION

It is not only population estimates compiled by the States that have been affected by the manner in which people are identified as Aborigines. Even recent censuses depend heavily upon the ascription by Europeans of particular 'blood levels' to particular individuals. This is because the Australian census is and has always been primarily a census of dwellings and the associated occupants, #1 based largely on a document known as the 'householder's schedule' in which one individual, normally the head of the household, enters details of the characteristics of all other individuals in the household. I am informed by census officials that as late as 1971, on Aboriginal settlements and missions, the householder's schedules were mostly completed by the white people in charge. #2 In addition, even with Aborigines not living in an institutional setting, the census collector normally at least assists in the compiling of the return.

This must always have been the case, so the census definition of 'Aboriginal' has been a mixture of self-identification, identification by others, and consultative identification. In each case the outcome has been affected by the sorts of variables mentioned previously; but as if these enumeration complications were not sufficient, the matter has been further clouded by the extent to which different groups have been covered, the way in which Aboriginal population data has been tabulated, and by the curious ways in which race has been established at the census.

3.1 Aborigines at censuses to 1901

Prior to the first Australian Census of 1911, information on race as such was rarely sought at the censuses. #3 Provision was merely made for the collector to note - generally under 'birthplace' - if the individual enumerated was an Aborigine or Chinese (or in Queensland, Pacific Islander) since these races were the subject of most concern. When enumerated in any substantial numbers, they were tabulated separately from the general population (which may or may not have included them - see later).

To my knowledge no Aborigines were enumerated and distinguished prior to the Western Australian Census of 1848, when those in the employ of whites were included, while the first attempt at an enumeration in all settled districts was at the South Australian Census of 1851.

Table 3.1.1 shows the situation up to the State censuses of 1901. It begins at 1828 since the New South Wales Census that year is conventionally regarded as the first Australian census in the modern sense. Even after 1828, however, it is rather difficult to say what is actually a 'census', since the word was used to

#1

It is this fact that made it so difficult for census administrators to come up with techniques for enumerating Aborigines not living in the manner of Europeans.

#2

This may of course be done in consultation with the individual concerned. A 'personal return' is available for those individuals who object to the householder completing a return on their behalf, but there is no information as to the extent to which Aboriginal (or other) census statistics are based on self-identification or identification by others.

#3

As far as I can establish, only at the South Australian Census of 1851; however specimens of the schedules used at many of the early censuses have not survived.

TABLE 3.1.1 ABORIGINES AT COLONIAL AND STATE CENSUSES 1828 - 1901.

1828	NSW.	Nov	?	not enumerated
1833	NSW.	Sep	2	" "
1836	NSW.	Sep	2	" "
	VIC.	May	25	not enumerated, but estimated later.
	VIC.	Nov	8	not enumerated
1838	VIC.	Sep	12	" "
1841	NSW.	Mar	2	" "
	VIC.	Mar	2	" "
	TAS.	Sep	27	" "
1844	S.A.	Feb	26	" "
1846	NSW.	Mar	2	" "
	VIC.	Mar	2	" "
	S.A.	Feb	26	" "
1847	TAS.	Dec	31	enumerated and tabulated with general population
1848	W.A.	Oct	10	those employed by settlers enumerated, total in settled districts estimated; those in employ included in some tabulations of general population.
1851	NSW.	Nov	1	not enumerated
	VIC.	Mar	2	those in contact enumerated; total estimated; not shown as a census in the <u>Australian Yearbook</u>
	S.A.	Jan	1	race on schedule; those in settled districts enumerated; tabulated separately.
	TAS.	Mar	1	enumerated and tabulated with general population
1854	VIC.	Apr	26	some enumerated, some estimated.
	W.A.	Sep	30	those in employ enumerated; included in some tabulations of general population
1855	S.A.	Mar	31	not mentioned in published abstracts; but those in settled districts may have been enumerated but not distinguished (see <u>Blue Books</u>)
1856	NSW.	Mar	1	not enumerated
1857	VIC.	Mar	29	nomads not included, rest partly estimated.
	TAS.	Mar	31	enumerated and tabulated with general population
1859	W.A.	Dec	31	those in employ enumerated; tabulated separately.
1860	S.A.	Apr	2	no Aboriginal figures published.
1861	NSW.	Apr	7	not enumerated
	VIC.	Apr	7	enumerated in settled districts; tabulated separately
	QLD.	Apr	7	not enumerated
	S.A.	Apr	8	enumerated in settled districts; tabulated separately.
	W.A.	Mar	31	not mentioned
	TAS.	Apr	7	enumerated and tabulated with general population
1864	QLD.	Jan	1	not enumerated
1866	S.A.	Mar	26	enumerated in settled districts; tabulated separately.
1868	QLD.	Mar	2	not enumerated
1870	W.A.	Mar	31	those in employ enumerated; tabulated with general population; estimate made of total in settled districts.
	TAS.	Feb	7	enumerated and tabulated with general population
1871	NSW.	Apr	2	those in contact enumerated; tabulated separately; total estimated later.
	VIC.	Apr	2	enumerated; tabulated separately
	QLD.	Sep	1	not enumerated
	S.A.	Apr	2	enumerated in settled districts; tabulated separately
1876	QLD.	May	1	not enumerated
	S.A.	Mar	26	enumerated in settled districts; tabulated separately
1881	NSW.	Apr	3	those in contact enumerated; tabulated under 'birthplace'; total estimated later.
	VIC.	Apr	3	enumerated; tabulated separately
	QLD.	Apr	3	not enumerated, but estimate made based on compilation of police returns.
	S.A.	Apr	3	enumerated in settled districts; tabulated separately.
	W.A.	Apr	3	those in employ enumerated; estimates compiled of total, but never published.
	TAS.	Apr	3	enumerated and tabulated with general population; all 'half-castes'.
	N.T.	Apr	3	not enumerated
1886	QLD.	May	1	partly enumerated, partly estimated; 'half-castes' not distinguished
1891	NSW.	Apr	5	enumerated but some Western tribes missed; 'half-castes' distinguished
	VIC.	Apr	5	included, but apparently an underenumeration; 'half-castes' distinguished
	QLD.	Apr	5	not enumerated
	S.A.	Apr	5	enumerated in settled districts; 'half-castes' not distinguished.
	W.A.	Apr	5	those in contact enumerated; 'half-castes' distinguished, tabulated both with general population and separately; 'full-blood' excluded from general population, separately tabulated.
	TAS.	Apr	5	fully enumerated; all 'half-castes'
	N.T.	Apr	5	enumerated for first time; 'half-castes' not distinguished
1901	NSW.	Mar	31	fully enumerated; only nomadic 'half-castes' distinguished
	VIC.	Mar	31	fully enumerated; 'half-castes' distinguished.
	QLD.	Mar	31	partly enumerated - total estimated; 'half-castes' distinguished.
	S.A.	Mar	31	fully enumerated except in remote areas; 'half-castes' distinguished.
	W.A.	Mar	31	those in settled districts enumerated; no estimate of rest; 'half-castes' distinguished
	TAS.	Mar	31	fully enumerated; all 'half-castes'
	N.T.	Mar	31	fully enumerated (or estimated); 'half-castes' distinguished

Sources: Details are taken from the actual census reports, either in the separate publication or in the appropriate Blue Books, Government Gazettes, Statistical Registers or Parliamentary Papers.

TABLE 3.1.2. PERSONS OF ABORIGINAL AND TORRES STRAIT ISLANDER DESCENT ENUMERATED AND ESTIMATED. CENSUSES 1836-1971.

		N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.
1836	enumerated	0	0							
	total	-	5,000							
	%	-	-							
1847	enumerated	.	.	.	.	.	38			
	total	.	.	.	.	.	45			
	%	.	.	.	.	.	84%			
1848	enumerated	.	.	.	.	541				
	total (settled districts)	.	.	.	.	1,960				
	%	.	.	.	.	28%				
1851	enumerated	.	1,409	.	3,730	.	?			
	total	.	2,693	.	-	.	-			
	%	.	52%	.	?	.	-			
1854	enumerated	.	96	.	.	233	16?			
	total	.	2,500	.	.	-	-			
	%	.	4%	.	.	?	?			
1857	enumerated	.	1,768	.	.	.	14			
	total	.	-	.	.	.	18			
	%	.	?	.	.	.	77%			
1859	enumerated	.	.	.	.	245				
	total	.	.	.	.	-				
	%	.	.	.	.	?				
1861	enumerated	0	1,694	0	5,046	.	?	.	.	6,740
	total	15,000	1,860?	-	-	.	-	.	.	-
	%	-	91%	-	?	.	-	.	.	?
1866	enumerated	.	.	.	4,397					
	total	.	.	.	-					
	%	.	.	.	?					
1870	enumerated	.	.	.	.	1,028	?			
	total	.	.	.	.	-	-			
	%	.	.	.	.	?	-			
1871	enumerated	983	1,330	0	3,369	.	.	.	.	5,682
	total	12,000	1,330	-	-	.	.	.	.	-
	%	8%	100%	-	?	.	.	.	.	?
1876	enumerated	.	.	0	3,953					
	total	.	.	-	-					
	%	.	.	-	?					
1881 Apr 3	enumerated	1,643	780	20,585	5,628?	2,346	97	718?	.	31,797
	total	10,000	870?	70,000?	-	-	97	-	.	-
	%	16%	90%	29%	?	?	100%	?	.	?
1886 May 1	enumerated	.	.	11,906						
	total	.	.	20,000						
	%	.	.	60%						
1891 Apr 5	enumerated	8,280	565	0	3,134	6,245	139	20,655	.	39,018
	total	8,280	565	-	-	-	139	20,655	.	-
	%	100%	100%	-	?	?	100%	100%	.	?
1901 Mar 31	enumerated	7,434	652	6,670	3,888	6,212	157	23,235	.	48,248 ^b
	total	7,434	652	26,670	5,185	30,000	157	23,235	.	93,333 ^b
	%	100%	100%	25%	75%	20%	100%	100%	.	52%
1911 Apr 3	enumerated	6,524	643	11,195	2,131	7,844	230	1,467	18	30,052
	total	7,329	643	22,508	4,817	27,000	230	22,000	a	84,527
	%	89%	100%	50%	44%	29%	100%	7%	-	36%
1921 Apr 3	enumerated	6,185	586	10,617	1,769	17,547	152	2,510	33	39,399
	total	6,185	586	17,104	2,420	27,547	152	17,809	33	71,836
	%	100%	100%	62%	73%	64%	100%	14%	100%	55%
1933 Jun 30	enumerated	9,351	865	15,676	2,139	10,107	270	6,590	68	45,066
	total	9,546	859	17,967	3,558	29,067	270	19,386	68	80,721
	%	98%	11	88%	60%	35%	100%	34%	100%	56%
1947 Jun 30 ^c	enumerated	11,560	1,277	13,537	2,621	9,507	214	12,232	100	51,048
	total	11,560	1,277	16,311	5,122	26,234	214	15,147	100	75,965
	%	100%	100%	83%	51%	36%	100%	81%	100%	67%
1954 Jun 30	enumerated	12,215	1,395	20,502	3,213	12,699	93	11,794	173	62,084
	total	12,215	1,395	22,813	4,973	16,215	93	17,163	173	75,040
	%	100%	100%	90%	65%	78%	100%	69%	100%	83%
1961 Jun 30	enumerated	14,720	1,796	24,903	4,885	16,276	38	17,763	145	80,526
	total	14,720	1,796	24,903	4,885	18,276	38	19,707	145	84,470
	%	100%	100%	100%	100%	89%	100%	90%	100%	95%
1966 Jun 30	enumerated	20,618	2,715	28,262	6,584	21,238	80	22,312	169	101,978
	total	20,618	2,715	28,262	6,584	21,238	80	22,312	169	101,978
	%	100%	100%	100%	100%	100%	100%	100%	100%	100%
1971 Jun 30	enumerated	23,873	6,371	31,922	7,299	22,181	671	23,381	255	115,953
	total	23,873	6,371	31,922	7,299	22,181	671	23,381	255	115,953
	%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Notes: a - presumably included in New South Wales.

b - by addition; estimates made by C.B.C.S. total to 102,370 but this is too high.

c - excludes Torres Strait Islanders.

Sources: Numbers enumerated, except 1966, are taken from the census Reports. 1966 numbers are unpublished figures for all persons of Aboriginal descent, plus persons of half or more Islander descent.

The estimated totals are official figures taken from the census Reports and the various Yearbooks, Statistical Registers or Reports of the State Aboriginal authorities. Some are seriously in error.

refer to musters, nominal enumerations, compilations of regional estimates, and also populations obtained by adding births, deaths and (sometimes) arrivals and departures to earlier years' figures. I have included censuses listed as such in the Australian Yearbook of 1973.

Table 3.1.2 shows for each census from 1836 to 1971 the number of Aborigines enumerated, where available the official estimate of the total number at the same date, and those enumerated as a percentage of the total. It begins in 1836 because that is the first year for which an estimate of the total is available.

If we consider 'the census' to be the final printed report, then it can be said that the determination of 'who is an Aborigine' for 'census' purposes has become increasingly complicated and increasingly error-prone over the years. Before 1891, the Colonial censuses simply recognized one category - 'Aborigines' - for enumeration, compilation and publication. So the only people of Aboriginal descent excluded would be those not enumerated (a substantial number) and those (probably very few) who, although enumerated did not reveal or were not aware of their ancestry. But as time went by various complications were added, either in enumeration, identification or tabulation of Aborigines, and with each complication the possibilities of error and the number of different categories excluded increased as well.

Why could not Aborigines have been included in the census in a routine way? We must look to three historical factors for the explanation: first, barriers of hostility and suspicion built up between the Aboriginal tribes and the authorities by the dispossession and destruction that accompanied the frontier of settlement; second, the development in Australia of an obsessive fear of contamination of the European stock by alien races; and third, the position of the Aborigines in the emerging Australian political system.

From the very first, two things are quite clear: the census authorities felt the need for some principle which would guide them in dealing with the Aborigines; but practical difficulties in enumerating them were not in themselves a major consideration. In the Report of the first census of Western Australian in 1848, for instance, the Administrator noted that

'the returns were ... calculated to throw light on the moral and physical condition of the people ... (including an account of) ... Aboriginal natives actually employed by colonists; and an estimate of their numbers in the located districts ... (Although) ... an accurate census of the Aborigines would seem almost impracticable if ... the names of individuals belonging to the several tribes are ascertained with a degree of certainty, useful estimates of their numbers may unquestionably be formed.

The number returned as ... employed by colonists may be fully relied upon, ... It may be observed that many ... have been several years in the employment of settlers. ...

In calculations therefore as to the consumption of grain, &c., by the population, the statist would be justified in taking this into his account; so that in computing the consumption of the colony, a given quantity of flour per day should be allowed to each individual of our colonial population, together with the Aborigines returned as casually and regularly employed by them. The number thus forming the daily consumers of the product would then be as many as 5,113. #4

#4

W.A. Government Gazette, December 19, 1848: 2-3. My emphasis.

Since at the time the settlers numbered only 4,430, adding Aborigines in employ made a substantial difference. At later censuses, however, although Aborigines in employ were always enumerated, their numbers were inconsequential except in frontier districts, and it is rarely made clear whether they are included in, or excluded from, tabulations of the general population.

The turn-of-decade censuses about 1850, saw Aborigines enumerated or estimated in South Australia for the first time in 1851. No details were shown, only total persons. Aborigines in settled districts, including nomads, were included in all subsequent South Australian censuses except (apparently) 1855. They were always tabulated separately, generally by County, showing sex, whether children or adults, the number sick or infirm, and those employed by settlers. However it is difficult to know what the general philosophy was in South Australia and whether the figures come from enumerations or estimates, since the results were generally published in tabular form only, without comment, interpretation or explanation.

At the mid-decade group of censuses about 1855, Aborigines were enumerated in Victoria for the first time in 1854, and again in 1857. The approach of the Victoria authorities seems to have been rather haphazard at first, and the very existence of the Aborigines in the Colony seems to have caught them by surprise: the 1854 Report indicates that no instructions were given to the collectors concerning the enumeration of Aborigines, as though they were not even thought of until the returns came in; it is stated that:

'No note appears to have been taken of the aboriginal tribes, with the exception of a very few individuals employed on stations, and who are returned accordingly'. #5

However, at the 1857 Census, the possibility of Aborigines being encountered was anticipated, and although 'their erratic mode of life obviously renders it difficult to obtain any accurate account of their numbers' the enumerators were instructed

'to ascertain, as nearly as possible, the number and sexes of the Aborigines who may be within their respective districts' 'the returns show this to be only 1768, of whom 40 only were to be found in the houses of Europeans, and 43 were living in tents; indicating that these last are employed by Europeans, shepherding or in other rural occupations. The returns, however, are necessarily very imperfect, for they are mainly based on the statements of persons in charge of stations, who gave the number of natives believed to be camped in the runs at the moment:' #6

At both these censuses the Aborigines were distinguished in a footnote to the 'birthplace' tables. A precedent was established in 1857 that was followed at all Victorian censuses: tabulations showed the population inclusive of Chinese and Aborigines, then exclusive of them, then Chinese and Aborigines separately.

By this stage Western Australia and Victoria share the same four principles: there is a proper enumeration only of those in employ; nomadism is held to make it too difficult to enumerate others in settled districts; so 'persons in a position to know' provide estimates of their numbers; and regions beyond settlement are not taken into account at all. In the years before self-government, similar guiding principles applied in all Colonies. Aborigines were enumerated if they were a part of the general economy and society, that is if they were pacified, and

#5

Victoria. Census 1854. Report: vii.

#6

Victoria. Census 1857. Report: 7,12.

estimates were formed of the numbers in contact with Europeans, presumably because the situation in regions where the country was occupied but not really pacified would have prevented ordinary enumeration. Aborigines were apparently always enumerated at the Tasmanian censuses, which was not difficult, since they were all either living as Europeans or confined by the Colonial authorities; but their numbers were not mentioned until 1881, and they were not tabulated separately until 1891.

At the turn-of-decade censuses about 1861, Aborigines in employ were as usual enumerated in Western Australia in 1859, while all those in settled districts were enumerated in Victoria and South Australia in 1861. They were tabulated separately in all three Colonies. It was in 1861 that the first attempt was made at a simultaneous census of the British Empire, which actually arose from a proposal by the Australian Colonies for a simultaneous Australian census.^{#7} Although it was not a complete success in the Australian Colonies, it marked the beginning of a move towards regular and simultaneous decennial census-taking, and pressures from the Imperial Government led to the Acts governing the Colonial censuses, and indeed the schedules and reports themselves, becoming increasingly uniform after 1861. The coordination was largely achieved in Australasia at conferences attended by the Statisticians from each Colony; they were held in 1861 in Melbourne, 1875 in Hobart, 1890 in Hobart, and 1900 in Sydney. However, Aborigines and other races were not mentioned at the conferences of 1861 and 1875, which were mainly concerned with achieving uniformity in trade statistics, etc.

Between 1861 and 1870 only South Australia enumerated Aborigines (in 1866). Western Australia did not take part in the 1871 simultaneous census, having held a census in 1870, at which Aborigines in employ were enumerated as usual. An attempt was also made to estimate the total in settled districts,

'His Excellency Governor Weld having expressed an earnest desire to obtain reliable information respecting the Aboriginal Population of the Country, so as to be able to form some approximate estimate of their entire numbers, divided into male and female adults, and male and female children. (The Registrar-General) sent Circulars to the several Resident Magistrates, seeking the best information they could collect, and suggested that valuable assistance might be obtained from the Police Officers in each District... The Magistrates were further requested to report on the numbers who have received any sort of education, or have been trained in the habits of industry, as also on their Social condition, and whether their numbers are decreasing, and the cause.'

Not surprisingly, given this very long shopping list,

'The result ... is not at all satisfactory, as affording anything like correct data on the number or Social condition of the Natives. The nomadic habits of this people, and their inability to give numerical information, renders it a matter of difficulty to procure any very reliable returns... (None) were received from (some) Districts, ... (and) ... there are numerous tribes living in the interior, bordering on the Settled Districts, that pay occasional visits only.' (Report: 26).

#7

See South Australia. Census 1861. Report: i.

The situation had clearly deteriorated since the promising start made in 1848, as had the Aboriginal population. The Report contained a long essay on the numbers and condition of the Aborigines, the extent of and reasons for the depopulation that had occurred, and measures that were being taken to deal with the situation. It is worth noting that the objectives outlined by the Registrar-General in 1870 were exactly the same as those that lay behind the Annual Aboriginal censuses held some fifty to seventy years later, as were the methods used and the reasons given for the poor results obtained. A similar comment applies to the estimation of the numbers of Aborigines not enumerated at the Commonwealth censuses until as recently as 1961.

At the 1871 Census Victoria and South Australia again attempted to enumerate Aborigines in settled districts, which by that stage meant all of Victoria. Both again tabulated Aborigines separately. For the first time, some Aborigines were enumerated in New South Wales, the Report showing them under 'birthplace' while Queensland ignored them. The Northern Territory was attached to South Australia, but no attempt was made to enumerate the Aborigines there. Except in Victoria, which as usual showed populations both inclusive and exclusive of Aborigines and Chinese, they were not included in the general population.

It must be remembered that after self-government the census had (as it still has) two quite separate purposes: to demonstrate the 'Wealth and Progress' of the Colonies;#8 and to determine the numbers of electors for use in the establishment of electoral quotas and boundaries. This joint statistical and political purpose had a profound effect on the conduct of the censuses after Federation as well, as we shall see.

In the older colonies, electoral franchise had been defined by property qualifications, and electoral boundaries were based on the number of registered electors. But the new Colonies, Queensland and Western Australia, tied their electoral system much more closely to population. In Queensland, with no property qualification, any adult male British subject who was not an Aborigine, a member of an alien race, a lunatic, inmate of a charitable institution or a prisoner was qualified to be an elector, so we find the Queensland Registrar-General mentioning Aborigines for the first time at the fourth census in 1871, saying

The aboriginals of the Colony have not been included either in this or in any previous Census. Their wandering habits, their apparent incapacity for civilisation, and the state of vagabondage into which they seem to fall whenever brought permanently into contact with the whites, would render any enumeration of them difficult, and the result not to be relied on to any extent; and although, for some purposes, it might be desirable to ascertain their numbers, and whether increasing or decreasing, for electoral purposes, one of the most important objects of the Census, they are altogether out of the question. (Report: 4. my emphasis).

Significantly, he also noted that, of the 6,000 who were enumerated, Neither Chinese nor Polynesians can, as a general rule, be looked upon as permanent settlers in the Colony. (Page 16).

#8

From the title of the publication which became the N.S.W. Yearbook.

Aborigines were completely excluded from the 1876 Queensland Census. Chinese collectors were used on the goldfields, but any special provisions for estimating the number of Aborigines 'was considered likely to interfere too much with the ordinary work of the census collectors.' (Report: vi).

The blandness of these statements is in stark contrast to the actual race relations situation at that time. The Queensland Government had established a para-military force with the sole aim of decimating or exterminating the natives in frontier regions, #9 and restrictive laws were already in force to actually prevent Asians and Pacific Islands from becoming permanent parts of the society. #10

The first true simultaneous intercolonial census was held in 1881; every Colony took Aborigines into account to some extent, although in Queensland they were not enumerated but their numbers estimated by the police. The assistance of the Protection Board was obtained in Victoria, and in Western Australia each magistrate was again asked to estimate the numbers in his district, but the returns did not 'appear to be sufficiently reliable to be made use of' (Report: 3).

A new and portentous development occurred in South Australia and Western Australia, where all general tabulations were clearly headed exclusive of aboriginals; apparently those in employ were excluded as well. An analysis of the Aborigines enumerated was included in a separate section. In New South Wales those in settled districts were enumerated and tabulated under 'birthplace'; in Victoria all were enumerated and important tables showed 'general' population, Chinese, Aborigines, and total population.

It was during the 1880s that the Federal movement, and the white Australia movement with which it was so closely associated, began to gain widespread support. McQueen (1970), #11 Yarwood (1971), and others have traced the extent to which the moves towards unification were prompted by the desire to throw a racial cordon sanitaire around the entire continent; it was implicit in the vision of Federal union that the Chinese and Aborigines were only a temporary encumbrance on white Australia; the Chinese and other alien races would be sent home and the blacks would die out. To again quote the Queensland Registrar-General:

'Perhaps but little practical benefit would result from ascertaining in any year the number of these unfortunates, who seem destined to die out before advancing settlement; though, if only as a means of delaying for a little time the extinction of the race, or as a question of mere humanity, it seems desirable to know in what proportions they are melting away before the onward march of civilization.'

Queensland. Census 1881. Report: ix

#9

See Rowley (1970a), H. Reynolds (1972) Aborigines and Settlers.

#10

A.T. Yarwood (1971) 'Attitudes towards non-European migrants' in F.S. Stevens (ed) (1971) Racism: the Australian experience. vol 1.

#11

H. McQueen (1970) A new Britannia.

While in Victoria the Government Statist was able to note that

'the existence of the few that still remain alive has no political or social significance whatever. The race will probably become extinct in the course of a few years.' Victorian Yearbook 1883-4 to 1889-90).

Only Queensland held a census in 1886, and as in 1881 Aborigines were not enumerated, their numbers being estimated by the police.

It was probably concern for the purity of the white race that led the Statisticians to distinguish 'half-castes' for the first time at the Empire Census of 1891. The method of dealing with Aborigines was raised at the Conference of Statists held in Hobart in 1890 to determine the form and method of analysis for the Empire Census of 1891, and although no resolution was made concerning the enumeration of Aborigines, it was decided, under the heading of 'compilation':

'9. That the Chinese and the Aborigines, as far as possible (including half-castes), be tabulated apart from the general population under every head of enquiry, so that it may be possible to combine their numbers therewith or separate them therefrom, as may be desired.' #12

This was carried out in all States except Queensland; Aborigines are not even mentioned in the Queensland Census Report, although it appears that 'civilized half-castes' were included but not distinguished.#13 On the other hand, considerable attention was devoted to alien races, of which almost 18,000 members were enumerated. New South Wales showed 'general population', 'Chinese', 'Aborigines' and 'total population', with both Chinese and Aborigines broken down into 'full-blood' and 'half-caste'. Victoria, although distinguishing 'half-castes' on the schedule, published only the total number of 'full-bloods' and 'half-castes'; all general tabulations showed as usual population both inclusive and exclusive of Aborigines and Chinese, both these groups including 'half-castes'. South Australia again included Aborigines in an entirely separate section, but did not distinguish 'full-bloods' from 'half-castes'. Tasmania distinguished Aborigines (and Chinese) for the first time, showing for all tables 'total population' and 'included in total population: Chinese, Chinese half-castes' and 'half-caste Tasmanian Aborigines'. Aborigines were also a category in all birthplace tables.

But as usual it is in Western Australia that we see signs of what was to come. Western Australia became self-governing only in 1889, and the new Constitution provided for electorates for the lower house to be distributed on the basis of population exclusive of Aborigines. At the Census, 'full-bloods' and 'half-castes' were distinguished, and 'full-bloods' were excluded from all tabulations of the general population. The Registrar-General stated in the Report that

'It appears to be manifestly unfair not to recognise our civilised natives as a portion of our population. A few of the ... are able to read and write, and profess the religions of the country; many are producers of our exports, and contributors to our revenue and expenditure, and all of them are, to a greater or less extent, consumers of our imports.

#12

Proceedings of the Conference of Statists, Hobart 1890.

#13

See the Report on the 1901 Queensland Census.

However, as the Constitution Act of 1889 makes distinct reference to the population of Western Australia, 'exclusive of aborigines,' it would not have been possible to add them to our numbers on the present occasion. So great care has been taken in this respect that even the civilized aborigines of other colonies, present in our own at the time of the census, have been eliminated from our population.'

Western Australia. Census 1891. Report: 17

'Half-caste' Aborigines, however, were included in the population, but in addition 'half-caste' Aborigines and Chinese were tabulated separately.

'As ... it may by the statisticians of other countries be considered advisable, for statistical purposes, to deduct their numbers from the whole population classed under the various heads of inquiry.'

Report: 87

In summary then, by this stage the principle of excluding Aborigines was firmly established even though there was no agreement on what to do with 'half-castes'. Frontier conditions still prevented enumeration of those not pacified, but published explanations justified the exclusion by reference to the statistical and political functions of the census, as well as to practical difficulties. In terms of demonstrating the wealth and progress of the colonies, the Queensland Registrar-General commented in 1881 that because there were hardly any Chinese at the earlier censuses, and Aborigines were not enumerated, better comparative tables could be produced if they were exclusive of Chinese and Aborigines. Exclusion also meant that a greater improvement could be seen in education, health and housing of the remaining (European) part of the population.

In Queensland and Western Australia the existence of electoral laws excluding Aborigines and alien races made the political nature of the exclusion quite specific. But a commitment to white Australia lay behind the apparently technical considerations as well: not only were the Chinese and Aborigines not a part of the general population at the time; it was taken for granted that they never would be.

The next census was held in 1901, two months after Federation, but at that stage it was still conducted by the State statisticians. At a conference held in Sydney in 1900,^{#14} it had been initially proposed that as in 1891 Aborigines (as well as Chinese and Pacific Islanders) be shown separately, but in such a form that they could be added to the general population to get total tables if desired. However, it was resolved instead (no reasons given) that what should be shown was, for each analysis:

1. General population (including Chinese, Aborigines, Pacific Islanders and everyone else).
2. Chinese, Pacific Islanders and other coloured races, as well as the Aborigines (including half-castes).

In the event, however, these resolutions of the Conference were over-shadowed by the interpretation placed upon section 127 of the new Federal Constitution, so further examination of the 1901 Census must be undertaken in conjunction with an investigation of the origins and effect of the Australian Constitution.

#14

Proceedings of Conference of Statisticians of the seven colonies of Australasia.
N.S.W.P.P. 1900, No C2. Appendix A:4.

3.2 Section 127

The Constitution of the Commonwealth of Australia, contained in the British Act of 1900, #15 made two references to Aborigines, section 51 (xxvi), preserving the States' exclusive power in Aboriginal affairs, and section 127, which stated that

'in reckoning the numbers of the people of the Commonwealth, or of a State or other part of the Commonwealth, aboriginal natives shall not be counted'.

Both these prohibitions were removed as a result of a referendum held in May 1967, #16 but the interpretation placed upon section 127 had resulted in Aborigines being excluded from enumeration to some extent at all Australian censuses before 1966, and had emblazoned the familiar legend 'exclusive of full-blood Aborigines' upon virtually every population tabulation produced by the Census Bureau until 1967.

F.L. Jones #17 has described their exclusion as 'pragmatic' rather than 'racial', and as mentioned earlier, it has been justified by the Census Bureau on the grounds of the practical difficulty of enumerating geographically or culturally remote Aborigines. But as might be anticipated from our examination of the exclusion of Aborigines at the Colonial censuses, it is much more complicated than this. Sawyer (1966) #18 has attempted to trace the history and define the scope of what he refers to as 'this extraordinary clause'. He contends that 'an exaggerated negative importance' was given to both sections referring to Aborigines, and that 'such doubtful interpretations to some extent influenced official policy'. In particular, he argues that 'even the most literal-minded constitutional Judge' would agree that section 127 should be interpreted to mean something like:

'when for the purposes of this Constitution it is necessary to reckon the numbers of the people of the Commonwealth, or of a State or other part of the Commonwealth, aboriginal natives shall not be counted'.

And he notes that there were four such purposes discernible, of which only one was of permanent importance. This was section 24, which required the membership of the House of representatives to be distributed among the States in proportion to their population. However, says Sawyer

'from an early date the Commonwealth authorities acting under the Census and Statistics Act, 1905 took the view that section 127 was also a qualification on the census and statistics power - section 51 (xi) - and that accordingly when taking censuses and publishing population figures, the Bureau must not include full-blooded aborigines'.

#15

The Commonwealth of Australia Constitution Act, 63 & 64 Vict. Chapter 12.

#16

By the Constitution Alteration (Aboriginals) Act 1967

#17

In 'The Demography of the Australian Aborigines', International Social Science Journal, 1965, 17(2):232-245.

#18

In 'The Australian Constitution and the Australian Aborigine' Federal Law Review, 1966, 2(1):17-36.

It is quite certain, however that section 127 was not intended to restrict the census power, since in introducing it (in a slightly different form) at the National Australasian Convention in Sydney in 1891, Sir Samuel Griffith, the Premier of Queensland - and also author of section 51(xxvi) - made a reference to 'the clauses to which it referred' having been included in the first draft of the Constitution Bill, removed, and then inserted again.^{#19} This probably occurred with certain clauses dealing with financial relations between the States and Commonwealth which have long since been superseded.^{#20} It certainly did not occur with either section 51(xi) (census power), or, strangely with section 41 (States' members in the House). Sawyer assumes that Aborigines were considered to be excluded from the calculation of the quota already by the equivalent of present section 25, which states that:

'... if by the law of any State all persons of any race are disqualified from voting at elections for the more numerous House of the Parliament of the State, then, in reckoning the number of the people of the State or of the Commonwealth, persons of that race resident in that State shall not be counted'.

But if the delegates did in fact assume that Aborigines were automatically excluded from the calculation of the quota by this section, they were mistaken. Section 25, which was adapted from the 14th amendment to the Constitution of the United States of America, is said by Sawyer to have been introduced as an incentive to all States to refrain from disenfranchising residents on the basis of race, because the number of seats a State was entitled to in the House of Representatives was proportional to its population, and was correspondingly reduced if racial voting laws were in force. But as Sawyer points out, in both the American and the Australian contexts the key phrase was 'if ... all persons of any race are disqualified'; as long as some of the members of a race (no matter how few) were entitled to vote, then all people of that race could be included in determining the number of States' representatives in the Federal house. So the effect of section 127 - regardless of its intention - was to prevent those States with large Aboriginal populations from obtaining correspondingly increased representation even if some or all Aborigines were enfranchised. Had this not been the case it is possible that the Northern Territory would still be part of South Australia - only possible, because with the passage of years the number of representatives each State has in the House has come to have far less importance than it apparently had to the Colonies at the time they were negotiating for Federation. The present-day interest, of course, is concentrated on the effect of a redistribution on the relative strengths of parties rather than States.

But although the evidence from Griffith's introductory remarks in 1891 indicates section 127 was meant to affect only the sharing of Commonwealth expenses, a set of quite different reasons was put forward at the Adelaide National Convention in 1897. Like Sawyer I feel the reasons are worth quoting in full.

'Dr Cockburn: As a general principle I think this is quite right. But in this colony '(sc. South Australia)' and I suppose in some of the other colonies, there are a number of natives who are on the rolls, and they ought not to be debarred from voting. Mr Deakin: This only determines the number of your representatives and the aboriginal population is too small to affect that in the least degree. Mr Barton: It is only for the purpose of determining the quota. Dr Cockburn: Is that perfectly clear?

#19

Convention Debates, Sydney, 1891:898-9.

#20

Sections 89, superseded 1901; 93, superseded 1910; 105, superseded 1982.

Even then as a matter of principle, they ought not to be deducted. Mr o'Connor: The amendment you have carried already preserves their votes. Dr Cockburn: I think these natives ought to be preserved as component parts in reckoning up the people. I can point out one place where 100 or 200 of these aboriginals vote. Mr Deakin: Well, it will take 26,000 to affect one vote. Mr Walker: I would point out to Dr Cockburn that one point in connection with this matter is, that when we come to divide the expenses of Federal Government per capita, if he leaves out these aboriginals South Australia will have so much the less to pay, whilst if they are counted South Australia will have so much more to pay.#21

To a stranger to the Convention debates, it comes as a shock to discover the overall confusion of these exchanges. One accepts as Sawyer does when referring to similar confusion over 51(xvii), that the founders were not supermen, that sometimes in the pressure of work, they missed obvious points. And deplorable though it may be, the role that outright xenophobia and racism played in the Federal movement is now so well established that it is no surprise that, as Sawyer observed, 'no-one suggested that laws discriminating against racial minorities were in any degree undesirable'. But the inability of the senior statesmen to grasp clearly the issues involved and the way in which various sections of the Constitution related to each other is really quite astonishing. Cockburn of course was completely mistaken in believing there was any connection between voting rights and 127. The delegates from the Colonies with restricted franchise, unlike some of their own Legislative Councils, had not yet fully appreciated the significance of basing electorates on population rather than on qualified voters. And although Walker's conclusion that South Australia would pay less is correct#22 (since South Australia had the highest proportion of Aborigines) his argument, based merely on the inclusion of Aborigines increasing the absolute population, misses the point entirely. But the most remarkable argument of all is that put forward by Deakin and Barton, that 127 only affects the quota, but that there were not enough Aborigines in any State to affect the quota anyway.#23 Which would mean that the section has no effect at all.

Finally, at the Melbourne Convention of 1898, Sir Edmund Barton

'attempted to clear up the misunderstanding by describing the purpose of the Clause. But whereas in 1897 it had been said that the Clause related to the establishment of a quota, explanation now had a different slant. According to Barton (who was chairman of the drafting committee) it was not related to Clause 24 (stating how a quota was to be calculated), nor to the allied Clause 25 (excluding the people 'of any race' in ascertaining the population of a state if this race was excluded from voting at State elections for the more numerous House). The purpose of

#21

National Australasian Convention Debates, Adelaide 1897.

#22

Note however that it completely contradicts Deakin & Barton who insist 127 only affects the number of representatives.

#23

This is also mistaken. Section 24 reads in part

'if on such division (of the population by the quota) there is a remainder greater than one-half of the quota, one more member shall be chosen in the State'.

So even a small number of Aborigines could give a State an extra seat, if it brought the remainder from under to over half a quota.

the Clause, as he put it, was more statistical. It related to matters of 'finance and other questions' and the reckoning of the number of people of a state' when the whole population was to be counted, and where it would not be considered fair to include the aborigines.'#24

Sawer is certain from the context that the 'other questions' and 'statistical' purposes refer only to statistics relevant to the working of the financial clauses important in the first few years of Federation, to which Griffith was referring in 1891.

So when section 127 was introduced (1891), and when adopted in its final form (1898) it was said to refer only to these financial clauses. But between these two occasions (in 1897) it was held that it could also affect the number of State seats in the House, but that the number of Aborigines was too small to make any difference.

The only reasonable interpretation I can give to this interpolated contradiction is that it was taken for granted by all speakers that section 127 was to apply to the financial clauses; and that without anyone ever saying so, all these exchanges in 1897 referred to other possible clauses that might be affected by the provisions. However this is entirely speculative, and goes against the sense of the debate. It seems more likely that the delegates were merely confused.

Given the fact that the Aborigines were barely mentioned at the conventions, or indeed in the Constitution, and the apparent irrelevance of s. 127 for any practical purposes, its significance seems largely symbolic. There were many other groups besides Aborigines who could with equal justification have been excluded from the cost-sharing formulas or the quota calculation - but the 1898 Convention in fact rejected a proposal to exclude aliens as well. The Aborigines, and the Aborigines alone, were excluded from the population, presumably reflecting an unstated consensus that what was then contrived by arithmetic would before too long be made a reality by the eventual demise of the 'dying race'.

3.3 Section 127 and the Census of 1901

One thing that is quite clear is that nowhere in the convention debates (or in the various commentaries on the Constitution)#25 is there any suggestion that section 127 in any way restricted the census power. Nevertheless, the census authorities immediately claimed 127 as their own. It is noted in the 1961 report for the Select Committee that

'at a Conference of Statisticians on 21st February 1900, held for the purposes of determining the number of representatives for each State, from the population of a state, disqualified races were deducted under section 25, and aborigines under clause 127. Thus in practice, on one occasion at least, section 127 was related to the establishment of a quota.'#26

#24

From 'An investigation of the origins and intentions of section 51, placitum XXVI, and section 127 of the Constitution of the Commonwealth of Australia'. Prepared by the National Library of Australia June 1961, for the 1961 Joint Committee on Aboriginal Voting Rights.

#25

e.g. J. Quick & R.R. Garran (1901) The annotated Constitution of the Commonwealth of Australia.

#26

The National Library report, June 1961, cited previously.

This is not the same conference referred to at the end of section 3.1, #27 and no report was published. The population figures used must have been updated estimates from the 1891 Censuses, as published annually in the Colonial Statistical Registers.

At the 1901 Census it is obvious that a much more determined effort was made in the States to enumerate all people of Aboriginal descent. But when it came to deciding 'who was an Aborigine' and to compiling and publishing the results, the amount of information made available was in some cases actually reduced. As noted at the end of Section 3.1, the Statisticians' Conference in 1900 had decided to show

1. total population including Aborigines and all others
2. Aborigines and other races separately (including 'half-castes') so that the latter could be deducted if required.

But only the Statisticians from Victoria and Tasmania followed the resolutions of the Conference, publishing analyses of the population (all included) and then separately the Aborigines and 'half-castes'. South Australia followed the original proposal (rejected by the conference): general tabulations excluded Aborigines, for whom details (by caste group) were presented in a separate section.

In Queensland, which enumerated Aborigines 'who had abandoned their nomadic ways' for the first time, 'all those Aborigines, whether full-blooded or half-caste, living in camps and leading the lives usual to Aborigines, were excluded'. General tables were apparently designed to satisfy both State and Federal electoral requirements, and also to assess the extent of miscegenation. They showed:

total population, including all except wandering Aborigines and 'half-castes'; then Chinese, Pacific Islanders, Japanese, Indians, other alien races, Aborigines and 'half-castes' (combined), 'Prisoners, lunatics and inmates of charitable institutions not being Chinese, Pacific Islanders, natives of India and Ceylon (coloured), other alien races or Aborigines', 'total adult Chinese, Pacific Islanders, Japanese, natives of India and Ceylon (coloured), other alien races and Aborigines'; also 'total adult prisoners, lunatics, and inmates of charitable institutions - such inmates not being Chinese, Pacific Islanders, Japanese, etc etc'.

And finally total adult population exclusive of Chinese Japanese, Pacific Islanders, other alien races, Aborigines etc etc.

(Adapted from Census Report).

The cards relating to all excluded persons were specially stamped with their race or class so as to be readily identifiable, and all comparative tables, and those showing the level of education, etc, excluded coloured races. An analysis of the race of marriage partners, and parents of 'half-castes', as also undertaken, on the basis of which the Registrar-General concluded, with some satisfaction, that the total coloured population was in fact decreasing as a proportion of the State, #28 and that

#27

Minutes of conference of Statisticians of the seven Colonies of Australasia ... Sydney, February 1900. N.S.W.P.P. 1900 , No.C2.

#28

Excluding Aborigines, it had declined from its highest value (5.05%) in 1891 to 4.70% in 1901. The coloured threat was never very great.

'none of the coloured races are likely, judging by the results of the past, to influence the colour of posterity in Queensland',

(Report: xxi)

In 1901 Queensland reached the stage Western Australia had attained in 1848:

'aborigines and half-castes were included ... who had become integral parts of the industrial population, or who by attending school on some mission station had actually entered upon civilized life'.

(Report: viii).

Even though so much effort was devoted to the exclusion of particular groups for State electoral purposes, the Registrar-General regretted that

'The wording of the Federal Constitution states that aborigines are not to be reckoned as part of the population of a state for Federal purposes, and this is unfortunate with respect to those included in the Census enumeration, for they undoubtedly form an integral part of the industrial population.'

(Report: ix; my emphasis).

When we come to New South Wales and Western Australia, the main influence on the tabulation of Aborigines was neither the resolutions of the Statisticians' Conference, nor State needs, but the Federal Constitution; the effect was straightforward in Western Australia, complex in New South Wales. At the New South Wales Census of 1901, all people of Aboriginal descent were enumerated, and as in other States, 'full-bloods' were also distinguished from 'half-castes'.#29 Initially a set of preliminary tables were published which were in accord with the resolutions of the 1900 Conference, and like Victoria and Tasmania showed

1. 'population', and
2. 'included in population' - Chinese including 'half-castes' and Aborigines including 'half-castes' for all analyses.#30

But it appears that subsequently some thought was given to the implications of section 127, and to the question of 'who was an Aborigine' for the purposes of the section, for when the Census results were issued in their final form, they showed

1. population, exclusive of Aborigines
2. Aborigines, with a note that 'included in these columns are Aborigines of full-blood and half-castes in a nomadic state'.#31

#29

It is not made clear in any contemporary sources, how persons identified as of Aboriginal descent, but less than half, were classified. I assume they were generally coded as 'half-castes'.

#30

N.S.W. Census 1901. Bulletin No.1: 'Preliminary statement. Abstract of Population'. N.S.W.P.P. 1901, No.C2.'

#31

N.S.W. Census 1901. Report. Also in N.S.W.P.P. 1902, No.C2. My emphasis.

Non-nomadic 'half-castes' (as well as Chinese, Pacific Islanders and all other races) were included with, and not distinguished from, the general population. Apparently it had been decided, first, that section 127 prohibited the inclusion of Aborigines as part of the general population, and second, that instead of an 'aboriginal native' meaning simply someone of Aboriginal descent, those excluded were to be defined partly on a genetic or genealogical basis (all 'full-bloods' no matter what their life-style) and partly on social grounds ('half-castes' only if living nomadically). It is likely, of course, that it was merely taken for granted that all 'full-bloods' were nomadic. If this were so, the cutoff for tabulation in New South Wales would have been the same as that for enumeration in Queensland.

This rather strange new definition may have been patterned on the New Zealand census enquiry, which distinguished 'full-blood' Maoris and 'half-castes' living as Maoris, while 'half-castes' living as Europeans were (until 1921) included in the general population.^{#32} Von Dadelszen, the New Zealand Government Statistician, was present at the 1900 Conference of Statisticians, and copies of the form of the New Zealand census were distributed there. But the 1901 N.S.W. Census differed from New Zealand in that although separated from the rest of the population, 'full-blood' Aborigines and 'half-castes' living as Aborigines were not separated from each other except in total. This meant that the published figures were completely cryptic, and that another group of (statistically) invisible Aborigines was created:^{#33} those enumerated, identified as of Aboriginal descent, but excluded from the Aboriginal population for 'policy' reasons. It was clearly quite a different matter from the exclusion of Aborigines, Chinese and Pacific Islanders (and all 'half-castes') contemplated by the Statisticians at the conference, and at earlier censuses. That the Aborigines were singled out, and defined in such a way, must have stemmed from an interpretation placed on section 127. It was indeed, as Sawyer claimed, an exaggerated negative interpretation, since, granted that 127 applies in the calculation of the quota, then it still only required Aborigines to be excluded for that particular purpose.

Nevertheless it resulted in the exclusion of Aborigines (but by another definition) from the Commonwealth census.

It is Western Australia that provides the complete model for that exclusion. In the Census Report the Registrar-General noted that the results were essential for determining both Federal and State representation, commenting as he did that

'Another object ... which is particularly valued in Australia, is the opportunity it affords for ascertaining the number of coloured and other alien races domiciled in, and their manner of distribution throughout, the several States of the Commonwealth.'

(Report: 7)

#32

D.I. Pool (1964) The Maori population of New Zealand. Ph.D. thesis, Australian National University.

#33

It has also caused confusion among later researchers - for instance, Rowley (1970a) and F.L. Jones (1970a) who were apparently not aware of the preliminary 'Abstract of Population' published in the N.S.W.P.P.'s. Jones attempted to reconstruct the total 'full-blood plus half-caste' population, but in fact added 'full-bloods' to 'full-bloods plus nomadic half-castes' and obtained an entirely spurious total.

The cards relating to Chinese, Aborigines and others were specially stamped as in Queensland; duplicate cards were in fact manufactured for 'half-caste' Aborigines, so that they could be tabulated both with the general population and separately,

'consequent upon a decision having been expressed by the Federal Attorney General, that full-blooded aboriginals alone were to be excluded from, and not to be deemed to form part of, the legally recognised populations of the different States of the Commonwealth.'

(Report: 80)

'The original intention in connection with the Census of the State was to exclude all aboriginals, whether full-blooded or half-caste, from the returns of general population. ...however, ... a notification was received that an opinion had been given by the Honourable the Attorney General of the Commonwealth to the effect that, 'in reckoning the population of the Commonwealth, half-castes are not aboriginal natives within the meaning of Section 127 of the Commonwealth of Australia Constitution Act, and should therefore be included'. Consequently, ... it was decided to include half-caste aboriginals in the general population, ... in the same manner as the non-aboriginal portion of the population, while full-blooded aboriginals have been excluded from all tables except those specially dealing with Aborigines and Chinese.'

(Report: 100)

This is really very strange. For State electoral purposes in 1891, the Registrar-General had taken the view that the State Constitution required the exclusion only of 'Aborinines' (that is, 'full-bloods'). Why they had intended to exclude both 'full-bloods' and 'half-castes' in 1901 is a mystery; it could surely not have been based solely on an interpretation of the new Federal constitution, since the wording of the Federal and State clauses excluding Aborigines was almost identical. I can only imagine that State legal opinion had changed between 1891 and 1901, but that this was considered to be overruled by the Commonwealth Attorney-General's opinion.

At any rate, the 1901 Western Australian Census became the model for the Commonwealth census: Aborigines were enumerated if they were accessible to ordinary enumeration procedures; it was assumed that all those not enumerated were 'full-bloods'; the general census population included 'half-castes' but excluded 'full-bloods'; and both 'full-bloods' and 'half-castes' were tabulated separately as well.

So in both 1891 and 1901, although the States had agreed upon a policy for the tabulation of Aborigines, only a minority of them followed it. This should not surprise us: a policy on how to present the data, without a constant policy on how to collect it, is an absurdity and can only result in confusion. The policy on enumeration of Aborigines was left entirely to the individual States, and confusion is exactly what resulted. In 1901, apart from Victoria and Tasmania, no two States acted the same: South Australia followed its established practice; Queensland excluded from enumeration 'half-castes' in settled areas unless they were in the employ of whites, even though everyone else included them; New South Wales enumerated all Aborigines but ended up excluding, apparently on the basis of the Federal Constitution, Aborigines defined in a manner which conflicted with the Federal definition of Aborigines; and Western Australia alone acted in accord with Federal requirements, because they happened to be identical with its own.

There is one crucial point to be drawn from this rather tedious exercise. The confusion, inadequacy, and lack of comparability of the early Aboriginal census data did not arise by chance, nor was it a result of incompetence of the census officials or of mere practical difficulties in enumerating tribal people. It represented a translation by the Colonial and State authorities of their native policies into census terms. In Victoria, for instance, it is certain that many people of Aboriginal descent were not enumerated as such because it was up to the enumerator to note whether they were Aborigines, and they apparently did so on the basis of whether they were Aborigines according to the law; those who were not, like non-nomadic 'half-castes' in New South Wales, although enumerated, were defined out of the Aboriginal population for policy reasons.

Similarly in Queensland, 'full-bloods' and 'half-castes' not actually in employ were not even enumerated for policy reasons. The variety of separate tabulations of Aborigines and similar political origins. And the 'practical difficulties' of enumerating the Aborigines beyond the frontier of settlement owed far more to the policy of dispossession than to the 'wandering' habits of the people. As early as 1848 it was demonstrated in Western Australia that methods could be developed for enumerating the tribes fairly adequately; but except in South Australia there seemed to be a universal agreement that it was not appropriate to do so until white occupation was consolidated, the blacks 'pacified', confined or destroyed, and the situation 'normalized'.

The results of the 1901 Census were not available when the quota was established for the first Federal election, and reference has already been made to the fact that the Statisticians' Conference in 1900 apparently established the number of members each State was to have on the basis of the 1891 Census, after excluding Aborigines and disqualified races. This calculation gave Queensland nine seats, but at the Statisticians' Conference in Hobart in 1902, after the results of the 1901 Census became available, it appears that the precise effect of section 127 on the quota had at last become crystal clear, for the minutes contain the following cryptic record for 21st January, 1902

Mr. HUGHES (Queensland) moved: That, as the number of inhabitants of Queensland, including such half-castes as were enumerated in the census of 1901, but exclusive of all full-blooded Aborigines, was 498,129, that State, at the present time, on the basis of census, 31st March 1901, would be entitled, under the 24th Section of the Constitution Act, to send ten members to the Federal House of Representatives. —Negatived.

Mr. HUGHES moved: That this Conference recognises the necessity for recording all persons engaged in Industrial pursuits, or attending school, in Census Enumeration, including Aborigines. —Carried.

Mr. HUGHES moved: That, as the 5137 Aborigines, included in the Queensland Census, are engaged in Industrial pursuits, or attending schools subsidised by the Government, they should be included in the general population for all purposes, except those relating to the Commonwealth. —Postponed.

Dr. ROTH, (Northern Protector of Aborigines) of Queensland, was called, and gave evidence as to the Number, Education, and Occupations of the Aborigines of Queensland.

(Report:10)

So clearly, the Conference took the view that s.127 required the exclusion of 'half-castes' as well as 'full-bloods' from the calculation of the quota. But in all other respects they seemed to take an extremely narrow view of the extent of the exclusion required - that is, only for Federal purposes - and that general tabulations should include all Aborigines, regardless of 'caste', who were a part of the general society and economy.

Yet, as evidenced by the unwillingness of the Conference to follow its resolutions to their logical conclusion, some uncertainty still remained. It appears that as a result of these discussions it was decided to seek the opinion of the Commonwealth Attorney-General as to whether 'half-castes' were 'aboriginal natives' within the meaning of section 127. The Attorney General gave the opinion that 'half-castes' were not 'aboriginal natives', thus overturning the first resolution quoted, and giving Queensland and extra seat in the House.

This development is treated in more detail in the next section, but it is worth noting here that the process we have just seen, by which the boundary of the Aboriginal population begins as clear-cut, then becomes very hazy, only to re-emerge in a slightly different place, can also be observed to occur repeatedly in the history of the Aboriginal administrations in the States and Territories, whose population statistics, like the census, inadequate at first because their system does not adequately cover remote groups. But as the statistics become more adequate - that is, as the authorities start to get the people fully under control - there is a mushrooming of statistical categories as finer and finer administrative distinctions are made as officials find it more and more difficult to locate the mythical watershed between Aborigines and non-Aborigines of Aboriginal descent which is fundamental to the assimilationist/absorptionist philosophy. Then, usually in association with a reorganization of the administration of Aboriginal affairs, a new and generally more restricted definition is introduced, resulting in a new sort of incomplete coverage, attributable to political or administrative exclusion. We have glimpsed this process already in Victoria; sooner or later it occurs at least once, and often several times, in every State and Territory. One unfortunate implication of this is that in order to interpret population figures produced by State authorities, it is necessary to examine them in just as much detail as the censuses.

3.4 Section 127 and the Commonwealth censuses

In 1905 the Federal Parliament enacted the Census and Statistics Act which established the Commonwealth Bureau of Census and Statistics and laid down the heads of enquiry for Commonwealth censuses. The Act made no reference to either Aborigines or race, but these were included in the census as 'other prescribed matters' as allowed under the regulation-making provisions.

If one were to judge by the published statements of the Bureau in its early years, it would appear that no discriminatory provisions were proposed regarding the enumeration of Aborigines or their inclusion in published statistics. Section 127 was to be interpreted in the narrowest possible way, and the only problem was to decide 'who was an aborigine'.

For instance in the Australian Yearbooks published by the Bureau, the section headed 'race and nationality' in the first issue in 1908 (and also that in 1909 and 1910) says:

'Strange to say, an enumeration of them has never been seriously undertaken in connection with any State census.#34

#34

The precise meaning here is not clear. They may mean that some estimation was always involved, even in the apparently 'complete' enumerations.

Then follows a review of various estimates of the total Aboriginal population at the time, and the article continues:

It is proposed to make an attempt to enumerate the aboriginal population of Australia in connection with the first Commonwealth Census to be taken in 1911.'

and after showing some Aboriginal population figures for 1901, states:

'in the Commonwealth Constitution Act provision is made for aboriginal natives to be excluded for all purposes for which statistics of population are made use of under the Act, but the opinion has been given by the Commonwealth Attorney-General that, 'in reckoning the population of the Commonwealth half-castes are not aboriginal natives within the meaning of section 127 of the Commonwealth of Australia Constitution Act, and should be therefore be included'. It may be added, however, that as 'half-castes' living in the nomadic state, are practically indistinguishable from aborigines, it has not always been found practicable to make the distinction, and further, that no authoritative definition of 'half-caste' has yet been given.' (Australian Yearbook, 1908: 145; my emphasis).

All of which, given the existence of 127, probably amounts to the most sensible statements concerning Aborigines and the census that the Bureau made until 1967.^{#35} The exclusion of people from the quota calculation on racial grounds is intolerable by today's standards, but the new definition at least avoided the racial stereotyping implied by the 1901 New South Wales definition, which confused biological and social criteria. But when the 1911 Census was actually taken, a very different attitude emerged to that implied by these early statements.

There was no Statisticians' conference held to plan the 1911 Census, and there is no published explanation of what happened to alter these good intentions. But as it turned out the coverage of the Aboriginal population in 1911 was markedly inferior to that obtained in earlier years. Without giving any reasons, the Statistician's Report merely states that

'the full blooded Australian aboriginals included ... represent only those who were in the employ of whites at the date of the Census or were living in a civilized or semi-civilized condition in the vicinity of settlements of whites at that date. An enumeration of aboriginals living in a purely wild state was not undertaken.'

#35

This does not mean I want to defend what Rowley in The Destruction of Aboriginal Society (1970a) calls the 'animal-husbandry' or 'breeding techniques' approach to race relations implied by the concepts of 'full-blood' and 'half-caste'. The 1901 N.S.W. definition, in giving primacy to 'life-style' was clearly incompatible with the previously described view of the N.S.W. and Victorian Boards, who insisted that Aborigines were only those of entirely or almost entirely Aboriginal descent. On the other hand, it was consistent with the emerging Queensland policy of encouraging 'part-Aboriginal' people to marry back into the full Aboriginal population. The Attorney-General may have been influenced by the more 'advanced' approach of the Southern states; at any rate the 'genetic' view prevailed, and all I wish to imply is that it held more prospect of consistent application in practice.

While the Yearbooks from 1911 to 1921 simply modified the earlier statement, saying

'An enumeration of them has never been seriously undertaken in connection with any Australian census.'

(my emphasis)

In effect, the Western Australian enumeration policy had been adopted in full for the Federal census, and since the enumeration in 1901 had been more restricted in Western Australia than in any State except Queensland, this resulted in an overall drop in both the number and proportion of Aborigines included, from an estimated 52% in 1901 to only 36% in 1911. (see table 3.1.2) Only Queensland showed an improved coverage; in South Australia (especially the Northern Territory) there was a dramatic drop; and even in New South Wales, which had achieved complete coverage as early as 1891, an estimated 11% were omitted. Sawyer (1966:30) considers that

'In 1900, both the prevailing attitude towards the aborigines, and the practical difficulties in enumerating their numbers with even approximate accuracy, made their exclusion from relevant population counts defensible. Even in 1911, the timorous attitude of the federal census authorities had some justification; the Commonwealth was still feeling its way with the States, who might easily have been upset about any move which could have been considered relevant to electoral quota questions, and the practical difficulties of enumerating aborigines were still formidable.'

But there is nothing here that would explain why the enumerators were instructed to include only those in the vicinity of settlements, in effect excluding some 20,000 persons who had apparently been enumerated without great difficulty in 1901. We have already seen that Aborigines were quite irrelevant to the quota (although the 'practical difficulties' were certainly political in a more general sense). And in its stated enumeration policy the Bureau was far from timorous, while in practice it had merely reverted to an earlier tradition. Nevertheless, Sawyer is closer to the truth here, particularly in his reference to 'prevailing attitudes', than in the view quoted earlier, that - perhaps based on legal opinion of the Attorney-General - the census authorities took the view that section 127 required the Bureau to exclude 'full-blood' Aborigines both when taking censuses and publishing population figures. There is no evidence that it was ever considered that Aborigines must be omitted from the actual enumeration - in fact, the Bureau, 'under the authority of the Commonwealth Census and Statistics Act 1905 -1938', #36 undertook between 1924 and 1944, in conjunction with State authorities, a series of annual censuses at which only Aborigines were enumerated. The view clearly adopted by the Bureau was that they may enumerate Aborigines, but that they need not. #37

But although there was no reason given for this change of policy relating to enumeration, the fact of the change was at least acknowledged. Not so with the policy relating to the exclusion of Aborigines from population statistics. We have noted that the Yearbooks to 1910 appeared to take the narrowest possible view of section 127. (Aboriginal natives to be excluded for all purposes for which

#36

The quotation is from the Statistician's Report on the 1933 Census.

#37

This is curiously reminiscent of the way in which compulsory provisions of the laws relating to electoral enrolment and national service were extended, but as options, to Aborigines in recent times.

statistics are made use of under the Constitution. This statement was repeated in every Yearbook until 1921. Yet the Statistician's Report on the 1911 Census baldly states that

'For all general tabulations, including those relating to Non-European races, the cards relating to full-blooded Australian Aborigines were eliminated, owing to the provision of section 127 of the Commonwealth Constitution,' (my emphasis)

which implies a totally different view of the application of 127: in actually tabulating the results, the Bureau had once again adopted the Western Australian model. The characteristics of those 'full-blood' Aborigines enumerated were analyzed very fully, but in an entirely separate section; 'half-caste' Aborigines (but not 'full-bloods') appeared as a category in the 'race' tables,

'those having Aboriginal blood to a degree less than one-half, and European blood to a greater degree than one half, being included for tabulation as European'.

So despite the census having been brought under a single authority, what actually happened, in both the enumeration and tabulation of Aborigines, was still at variance with stated policy. The contradiction between the Yearbook, the Statistician's Report, and actual practice indicates that the Bureau's view that it may exclude 'full-blood' Aborigines from enumeration, and must exclude them from tabulation, was never based on a definitive legal opinion. In fact, although the full text of the Attorney-General's letter on the subject has never been published, it is quite clear from the extracts available that the opinion sought and given did not even refer to exclusion, nor indeed to 'full-blood' Aborigines at all. Instead of asking for a definition of 'aboriginal native' (since none was contained in the Constitution itself) or for an opinion of the extent of the prohibition implied by the term 'shall not be counted', the opinion sought related only to the extremely restricted question of whether a 'half-caste' Aboriginal is an 'aboriginal native' for the purposes of s. 127. And the opinion given was almost as restricted: in full it was that

'persons of the half-blood are not 'aboriginal natives' for the purposes of the Constitution, and a fortiori that persons of less than half aboriginal blood are not aboriginal natives'. (Census Reports. 1911 to 1966.)

But the reader will note that there are a number of things still unresolved. What exactly is a person of the 'half-blood'? What in this context are the 'purposes of the Constitution'? And what is the position of persons of more than half but less than full 'blood'? Definitive answers were neither sought nor given to these questions, and yet the Bureau proceeded to establish a policy on the exclusion of Aborigines upon this very shaky foundation. It was clearly more than a convenient post hoc rationalization of the fact that the Aboriginal data in 1911 was incomplete: the census authorities had instructed the enumerators not to attempt to make it complete.

Again I can only assume that even though this was a matter of constitutional law, the mythology of conventional wisdom of race relations was allowed to determine the way in which these questions were answered. In that period of social Darwinism, an ethnocentric pseudo-biological view of race prevailed and it was common to categorize people of mixed descent as 'half-castes', 'quadroons', 'octorcons' and so on, referring solely to the proportion of strain of European 'blood' that the individual was said to retain.^{#38} The ethnocentrism is obvious. But in addition, these terms, like the census categorization, implied that hybridization was a one-way process of absorption - that is, that people of mixed descent were always products of unions between a white person and someone who was either fully or partly non-white. The possibility of 'back-crossing' (that is, 'part-European' people having children with persons of other than European race) was simply not allowed for.^{#39} On this basis, the census authorities took the view that a 'half-caste' could only be a person with 'full-blood' Aboriginal parent and one 'full-blood' European parent, while persons of more than 'half-caste' but less than 'full-blood' could not occur. Of necessity, persons of less than 'half-caste' (and only proportions of the series $p = 2^{-i}$, $i = 2, 3, 4 \dots$ could occur) were classified as 'full-blood' Europeans.

So for the first Commonwealth census, the interpretation of 'shall not be counted' as well as the decision as to who was a 'half-caste', was entirely in the Bureau's hands. In the absence of any documentation of the considerations that led to the pattern established then, it must be assumed that, as at the Queensland Census of 1876, it was felt that enumerating nomadic people even in settled districts would interfere too much with the ordinary work of the collectors. The Bureau managed to conduct the 1911, 1921 and 1933 Censuses before even considering the meaning of 'full-blood' (in 1947 it was stated that anyone having a 'preponderance of the blood' was to be classified as a 'full-blood').^{#40} If any further proof is needed that the exclusion of Aborigines from census enumerations and tabulations was determined as much by expediency and political and administrative considerations, as by any constitutional requirement, it may be mentioned that in 1947 without any explanation or justification, the Statistician published figures which indicated that over 2,000 'half-castes' had been omitted from the enumeration in South Australia and Western Australia.^{#41} In addition the Bureau, which had excluded 'full-blood' Torres Strait Islanders in 1911, 1921 and 1938 included them in the general population from 1947 on the basis of the fact that a State law had been passed in Queensland declaring that they were no longer to be considered Aborigines. The most important redistribution in Australian history was undertaken in 1949, involving an increase in the size of both the Senate and

#38

See for instance the Reports of the N.S.W.A.P.B. from 1910 to 1925.

#39

Again the exception is Queensland, where in the late 1920s the Chief Protector instituted a policy of requiring 'part-Aboriginal' people to 'marry back'.

#40

A similar definition was established at the Statisticians' Conference in 1926 for use in the annual Aboriginal censuses, and Rowley (1970a:344) reports that a definition in these terms was provided by the Attorney-General to the Chief Electoral Officer in 1929, but no mention is made of the definition of 'full-blood' in the 1933 Census Report.

#41

Census 1947. Statistician's Report: 153. There is some doubt as to whether these people actually existed (see chapter 7).

the House, and it was based on the 1947 Census. But not only were the changes mentioned not challenged: to the best of my knowledge, they were never even noticed.

But in the area of race relations, expedient solutions and arbitrary formulas have a way of becoming enshrined as fundamental principles, and that is exactly what happened with the exclusion of aborigines from the census. It is not so much as Sawyer would have it, a case of 'exaggerated negative interpretations' of the Constitution affecting official policy, as that both interpretation and official policy were themselves determined by the climate and history of attitudes to the blacks, and their residual, depersonalized status in the white-dominated society. Once the exclusion of difficult Aboriginal groups had been legitimized, it was not questioned for almost fifty years. The Royal Commission on the Constitution, 1927-29 did not even address itself to the matter, and it was not until 1959 that the Joint Parliamentary Committee on Constitutional Review recommended its repeal. This was achieved by referendum in 1967 and if the origins of section 127 were confused, its demise was no less so. There was some misunderstanding in the electorate about the effects of the proposed repeal of 127 and 51(xvii), not lessened by the fact that the referendum also presented a proposed amendment to section 24 which had no relation to Aboriginal affairs. To clear up such misunderstandings, the Attorney-General (B.M.Snedden) is reported as saying that the Government would be satisfied with the repeal of section 127, which 'bars aborigines from voting in a federal poll'.#42

3.5 Aborigines and race at the censuses 1911 - 1971

At all censuses since 1911 Aborigines have been enumerated to some extent. Those of half or less Aboriginal descent - even if living tribally - have nominally been fully enumerated and included in the statistics of the general population, - nominally, because, as the Yearbooks acknowledged, 'half-castes' could not be distinguished with any certainty. 'Half-caste' Aborigines were distinguished in the 'race' analysis, while those of less than 'half-caste' have been considered as Europeans.

As for 'full-bloods', although they have been excluded from published statistics for the general population, attempts have been made since 1911 to collect details for separate analysis and publication; the Statisticians have always warned, however, that the coverage was incomplete and the demographic data unreliable. But it has also been repeatedly stated that since 1933 at least, with each succeeding census the coverage of the Aboriginal population was progressively improved.#43

Although the coverage of Aborigines was marginally better in 1921 than in 1911, no analysis whatsoever was published of the data collected for 'full-blood' Aborigines. Again there was no Statisticians' conference held to plan the Census, so it is impossible to know what led up to this, but it appears that the schedules relating to 'full-bloods' were not even punched onto cards. There is no mention in the Statistician's Report of even the number and sex of those enumerated; however these details do appear in the Yearbooks. 'Half-castes' were fully tabulated as a category in the 'race' analysis, and as usual those of less than half Aboriginal 'blood' were classified as Europeans.

#42

Sydney Morning Herald, 11 November, 1965: 5.

#43

Census 1966. The Aboriginal Population of Australia. Summary of Characteristics.

However, a new development occurred at the 1921 Census which established a pattern that continued until 1966. In 1911 some effort was apparently made to estimate the total number of Aborigines. The Report says

'The most reliable estimates of the total full-blooded aboriginal population of Australia placed the number somewhat under 100,000, but as the data available for any such estimate are very meagre, the results cannot be regarded as more than very rough approximations. ' (p 99)

But in 1921 the cooperation of the Statisticians and Protectors of Aborigines in the States was obtained and an estimate made of the total number of Aborigines in each State, and their caste and sex. This was done at each census until 1966, when for the first time it was concluded that Aborigines had been fully enumerated at the general population census.#44

The numbers enumerated and estimated in each State, Territory and Australia, at censuses from 1911 to 1971, have already been shown in table 3.2.1. As with the Colonial and State censuses, some of the estimates need to be treated with caution. While the percentage enumerated increases progressively for Australia as a whole, the sequence in South Australia, Western Australia and the Northern Territory is quite erratic, and changes in the estimated totals have been as important as improved enumerations in producing larger percentages.

There is no indication that the census authorities ever attempted to develop special methods for actually enumerating tribal people in the ordinary way - they seem to have waited for the blacks to come to them.#45 The 'practical difficulties' were solved by the gradual movement of Aboriginal people into settlements, and this process was virtually complete by 1966, when, as stated earlier, the Bureau felt they had obtained for the first time a relatively complete enumeration of Aborigines throughout Australia. This was achieved before the amendments to the Constitution were passed by referendum, so the results were published separately, but from 1971 censuses will include Aborigines with the general population, although of course their 'race' will be recorded as always, and separate analysis of the Aboriginal population will presumably be performed.#46

As we have seen, race was never treated as an ordinary characteristic at the Colonial and State censuses: it was noted so as to enable certain groups to be entirely excluded from the general census population. 'Race' had come to be associated with the 'birthplace' question, which itself had grown out of the 'nationality' question. In fact, at the early New South Wales censuses, an examination was made of statistics relating to the English, Irish, German, and even English-speaking races. The development in Australia of the complex of census enquires relating to ethnicity (nationality/birthplace/citizenship/race) is a study in itself.

#44

The annual Aboriginal censuses between 1924 and 1944 also developed out of the 1921 attempt to estimate total numbers (see section 5.1).

#45

This is quite explicitly acknowledged in - for example - the Western Australian Yearbook, 1973.

#46

We hope. The coding of races was severely curtailed at the 1971 Census.

But at all Commonwealth censuses, information as to race has been sought with a special question, by means of which Aborigines, whether 'full-bloods' or 'half-castes', have been identified. However, the concept of race used has been a curiously ethnocentric mixture of social, geographical and biological criteria, on the basis of which a rigorous treatment of any racial group, including the Aborigines, is virtually impossible. The question on race was included, said the Statistician in his report for 1911, because of 'the interest taken by the people of Australia in the question on Non-European population'.#47

The main concern was quite explicitly to monitor the success of the white Australia policy, and the extent to which the purity of the European stock was being diluted, so much so that up to 1954 many census analyses simply break race down into three categories,

European, full-blood non-European, half-caste non-European

without any further refinement.

The actual form of the question has however evolved over the years. In 1911, only non-Europeans were required to answer, but the question was similar to that used in 1921 and 1933. In 1921, for instance, persons were instructed to

'State if of European race. If not European state what race...In the case of a half-caste, the letters H.C. are to be added, for example H.C. Aboriginal, H.C Chinese, etc,'#48

No provision was made for the numerous other racial combinations possible, leaving a residuum of unclassifiable individuals who had to be dealt with by arbitrary formula. No instructions were given to tell such people how to answer the question, but clearly many gave responses which were not provided for. For instance, we have already seen that some people were returned as of 'Aboriginal blood' to a lesser degree than one-half and European blood to a greater degree than one half. They were

'included for tabulation as European. A similar provision applies to those classed as half-castes of other races than aboriginal. In this connexion it may be noted that as the tabulation was essentially one distinguishing between European and Non-European races, those classified as half-caste have European blood in their veins to the degree of one-half. Where the parents of children were both of Non-European race, but not the same race, the children were classed as Non-European of full-blood, and tabulated according to the race of the father.' #49

Where this information on race of father was to be obtained is a complete mystery, however, since there was no instruction to collect it or provision to record it on the schedule. And it will be noted that even if father's race were known, there is no way that a person of mixed race whose mother was non-European and whose father was himself of mixed race could be sensibly classified by this scheme; by a literal reading, he would be a 'full-blood non-European half-caste Aborigine' (or whatever).

#47

Repeated with variations in 1921, 1933, 1947.

#48

Census 1921. Statistician's report: 112.

#49

Census 1911. Statistician's Report: 222. Also repeated in essence in 1921, 1933, 1947, 1954.

By 1933, the census officials were clearly dissatisfied with the fact that responses to the race question could not be dealt with in a logical or systematic manner. In 1911 and 1921 the chapter of the report had been headed Race (as it was again from 1947). But in 1933 it was headed Ethnic origin of the population and the report contained a short essay which explored the deficiencies of the race enquiry, stating that the

'races, so-called ... are named with a geographical rather than a truly ethnological description' ... 'each ... is a mixed group when viewed in the light of the hypothetical genetic types from which it is derived. The limitations of the census data in providing a satisfactory 'ethnic pattern' are further indicated by the facts (i) that all the population of European origin has to be classed as one such group; (ii) that the full-blood non-Europeans are classified into their commonly recognized but not their scientific groupings; (iii) that the barest possible indications of the parentage of half-castes are possible, and (iv) that the returns covering the aboriginal population are necessarily incomplete. Census statistics of 'race' can therefore only in very slight degree, answer the questions which interest the anthropologist and ethnologist. On the other hand, they do possess great utility for the purposes of governmental administration and ... practical purposes.'^{#50}

Despite these reservations, the attention given to the Aborigines at the 1933 Census exceeded anything either before or after, until 1966. The annual Aboriginal Census taken in 1933 provided a very complete estimate of the total Aboriginal population at the time of the general census, and in addition a comprehensive analysis of the characteristics of those 'full-bloods' enumerated was published in a separate bulletin,^{#51} something which had not been done since 1911 and was not done again until 1966.

But the strains that had developed in the system were in fact heightened by more adequate enumeration and more detailed analysis. An organization like the Census bureau, with its inbuilt technical and bureaucratic tendencies towards rationality and consistency, was attempting to execute a policy which contained a number of contradictions and ambiguities, and the better it did its job, the more intrusive they became. The Bureau resolved its problems by establishing the doctrine of the exclusion of 'full-bloods' from all census tabulations as an unquestionable principle, and deducing its policy in particular areas from this by an inexorable logic, some of the convolutions of which were really quite remarkable. As noted much earlier, it has always been the practice of the statisticians to produce annual population estimates based on the most recent census results, updated by the application of current statistics on births, deaths and migration. It was accepted that 'full-bloods' need not be enumerated but that if enumerated they must be excluded from all census population tables, so the Bureau was forced to apply the same logic to registration of aboriginal births, deaths and marriages. From 1933 on the various Registrar-Generals and Statisticians in the States and Territories developed special mechanisms for identifying 'full-blood' Aboriginal vital events in order to exclude them from the birth and death statistics. These mechanisms relied on local Registrars recognizing Aboriginal names, localities, etc, and they were never at all

^{#50}

Census 1933. Report, vol.3:117. Repeated with variations in 1947, 1954 and 1961 Reports.

^{#51}

Census 1933. Bulletin No 24: Summary relating to full-blood Aborigines.

satisfactory despite a great deal of labour going into them. There was also an unfortunate side-effect, in that in the case of Aborigines, State Registrars never bothered to enforce the legal requirements for registration; in fact in the Northern Territory the registration of Aboriginal births, deaths and marriages was actually prohibited. All this despite the fact that electoral redistributions are always based on the actual census figures, never on the updated annual estimates. These exclusions were never challenged.

In addition, from 1933, certain dwellings defined as 'full-blood Aboriginal dwelling's' were excluded from all census dwelling tabulations!

But the tendency towards logic and consistency did not always produce such absurd results. The race question, for instance, was progressively improved by gradual modifications made after 1933, in an attempt to eliminate its arbitrariness and allow for all possibilities. It was first recognized that the question as framed did not make explicit provision for combinations of other than European races, or distinguish 'half-castes' in the sense of issue of 'full-blood' parents of two different races, from those of whom one or both parents were themselves of mixed race. So in 1947, 1954 and 1961 the instructions for 'half-castes' were modified to read.

'If the person is half-caste with one parent of European race write also 'H.C.', for example 'H.C. Aboriginal', 'H.C. Chinese',

adding:

'In the case of a person both of whose parents are non-European but of different races, state the race of that person's father (and do not add 'H.C.').'#52

I find it hard to believe that most respondents even understood this instruction, let alone followed it. If they had, however, they would have contributed to the leakage from the 'half-caste' to 'full-blood' population which, as we shall later see, became prevalent in the post-war years. Our hypothetical individual whom the census coders would have classified before as a 'full-blood non-European half-caste Aborigine' would now be classified simply as 'aborigine' (that is, a 'full-blood') even if both his parents were 'half-caste' Aborigines. The old mental block was still there. It was now accepted that there could be individuals whose parents were of different races, but neither of them European. But there was still no recognition of the possibility of individuals having two parents themselves of mixed race. However it was now made quite clear to the respondent that the term 'half-caste' applied to first generation half-Europeans only; the main concern was with the process of hybridization rather than the accumulated genealogy of any individual.

But while this made the intention of the enquiry clear for the first time, it only emphasized the fact that the ethnocentric bias of the question must result in the lumping of an extremely diverse assortment of people into categories arbitrarily determined by the father's race; moreover it contravened accepted usage of the term 'half-caste'. The Bureau's assumption that 'Aborigine' means 'full-blood' was also at variance with the common meaning of the term (someone discernibly of Aboriginal descent). No wonder the general public, and the Aborigines themselves, were confused about whether they were increasing or decreasing in numbers.

The strange developments at the 1947 Census have already been foreshadowed. The enumeration of Aborigines was an improvement over 1933, although over 2,000 'half-castes' were not enumerated; those included were tabulated in the 'race' section as usual. The characteristics of the 'full-bloods' enumerated were fully

#52

See the Statistician's Reports.

analyzed, but none of the tables were ever published. This was a backward step compared to 1933, and the fact that the analysis had been performed was not even mentioned in the Statistician's Report. However, the original tabulation sheets have recently been re-discovered by the Bureau, and I have drawn heavily on them in later sections. #53

It was also in 1947 that the Bureau stated for the first time that

'The principle followed in classification is that persons having a preponderance of aboriginal blood are regarded as full-blood'

while classifying as usual

'those of half aboriginal and half European blood as half-caste, while those having aboriginal blood to a degree less than one-half, and European blood to a degree greater than one-half, have been dealt with as of European race'. (Statistician's Report: 154)

What still puzzles me, however, is how these decisions could possibly have been made by the coders, since, as we have already seen, there was no provision for recording the 'degree of blood' on the schedule. Of course, some people probably disobeyed the instructions, and returned themselves as 'quarter-caste', 'three-quarter-caste', etc. With children living at home it may have been done on the rather dangerous assumption that the children's 'blood level' could be deduced from that of the parents. Note that this would mean that, as was the case with the New South Wales, Victorian and Western Australian assimilation legislation, a child's official race would change when it reached adulthood.

We cannot pass on from 1947 without looking further at the final piece of what Sawyer (1966) calls 'lunatic literalness' in the application of s.127 - the decision that Torres Strait Islanders were not 'aboriginal natives' within the meaning of 127. It will be recalled that ever since Federation, Queensland had been concerned about the effect the exclusion of Aborigines had on the number of members it was to send to the Federal House. It was the Queensland authorities who pressed for the continuation of the annual Aboriginal censuses, and alone of all the States they published every year from 1928 to 1941 a special statement showing the population of the State and regions including 'full-blood' Aborigines. The decision to introduce a separate Act for Torres Strait Islanders in 1939 may not have been specifically motivated by a desire to increase the number of Federal members, but the Queensland authorities immediately pointed out to the Commonwealth Statistician that upon the passage into law of the new Act, Torres Strait Islanders were not Aborigines and were not to be excluded from the population under s.127. #54 The astonishing thing is that the Statistician, and also the Chief Electoral Officer, both Commonwealth officials acting under the Commonwealth Constitution and Commonwealth Acts, accepted without question that they were bound by this change in a State Act. After having been included as Aborigines - 'full-blood' or 'half-caste' - up to 1933, Torres Strait Islanders were classified as 'Polynesians' in 1947. However, despite the fact that the Queensland Registrar-General also insisted that under the new Act the castes of Torres Strait Islanders were no longer to be distinguished, the Bureau continued to show 'full-blood' and 'half-caste' Islanders separately. Since 'Polynesian' included both 'native' and 'alien' races, however, Torres Strait Islanders as such could not be distinguished, and so it is not possible to obtain strictly comparable populations between 1933 and 1947.

#53

My thanks to K.G. Crawford, Director of the Census, for drawing my attention to them.

#54

Correspondence on Census Bureau files.

The treatment of race at the census reached its lowest point in 1954, possibly because at this time belief in assimilation and uniformity was at its strongest. The enumeration of aborigines was in fact quite an improvement over 1947, but 'full-bloods' were apparently not even carded - the schedulers were held for a few years, but were finally destroyed without ever having been analyzed. Moreover, hardly any analysis of 'race' was undertaken at all and very little was published. Many of the unpublished tabulations that were performed have been lost by the Census Bureau. However for the first time, Torres Strait Islanders were shown as a separate group.

At the 1961 Census enumeration of Aborigines was almost complete, but although 'full-bloods' were tabulated, the results were not published. The same question was used as in 1947 and 1954, but by this time it was becoming clear that the 'full-blood' / 'half-caste' distinction was becoming unworkable.

Jones (1970a) has examined the definition of Aborigines used at the 1961 Census in some detail, considering the various possible outcomes of mixed unions in terms of the 'actual' racial composition of the progeny and the possible racial identifications the individuals may retain - whether 'Aboriginal', 'half-caste', 'full-blood' or 'European'. He concludes that it is probable that a high proportion of those describing themselves as 'Aboriginal' in N.S.W. and Victoria in 1961 were in fact of mixed racial ancestry, and that some people of Aboriginal descent must have returned themselves as 'European' or 'Australian', perhaps because of dislike of the term 'half-caste'. He observes that the 'full-blood', 'half-caste' and non-Aboriginal populations are not closed demographically, since the issue of a mother who belongs to one population may be a member of the other, but goes on to say

Notwithstanding the complexity of the matter one has little alternative except to treat the full-blood and half-caste Aboriginal populations as enumerated, and as statistically separate populations. Most sociologists would probably prefer a behavioural definition of the Aboriginal population of Australia, but such a definition could not be applied in official censuses and surveys before the repeal of Section 127 of the Australian Constitution'. (F.L. Jones 1970a:13)

I cannot really see the force of the argument. Even working with official statistics, there is an alternative, which at least goes part of the way towards establishing a 'behavioural' definition of the population; that alternative is to amalgamate 'full-blood' and 'half-caste' statistics wherever possible.^{#55} The matter is certainly complex, but it is surely made more so by clinging to this offensive and illogical distinction which can place husbands, wives, children and even siblings in completely different demographic populations.^{#56}

It should be noted that Jones' conclusion that some people of Aboriginal descent must have identified as 'European' or 'Australian' is based only on the fact that most 'half-caste' cohorts showed decreases between 1954 and 1961 which were much too large to be attributable to mortality alone. Jones merely assumes that this resulted from people changing their race from 'half-caste' to European (presumably

#55

It is possible for all Commonwealth censuses except 1921 and 1954, at which no analysis of 'full-bloods' was performed.

#56

D.I. Pool (1964), working with the much higher quality Maori data from New Zealand concluded similarly that the use of 'half-caste' fertility rates involves a 'logical error', but like Jones, did not allow this to prevent him from calculating them.

because that is what the assimilation doctrine would lead us to expect). It was equally possible that they changed from 'half-caste' to 'Aboriginal' - but the 'full-blood' data was not adequate enough to bring out the cohort changes this would imply.

Now the logical inadequacies of the race enquiry were eliminated at the 1966 census. Apparently prompted by a desire within the Bureau itself to rationalize the race analysis, and possibly also as a result of changes in the Australian attitude to race, a quite different question was used,

'in an endeavour to obtain precise data on race mixture and also to avoid the approbrium attaching to the term 'half-caste'.#57

The question for the first time made provision for other than first- generation racial mixtures. It read:

'State each person's race. For persons of European race wherever born, write 'European'. Otherwise state whether Aboriginal, Chinese, Indian, Japanese, etc., as the case may be. If of more than one race give particulars, for example, 1/2 European - 1/2 Aboriginal, 3/4 Aboriginal - 1/4 Chinese, 1/2 European - 1/2 Chinese.'#58

But the Basic aim of the analysis was still the same: the Bureau was still operating on the principle that 'full-blood' Aborigines were to be excluded from published figures, and despite the large amount of information collected on racial origin, it was all reduced at the coding stage to the same three categories as always:

'full-bloods' were persons stated to be more than half Aboriginal (the remaining fraction was immaterial);

'half-castes' were persons stated to be half European and half Aboriginal;

persons of less than half Aboriginal descent, but more than half European, (or whatever) were coded as European.

Persons of half Aboriginal descent, but not half European, as well as persons of less than half Aboriginal descent, but not more than half any other single race, were classified as 'other mixed-bloods'.

So at last a rational set of categories had been distinguished in the collection of the data. But this could not eliminate the arbitrariness that worried the census takers, for that was a function of the categories the data was being coded into, and these had not changed. The more systematic collection merely defined the unclassifiable residual category more precisely and made the arbitrariness of the entire classification more obvious.

Nor could the fact that the categorization was made more systematic remove the sociological factors which affect the responses of Aboriginal (and probably other) people to the race question. For as posed it assumed two things: that people had full knowledge of their descent, and that the question was affectively neutral. But even if Aboriginal people had total knowledge of their genealogy, and were able to transform this perfect knowledge into proportions or fractions, it is

#57

Census 1966. The Aboriginal population of Australia. Summary of Characteristics:
3.

#58

Census 1966. Householder's Schedule.

clear that their responses were also influenced by the extent to which they valued their Aboriginal heritage.

In a special investigation conducted before any Aboriginal figures were published, #59 in which individuals' returns were compared in 1961 and 1966, the Bureau found that people of Aboriginal descent simply did not respond as had been expected. With some difficulty 619 individuals were matched; of this restricted sample only 35% had what the Bureau considered the same code in 1961 and 1966. 21% had called themselves 'H.C.' in 1961 and '3/4 Aboriginal' in 1966, which the Bureau considered to be an understandable change and an improved classification resulting from the new wording of the question. But they were disturbed to find that 15% of persons who answered 'H.C.' in 1961 answered 'Aboriginal' in 1966, and were coded as 'full-bloods'. The census officials were apparently surprised by this 'seemingly strange situation' (strange because it conflicted with the conventional wisdom of assimilation). Had they looked closely at earlier censuses, however, they would have discovered that leakage from the 'half-caste' to the 'full-blood' population had been occurring during the entire post-war period.

The report concluded that the change probably arose primarily from the fact that when the individual (or the enumerator) was uncertain of the actual 'blood level', the wording of the 1961 question gave them an ideal opportunity to answer 'H.C.', while in 1966 there was no such easy way out in the face of uncertainty, so such persons may have just answered 'Aboriginal'. Again the fact that 'blood levels' of children did not correspond with those of their parents was cited as evidence that many Aborigines do not know their degree of descent; it may however have indicated just the opposite.

This investigation was made prior to the release of the Bulletin showing preliminary figures for 'full-bloods', #60 and was undertaken because of the unexpected increase in the number the Bureau felt compelled to exclude from the general population. In the Bulletin however, the Bureau was less than frank, and made no mention of persons who were previously called 'half-castes' being classified as 'Aborigines'. Instead they attributed the increase to improved coverage, natural increase, and improved classification flowing from the new question. However when final Census figures also showed a dramatic drop in the 'half-caste' population, some action was clearly needed. It was at this stage that it was decided not to publish details of the 'full-blood' population at all, for Aborigines or any other race. To quote the Bureau in full:

'Investigations made by matching the replies of individuals at the 1961 and 1966 Censuses and by comparing overall Census results with data available from the State instrumentalities responsible for Aboriginal welfare suggest that considerable doubt attaches to the validity of the replies given to the question on race at the 1966 and previous Censuses.'

#59

C.B.C.S. Census Branch. Project Report: Aborigines - Preliminary Investigation into the effects of the Race question at the 1966 census.

#60

Census 1966. Special statement. Full-blood Aborigines. States and Territories of Australia.

It has now been concluded:

- (a) That reporting by Aborigines in the 1966 Census was insufficiently precise to differentiate persons who are 50 per cent Aboriginal from those who are more than 50 per cent Aboriginal.
- (b) That similar dissections obtained at Censuses prior to the 1966 Census were similarly imprecise.
- (c) That even a total of all persons who are 50 per cent or more Aboriginal may be suspect, primarily because of the inclusion of persons who are less than 50 per cent Aboriginal and described themselves simply as 'Aboriginal' but also because of persons who are 50 per cent Aboriginal stating their race as 'Europeans'.

Nevertheless, the statistics in this Bulletin, which relate to persons who have described themselves as 50 per cent or more Aboriginal or simply as 'Aboriginal', are presented subject to these limitations in the hope that comments and suggestions will lead in future Censuses to the compilation of more reliable data. #61

In fact this statement is not completely accurate, because in coding the 1966 race question, the old ethnocentric definition of a 'half-caste' as a half-caste European was still retained. Thus persons who said they were half Aboriginal but not half European were placed in the residual 'mixed-blood' category. These people were not included in the published population of 'persons of 50 per cent or more Aboriginal descent'.

But this is a minor point. What is significant is that there remained virtually no continuity demonstrable between the various categories that should have been equivalent. Nor did the shifting of the limits of the 'Aboriginal' population from 'full-blood' (that is, more than 1/2 Aboriginal) to 'half or more Aboriginal' in fact produce a population which was any more stable, closed or homogeneous. It simply moved the demarcation to an area where, because the 'full-blood' group was never fully enumerated at previous censuses, there were few previous figures to compare. It will also be appreciated that the composite Aboriginal population finally used by the Bureau was composed partly of 'full-bloods' (i.e., persons of more than half Aboriginal descent) who have always been nominally excluded from census population figures, and partly of 'half-castes' (i.e., persons of half European and half Aboriginal descent) who have always been included. This meant that the population was not separate from the general population as described in Census statistics, but overlapped partly with it, making it impossible to calculate the total population of Australia from published statistics.

Fortunately, at the request of interested parties, the Bureau had added a special code to the records of all persons who said they were of some Aboriginal descent, but not enough to be classified as Aborigines, and certain unpublished tabulations are available for this population. Where appropriate, therefore, another population can be defined by aggregation, consisting of all individuals who identified themselves as having any Aboriginal ancestry at all.

The total identified Aboriginal populations in 1961 and 1966 are not formally equivalent - people who stated they were of less than half Aboriginal descent are included as Aborigines in 1966, excluded in 1961. In addition, some people apparently identified themselves as Aborigines in 1966 who did not do so in 1961. But we will see later that of all the groups that could be compared between 1961 and 1966, only the total identified populations are reasonably comparable. Many

#61

Census 1966. The Aboriginal Population of Australia. Summary of Characteristics: 3-4.

people with only a minor fraction of Aboriginal 'blood' consider themselves to be Aborigines: despite the white mythology the Aborigines are clearly assimilators more than they are assimilees.

This movement of people from the identified non-Aboriginal population to the identified Aboriginal population, as well as the movements between the various sub-groups of the Aboriginal population, is clearly of great sociological interest, because the direction of net migration indicates the extent to which people of mixed race are identifying as Europeans, Aborigines or whatever. And it is of great demographic interest because in the absence of information concerning vital rates, this social migration is inseparably confounded with the natural rate of increase.

Although the Bureau was satisfied that the enumeration of Aborigines in 1966 was 'virtually complete', the Census was widely criticized by Aboriginal welfare groups and by State Aboriginal administrations. The asking of fractions of race was widely condemned as being offensive and racist, and it was also claimed that even the total identified Aboriginal population was far too low. At the time the States in total claimed an Aboriginal population of about 130,000,^{#62} but only 97,000-odd were enumerated. It was claimed that although enumeration of remote tribal groups had now been made complete, underenumeration had become a problem in major urban areas. The Foundation for Aboriginal Affairs in Sydney, for instance, claimed it had knowledge of 10 to 12,000 Aborigines in Sydney, while the Census showed only a little over 1,000. From the foregoing discussion, however, it will be appreciated that these persons were not necessarily all omitted from the enumeration - they may simply not have identified as Aborigines. For the 1971 Census, the Bureau adopted an entirely new race question. Section 127 had been repealed, so there was no longer any need to distinguish 'full-bloods'; and it was accepted that the sub-groups formerly distinguished within the Aboriginal population were not stable over time. So in consultation with persons and organizations concerned with Aboriginal affairs, the Bureau decided to abandon the 'biological' or 'genealogical' concept of race in favour of an entirely social or self-identification concept.

The 1971 question read

'What is this person's racial origin

(If of mixed origin, indicate the one to which he considers himself to belong.)

(Tick one box only or give one origin only.)

1. European origin
2. Aboriginal origin
3. Torres Strait Islander origin
4. Other origin (give one only)'^{#63}

This radical advance did not pass unchallenged. A number of objections were raised, most of which are summarized in an article headed 'The census muddle' in Nation, June 12, 1971. The article quoted the 1966 question, and said

'This question displeased a number of people, but especially organizations concerned with Aborigines. As a concession to them, the halves and quarters were cut out, and a person of 'mixed origin' may state 'the one' to which he considers he belongs. This option confuses an already confused issue for scientific purposes. If the data are

^{#62}

Australia. Department of Territories (1967) The Australian Aborigines.

^{#63}

Census 1971. Householder's schedule.

intended to allow geneticists or pseudo-geneticists to draw conclusions, then answers obtained in this way are likely to be highly confusing. Genetics doesn't depend on what genes people think they have: social identification is quite another matter. In fact in countries like Mexico, persons descended on all sides from 'Indians' may describe themselves as 'Mestizos'. In the present Australian situation it is likely that persons entered as 'part-Aboriginals' under the previous Census, who have successfully climbed up the occupational ladder, would give their origin as European, while those who live on reserves would list themselves as Aborigines. The resulting figures would then lend themselves to the inference that 'Aborigines' (defined in some sense or other) are destined biologically to fill the lower positions and are incapable of entering Australian society.

Other queries about the 1966 race question have led to greater caution in 1971. Somebody must have delicately pointed out that 'Chinese' and 'Japanese' aren't races in anybody's book. This time, there are four alternatives; European, Aboriginal, Torres Strait Islander, and Other (give one only). The elevation of Torres Strait Islanders into a 'race' must surprise even the most conservative thinkers on such subjects. Persons originating a couple of miles away on the Papuan mainland will fall into an entirely different category - 'Other'. The presence of this question is believed to stem from a request by the Queensland Government, which applies restrictive laws to this section of Australia's citizens.

The number of Aborigines and reproductive figures about them, on which the population can be projected for the future, is important to planning in the Northern Territory; and for this the Commonwealth itself has legal responsibility. But census areas, particularly in the more sparsely populated areas of the country, can be easily correlated with electoral divisions. Some suspicious observers believe that the Queensland data are being sought to help with future gerrymanders - to divide up the areas where islanders live so as to make them least influential in affecting election results.'

I do not want to devote too much attention to the specific arguments used in the article, which in my view are both mistaken and offensive, but rather to take up the general points raised, because they are in fact representative of the views of certain academics, liberals, and Government officials.

First, and most objectionable, is the assertion that there are considerations which make it undesirable for people to be allowed to identify as they choose, that because of the 'present Australian situation' a particular set of alternatives must be imposed for the Aborigines' own good: the article seems to argue that what must be obtained is information that can be used in debate (presumably among white people) on whether the Aborigines are capable of 'making the grade' or not.

Apart from the fact that all the evidence on 'part-Aboriginals' changing their identification in fact indicates that it occurs in the opposite direction to that suggested, it is really astounding to me that someone could describe with apparent approval the Mexican situation but then go on to say that this is not appropriate for 'our' natives. Not allowing people to identify in terms that make sense to themselves can only perpetuate the existing position of the Aborigines in Australian society, since it involves an acceptance of individual and institutional racism as an unchangeable parameter to which Aboriginal people must simply adjust. It can only aggravate the 'identity' problems which plague Aboriginal individuals and groups, many of them assimilated to such an extent that

they have introduced the negative attitudes of the general community towards their own race. And even from a purely technical point of view, requiring Aboriginal people to identify themselves in terms of imposed white stereotypes is self-defeating. As Jones noted, they may refuse to place themselves in categories they find objectionable, or even if they are cooperative, ignorance, confusion, or the inadequacy of 'biological' categories may prevent them from classifying themselves 'correctly' or consistently.

The author of this article did in fact have some training as an anthropologist, but he clearly attaches more importance to the physical anthropology of race than to the concept of ethnicity in the sociological sense. We have already seen that it was the Bureau's own discovery of the instability of the sub-groups that led to their abandonment, that Torres Strait Islanders have been a 'race' at the census since 1954, and that the Bureau has itself stated since 1933 that race at the census was neither a genetic nor ethnological concept. Assuming that no-one would dispute that people do identify as belonging to particular groups which they call races, what is involved here is an argument about usage - that the term 'race' ought not be used to describe 'subjective', socially defined or 'ethnic' groups, but should be reserved for 'objective' or biologically defined groups. Perhaps so, although the ethnic usage (as in the English 'race') is an earlier one. But if we agree that 'objective' race and 'subjective' race (or whatever other term is acceptable) may be quite different, then it follows that no matter how the question is phrased, no census information on race has any clearcut bearing on the person's 'real' race. Genetic conclusions can only be drawn from genetic data, and information about the biology of race can only be obtained by the methods of biological science, not by open-ended or multiple-choice questionnaires at census time.

Perhaps it may be objected that genetic investigations can be undertaken by studying genealogies, and that this can be achieved by questionnaire or other methods depending solely on testimony. But apart from the fact that people are unable or unwilling to express their accumulated genealogy in terms of fractions, etc., the mere tracing of genealogies has no immediate bearing on human biology, unless it is undertaken in connection with the transmission of specific characters. And even if genealogical studies were used to assign people to a particular caste or descent group, definition of such groups would be an extraordinarily difficult task. Between that subset of the population which is entirely of Aboriginal descent, and that subset which is entirely non-Aboriginal, stretches a multi-dimensional array of groups of different compositions which have emerged during the long period of contact and interbreeding between the Aborigines and other races. Even if we only take account of the possible racial admixtures of European and Aboriginal that could have occurred in the 200 or so years of European settlement, an assumed generation length of 25 years would yield 510 ancestors for any one individual, and 256 possible racial compositions any present-day individual may have. Of course, not all are equally probable, but at the same time it is patent that the conventional categories are too cryptic to adequately describe the biological and genealogical complexities involved, since no matter how categorized, descent groups defined according to proportion of Aboriginal ancestry would include persons from many different genealogical lines, who may belong to genetic populations which are actually diverging, and are certainly not closed either demographically or genetically.

It will be obvious from what I have said that for census purposes I regard self-identification as the only acceptable method of determining race. Even if there were no logical or practical objections to the use of the concepts of caste, degree of descent and proportion of blood, they would still be quite unacceptable because they are so arrogantly racist. Europeans often do not seem to realise just how offensive the whole battery of descent terms like 'half-caste', 'part-

Aborigine' or '1/4 Aborigine' are to those Aboriginal people who are aware of the history and nature of race relations in this country, and the way in which the white society looked to the culling and crossing techniques of animal husbandry for a solution to the Aboriginal problem and its own excessive masculinity.

Something of this feeling is conveyed, although in a very controlled way, by Kath Walker, a well-known Aboriginal poet, in commenting on a paper on Aboriginal demography at a 1966 Monash University seminar, when she says

'I would like to say something about the deficiencies of the census. Regarding the identification of an Aborigine: surely the white man makes it very hard for himself in getting the census information by bringing in this caste business, quarter-caste and three-quarter-caste, etc. I notice he does not do this in the European world. Surely we can identify the Aborigine as one who identifies himself as an Aborigine - and we can well do without caste. Many of us would prefer, and I think I speak for the Aborigines and Torres Strait Islanders at this seminar today, to keep alive our own culture in order to salvage what is left because this is all we can do. It is not our desire to see our own culture destroyed.'^{#64}

Aboriginal people in ordinary conversation are more specific. These terms are 'an attempt by the white man to drive a wedge between us' according to one comment I have heard.

On the other hand, Aborigines who lack this awareness of the way in which policy has been dedicated to the disappearance of their physical and cultural identity, nevertheless feel its effects through the use of these labels, which constantly reiterate that their caste status relative to the general society is forever fixed by the proportion of white 'blood' they are judged to have.

So technical, logical and ideological considerations all indicate that the 'objective', 'genetic', or 'genealogical' approach to race is inappropriate in the census context. It always has been. The Bureau was really only facing up to this fact when it acknowledged the 'social' or 'subjective' basis of the race enquiry. This explicit recognition that the respondent does in fact choose, within limits, his racial group, and that individuals' responses may consequently change over time, may be disturbing to those who consider that the census schedule should be an objective measuring or sorting instrument, but the only alternative would be to drop the race question altogether.

Nor is that suggestion without its supporters; in fact, it is really implied by the reference to electoral redistribution in the article quoted from Nation - that is, that it is not in the interests of Aborigines (or other races) to be distinguished in statistics at all. Needless to say it is a view put forward by white people, not by Aborigines.

C.M. Tatz has examined on a number of occasions the arguments against distinguishing Aborigines.^{#65} Three sorts or reasons are given: it may be suggested, as in the Nation article, that such information would be used to the Aboriginal people's disadvantage; or it may be argued that it is in some way discriminatory in principle to make distinctions by race, even if no particular

^{#64}

commenting on J.P.M. Long's (1966) 'The number and distribution of Aborigines in Australia' in Sharp and Tatz (1966).

^{#65}

See for instance 'Aboriginal education - present facilities and needs' in T. Roper (ed) (1969) Aboriginal education: the teacher's role.

undesirable effects can be adduced - that statistical distinctions involve a form of apartheid and are objectionable in themselves. Or a third position, more explicitly racist, is that the Aborigines should not be distinguished because they do not have - or ought not to have - any special characteristics or needs, that distinguishing their statistics runs counter to the doctrine of assimilation, which involves a commitment to the disappearance of the Aborigines as a separate or identifiable group.

These are not really arguments so much as slogans, but they cannot be ignored, because their effect is so serious. Assimilation as a goal of policy has now been explicitly abrogated by the Australian Government, whose stated policy is now aimed at promoting 'independence' and 'self-determination'. But even if assimilation were an acceptable goal, one must ask with Tatz how progress towards it could be assessed in a statistical vacuum. And while it would be foolish to deny that there is the possibility of separate statistics being used to 'the Aborigines' disadvantage, this argument can equally be used to justify their collection, since at present it is the lack of separate statistics which is to their disadvantage. In the field of health particularly, statistics are not kept, or those kept are not made public, simply because the facts are such a disgrace to the nation.#66

Putting aside the detail and the plausibility of the arguments used, the sociological effect of the lack of separate statistics is quite plain: it allows the existing situations of white dominance and privilege to continue and permits de facto policies of neglect to run their course without interference. The collection of separate statistics by no means guarantees that the problems will be recognized or solved, but unless they are collected, some administrations will continue to deny that the problems even exist. In the case of electoral statistics, there would be nothing new in Aborigines (or Torres Strait Islanders) being distinguished in order to be excluded or neutralized, but even if there was some such motive involved, a knowledge of the distribution of Aborigines in State and Federal electorates may well be very much to the Aborigines' advantage, since it seems that, if they were enrolled and exercised the franchise, an Aboriginal bloc vote could determine the outcome in a number of rural electorates.

There is one criticism which can still be levelled at the 1971 question, however, which is that it does not allow people to state that they are of mixed racial origin, if this is what they consider themselves to be. This is a point that has been raised by some anthropologists, and by officials, especially in the Northern Territory where the distinction between 'natives' and 'coloureds' has been important in Aboriginal administration. At another Monash University seminar in 1967,

'Mr. Alan Duncan disliked the dichotomy between Aborigines and part-Aborigines and preferred to define an Aborigine as one who identifies as an Aborigine, whether he is 5 per cent or 100 per cent by blood....' 'aboriginal people themselves in the Northern Territory make this distinction', replied Mr. Ted Milliken,#67

#66

Until recently, statistics of Aboriginal mortality in the Northern Territory could be obtained only by means of questions in Parliament. The situation is now showing signs of improvement, but although it is now the policy of the Australia Labor Party and the Australian Government that Aboriginal mortality statistics should be collected, they are not yet available, nor, in the eastern States, have there even been any moves to set up a system for collecting them.

#67

At that time, Assistant Director (Research), Social Welfare Branch, Northern Territory Administration. My emphasis.

... (and) ... one must take account of the reality of what exists in someone's mind. Moreover ... the group for whom his Branch was responsible were full-bloods who come to school speaking an Aboriginal language and for whom English is a second language.'

The same speaker added, in another part of the proceedings, that.

'In the multi-racial society we have in Darwin, we face a very interesting situation where the part-Aboriginal people, for a number of historical reasons, have identified with the European community, and they have little contact, certainly no identification, with the full-blood Aboriginal section of the population. This is not the situation in the Centre, where we have the reverse.'^{#68}

There is some irony in Milliken's reference to 'historical reasons', since it was the determined efforts of the Northern Territory authorities in separating 'part-Aboriginal' infants from their mothers which created and sustained this distinct 'coloured' class. But the distinction between Aborigines and 'part-Aborigines' has become firmly embedded in the social structure of the Northern Territory, and despite its recent abandonment as a basis for the administration of Aboriginal affairs, it is still considered fundamental by most people in the north. 'Part-Aborigines' are in general considered, and consider themselves, to be above the 'caste barrier', and hence to have a certain amount of social mobility denied to the 'natives', while there still remains a general conviction that there is some immutable connection between descent and temperament, ability, life-style and culture, and that consequently there is a need for special controls on, and special provisions for, 'full-bloods' only.^{#69}

The question now is whether the stratification that exists will continue, or will tend to disappear as it has elsewhere. That it has persisted so long is a result of the late occurrence and limited extent of European settlement in the Territory. This has meant that the population factor itself remains an important consideration, because Aborigines and 'part-Aborigines' still make up over a third of the population. But it is important to realize that the equating of cultural and physical (genealogical) characteristics involved here is far more than a simple racist stereotype. The whole object of the 'new-look' assimilation policy of the late 1930s was to provide a framework for ensuring that these stereotypes were fulfilled by legal compulsion: 'part-Aborigines' were to be required to be tutored in preparation for eventual social and physical absorption by the white society, while 'full-bloods' were to be segregated, socially and economically if living near Europeans, physically on remote reserves if their tribal life was relatively intact.^{#70} In most parts of Australia, only the 'assimilation' aspect was put into practice, but in the Northern Territory the late and limited settlement meant that it was possible to implement both aspects. Enormous reserves were created at a time when tribal life had not disintegrated, but

^{#68}

From 'Participants' viewpoints' in S.S. Dunn and C.M. Tatz (eds) (1969) Aborigines and education: 236-7.

^{#69}

I am informed that at the time when the new 1971 Census race question was being considered, Northern Territory officials repeatedly expressed concern that they would 'lose track of the full-bloods'.

^{#70}

See for instance the Report of the Western Australian Commissioner for Native Affairs, 1937.

'half-caste' children were removed from the reserves, and hence from tribal culture, to be raised as white in institutions.

But one effect of being raised subject only to the values of the white society in a situation of rigid separation from tribal people was that the 'part-coloured' people in the post-war years began to resist the imposition of restrictive laws, which they considered appropriate only to 'natives'. When the Aboriginal administration of the Northern Territory was reorganized in 1953, they were entirely freed of control, but, as Milliken noted, it appears that it was only in the city of Darwin that this led to anything akin to assimilation or social equality, and the 'part-coloured' people have never really become a secure group in their own right, perhaps because in contrast to the practice in many European colonies there were no special privileges associated with their caste. They are cut off from both the tribal people and the upper levels of the white society, remaining as a reluctantly visible proletariat, always resisting any suggestion that they are in any way to be bracketed with the 'natives', even when this term includes their own parents or grandparents.

In the past, the maintenance of the division between people of full and part descent was defended for the benefits it gave to 'part-coloured' people. But in recent years a curious reversal has occurred, and it is now said that its maintenance is essential to protect the interests of tribal people. Until very recently, it was almost unthinkable that a 'part-coloured' person would want to identify with, or find common cause with, the 'natives', and in any case the former Welfare Branch was never prepared to allow it. But as a result of changes flowing from the relaxation of restrictions on the movement of tribal people and on access to reserves, a number of 'part-aboriginal' people have been able to establish communication with tribal people, and have come to identify strongly with them. It has immediately become obvious that there is and always was far more involved than simply respecting distinctions important to the aboriginal people themselves. Those who in the past have been in a position to interpret to the general society the attitudes and values of tribal people have claimed, for instance that the caste barrier is significant in terms of tribal Aboriginal values as well, and that tribal people do not accept that 'half-castes' or 'part-coloured' people are Aborigines at all. And neither public opinion in the north, including the supposedly racially tolerant people of Darwin, nor, in general, anthropologists, have been prepared to accept the proposition that 'part-Aborigines' have a right to speak on behalf of tribal people.

Tribal people certainly regard 'part-Aborigines' as different and often deprecate their colour. But that is often a defensive position, and one that is in fact actively promoted by the authorities. Mullard (1974) reports that during discussions with residents of a Northern Territory reserve, an Aboriginal man told him

'We told (by white 'protectors') half-castes bring shame on us ... We let them go.' #71

The very existence of 'part-Aborigines' reflects the dominance of the white society and the relative powerlessness of Aboriginal men, so it would certainly be understandable if tribal people did want to simply shut the matter out of their minds by denying that there is any connection. But in a sense none of this is relevant, since the crucial point must still be how 'part-Aborigines' regard themselves. And it is quite plainly that proposition, and the threat it poses to a number of aspects of the conventional wisdom and conventional wise men of race relations, that provokes the most opposition. It has become common in the

#71

C. Mullard (1974) Aborigines in Australia today: 62.

Legislative Council to refer to them as 'persons claiming to be Aborigines', #72 while anthropologists in discussions on the subject have used terms similar to those used by R.M. Berndt, referring to the 'noongars' (detrribalized 'part-Aborigines') of south-west Western Australia as 'Aborigines in name only'. #73 It has been claimed that 'part-Aborigines' must not be allowed to identify as Aborigines or sit on bodies which include tribal people because they will dominate them and disrupt tribal life. The protection philosophy is still alive and well, with its offensive assumption that 'full-blood' or tribal people could not possibly participate as equals with detrribalized people. #74 While this may be partly true at present, it reflects merely the lack of facilities such as interpreters, or the (enforced) lack of experience of tribal people in the politics of the wider society. The latter deficiency is rapidly being remedied.

Of course there must always be a cultural gap between tribal and detrribalized people, but there can be no doubt that a political unity, in many ways engendered by the divide-and-rule approach of the past, is in fact developing, and that the real cause of concern to particular interest groups such as politicians, pastoral spokesmen and academics is that these politically active 'part-Aborigines' are disputing their exclusive right to represent to the general society the views of tribal people. It is ironical that these groups, all of whom are concerned to promote or preserve their own special interests, should accuse 'part-Aborigines', who alone are attempting to give tribal people direct access to the power structure of the general society, of being self-interested.

In addition to being brought together in political and advisory forums, increasing numbers of 'full-blood' people are moving to the towns and living in fringe-dwelling communities which in the northern Territory as elsewhere are a bridge between tribal people and assimilated town-dwellers. It would be surprising indeed if an awareness of common status and shared disadvantages did not develop at this level as well. If, as Milliken suggests, there is an absence in Darwin of the alienation felt by 'part-Aboriginal' people in the south, there may also be an absence of the movement of 'part-Aboriginal' people back into the identified Aboriginal population - about two thirds of the 'part-Aboriginal' people in the Northern Territory did not identify as Aborigines at the 1971 Census. But a substantial breakdown of the caste-structure seems to be as inevitable there as elsewhere. Whether or not this occurs, however, there are strong reasons for not introducing the complication of mixed-race into the census question, because that would imply official acceptance of the present caste structure. If there remains some interest in the subject from an academic point of view, then it is appropriate to study it by means of special, non-official surveys.

#72

See for instance the Northern Territory Legislative Council Hansard for 10 October 1973 (777 etc.)

#73

R.M. Berndt (1973) The Australian Aboriginal: the widening gap. Paper presented to A.N.Z.A.A.S. Congress, Perth.

#74

A new and disturbing variation on this theme has recently emerged. Both the Australian Minister for Aboriginal Affairs and the Permanent Head of his Department have publicly disputed the right of a number of organizations critical of the Department, including the fully elected National Aboriginal Congress, to speak on behalf of Aborigines, saying that they are dominated by vocal urban Aborigines, and that the 'real' Aborigines are the rural dwellers.

So in general I would argue that the form of the race enquiry is now satisfactory. The Australian Bureau of Statistics has recommended that all Aboriginal statistics should be collected by the use of a question of the same general form as the 1971 Census race question, that is, that statistics be based on self-identification and that people be asked their race rather than only whether they are Aboriginal. The National Health and Medical Research Council has also recently endorsed this recommendation. #75 I understand from A.B.S. officials, however, that it is proposed to alter the question slightly for the 1976 Census. People will again be asked to state their racial origin, but the only options actually listed will be 'Australian Aboriginal', 'Torres Strait Islander' and 'Other (please specify)'. It would appear that some purists have objected to the term 'European' being used instead of 'Caucasoid'. As might be anticipated from what has already been said, I regard this criticism as being based on a fundamental misconception of the nature of the census race enquiry. However I cannot really see any undesirable consequences flowing from the change provided the 'Other' responses are then coded into a reasonably adequate set of categories. There is a constant danger that the coding will be curtailed on the fatuous grounds that distinguishing race (even European race) involves racial discrimination, especially at a time when the 'alien' non-European population is increasing rapidly through immigration, and Governments do not feel that the electorate is yet tolerant enough to accept the fact.

But although the form of the question in 1971 may have been satisfactory, problems of other kinds arose. Potentially the most serious was under-enumeration. Special efforts had been made to enumerate Aborigines in urban areas, but it was again claimed, as in 1966, that many were missed by the census collectors. The one piece of substantial evidence for this claim is a special survey of Aborigines in Sydney undertaken 15 months after the 1971 Census. #76 Only 5,479 Aborigines were enumerated in the Sydney Statistical division, while it was estimated on the basis of the survey that there were 9,098 Aborigines in the metropolitan area (however only about half were actually contacted). The difficulty is, of course, that while it seems certain that some under-enumeration did occur, an unknown number of the 'survey Aborigines' were equally certainly enumerated, but did not identify, at the Census, so the overall magnitude of the deficiency is impossible to assess.

There was also an unexpected development with respect to the self-identification aspect of the race question. We have seen that the subgroups of the Aboriginal population were not stable over time, and that leakage had occurred in both directions across the boundary between the Aboriginal and European populations. But in 1971 there was for the first time an indication of substantial apparent leakage from the Aboriginal to the Torres Strait islander population. Although Torres Strait islander had been a race category since 1954, 1971 was the first time it had been mentioned as an option on the schedule. Presumably as a result of this, over 4,000 more persons identified as Islanders in 1971 than in 1966 - an increase of 80%. Since at the same time the increase in the Aboriginal population was low compared to earlier intercensals, it is a plausible inference that a substantial number of persons who had been returned as Aborigines in 1966 were identified as islanders in 1971.

There is one other possible explanation, but unfortunately it cannot be tested. In recent years there have been instituted a number of special benefits for Aborigines and Torres Strait islanders, and this could have encouraged persons

#75

Report of the Seventy-eighth Session, Perth, May 1974: 10.

#76

W.D. Scott and Company (1973a) Problems and needs of the Aborigines of Sydney.

belonging to 'alien' Pacific races to identify as Torres Strait Islanders. But despite the fact that a comprehensive list of races (as identified) had been used for coding, tabulation and publication at all Commonwealth censuses between 1911 and 1966, the Census Bureau decided that in 1971 they would code only those races specified on the schedule (European, Aboriginal, Torres Strait islander) and Chinese, all others being simply coded 'other'.#77 So there is no way of establishing to what extent, if any, the intercensal increase in the Torres Strait Islander population was at the expense of minor racial groups such as Papuan, New Guinean, Fijian, Maori, or, probably the most likely 'Pacific Islander not elsewhere included'.

Although these racial groups were not distinguished in the coding, it might have been possible to check whether they lost people to the Torres Strait Islanders in 1971 by going back to the original returns; but at the order of the then Treasurer (B.M. Snedden), all schedules from the 1966 and 1971 Censuses (as well as microfilms of the 1961 Census schedules) were destroyed in 1971 in a political gesture to pacify certain groups which had made sensational objections to the holding of the 1971 Census, claiming that the information collected would be made available to the security police.

However I am reasonably sure that it was movement from the Aboriginal to the Torres Strait Islander population between 1966 and 1971 that was responsible for there being too few Aborigines and too many Islanders in 1971. If I am right, this would not imply some brand new phenomenon, but merely that the continuum along which category-jumping or ethnic migration occurs also extends to Torres Strait Islanders. Just as in the case of the 'part-Aborigines' in the Northern Territory, the Queensland Aboriginal administration, public opinion in the north, and also many Aborigines and Islanders themselves, have always insisted that the two groups are entirely separate, and also stratified in terms of social status, islanders having higher prestige. The apparent leakage between 1966 and 1971 would seem to falsify the assertion that the groups are entirely separate, while confirming the realative status of the two. But the social stratification is really derived from the differential legal statuses accorded the two groups; we have seen already that given the opportunity, people will place themselves in groups with higher prestige, more social mobility and less restrictions on civil rights. Whether the 1971 situation is a once-only effect of the new question, or the first sign of a process that will continue at later censuses, will probably depend on whether the choice between identifying as an Aborigine or an Islander continues to carry with it differential social costs or benefits.

It seems unlikely, however, that the distinction between Aborigines and Islanders will ever disappear entirely. The separation of the two did not involve anything as drastic as the enforced sundering of the generations, such as occurred when 'half-castes' were separated from 'full-bloods'; the strains this generated themselves eventually gave rise to the movement for reunification of the Aboriginal castes at the individual level. Sociologically, the Aboriginal-Islander distinction has more in common with the sorts of perceived differences between tribal and regional mainland groups described by Barwick

#77

Hence my earlier expressed concern about the coding of race at the 1976 Census. Reasons mentioned by A.B.S. officials for not distinguishing other races in 1971 were - predictably - that it would lay the Bureau open to charges of discrimination, and that there was 'no demand' for separate statistics for 'other' races. The latter position is one much favoured by the Bureau; the reader is referred to a brief contribution by B.S. Marsden (1973) in G. McCalden (ed) (1973) URPIS-ONE: 26.22 for a devastating summary of the adequacy of the Bureau's assessment of 'demand'.

(1963) and many others, reinforced somewhat by legal and administrative pressures. Thus, while it seems well established that the physical and cultural differences between the two are of degree rather than of kind (see White 1971, Beckett 1972), #78 and that the boundary is somewhat blurred to the people themselves, a reflexive sense of perceived 'otherness' will probably always persist, just as it probably will between mainland groups.

Nevertheless the divide-and-rule era has clearly passed. Just as diverse Aboriginal groups have developed a united political front since laws restricting movement and access were relaxed and more resources have been made available, Aborigines and Torres Strait Islanders now speak politically with a united national voice, through organizations such as the Federal Council for the advancement of Aborigines and Torres Strait Islanders, and the National Aboriginal Congress.

When more information is available from subsequent censuses, it may be possible to study the demography of the two groups separately, including an account of the extent of leakage between them. But at this stage I feel the only sensible way of approaching the matter is to amalgamate the Aboriginal and Torres Strait Islander populations whenever intercensal and other comparisons are performed. Before 1947, the distinction was not made anyway; after 1947 the separate population figures can be aggregated. Only in 1947, when Torres Strait Islanders were not distinguished from other 'Polynesians', is it impossible to create a combined population by simple addition; however even then its size may be estimated indirectly with reasonable certainty.

#78

J.R. Beckett (1972). 'The Torres Strait Islanders' in D. Walker (ed) (1972) Bridge and barrier: the natural and cultural history of Torres Strait: 307-326.

4. CONCLUSION: WHO IS AN ABORIGINE: WHAT IS THE ABORIGINAL POPULATION?

The process of separation of the Aboriginal population into different groups, and the tendency for 'part-Aborigines' to cease identifying as a result of official pressures, occurred early in Victoria, late in the Northern Territory. But the process from the point of view of population statistics has been essentially the same.

Initially, Aborigines enumerated were those in employment, on settlements or in contact, often including numbers of people of mixed descent; those excluded were tribal people not in regular contact, presumably mostly of full Aboriginal descent. With the development of restrictive legislation, people of mixed descent were progressively excluded from, or voluntarily left, the identified or official Aboriginal population. At the same time tribal ('full-blood') people were being attracted or confined to institutional settlements or being overtaken by the frontier of settlement, and hence included in population statistics. Finally, in recent times, with the 'full-blood' people now fully identified and enumerated, the combination of changing policies and changing identifications has resulted in large numbers of 'part-Aboriginal' people previously excluded from the Aboriginal population moving back into it.

This process was accompanied initially by a proliferation of the caste or descent categories into which the Aboriginal population was divided, generally as an adjunct to Government policy and control. This was never done in a methodologically sound fashion, so the Australian data is not really good enough to detect the process of ethnic migration or 'category-jumping' described by Pool (1966) as occurring between sub-groups of the Maori population.

Nevertheless it is clear that this process did occur, at first outwards from 'Aboriginal' towards the 'European' categories, and later back in the direction of the categories of greater 'Aboriginal' descent. In the absence of vital registrations, and with differential census coverage for the different descent groups, it is next to impossible to distinguish, for the different groups, the effects of this process of in- and out-migration from the effects of mortality and fertility. In addition the groups are not closed demographically, so in-migration can occur at birth as well.

All this has been radically simplified by the adoption of a social, subjective or self-identification definition of race and the complete abandonment of any attempt to distinguish caste groups. While all these complex processes may still continue, they will continue within the population, and the effects of social migration are occurring across only one population boundary (three if Torres Strait Islanders are kept separate), instead of several times that number. If at this stage Aborigines and Islanders are taken as a single population, and assuming the adequacy of enumeration does not deteriorate, only three types of leakage are now discernible:

1. people changing their identification from Aboriginal to non-Aboriginal or vice versa, or children who on leaving home or institutions identify themselves differently to the way their parents or others described them;
2. some Aboriginal mothers may even now consider their child belongs to a different race to themselves. This is most likely with mixed marriages, but could occur under other circumstances as well;

3. some additions to the Aboriginal population will be the issue of non-Aboriginal mothers.

In this study, for historical reasons, I have had to make use of statistics for the 'full-blood', 'half-caste' and other sub-groups, but these are utilized only for the light they shed on the demography of the Aboriginal population as a whole. If we only have to deal with a single population it becomes feasible to work back over past census and State and Territory population figures to try to determine the extent to which apparent population increases and decreases have resulted from the effect of births and deaths, rather than social migration or compulsory exclusion. The census does now define such a single population - in one sense - the sense that an Aborigine is and Aborigine without any further qualification or subdivision. The State administrations have also now accepted the 'undivided' concept - even if castes are distinguished, no formal legal rights or disabilities are associated with the different groups. But the two populations are still not the same. In general, the States' Aboriginal populations are comprised of 'persons known to be Aborigines' and are still substantially larger (by about 30%) than the census-defined population of 'persons stated to be Aborigines'. Some people have questioned whether this extra groups of invisible (to the census) Aborigines really exist, but I do not think there can be any real doubt of that. The discrepancy merely indicates that 'identifying' is not an all-or-none or once-and-for-all phenomenon like a religious conversion; it is entirely dependent on the circumstances, and people who have no hesitation in referring to themselves as Aborigines when talking to other Aborigines, research workers and even Government officials, still continue to respond to official documents (such as the census) in terms of whether they are 'officially' Aborigines under the legal definitions they grew up with - generally, whether they have some particular threshold level of Aboriginal 'blood'.

Census officials have actually argued that the States should not be permitted to include these 'invisible' Aborigines in their claimed populations. That point of view would have some force if - as in the recent past - anyone who was considered an Aborigine was placed under some sort of legal control or disadvantage. But even in Queensland, which still allows Aborigines to sign away their civil rights, there is no way a person, not now under the control of the State Department, can be disadvantaged simply by being counted as an Aborigine. And on the other side of the coin, it remains demonstrable from State statistics that the 'invisible' people are a part of the Aboriginal population in a sociological sense, and that they share most of the characteristics and disadvantages of the census-identified Aboriginal population, including its youthfulness, health standards, and social, economic and legal status. The two different populations are in my view simple facts of life, each equally valid. Once that is accepted, their existence poses no particular difficulties, but if it is not accepted, an understanding and explanation of Aboriginal population processes is quite impossible.

5. SOURCES

With two important exceptions, all the information about Aboriginal population history, whether before or after European occupation, comes from non-Aboriginal sources. Those two exceptions are, first, archaeological evidence as to the density of population in particular areas, and second, genealogical information in the minds of the Aboriginal people. The full potential of both these sources is only just beginning to be appreciated, and we shall return to them later.#1

As for European estimates of Aboriginal population size, structure and dynamics, these date from the earliest records. In the first instance some were based upon projections of coastal densities to the country as a whole, and consequently were far too high. While I am not aware that James Cook attempted to estimate the population on the East Coast, as he did for the islands of New Zealand and Hawaii, Arthur Phillip, the first Governor of New South Wales, estimated in a Colonial Office despatch that the whole of Australia contained some 1,000,000 persons,#2 based on the numbers observed (3,000) between Broken Bay and Botany Bay.#3 Similarly the Western Australia Blue Book for 1834 states that the Aborigines are 'supposed to amount to one person to each square mile of country', which may have been true around the Swan River, but which if applied to the whole of the Colony would give an absurdly high population of just under 1,000,000. By 1838 the estimated density was halved to one person to each two square miles, but this was still far too high.

As time went by numerous estimates were offered by settlers, officials and others as to the size and other characteristics of Aboriginal groups in the vicinity of settlements and contact points, and with the development of Aboriginal protectorates, statistics of births and deaths, as well as more detailed information on population structure, were also collected. The censuses were also progressively extended to include Aborigines. In the twentieth century these primarily official sources have continued to be the most important, but they have been supplemented by ethnographic and other research into demographic aspects of particular Aboriginal groups.

What I have tried to do in this study is to collect as much information as possible about the history of the Aboriginal population and compile it into a single reference source, as the first step in an attempt to reconstruct the demographic history of the Aboriginal people. However, as in many other aspects of race relations, there is a super-abundance of assertion and guesswork despite the dearth of hard facts, and unlike Edward Curr, who in 'Recollections of squatting in Victoria' could claim in 1883 to have seen every printed estimate of the Victorian Aboriginal population, I am certain that some, possibly many, sources must have eluded me.

#1

It has also been suggested (see 'The Aborigines' in vol.II of Bourke, Bourke Historical Society, 1969) that census sticks were used by some Western N.S.W. tribes to keep a tally of numbers, but this is not proven.

#2

New South Wales Yearbook No.1, 1904-05; a similar estimate was made by J.W. Bleakley in 1929. (see M.M. Bennett (1930) The Australian Aborigine as a human being.)

#3

This method is still in vogue, and up until quite recently was used to estimate the population of nomads in the desert of Western Australia. It is quite indefensible unless it takes into account ecological variations in different regions.

5.1 Official sources.

At one time or another, official estimates have been made of the Aboriginal populations of the various Australian Colonies at the time of European occupation. I have attempted to collect and evaluate all of them. But the first regular official references to Aboriginal population statistics are those from the Colonial Blue Books. Every year each British Colony was required to forward to the Colonial Secretary a 'Return for the Colony' detailing all the important aspects of the administration. These returns were the forerunners of the Statistical Registers and Yearbooks which appeared later. The records were entered in manuscript into a pre-printed book and under the section 'Population' the printed headings up to 1835 asked for details to be recorded of:

The area in square miles.

The number of whites, males and females.

The number of free blacks, males and females.

The number of slaves, males and females.

Aliens and Resident Strangers.

Population per square mile.

Numbers employed in agriculture, manufacture and commerce.

And the number of births, marriages and deaths - all by County and district.

Later versions asked for similar details except that the column for 'slaves' was omitted and 'Coloured population males and females' was to be entered, all details by County, District or Parish.

I do not know to what use the columns for black or coloured population were put in other Colonies, but in the Australian ones they were usually simply ignored, which we may consider as setting a precedent for the attitude of later Governments to the question of Aboriginal population statistics in general. On other occasions the heading was crossed out and changed to some other, such as 'military', 'convicts', 'ticket of leave', etc. Those Blue Books that do contain estimates of the Aboriginal population can be found in table 5.1.1. Sometimes, for example in South Australia, only those 'in contact' were stated, and then generally only with a total figure for the Colony. Only in one instance, in the New South Wales return for 1826, were details by County shown. Generally population statistics were taken from the Colonial censuses, but other figures are apparently drawn from special censuses or estimates.

The Blue Books were discontinued between 1855 and 1865, as the Colonies achieved self-government, being replaced by printed 'Statistical Registers' which were bound in with the Parliamentary Papers of the Colonies' Legislative bodies. Later Colonial and State estimates are extracted from the Yearbooks, Statistical Registers, Reports of the Aboriginal authorities, and so on. Between 1895 and 1920, the Aborigines Department in Western Australia, the Chief Protector of Aborigines in South Australia, and the Northern Protector (later Chief Protector) of Aborigines in Queensland, were in the habit of showing in their Reports the Aboriginal population and the expenditure on Aboriginal welfare in each State. The information was apparently obtained from the various State Aboriginal bodies, and often does not appear in any other source. Even though some minor dating errors seem to have occurred, I have included these figures under the date of the report in which they appear. It should be borne in mind that with these Colonial and State estimates, the definition of 'Aborigine' varies with time and place, but detailed examination of this is left to the State by State treatment that follows in Chapter 7.

There is little more that needs to be said here about the census as a source. The problems of coverage and definition have already been discussed and a detailed examination of the results is to be found in the following chapters. There remains one other significant official source of Aboriginal population statistics: the

TABLE 5.1.1. ESTIMATES OF ABORIGINAL POPULATION IN COLONIAL BLUE BOOKS

<u>New South Wales</u>		
1822-1825	.	not entered
1826	3,019	in settled districts
1827-1856	.	not entered
<u>Tasmania</u>		
1822-1830	.	not entered
1831	.	'cannot be ascertained but supposed to be very small'
1832	156	106 on Flinders Island, plus 50 'in a state of nature wandering through the colony'.
1833	122	on Flinders Island
1834	111	" " "
1835	111	" " "
1836	116	" " "
1837	97	" " "
1838	8	" " " (presumably)
1839	49	" " "
1840	60	" " "
1841-1846	.	not entered
1847	38	from 1847 Census
1848	38	from 1847 Census
1849	36	
1850	38	from 1847 Census
1851-1857	.	not entered
1858	17	15 at Oyster Cove, 2 others living nearby.
<u>Western Australia</u>		
1834	.	'supposed to amount to one person to each square mile of Territory'
1835	22	presumably those in employ.
1836-1837	.	not entered
1838	750	in contact, 'nearest estimate appears to be ... one Native to each... two Square Miles.'
1839-1843	.	not entered
1844	200	in employ
1845-1846	.	not entered
1847	.	'excludes Aborigines'
1848	1,960	in settled districts
1849-1853	.	not entered
1854-1858	233	in employ - from 1854 Census
1859-1860	.	not entered
<u>South Australia</u>		
1840	650	in Adelaide area
1841	646	in Adelaide area
1843	1,600	in settled areas
1844	1,600	'in contact'
1845	1,600	in settled districts only
1846	2,400	in settled districts only
1847	3,680	estimate - presume settled districts only.
1848	3,730	in contact
1849	3,730	
1850	3,730	estimate - in settled districts only.
1851	3,780	estimate - for settled districts
1852	3,670	" " " "
1853	3,640	" " " "
1854	3,450	" " " "
1855	3,540	" " " "
1856-1863	.	not entered
<u>Victoria</u>		
1851	2,693	1409 in contact, 1284 estimated
1852	2,500	
1853	2,500	
1854	2,500	from 1854 Census - partly estimated
1855	2,500	
1856	2,500	

series of annual Aboriginal censuses that were held between 1921 and 1944.

Although, as we have seen, the actual enumeration of Aborigines at the Census of 1921 was quite poor, an attempt was made in conjunction with the Census to obtain an estimate of the total Aboriginal population of Australia. As noted in section 3.5, this was done in cooperation with the Statisticians and the Protectors of Aborigines in each State and Territory, details being obtained of the numbers of males and females of 'full-bloods' and 'half-castes' separately. The figures were apparently compiled from returns for each administrative district, and the result

1921
'although still incomplete, probably represents a much closer estimate than has been available previously in connexion with the taking of a census. The most serious defect ... is an estimate of 10,000 Aborigines which the Chief Protector of Western Australia regards as out of touch with his Department and consequently not included in the figures supplied by him.'#4

It was subsequently decided that, from 1924, a joint Aboriginal census should be taken in June each year. As with the treatment of Aborigines at the general census, it is difficult to establish the reasons behind this decision. Beginning in 1923, as part of the attempt at unification of statistical services, conferences of the Commonwealth and State Statisticians were held annually; however the reports of the 1923 and 1924 conferences make no mention of the special Aboriginal census. According to other sources, the aim of these censuses was to ascertain the Aborigines' 'numbers and the extent to which they enter the economic life of Australia'.#5 What were described as 'crude censuses' of the Aboriginal population were taken in 1924 and 1925, including both 'full-bloods' and 'half-castes', but

'it was evident that, unless the efforts at counting these primitive people received the hearty and patient cooperation of State Statisticians, protectors of aborigines, and missionaries, success was not attainable within a measurable future.

The fate of our aboriginal population being considered of importance to Australia and of interest to science throughout the world, the desirability of making a sustained effort to procure reliable information about them was brought up for discussion at the Conference of Statisticians held in Sydney in October, 1925. The matter received the hearty support of the Conference ...'#6

It was resolved that the Aboriginal census should be continued, and that details obtained should include:

1923
Middle
Cass
number & distribution of 'full-bloods'
number & distribution of 'half-castes' living with 'full-bloods'
males and females
adults and children
whether nomadic, in regular employment or in protection camps
(Report: 5)

Strictly speaking, they were not 'censuses' at all in the sense of individual

#4

Australian Yearbook No. 14, 1921:1128.

#5

'Aboriginal census'. A.B.M. Review, March, 1933.

#6

'Aboriginal census of Australia'. American Journal of Physical Anthropology, 1927, 10:486-489.

So it seems that in addition to assessing the extent to which Aborigines were participating in the general society and economy, the annual census was intended to lead to the development of more adequate means of enumerating the Aborigines properly. When the results of the 1926 census were published, the Commonwealth Statistician is quoted as saying, somewhat piously, that it

'marks a small step forward in the study, from the statistician's point of view, of the aboriginal; but ... there is a long way to go. It is, however, hoped that each year will bring us a little nearer to statistical truth regarding our aboriginal brethren who, ever since the discovery of Australia, have attracted universal interest'.

No definition of either 'half-caste' or 'full-blood' was incorporated in the 1925 resolutions, but at the Statisticians' Conference in Perth in 1926, it was resolved:

- a. That for the purpose of statistics of Australian aboriginal population, persons of mixed blood living with aboriginals shall be classed as 'half-caste aboriginals', whatever be the degree of the white strain.
- b. That persons of mixed blood not living with aboriginals shall be included as 'half-caste' if the strains are approximately equal, as 'full-blood' if the predominant strain is aboriginal, and not included at all if the predominant strain is white. (Report: 4)

The decision to include all 'part-Aborigines' living with Aborigines as 'half-castes', represented yet another variation of the definition of who is an Aborigine. The resolution was not confined to the annual censuses; in principle it should have applied at subsequent general population censuses as well. However there is no evidence that it ever was: perhaps 'living with aboriginals' was interpreted as 'living with 'full-bloods''-- in which case 'part-Aborigines' involved would in all probability be literal 'first generation half-castes'.

At the Statisticians' Conference in Hobart in 1928 the classification of social and employment status was made more rigorous by introducing a new category, 'other', for the children of persons in employ; and it was decided that persons both 'in regular employ' and 'in supervised camps' should be included under the former rather than the latter heading, 'as it is desired to ascertain what proportion of the total number is in such employment'. (Report: 4)

These censuses were held every year until June 1941, when they were discontinued for the duration of the war. The 1933 Aboriginal Census was used to estimate the total Aboriginal population at the time of the 1933 Census of the general population. The annual collection must have involved considerable effort and expense. Over five hundred people - mostly local police - were involved in taking the census, which was generally conducted in conjunction with the annual census of agriculture, and not all States were convinced of the value of the exercise. At the Statisticians' Conference in Sydney in 1932, the South Australian Government Statist queried whether the annual census was justified. The conference resolved that the annual census should continue, but by this stage the meliorist view seems to have faded into the background - in fact, except for one further refinement which resulted in 'in regular employment' being cross-tabulated by all other variables on the return, there is very little indication of any improvement in the coverage of difficult groups at all. The estimate of 10,000 'out of touch' in Western Australia was included every year, although it is now clear that possibly not ever a tenth of that number ever existed, and from comments in the South Australian Statistical Registers it appears that no attempt was made to include figures for Aborigines in the far north-west of that

enumerations: a return was submitted for each district showing a summary by sex, caste, and socio-economic situation. Often the figures were merely rough guesses, as witnessed by the frequent use of round numbers in the different categories. So it is not surprising that even after 20 years of annual censuses, the Bureau had learnt few lessons applicable to the enumeration of Aborigines at the general census. The method of regional estimates meant that - hopefully - the local police officers would produce better estimates as the years went by. But what was needed was the development of a system for individual enumeration which did not depend on the accumulation of local knowledge by particular individuals, and the annual censuses did not really contribute significantly to the development of such a system.

An attempt was made to re-establish the annual census in 1944, but the results that year were incomplete (New South Wales did not take part), and at the Statisticians' Conference in Canberra in 1945, South Australia again opposed the continuation of the census on the grounds of cost, saying that annual changes merely reflected the Aborigines' 'nomadic habits'.

The Conference resolved that the annual census was unnecessary, and that particulars of the settled population of whatever descent should be obtained as part of the general population census, while the nomadic population should be estimated in census years by the appropriate State or Territorial authority. Even the latter resolution was opposed by South Australia, as involving too much work, while the Western Australian Government Statistician considered there was no hope of estimating the numbers of large groups in the north of Western Australia. We shall see later that the estimates made by both these States at subsequent censuses reflected this lack of enthusiasm.

Strangely, the censuses were not regularly published. The Yearbooks generally showed annual totals by State, and the Commonwealth and some State offices released annual bulletins summarizing the results; some State Aborigines departments also included further information in their reports. But full details are not available in published sources. The original tabulation sheets showing full details for each police patrol district from 1927, as well as the original returns from 1938, are still in existence, and I have used these documents to fill gaps in the published material. Annual totals by State are shown in table 5.1.2; where more detail is available it is included in chapters 7 and 8.

Official information about Aboriginal vital events is also available both from the Bureau of Statistics and the State and Territory administrations. As noted earlier, official vital statistics for the whole Aboriginal population are not available; until the 1960s the registration of Aboriginal births and deaths was not complete in most States and Territories, and even when registration was adequate, Aborigines were not distinguished in the documentation. At present, although there is a stated commitment to the collection of Aboriginal vital statistics on the part of the Australian Government, there still seems little immediate prospect of persuading the State Registrars to distinguish race on the birth and death notifications.

However, as we have seen, the Bureau of Statistics has since 1933 been concerned with estimating Aboriginal fertility and mortality for negative reasons; because the Registrars' records always contained at least some 'full-blood' births and deaths, it was necessary to identify these in order to exclude them from published statistics. This was done by asking local registrars to identify 'full-blood' certificates, and by compiling State and national totals from these local figures. The Bureau has never been prepared to release these records of 'full-blood' births and deaths to other than Government users, insisting that they were gross estimates only, unreliable, and collected for internal use only. However P.M. Moodie of the Australian Department of Health has used this data, in conjunction

TABLE 5.1.2. ABORIGINES AT ANNUAL ABORIGINAL CENSUSES 1921 - 1944.

	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.
1921	6,067	540	16,854 ^h	2,741 ⁱ	27,671 ^a	b	17,973	b	71,846 ^{a,c,h}
1924	6,471	509	17,914	5,107	24,028 ^a	b	20,688	b	74,717 ^{a,c}
1925	7,066	480	b	5,093	24,794 ^a	b	20,426	b	75,773 ^{a,c,d}
1926	7,066	514	17,651	3,983 ^e	24,642 ^a	b	20,506	b	74,362 ^{a,c,e}
1927	6,793	562	17,733	3,703 ^e	25,582 ^a	b	21,040	b	75,413 ^{a,c,e}
1928	8,043	660 ^g	17,614	4,180 ^e	25,034 ^a	b	21,950	b	77,481 ^{a,c,e}
1929	8,342	661	18,046	4,086 ^e	25,627 ^a	b	21,669	b	78,431 ^{a,c,e}
1930	8,918	566	17,931	3,995 ^e	26,300 ^a	b	21,821	b	79,531 ^{a,c,e}
1931	9,367	606	17,706	3,349 ^e	26,507 ^a	b	20,380	b	77,915 ^{a,c,e}
1932	9,424	603	17,440	3,407 ^e	28,234 ^a	b	19,507	b	78,915 ^{a,c,e}
1933	9,714	596	16,957	3,579 ^e	29,298 ^a	b	19,424	b	79,568 ^{a,c,e}
1934	10,381	612	17,222	3,509 ^e	26,515 ^a	270	18,008	68	76,585 ^{a,e}
1935	10,276	630	17,495	3,788 ^e	26,442 ^a	263	18,244	57	77,195 ^{a,e}
1936	10,646	641	18,122	3,357 ^e	26,313 ^a	271	17,730	79	77,159 ^{a,e}
1937	10,603	699	18,024	3,837 ^e	26,327 ^a	310	16,887	98	76,785 ^{a,e}
1938	10,420	739	18,621	4,229 ^e	26,484 ^a	257	15,261	86	76,097 ^{a,e}
1939	10,863	800	18,808	4,881 ^e	26,566 ^a	274	15,002	75	77,269 ^{a,e}
1940	Aborigines T.S.Islanders Total	10,861 750	14,930 3,727 18,657	4,954	26,602 ^a	283	14,803	88	73,271 ^a 3,727 76,998 ^a
1941	Aborigines T.S.Islanders Total	10,616 775	15,428 3,675 19,103	5,018	26,116 ^a	285	14,488	85	72,811 ^a 3,675 76,486 ^a
1944	Aborigines T.S.Islanders Total	b 954	13,525 3,900 17,425	5,076	27,092 ^a	377	14,153	102	71,895 ^{a,f} 3,900 75,795 ^{a,f}

notes: a - including an estimated 10,000 out of contact.
b - not taken that year.
c - excluding Tasmania and A.C.T.
d - using the Queensland figure from 1924.
e - excluding an unknown number in the Musgrave and Everard Ranges.
f - using the N.S.W. figure from 1941.
g - as corrected by me; published tables repeated 1927 figure.
h - including an estimate of 1400 in remote areas not included in returns.
i - far too low.

with registrations relating to other persons of Aboriginal descent obtained by searching registration records for indications of Aboriginal descent, such as particular surnames, places of residence, etc., in an extensive study of Aboriginal fertility, mortality and morbidity, and some of the results have been recently published.#7

There are a variety of State and Territory sources of information about Aboriginal births and deaths, of which the Registrars' records are of course one. The Protection Boards and their successors have always kept records of the people under their control for administrative purposes, and in principle, given sufficient interest and resources, it would have been possible to extract statistics of births, deaths and populations from the earliest times. However, this was not often done, except for particular communities or particular categories. New South Wales and Victoria both produced separate statistics for the whole State from the 1880s, and South Australia, Queensland, Western Australia and the Northern Territory did so at different times up to the present. But the records were rarely complete, and the statistics are further attenuated by the deliberate exclusion of various groups either because they were legislated out of the Aboriginal population, or because they were not living in managed institutions. I have collected together all State statistics which I have been able to locate, either in published sources or in the records of the State authorities, but this by no means exhausts this source of information. There remains an enormous body of administrative records in all States and Territories, held either centrally or by local officials, from which demographic data could be extracted given access, time and resources; the labour involved, however, would be enormous as well, and it has not been possible, within the scope of this study, to attempt an analysis of this material. But it clearly holds very great potential for future research.

A final, and extremely important, source of information on Aboriginal vital rates is the medical and hospital records maintained by some State and Territory health authorities. In the Northern Territory, Western Australia and South Australia, hospital statistics distinguish race, and this is in fact the most important current source of Aboriginal birth statistics. Only in Western Australia, however, do medical statistics also yield information on deaths, because of the use in that State of an integrated medical record system for Aboriginal (and other) clients of the Community Health section of the Public Health Department.

Further details of the Aboriginal vital statistics available are contained in the detailed State and Territory sections of Chapter 7.

5.2 Unofficial sources

At the same time as official estimates were being made, private individuals began to record their impressions of the size and other characteristics of the Aboriginal populations of the various Colonies, or of particular regions or groups, whether in contact or in total. The miscellaneous estimates vary in reliability from the vaguest approximations to individual enumerations, and of course were most commonly made in the early years of settlement. They are most plentiful for Tasmania and Victoria, both circumscribed and early subject to fairly close settlement. Some estimates are also available for New South Wales

#7

P.M. Moodie (1973) Aboriginal Health.

and South Australia proper, but for Queensland, Western Australia, and the Northern Territory, one has to wait until almost 1900 before any are forthcoming. Brough Smith (1876), #8 Curr (1883, 1886), #9 Radcliffe Brown (1930), #10 Hormann (1948), #11 R.M. Jones (1971a) #12 and others have reviewed such estimates for particular localities or at particular times. Those I have been able to assemble are tabulated in Chapter 7. Also included, for completeness are the various estimates of the pre-European Aboriginal populations.

Apart from the early settlers', explorers' and travellers' estimates, the figures come from two main sources: ethnographic accounts of particular tribes or groups, and studies of detribalized people based on the tracing of referrals and genealogies. I have drawn on these sources to only a limited extent, despite the fact that these generally unrecorded genealogies of living Aborigines are the single most promising source of information on Aboriginal demography, and one which is in danger of being lost entirely. Even the collection of genealogical material involves a great deal of labour; consequently, that which is available is usually for small traditional groups and has a restricted time scale. Major genealogical collections do exist - some based on anthropological studies, but most contained in administrative records maintained by Aboriginal welfare authorities. But despite the urgings of Tindale (1963) #13 and others, the collection, integration and analysis of this material has not been attempted.

With a few notable exceptions, genealogical studies of local groups have been concerned with qualitative rather than quantitative analysis; and the uncertain relevance of data severely restricted in both space and time to the study of the Aboriginal population as a whole, means that even quantitative studies of local groups must be used with great caution. The most important studies covering both reasonably large populations and/or a reasonably long time-span are those of Gale in South Australia, #14 Barwick (1971) in Victoria, and Mollison (1973, 1974)

#8

R. Brough Smyth (1876) The Aborigines of Victoria, etc.

#9

E.M. Curr (1886) The Australian Race.

#10

A.R. Radcliffe-Brown (1930) 'Former numbers and distribution of the Australian Aborigines' in Australian Yearbook, 23:687-696.

#11

B.L. Hormann (1949) Extinction and survival. Ph.D. thesis, University of Chicago.

#12

R.M. Jones (1971a) 'The demography of hunters and farmers in Tasmania' in Mulvaney & Golson (1971).

#13

N.B. Tindale (1963) 'Tribal distribution and population' in H. Shiels (ed) (1963) Australian Aboriginal studies.

#14

F. Gale (1969) 'A changing Aboriginal population' in F. Gale and G. Lawton (eds) (1969) Settlement and encounter.

in Tasmania. #15 Because they must rely on recollection as well as on documentary evidence, these studies can never be as detailed or complete as those based on church registers in Europe. Nevertheless the Aboriginal data is amenable to the methods of family reconstitution which are now the stock-in-trade of historical demography. Besides re-creating population histories, these studies are doubly significant since in tracing family connections, they include many people who although considering themselves of Aboriginal descent do not appear to be included as Aborigines in census or State statistics.

Unfortunately, however, there is almost as much labour involved in producing a population history from a set of individual genealogies as there is in the collection of the genealogies in the first place. Gale's (1969) study is complete, and covers almost 90 years, but the total number of individuals concerned is only 2,625. Barwick's, on the other hand, appears to cover about 20,000 persons, but despite having worked on this material for some fourteen years, she is not yet in a position to present the results in terms of a quantitative demographic history. When she does so, the result will be a piece of research of very great significance indeed. Mollison's study covers about 10,000 people, but it is not clear whether he intends to extract demographic statistics from his genealogies; to date he has only produced rough estimates of the total numbers involved.

Genealogical studies are also often used to reconstitute family histories of traditionally oriented Aboriginal groups, although as Barwick (1971), Yengoyan (1970)#16 and others have pointed out, this technique must be used with circumspection because of widespread taboos on mentioning the names of dead people and of certain categories of relationships. It is also commonly held that the deaths of young children are often forgotten, but this has never really been established. Such studies, however, are generally concerned with establishing marriage rules or other aspects of social organization related to descent, and an explicit interest in the quantitative demographic aspect is rare. The notable exceptions mentioned earlier are chiefly to be found in the writings of Yengoyan, (1968,#17 1970) and Long (1970b,#18 1971,#19 etc.). These and other authors are referred to in more detail in the following three chapters.

#15

B.C. Mollison (1973) Stress in Tasmanian Aboriginal descendants. Paper presented to 25th World Mental Health Congress, Canberra: B.C. Mollison (1974) 'Tracing the 'extinct' Tasmanians' Aboriginal News, 1(10): 23-24.

#16

A.A. Yengoyan (1970) 'Demographic factors in Pitjandjara social organization' in R.M. Berndt (ed) (1970) Australian Aboriginal Anthropology.

#17

A.A. Yengoyan (1968) 'Demographic and ecological influences on Aboriginal Australian marriage sections' in R.B. Lee and I. DeVore (eds) (1968) Man the hunter.

#18

J.P.M. Long (1970b) 'Polygyny, acculturation and contact: aspects of Aboriginal marriage in central Australia.' in Berndt (1970).

#19

J.P.M. Long (1971) 'Arid region Aborigines: the Pintubi.' in Mulvaney and Golson (1971).

PART II

PREHISTORY.

6. THE PREHISTORY OF THE AUSTRALIAN POPULATION

6.1 Population at the time of European settlement.

530
Until A.R. Radcliffe-Brown published his paper on the 'Former numbers and distribution of the Australian Aborigines' in the Australian Yearbook 1930, estimates of the population of Australia when Europeans arrived tended to be either very high (1,000,000) or very low (about 150,000). As mentioned earlier, 1,000,000 was cited by the first Governor of New South Wales, and also by J.W. Bleakley, while the figure of 150,000 appears in the Australian Handbook for 1881 and succeeding years, and in many Australian Yearbooks up to 1929; I have never seen a source acknowledged. In the Yearbooks from 1924 to 1929 an attempt had been made to outline the known history of the Aboriginal population, including various early estimates, but the author of these articles was clearly unable to assess the validity of many of his figures, and the comprehensive but somewhat ambitious presentation of 1924 was gradually reduced to a sketchy outline by 1929. Radcliffe-Brown was apparently asked to contribute his paper because it was realised that a thorough-going expert appraisal was required. He was recognized as an authority already, having made a preliminary analysis of the problem in The Australian Aborigines, a paper presented to the second conference of the Institute of Pacific Relations in Honolulu in 1927. (Hormann, 1949).

Radcliffe-Brown proceeded by partitioning the country, where possible into tribal areas, and searching for all known indications of pre-European population, including explorers' and settlers' accounts, statements by Aboriginal people, and density calculations based on the favourability or otherwise of the environment in particular areas. His conclusions are shown in table 6.1.2. The final estimates are very conservative indeed. They are 'the minimum that we can reasonably estimate for each portion.' #1 The South Australian figure is 'probably well under the true figure'; Victoria is 'decidedly an under- rather than an over- estimate'; Queensland 'probably had more than this'; New South Wales is 'on the safe side'.

Radcliffe-Brown himself felt it was reasonable to inflate the estimated total to between 250,000 and 300,000 and possibly more; 300,000 implies an overall density of one person per 25.6 km, or a density in non-desert areas of one person per 19.4 km. #2 Despite the fact that Radcliffe-Brown himself was concerned only to establish minimum figures below which the true population size could not possibly

#1

(1930:696). I do not believe anyone has ever attempted to estimate the maximum population that could have been supported, perhaps, as Hormann (1949) suggests, because of a desire to avoid emphasizing the depopulation that has occurred. Radcliffe-Brown also makes this point indirectly when dismissing Brough Smith's Victorian estimates. (1930:690).

#2

These and other densities cited differ slightly from Radcliffe-Brown's own calculations due to recent revisions in the estimated areas of the States.

TABLE 6.1.1. AREAS AND TRIBES OF THE STATES, TERRITORIES AND AUSTRALIA.								
	N.S.W. ^a	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	AUST.
Area ^b in km ²	803,860	227,619	1,727,522	984,377	2,527,621	68,332	1,347,519	7,686,950
% in each State	10.46	2.96	22.47	12.81	32.88	0.89	17.53	100.00
Number of tribes ^c	61	27	200	43	126	9	114	580
% in each State	10.52	4.66	34.48	7.41	21.72	1.55	19.66	100.00
km ² per tribe	13,178.0	8,403.3	8,637.6	22,892.5	20,060.5	7,592.4	11,820.3	13,253.2

TABLE 6.1.2. RADCLIFFE-BROWN'S (1930) ESTIMATES OF PRE-EUROPEAN ABORIGINAL POPULATIONS.								
	N.S.W. ^a	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	AUST.
Initial estimates	to 40,000 45,000	11,500	100,000	10,000	to 52,000 55,000	to 2,000 3,000	35,000	to 250,500 259,500
% in each State	to 15.72 17.61	to 4.45 4.47	to 38.68 39.76	to 3.87 3.98	to 20.27 21.70	to 0.77 1.19	to 13.54 15.92	
Average tribal size	to 656 738	426	500	233	to 413 437	to 222 333	307	to 432 447
km ² per person ^d	to 17.9 20.1	19.8	17.3	98.4	to 46.0 48.6	to 22.8 34.2	38.5	to 29.6 30.7
Final estimate	40,000	11,500	100,000	10,000	52,000	2,500	35,000	251,000
% in each State	15.94	4.58	39.84	3.98	20.72	1.00	13.94	100.00
Average tribal size	656	426	500	233	413	278	307	433
km ² per person ^d	20.1	19.8	17.3	98.4	48.6	27.3	38.5	30.6
Raised to 300,000	47,809	13,745	119,522	11,952	62,151	2,988	41,832	300,000
% in each State	15.94	4.58	39.84	3.98	20.72	1.00	13.94	100.00
Average tribal size	784	509	598	278	493	332	367	517
km ² per person	16.8	16.6	14.5	82.4	40.7	22.9	32.2	25.6

TABLE 6.1.2. D.S.DAVIDSON'S (1938) ESTIMATES.								
	N.S.W. ^a	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	AUST.
Populations	to 40,000 48,000	to 11,500 15,300	to 100,000 120,000	to 10,000 12,000	to 55,000 63,000	to 2,000 2,500	35,000	to 253,500 302,800
% in each State	to 13.57 18.39	to 3.85 5.96	to 35.36 43.96	to 3.32 4.71	to 18.66 24.14	to 0.66 .99	to 11.83 16.15	
Average tribal size	to 656 787	to 426 567	to 500 600	to 233 279	to 437 500	to 222 278	to 307 368	to 437 522
km ² per person	to 16.7 20.1	to 14.9 19.8	to 14.4 17.3	to 82.0 98.4	to 40.1 46.0	to 27.3 34.2	to 32.1 38.5	to 25.4 30.3
Number of hordes	to 1,120 1,350	to 325 435	to 2,830 3,400	to 280 340	to 1,565 1,800	to 57 70	to 1,000 1,200	to 7,177 8,595
km ² per horde	to 595.5 717.7	to 523.3 700.4	to 508.1 610.4	to 2,895.5 3,515.6	to 1,404.2 1,615.1	to 976.2 1,198.8	to 1,122.9 1,347.5	to 894.3 1,071.0

TABLE 6.1.4. F.L.JONES' (1970a) MODIFICATION OF RADCLIFFE-BROWN'S ESTIMATES.								
	N.S.W. ^a	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	AUST.
Populations	to 26,000 30,500	13,500	100,000	10,000 or more	as low as 40,000	2,500	35,000	to 227,000 ^e 231,500
% in each State	to 11.23 13.44	to 5.83 5.95	to 43.20 44.05	to 4.32 4.41	to 17.28 17.62	to 1.08 1.10	to 15.12 15.42	
Average tribal size	to 426 500	500	500	233	317	278	307	to 391 599
km ² per person	to 26.4 30.9	16.9	17.3	98.4	63.2	27.3	38.5	to 33.2 33.9

TABLE 6.1.5. POPULATIONS ASSUMING UNIFORM TRIBAL SIZE.								
	N.S.W. ^a	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	AUST.
Tribal size 500	30,500	13,500	100,000	21,500	63,000	4,500	57,000	290,000
km ² per person	26.4	16.9	17.3	45.8	40.1	15.2	23.6	26.5
Tribal size 600	36,600	16,200	120,000	25,800	75,600	5,400	68,400	348,000
km ² per person	22.0	14.1	14.4	38.2	33.4	12.7	19.7	22.1
% in each State (both)	10.52	4.66	34.48	7.41	21.72	1.55	19.66	100.00

TABLE 6.1.6. MY SYNTHESIS.								
	N.S.W. ^a	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	AUST.
Population	48,000	15,000	120,000	15,000	62,000	4,500	50,000	314,500
% in each State	15.26	4.77	38.16	4.77	19.71	1.43	15.90	100.00
Average tribal size	787	556	600	349	492	500	439	542
km ² per person	16.8	15.2	14.4	65.6	40.8	15.2	27.0	24.4

Notes: a - including A.C.T.
b - from Australian Yearbook No 57, 1971, converted to SI units.
c - mainland tribes from F.L.Jones(1970a) from Tindale(1940); Tasmania from R.M.Jones(1971a)
d - slightly different from Radcliffe-Brown's figures because areas used here are more accurate.
e - by addition; Jones gives 215,000 as minimum.

Lawrence has also collected a number of estimates of densities in other areas, which range from one person per 90 km in spinifex country in central Australia, to one per 0.2 km in tropical coastlands. (table 6.1.7) The average of the densities he has collected is one person per 31.9 km, which is very close to Radcliffe-Brown estimate for Australia as a whole. The densities of groups specifically mentioned by Radcliffe-Brown are shown in table 6.1.8; their average is one person per 29.07 km. But as Lawrence himself has noted (1971: 259), population densities in isolation are not very illuminating, unless they take account of ecological variations, and are integrated with explorers' and settlers' accounts, ethnographic, archaeological, linguistic and genetic evidence, official statistics and resource analysis, as R.M. Jones did for Tasmania. And they are completely useless unless they are specifically known to relate the size of an entire land-owning group to the entire area of land owned. Such figures are hard to come by. Yengoyan (1968) has calculated the densities for 24 whole tribes, and these range from 1 person per 1.3 km to 1 per 246 km, with an average of about 1 per 59.1 km, #7 almost half the average implied by Radcliffe-Brown's and Lawrence's figures.

R.M. Jones has suggested that for riverina and coastal groups, the number of persons per km of river or coast may be more meaningful than persons per km occupied. Lawrence notes that coastal densities varied from 2.5 persons per km of coast near Sydney to 21.5 in Cape York. The explorer Eyre estimated that there were between 1.9 and 2.5 persons per km on the Murray - Murrumbidgee system. However there are technical problems here as well, in actually measuring the length of the littoral. Recent use of computer mapping techniques in the measurement of the coastline of Tasmania has resulted in a 2-fold increase in the estimated length, because such methods can detect fine features lost to normal mapping methods. #8

F.L. Jones (1970a) has applied a slightly different method in attempting to evaluate Radcliffe-Brown's estimates. In 1940 N.B. Tindale #9 after collecting all available information, concluded there were originally some 574 tribes in Australia; Jones has used Tindale's estimates of the number of tribes to calculate the tribal sizes implied in each State by Radcliffe-Brown's figures. (table 6.1.2) This method may be considered as a short-cut in place of more detailed investigation, if one accepts the assumption, used constantly by Birdsell, that systematic variations in tribal size are relatively few, and that 'on the average, and in a purely statistical sense, the Aboriginal tribes of Australia had a population approximating 500 individuals' (1950:280). #10 Tribal areas are then assumed to vary in order to provide adequate resources to support this population. Birdsell considers that tribal density ranges from a minimum of 1 person per 155.4km (Pitjandjara) to a maximum of 1 person per 1.3 km (Murray estuary).

#7

A.A. Yengoyan (1968) 'Demographic and ecological influences and Aboriginal Australian marriage sections' in R.B. Lee and I. DeVore (eds) (1968) Man the hunter.

#8

I.D.G. Macleod, J.G. Fryer and D.R. Smith (1973) 'A thematic mapping base' in McCalden (1973).

#9

N.B. Tindale (1940) 'Distribution of Australian Aboriginal tribes: a field survey' Transactions of the Royal Society of South Australia, 64: 140-231. I understand Tindale now estimates the number of tribes at 586 - 12.

Radcliffe-Brown's estimates however, imply some distinct deviations from this suggested normal tribal size, as shown in table 6.1.2. On the basis of these calculations, F.L. Jones suggests, somewhat surprisingly, that Radcliffe-Brown's figures should be revised downwards. He considers the figures for New South Wales and Western Australia may be too high, and proposes that tribal size for New South Wales should lie between the Queensland and Victorian figures, while for Western Australia he applies Northern Territory tribal sizes to obtain a reduced figure, although at the same time suggesting that the Territory figure may be too high. He feels that the Victorian and South Australian estimates may be too low; so increases Victoria by assuming a tribal size of 500, but suggests that perhaps climate explains the low South Australian figure. Finally he states that if we

'assume that average tribal size did not exceed 500 persons (it may have been smaller), then Radcliffe-Brown's minimum figure of 248,500 mainland Aborigines may need to be reduced to as low as 215,000'.

Jones' revisions are summarized in table 6.1.4. On the other hand, if tribal size averaged exactly 500 in each State, this would imply a total population of 290,000, and a density of one person per 26.5 km, as shown in table 6.1.5. This table also contains for comparison the corresponding calculations if average tribal size is taken as 600. (Elkin's (1964) 'upper average'). #10 For Australia as a whole, this gives a total of 348,000, (table 6.1.5.) which represents one person per 22.1 km. State populations and densities would show a corresponding increase. Even taking 500 as the average, a calculation of this kind results in a higher estimate than Radcliffe-Brown's in all States except New South Wales.

But is it likely that the relative sizes of the State populations are more correctly indicated by table 6.1.5, or by any assumption of a uniform Australia-wide average size? It has been suggested that the average size in New South Wales may indeed have been much larger than for other States, because of the existence of some large tribes with 'more advanced political systems', #11 so the original average size of 656 may well be more correct. Conversely, the low figures for South Australia and the Northern Territory may reflect true regional variations. Radcliffe-Brown's South Australian figure of 10,000 does seem much too low, implying as it does a tribal size of only 238 and a density of approximately one person per 100 km. It is not so much the sparseness as the low tribal size that is worrying. The low density is a result of his assumption of a density of only one person per 207 km in the desert areas which cover a majority of the State, and this is consistent with, for instance, the work of Long (1971) who considers a density of one person per 200km as a reasonable estimate for the Pintubi in western central Australia. #12 On the other hand, a population of the

#10

A.P. Elkin (1964) The Australian Aborigines. 4th edition.

#11

Tindale (1940). J.B. Birdsell (1953), in 'Some environmental and cultural factors influencing the structuring of Australian Aboriginal populations', The American naturalist, vol.87:171-207. notes that Kryzwicki, in Primitive society and its vital statistics, 1934, considered the Kamilaroi to have totalled between 6,000 and 7,000 persons, and the Wiradjari to have numbered about 3,000, although these figures may be over-estimates. The alleged cultural differences are disputed: see A.R. Pilling (1968) 'Southeastern Australia : level of social organization' in Lee & DeVore (1968).

#12

J.P.M. Long (1971), 'Arid region Aborigines: the Pintubi', in Mulvaney & Golson (1971).

order of 21,500 to 25,800, which would be implied by tribal size of 500 to 600, seems much too high, although Gale (1964) presents a graph of population decline in South Australia which shows an original population of over 20,000; #13 however this may be based on mistaken assumptions.

One of the main problems here is that the concept of 'tribe' is not necessarily a unitary one. #14 In the Northern Territory, where Radcliffe-Brown's implied tribal size again seems low relative to the rest of Australia, it is established that in the high rainfall regions there were a substantial number of what Birdsell (1953) calls 'fragmented' tribes with populations less than 500. However, Birdsell and Tindale (1940) also note the existence of small of fragmented tribes in central western Queensland, while Berndt & Berndt (1964), consider some of Tindale's Western Desert 'tribes' do not warrant the description, so the environment would not necessarily be sufficient to explain the low Northern Territory figure. Indeed Yengoyan (1968) takes the view that tribes should be larger in well watered coastal regions.

The assumption that tribal size averages 500, and that there are few systematic deviations from this norm, is central to most writings on pre-contact Aboriginal demography, especially Birdsell's. In fact, as Hiatt has commented in Lee and DeVore (1968), 500 has become something of a magic number, and in the absence of direct evidence, it has been assumed or asserted to hold for a wide variety of modern hunter-gatherer societies, and for prehistoric ones as well. It is not so much the assertion that tribal size had an average value of 500 which is objectionable (after all, it must have had some average value; whether it is true or not is another matter). But Birdsell also insists that this value is 'stable', 'a constant', and 'a strong statistical tendency', and that 'systematic deviations are relatively few', and it is this proposition, rather than the particular value chosen for the mean, which is indispensable to his model of pre-European population ecology.

However, as Hiatt points out in Lee and DeVore (1968: 246), this 'amazing constancy of numbers of the dialect tribe' is hardly compatible with the fact that the range of known sizes is between 100 and 1,500 or 2,000. Yengoyan (1968) has summarized some of the independent evidence that exists on tribal size, drawing largely on Kryzwicki (1934) and Curr (1886). Birdsell's own evidence is from Kryzwicki. Yengoyan presents data on only 76 tribes for which information on sections and subsections is also available. Birdsell includes 123. Yengoyan's average is about 506, Birdsell's 557. This evidence, summarized in figures 6.1.1 and 6.1.2, indicates that the distribution of population sizes of tribes for whom estimates are available is in fact highly skewed, with a marked modal tendency at about 275. The arithmetic mean is pulled up to between 500 and 600 by a small number of very large tribes. The form of the actual distribution is in fact determined more by 'systematic deviations' from the mean than by the mean itself;

#13

Fay Gale (1964), A study of assimilation.

#14

See Birdsell (1953) and the discussion throughout Lee and DeVore. (1968), and also J.B. Birdsell (1970), 'Ecology, spacing mechanisms and adaptive behaviour', in R. Crocombe (ed) (1970), Aboriginal land tenure in the South Pacific.

there is certainly a 'strong central tendency', but it is not the mean but the mode.

In reply to Hiatt's criticism, Birdsell merely repeated that

'as a statistical tendency in Australia they tend to approximate 500 persons, a number which is not magical but represents the consequences of stable equilibrium systems developed under similar conditions.' (1970: 354)

He went on to claim that the figure of 500 was based on early observers' estimates, adding ingenuously that Kryzwicki, 'using different methods and with erroneous tribal assignments' got exactly the same figure. But this was a little dishonest. It is true that Kryzwicki estimated 550 as the average in 1934. Radcliffe-Brown himself had estimated it at 500 in 1930. But in Birdsell's 1950 paper, where he used the figure for the first time, he derived it by simply dividing Radcliffe-Brown's estimate of the total population (about 300,000) by Tindale's estimate of the total number of tribes (about 600). In the 1953 paper he went on to demonstrate a correlation of about .5 between the population of 45 tribes listed by Kryzwicki and the populations estimated by assuming that their deviation from a mean of 500 was the same as the deviation of the tribe's area from the area predicted from its rainfall. This was based on a modified exponential relationship established between tribal areas and rainfall in a series of only 123 'ecologically and culturally homogeneous' tribes. These, rather than the entire Australian total of 600-odd tribes, are the 'stable equilibrium systems developed under similar conditions' referred to earlier. Birdsell then used the same methodology to reconstruct the populations of these 123 tribes from their areas, as shown in figures 6.1.2 and 6.1.3. He acknowledged that the assumption of a mean of 500 was arbitrary, saying that it could be changed later should more accurate information become available (1953:190) but went on to conclude, in a completely circular fashion, that because the estimated distribution of tribal population would (after some correction) have a mean of 500 and a $+1$ standard deviation range of 600 'it may be claimed that Kryzwicki's earlier analysis is essentially confirmed' (1953:200). In fact, of course, all he had shown was that the distribution should have the mean it was assumed to have, and that its shape should be the same as that of the transformed distribution of areas from which it was derived. And even then, as is shown in figures 6.1.1 and 6.1.2, (and as Birdsell himself acknowledges) the distribution of this restricted series of tribes is much narrower than for all those for which information is available. What he does not acknowledge is that the third moment is also much lower.

There is probably little to be gained by devoting further attention to this question. Hiatt is certainly correct in his characterization of 500 as a magic number, and like most myths, this has arisen in response to uncertainty in a situation where there is a need for positive answers. It is not only that the information needed for an informed analysis is lost and can never be recovered; there remains substantial disagreement about the concept of 'tribe' itself. Whether taken as a territorial, genetic, linguistic or sociological unit, however, a tribe's boundary is at best capable of being defined probabilistically, in terms of a dynamic equilibrium with its total environment, so constancy in any characteristic is probably the last thing we should expect it to display. The limited amount of direct evidence available does indicate an average size of 400 to 600 for the particular tribes involved. But in the final analysis, the figure of 500 said to apply to Australia as a whole, is still only the result obtained by dividing Radcliffe-Brown's population by Tindale's tribes. Whether tribal size is valid then depends on whether the two component figures are. Yet I understand that Birdsell has recently attempted to estimate the pre-European population by taking Tindale's latest revised estimate of the number of tribes and multiplying it by 500!

My own assessment of the pre-European population, summarized in table 6.1.6, is probably no better founded, but nor does it pretend to be. All I have done is take the upper estimates of Davidson and Radcliffe-Brown, preferring Davidson's for Victoria, and then adjusted South Australia and the Northern Territory upwards in the light of tribal distribution and information on the absolute and relative sizes of their populations in the latter part of the 19th century. This is documented more fully in Chapter 7, but it should be noted that these assessments are still basically subjective. Regional differences in tribal size and population density are documented, but not to the extent that one can contrast State averages with any confidence. To do so would require a tribe-by-tribe analysis of environment and population size, density and ecology over the whole continent, major research project in itself.

In conclusion, we may note, as does Biskup (1973) #16 when comparing Radcliffe-Brown's and Davidson's estimates of the pre-European populations of western Australia, that the significant thing here is not so much that we cannot say whether the Australian population was 250,000 or 500,000, as that we can say that this was the general order of magnitude, and that it was, by agricultural and industrial standards, very small indeed.

6.2 Population aspect of Aboriginal settlement

It is possible to make an informed guess as to the general order of magnitude and rough distribution of the Australian population when Europeans first arrived, but somewhat less can be said of the history of the population in the preceding 40,000 or more years of known human occupation of the continent. Until very recently, indirect inference implied a greater antiquity for Aboriginal occupation than could be demonstrated by direct evidence. On the basis of his highly theoretical model of Aboriginal settlement, Birdsell (1958)#17 calculated that some of the ancestors of the present-day Aborigines must have reached Australia at least 32,000 years ago. At a rather less speculative level, Tryon (1971: 349)#18 quotes Capell's conclusion from his studies of Australian languages, that

'it is necessary to postulate a lengthy period of sojourn in the continent, at least 12,000 to 15,000 years, to account for the development of the great diversities existing at the present day between languages of different parts of the continent'

while Kirk (1971: 340),#19 on the basis of genetic data, calculated that a homogeneous colonizing group, with an isolate (tribal) size as large as 1,000, would take only 11,000 years to produce the observed frequencies of the best-documented alleles, as a result of genetic drift alone.

#16

P. Biskup (1973) Not slaves, not citizens.

#17

J.B. Birdsell (1958) 'Some population problems involving Pleistocene man'. Cold Springs Harbor symposia on quantitative biology, 22:47-69.

#18

D.T. Tryon (1971) 'Linguistic evidence and Aboriginal origins.' in Mulvaney and Golson (1971). The source is A. Capell (1962) Some linguistic types in Australia.

#19

R.L. Kirk (1971) 'Genetic evidence and its implications for Aboriginal prehistory' in Mulvaney and Golson (1971).

As Mulvaney notes (1971: 368), #20 at the time when Birdsell and Capell were writing, the oldest positive radiocarbon date for toolmakers in Australia was 8,700 ± 120 B.P. But direct datings of organic remnants of human activity have now pushed the minimum period of occupation back to at least 40,000 B.P., #21 and the fact that the oldest established site is near Menindee in western New South Wales implies at least some time lapse since the first landfall. Moreover, this one site has added possibly 15,000 years to the known antiquity of man's presence in Australia, and it seems certain that even earlier dates will be fixed as the prehistory of the continent becomes better documented.

The most popular account of Aboriginal settlement has it that some time during the Fourth or Last Glacial Period at least one, and possibly several waves of prehistoric immigrants crossed the Asian-Australian ecological watershed, known as Wallace's line, during one of the periods of maximum glaciation by floating across the narrowed seas from the exposed Sunda Shelf of the Malay archipelago to the then considerably augmented Australia-New Guinea landmass. They may have arrived at the 'bird's head' of West Irian, or at the north-west of the Sahul Shelf, the continental shelf which now lies beneath the Timor Sea.' #22

Theoretical calculations have suggested that the continent may then have been peopled in as little as a few hundred years (Abbie 1960) #23 or as long as 4,000 years (Birdsell 1958). A few writers, for instance Birdsell (1958), Mulvaney (1970) #24 and R.M. Jones (1971a) have also commented briefly on the possible changes in population size, distribution and structure that may have occurred in the period between the completion of Aboriginal settlement and the beginning of European occupation. However direct evidence bearing on any of these matters is in very short supply.

A complete account of the population aspects of Aboriginal settlement would need to tell us how many waves of migrants there have been, when, why and how they came and in what numbers, where they arrived, in what way the country was settled, how long it took to establish and stably populate tribal areas, and how long it has been since settlement was completed, as well as the effect of known and hypothesized climatic and technological changes on population size, composition, distribution and history since then. Archaeological evidence will almost certainly become available which will bear on these matters directly, but at present with one or two exceptions, all accounts rely on first principle theorizing, and on inferences, assumptions and extrapolations based on post-European observations of such features as genetic or linguistic variability, or of the supposed capacity of particular regions to support a particular life-style at a particular time.

#20

D.J. Mulvaney (1971) 'Aboriginal social evolution: a retrospective view' in Mulvaney and Golson (1971).

#21

According to unpublished reports.

#22

See for instance Berndt and Berndt (1964).

#23

A.A. Abbie (1960) 'Curr's views on how the Aborigines peopled Australia.' Australian Journal of Science, 22(10):399-404.

#24

D.J. Mulvaney (1970) The prehistory of Australia.

This is demonstrated most clearly in the population model developed by J.B. Birdsell in elaborating his tri-hybrid theory of the origins of the Australian Aborigines (Birdsell 1949, #25 1950, 1953, 1958). In the 1958 paper Birdsell has attempted

'to estimate the time required for a population to expand across a former barrier into an unoccupied area and to saturate it to carrying capacity'.

He sees the occupation of Australia as a model for the great migrations that must have occurred during the Pleistocene as the various hominid and human populations radiated from their evolutionary mainspring 'in Africa'.

Birdsell's three migrant groups, which he distinguishes almost entirely on the basis of the distribution of a number of somatic phenotypes in modern Aboriginal populations are, following MacIntosh's (1965) not entirely sympathetic summary. #26

1. The Oceanic Negritoids or Barrineans or Tasmanoids or First Wave, who arrived early in the last glacial period, say 30 to 35,000 B.P.
2. The Murrayian or Archaic White or Caucasoid or second migration, who arrived in the mid-portion, say 20 to 30,000 B.P.
3. The Carpentarians or 'Australoids' or 'fourth major racial group' or Northern Type B of Fenner 1939 or Veddoid or Pre-Dravidian elements who arrived prior to the final subsidence of the Sahul Shelf, late in the last glacial period, say 8 to 20,000 B.P.

Birdsell's model also depends upon the estimate made by A.R. Radcliffe-Brown in 1930 that at the time of European settlement the Aboriginal population of Australia was approximately 300,000 persons. He assumes that the population has been the same since settlement was complete.

In order to calculate the time taken for his three waves of immigrants to occupy the continent, Birdsell has made a number of assumptions concerning:

1. the timing of the invasions
2. the relative overlap of successive migrations
3. the innate capacity for increase in human (sapiens?) populations
4. the average size of family, horde, and tribal units established
5. the extractive efficiency of the immigrants
6. the stage of population growth at which migrants move off to form a new colony
7. inter-generation interval
8. Pleistocene land-forms
9. glacial climate change.

Unfortunately, he has never published his calculations in detail. However, he concludes after examining the effect of the size of the colonizing unit and other factors, that the time taken for the first wave to entirely occupy the continent would be unlikely to exceed 4,000 years, even on the most conservative assumptions. He also derives a date of 32,000 B.P. for the original arrival of the Negritos, by combining his model of the process of settlement and the 'rolling back' of earlier occupants with dates of arrival of his three waves estimated on

#25

J.B. Birdsell (1949) 'The racial origins of the extinct Tasmanians.' Records of the Queen Victoria Museum, 2(3): 105-122.

#26

N.W.G. MacIntosh (1965) 'The physical aspect of man in Australia.' in R.M. Berndt and C.H. Berndt (eds) (1965) Aboriginal man in Australia.

the basis of the dates of the lowest Pleistocene sea-levels and on modern gene frequencies.

But for almost every one of the assumptions Birdsell uses, an equally plausible alternative could be suggested with vastly differing implications. In addition to postulating three successive migrations, his best estimate of 2,000 years assumes a passive occupation, with the country being peopled without any active exploration. Settlement, although inhibited to some extent by natural barriers, on the whole spreads wave-like from the point of entry across the continent, as a result solely of population growth within each tribal area leading to the budding of new groups into adjoining regions as saturation is approached, regardless of the favourability or otherwise of alternative neighboring areas. If there were less than three migrations, or if in fact settlement proceeded by more active exploration or via the most favourable ecological corridors, the time required for complete settlement would be considerably shortened, especially since the inland river system may still have been flourishing during the period of settlement, and the exposed continental shelf south of the Nullarbor would have provided an hospitable east-west migration zone. #27 Abbie (1960) postulates a one-stage mainland settlement, and does not take account of the numerous complicating factors introduced by Birdsell, and he estimates that settlement would only take 'a few hundred years'.

The weight of evidence, however, indicates that if anything Birdsell's estimates are too optimistic. He has criticized previous conceptualizations of hunter-gatherer territorial expansion for

'systematically ignoring the possibility that human densities at such a cultural level are primarily a product of a complex of environmental determinants' and for giving 'little recognition to the nature of population equilibrium', and conceptualizing 'the spread of man ... in terms of migration rather than population growth'. (1958:47)

but his own model, based on a combination of environmental determinism and population biology, is seriously weakened by an exaggerated idea of the rate at which human populations are capable of increasing, even given an unlimited environment and an absence of cultural or biological restraints on reproduction. He holds three assumptions constant: the rate at which the populations increase, the ultimate size reached by individual tribes, and the ultimate population of Australia.

In considering the rate of increase, Birdsell examined the evidence from a number of modern human populations which have grown from a small colonizing group in an initially unlimited environment, and concluded that what he terms the 'intrinsic rate of increase' of human populations is about 2.0 per generation. By this rate he means the equivalent 'for a given cultural level of achievement' of Lotka's r , the intrinsic rate of increase used in population biology: #28 the population would double each generation in an unlimited environment. But Birdsell has his own definition of a generation. He says (1958:55) that

#27

See R.A. Keble (1947) 'Notes on Australian Quaternary climates and migrations': Memoirs of the National Museum, Melbourne, 15:28-81; J.N. Jennings (1971) 'Sea level changes and land links' in Mulvaney & Golson (1971), Macintosh (1965).

#28

See L.I. Dublin and A.J. Lotka (1925) 'On the true rate of natural increase' Journal of the American Statistical Association, 20:305.

'while demographers find the interval between generations is best based upon the age of the woman at the mid point of her fertility, anthropological data are too scanty for such calculations'. The generational interval between first children suits the model here...'

and he takes this interval as being about 16 years. Now although a doubling in 16 years (equivalent to a rate of increase of over 4% a year) could certainly be maintained for several such 'generations' if the founding population consisted only of individuals in the child-bearing years, it would be quite impossible for a population of the type envisaged in this model to maintain such a rate of growth once it became stable. The concept of an intrinsic rate of increase can only sensibly mean the rate at which a stable population increases under its characteristic schedules of fertility and mortality, and to my knowledge the Hutterites of North America are the only documented case of a stable population with a rate of increase of 4% a year. This group, from 1946-50, had a net reproduction rate (approximately, the rate of increase per (true) generation) of 3.66 (Eaton and Mayer, 1954).#29 Average age of Hutterite women at childbirth was just under 30 years, so the population was close to doubling every 16 years. But as the authors quoted note, this was only possible because the Hutterites have a unique combination of 'modern' death rates and 'primitive' birth rates. They comment that

'the high fertility and low mortality of this sect combine to produce a rate of increase that may be unique in human experience'.

Of course, Birdsell may simply be using terms loosely. If all he means to imply is that the populations double every 16 years until they become stable, this would be possible even under the high fertility and mortality that must have characterized Pleistocene human populations, if the 'founders' were young adults. However, this would raise other problems for Birdsell's theory. He conceives of the colonizing groups as consisting of either a 'biological family unit' of about 5 persons, of a 'horde' of 25, or, though he considers it unlikely, of a 'sub-tribe' or 'supra-horde' of 125 persons. Birdsell takes average 'stabilized' tribal size as only 500, so of these alternatives, a horde or a sub-tribe would have an age distribution which would be an unbiased and relatively reliable estimate of the stable; there would be little potential for high growth. On the other hand a 'biological family unit' which Birdsell says 'in Australia, as in many other parts of the world ... consisted of one adult male, one or more adult females, and their children', (1958:54) would almost certainly have a biased age distribution, the extent of the bias depending on whether the migration occurred at a particular stage of the family life cycle. If it did not, the age distribution could still be an unbiased, though highly variable, estimate of the stable, and over a range of instances those favouring rapid growth would be balanced by those allowing only slow growth. In all these cases the very high rate of growth required would be sustainable over the period envisaged only if the colonizing groups forming new 'swarms' were small and dominated by young couples in the most fertile years. Under these circumstances it could last for two or at most three true generations (say 50 to 75 years), until the biased age distribution of the founders had been worked out of the population. By contrast Birdsell shows it occurring under all assumed group sizes, and in the case of a founding group of 5 persons, lasting for up to seven of his 'generations' (112 years).

#29

J.W. Eaton and A.J. Mayer (1954) 'The social biology of very high fertility among the Hutterites: the demography of a unique population.' Human biology, 25:206-264.

This could only occur if the 'founding' population was constantly supplemented by new migrants from the parent population, and again the age distribution of these newcomers would have to be heavily biased towards the most fertile years. This is in fact a plausible model, but it is not provided for by Birdsell. At most he envisages a chain-migration resulting in whole hordes eventually moving into new areas; this would tend to have the opposite effect, normalizing the age distribution and reducing the potential for rapid growth.

There is some indication that Birdsell himself has become aware of the deficiencies of the 1958 model. In a brief note in his 1968 article, he re-asserts his basic principle, that

'The primary force towards an expansion of population number #30 is no more complicated than the inherent excessive fertility which characterizes all successful species.'

but goes on to say that although

'for simple hunters, the intrinsic rate of increase has been calculated as a doubling of numbers per generation ... this should be raised to a tripling in numbers per generation, with the mean generational interval extended to about thirty years.' (1968:230)

A net reproduction rate of 3.0 is at least within the range of recorded values; whether it is attainable by a population subject to 'primitive' mortality is another matter. At any rate, on the basis of Birdsell's own assumptions, all his estimates of the time required for settlement are much too short, and a complete re-working of his model is called for. This would result in the estimated times being increased by a factor of between 1.5 and 2.0.

There are other criticisms which can be levelled against Birdsell's model, however, which are not simply technical. He has tried to make the most conservative assumptions in order to estimate the maximum time that would need to be allowed for the occupation of the whole continent, and like almost everyone else, he accepts the 'minimalist' theory that the prehistoric colonists could only have crossed to Australia during periods of maximum glaciation, when the seas were at their lowest, and the width of any one water traverse reduced to 50 to 100 km (Jennings 1971). But in fact this scenario is quite difficult to defend, since it offers no suggestion as to the actual stimulus to the migrations; they are apparently considered to occur by chance, and to be more likely the less the distance involved. It also ignores the fact that the advances and retreats of glaciation, and the related retreats and advances of the shorelines, must of themselves have been important influences on the populations in between. The continental shelves of south-east Asia would certainly have been occupied during glacial maxima, and when the seas subsequently began to rise, the occupants, like those in the path of advancing glaciation in the Northern Hemisphere when seas

#30

What he is really referring to is the expansion of the territory the population occupies.

were falling, must have been tightly squeezed between the advancing shoreline and the groups whose territories lay behind them. MacIntosh (1965) and Tindale ((1967), #31 as quoted by Mulvaney (1971) and Golson (1972)), #32 suggest that this in fact provides a more plausible explanation of the migrations to Australia than the 'minimalist' one. In part, the low seas scenario is based on a false analogy, with the crossing of the first Americans from Siberia to Alaska, a relic of the unsuccessful search for a land bridge to Australia. The crossing to America is certainly more likely to have occurred at low sea level, since only then was the land link exposed, but there is really no parallel between this and the crossing of Wallace's line, for in the latter case there was always a major piece of navigation to be undertaken, even at the lowest eustatic level. If the crossing was accidental, it could have occurred at any time; if deliberate, while it could also have occurred at any time, it would by this interpretation have been more likely in the period when the seas were actually rising.

This has crucial implications not only for the timing of the colonization, but also for the type of colonization involved. Birdsell has it that the populations were homogeneous, spreading over the entire world by swarming like bees forming a new hive. Under this model, exploration is a result of either population pressure or chance events. But the human groups at the frontier of expansion may in fact have been specialized colonizers, just as was the case with the European New World frontiers, perhaps constantly being pushed further and further by settlement behind and advancing in the face of constant opposition from earlier colonists in front. Clearly, any assumptions about the cultural aspects of the settlement process can only be speculative, but discussion of at least the limiting possibilities cannot be avoided.

For instance, Birdsell assumes that the migrants arrived in Australia entirely free of cultural restraints on reproduction or territoriality. He makes the former assumption implicitly in basing his growth rate on the fertility performance of small groups placed, usually by some cataclysm, in a situation in which an initially unlimited environment was available for occupation by a small colonizing group. His most important models are the colonization of Pitcairn Island and the Bass Strait Islands.

Now the original colonizers of Australia may indeed have been brought here by some cataclysm - such as being swept here while on a coastal voyage in south-east Asia. But even if this occurred, they would not necessarily have left their cultural restraints behind them. If the migration was purposeful, they certainly would not have. A 'frontier culture' associated with the groups in the vanguard of human settlement may have resulted in unrestrained reproduction, but even such a specialized frontier culture does not necessarily imply the most rapid possible population growth. Other aspects of colonization, especially the establishment of territories and the transition to a social system suited to stability and permanency, might well modify the growth rate, even without taking accounts of the effect of unfamiliar habitat and the possibility of hostile opposition which would face all but the very first human or hominid colonists.

#31

N.B. Tindale (1967) 'Peopling the lands southeast of Asia'. Colorado quarterly, 15:339-353.

#32

J. Golson (1972) 'Land connections, sea barriers and relationship of Australian and New Guinea prehistory.' in Walker (1972):379.

In the context of his settlement model, Birdsell sees the ultimate size that each tribe reaches not as any kind of social norm, but as being established mechanistically by each tribe learning to keep its numbers in balance with the resources available. And yet he still maintains that the ultimate size reached is on the average the magic number of 500. He uses a logistic model for the growth of tribal populations in newly occupied areas, and assumes that 'budding-off' into yet newer areas occurs at either 40%, 60% or 80% of 'carrying capacity', by which he means ultimate tribal size. However he also takes the classical view that population growth is at first slowed and finally stopped by the fact that each individual added reduces the per capita resources available. This then brings into operation some mechanism which reduces the rate of population growth progressively to zero.

In the case of the populations he used as models, the logistic decline probably reflects no more than a working out of the initially growth-favouring age distribution, but even putting this factor aside, the environmental determinism implied by Birdsell's theory cannot provide an adequate settlement model. For a start, the importance given to the group beginning to run out of resources is not compatible with the now universally accepted view that hunter-gatherers do not exploit the environment to the maximum, and that territorial rather than economic constraints keep optimum population levels at only 20 to 30% of maximum carrying capacity (Lee and DeVore 1968:10). Since Birdsell explicitly has the ultimate tribal size at the time of settlement the same as it is now, this optimum would still apply; under those circumstances it may be doubted whether diminishing per capita resources could possibly become a threshold stimulus for either reduction in the rate of growth or migration into new areas.

Another difficulty is that even if such minute diminishing returns were perceptible, it is implied that the population growth occurs within a restricted environment - i.e. that the founding group occupies an area which turns out to be just sufficient to support the magic number of 500 people at the optimum level of exploitation.

But what control mechanism could possibly operate to achieve this? One way or another, the colonizing group must carry with them some normative or archetypal concept of either tribal size, tribal area, or, somewhat less plausibly, required per capita resources.

The Hutterites may provide some insight here as well: in their case it seems to be the actual current size of the group that is the stimulus to migration; they normally start to 'swarm' and form new colonies when the size of the parent colony begins to exceed about 100 persons. This is said to be the maximum size at which their highly group-oriented social system can function. (Eaton and Mayer 1953:257) Perhaps we can invoke a similar model for hunter-gatherer populations: given some 'ultimate' cause of migration (such as rising seas in their homeland) small groups may move to a new territory and expand in numbers until they exceed what is perceived (possibly innately but more probably in terms of transmitted social norms) to be the optimum size. This would represent a balance between requirements for cohesion based on face-to-face contacts, and the ultimate need for a marriage system based on outmarriage from the local group. (c.f. Yengoyan 1968). No assumption is made about what that size is, or that it is independent of the ecology of the region occupied. The group would space itself in such a way as to occupy whatever area was required to sustain the optimum population with an appropriate balance between economic and social needs, further adjusting the occupied area as other tribes established themselves on the periphery, so as to bring the boundaries into line with the natural demarcation features such as ridges, rivers and waterless areas, that both Tindale and Birdsell stress.

One remaining problem is to specify the mechanism by which population control replaces outmigration as the means of maintaining the population within the required limits. This would have to occur some time before all adjoining areas were fully occupied, for at that stage outmigration could no longer occur. Again, social and cultural mechanisms must have been responsible, but any attempt to specify this further would go beyond setting limits to the possibilities, and take us into the realm of pure speculation.

What is certain, however, is that some such mechanism must be involved here as well. The combination of environmental determinism and population biology on which Birdsell relies cannot provide an adequate model for settlement.

In inferring glacial populations, tribal sizes, and tribal areas from modern ones, Birdsell has in general held the populations constant, varying only the areas that they occupy. We have already seen that he assumes that his earlier migrants had an average tribal size of 500, despite having a less efficient economy than modern Aborigines. For Australia as a whole, he says in the 1950 paper that

'the pre-Carpentarian (i.e. final glacial) population within the present boundaries of the continent may be presumed equivalent to that found today, namely 300,000' (1950:296. my emphasis)

This however leaves the question of what was happening on the exposed continental margins. In the 1958 paper, Birdsell takes the simplifying assumption further, saying that after the two millenia devoted to the initial occupation,

'despite the assumption of a (lower) extractive efficiency for the first negritic immigrants into Australia, the total stabilized population for the glacial configuration of land surfaces must have resulted in a population again approximating 300,000 persons' (1958: 64. my emphasis)

This is quite startling when we consider that this 'glacial configuration of land surfaces' included all of West Irian, Papua New Guinea, Australia and Tasmania, as well as some 2 x 10 km of continental shelf - an area at least half as large again as the present Australian landmass, and with a much greater proportion of its area probably located in favourable climatic zones. Even the area south of the supposed Carpentarian drainage outlet and the depression which now forms Torrens Strait is about 30% larger than the present area of Australia.

Since the population is the same even though the area is larger, density must be less. The tribe is the unit involved, and

'The geographical area required to support an Australian tribe in modern times under a given rainfall regime is multiplied by 130 per cent to allow for the reduction in extractive efficiency' (Birdsell 1958:62)

This exact compensation of increased area for lower efficiency would not be plausible, even if it only occurred at the glacial maxima. But Birdsell goes beyond that to assume that the populations of both individual tribes and Australia as a whole have stayed the same for the entire 40,000 or more years since settlement of Australia was completed. He does note (1950:280) that

'It is probable that in a long term span, tribes grow and decline in population. There is some evidence that the exigencies of inter-tribal warfare occasionally caused the remnants of a decimated tribe to be absorbed by another. Likewise, there are indications that a tribe which succeeded in expanding its population tended to differentiate into several new tribal groups.'

but adds that

'It must be assumed that in a statistical sense these two opposing tendencies balance each other out.'

Remember that during this time the exposed landmass was reduced and increased at least twice during interstadials; but any longterm reduction in area is apparently assumed to be exactly compensated for by the penetration of new immigrants with greater extractive efficiency. The network of tribal boundaries lies on an elastic surface bounded by the moving coastline, the boundaries migrating backwards and forwards across the landscape as the overall area of Australia waxes and wanes. More efficient groups - or at least their technologies - would have to arrive at the glacial maxima, and then move ahead of the rising seas like a sonic boom, so that tribal areas over the whole continent shrank back at just the right rate to keep the coastal tribes from getting their toes wet. But even that is believable compared to what would be required while the seas were falling: the tribes would have to expand their areas so as to occupy the entire exposed landmass, but they would also have to lower their efficiency, because the population of Australia as a whole, and of individual tribes, remains constant.

But surely, even granted the necessity of invoking some magic number, it is much more likely that tribal size would vary with efficiency, and that the exposed continental shelves would be occupied, not by a proportional increase in the areas of all tribes, but by new ones forming at the margins, or else by coastal tribes getting larger. When the seas rose again there would be places where these groups on the margins may simply have been eliminated - for instance, on the Great Australian Bight, the steep cliffs of the present shoreline may have been the northern boundary of the tribes that occupied the continental shelf, and any retreat into neighbouring tribal areas would have been very difficult indeed. In other places where a retreat was possible, the coastal tribes would have been forced into conflict with their neighbours until some sort of equilibrium was restored. Along the east coast, the adjustment would have to take place within the confines of the coastal strip; in other areas, where there were no inland barriers, the adjustment could spread a long way inland. This sort of process, which would occur at the margins as a result of pressure from rising seas, could be only a particular case of boundary adjustment. As Birdsell acknowledges, we have to allow for the possibility of tribal areas and populations growing and contracting like living cells, not only as a result of warfare, but also of differences in technology; in a bounded universe one tribe's territory can only grow at the expense of another, but some conservative force eventually must act to limit expansion - whether this force is the sort of limits on effective communication and linguistic affinity Birdsell invokes, or merely resistance from neighbouring groups.

The assumption of stability over time makes for simplicity in model-building, and that is one reason why Birdsell espouses it. He uses the number of tribal areas traversed as a measure of the 'genetic distance' that particular characters have travelled, and hence of the time and place of arrival of his various immigrant groups, on the somewhat questionable grounds that the parameters of gene transfer within as well as between tribes are not affected by the density or otherwise of occupation of particular tribal areas. Each tribal area crossed become an equal unit of genetic distance. Because he only needs tribal areas to calculate genetic distances, Birdsell is able to ignore the question of the northern boundary of glacial Australia. He assumes that the migrants arrived at the Sahul Shelf, and did not have to traverse West Irian, Papua or New Guinea, so does not give further consideration to the equatorial region.

But it goes beyond simplicity in model-building. Not only total population size and distribution, but also composition or structure is considered by Birdsell to remain constant:

'population pyramids will be generally uniform from tribe to tribe and tend to remain constant through time ... A crude and preliminary analysis suggests that for Australia the size of the effective breeding population would be less than 40 per cent of the tribal population'. (Birdsell, 1953:173)

Moreover he considers masculinity, parity distribution and infant mortality to have remained essentially constant during the Pleistocene, operating within a primarily environmentally determined equilibrium system. (1968: 236) Far from being just one of a range of possible assumptions, Birdsell's assumption of constancy over time is central to his whole view of Aboriginal population dynamics. Many others have also adopted the position that a static population was implied by the static nature of Aboriginal society, and vice versa. For instance, the absence of a neolithic revolution in Australia has been cited as evidence for the existence of a stable adjustment of population to environment (White 1971), while like Strehlow (1965),^{#33} and Tindale (1959), the anonymous author of 'The Aborigines of Victoria' for the Victorian Yearbook in 1965 felt that 'despite regional bounties, the land only fed a population adapted for survival during the leanest season'.

But this tendency towards stability and uniformity has clearly been overemphasized, reflecting what Mulvaney refers to as the fallacy of the 'unchanging land and people' (1971:378). As White suggests when rejecting equilibrium explanations, other factors may have positively precluded the development of domestication and agriculture in Australia. R.M. Jones notes (1971a:282), that under relatively stable environmental conditions

'We have two models to consider. Either the population fluctuated widely about some mean, so that in good years it increased rapidly only to be drastically reduced when population exceeded food supply; or having reached equilibrium, the population maintained itself at about that level over a long period of time. If the latter, then this equilibrium position would be somewhat below the maximum number of people the environment could support at any one time, so that the population could be buffered against fluctuations in the abundance of natural resources. There are many ways in which a hunting and gathering society is able to exercise some control over its numbers, for example through infanticide.'

The control of population size by Aboriginal people is well established, but in historical times this was exercised, not to achieve a stationary population, but in order to reduce population in response to the expropriation of resources by Europeans. (Bonwick 1870, Curr 1886, etc) It seems certain that in prehistoric times similar reductions would have been achieved as a response to natural disasters and possibly also tribal conflict. Conversely, it is difficult to believe that the population would not be allowed to expand to some extent when times were very good. Any such fluctuations in size imply fluctuations in structure as well, especially since female births seem to have been more subject to control.

#33

T.G.H. Strehlow (1965) 'Culture, social structure and environment in Aboriginal Central Australia' in Berndt and Berndt (1965).

Jones concludes (1971a:282) that

'the numbers and distribution of Aboriginal man in Tasmania at the time of European contact were the result of a long established equilibrium between population and environment which had probably been set up over thousands of years.'

This is somewhat more restrained than Birdsell's assumption of a stable equilibrium during the entire period of occupation, but the conclusion is equivocal. Equilibrium models leave us little the wiser unless the nature and parameters of the feedback mechanism can be independently specified. Jones clearly rejects the view that population could fluctuate widely with the favourability of seasons, but this still leaves unanswered the question of how (or whether) average populations would increase or decrease in response to longer-term environmental changes.

Mulvaney has considered this briefly, but he does not seem to clearly distinguish between short- and long-term variation in numbers. He notes Strehlow's and Tindale's views that Aboriginal social organization and territoriality had largely evolved as a response to the unpredictability of the climate, in order to avoid over-exploitation and ensure survival of the group. Then he comments.

'The fact remains, however, that in a nomadic hunting society, it is the leanest season which is the true gauge of the capacity of a country to sustain a population. So it was also that many early explorers were misled while traversing territory during the wet season or after abnormal rains. Their accurate, yet misleading, reports tempted cattlemen and sheep-masters to de-pasture their herds or flocks in areas totally unsuited to intensive grazing. Nature soon depopulated the region of stock, down to its actual carrying capacity. It may be suggested likewise that the Aboriginal population in 1788 had achieved ecological equilibrium. It is probable that the first Aboriginal immigrants multiplied rapidly with the presumed favourable conditions in Pleistocene Australia, but it is interesting to reflect that the optimum population level was possibly attained long before the Europeans arrived. Indeed, the surface distribution of stone artifacts is so dense in arid areas such as the Lake Eyre Basin and the Flinders Ranges, that it seems probable that these regions supported a larger prehistoric population than that occupying them during European contact times.' (1970: 49; my emphasis.)

This drawing of a parallel between seasonal fluctuations and changes occurring over thousands of years may be merely illustrative. But the point needs to be made that there are not two models to be considered, as R.M. Jones would have it, but three or four. We have the possibility of long-term trends in the population in response to long-term environmental (or cultural) changes; about these long-term trends, short-term seasonal or other cyclical fluctuations may or may not occur. It is inconceivable that long-term trends have not occurred, although it is questionable whether this is established by the distribution of implements Mulvaney mentioned. Especially in the Lake Eyre region, the artifacts found on the surface may represent the yield from hundreds of metres of sediment removed by aeolian deflation during the upper Pleistocene and Holocene. (Jennings and Mabbutt, 1971).#34 It should also be borne in mind that, as with pastoral occupation, the utilization of the land may itself have resulted in reduced carrying capacity, regardless of changing climate. This applies especially to the use of fire in hunting and to the possible extinction of large fauna due to over-cropping.

#34

J.N. Jennings and J.A. Mabbutt (eds) (1971) Landform studies from Australia and New Guinea.

Figure 6.2.1. is a speculative picture of the changes that may have occurred in the population between Aboriginal and European settlement. I have assumed the first settlers arrived during the earliest Wisconsin glacial, either when sea levels were low and inter-island distances small, or, following MacIntosh (1965), when the seas were beginning to rise. I have accepted Birdsell's general outline of the process of occupation, but expanded the time required to 5,000 years and have assumed that Australia (excluding New Guinea) was about one-fifth larger at the maximum glaciations. While recognizing that the exposed littorals would support a higher than average density, I have taken the population to be simply proportional to the exposed area of land.

Totally ignoring short-term fluctuations, the population is portrayed as shrinking to the supposed pre-contact level of about 300,000 during a major retreat of the ice between 30 and 20,000 B.P., then increasing again to the original high level as the final maximum occurred about 20 to 18,000 B.P. Since no technological changes are documented in this early period, I have not assumed any changes in density related to changes in the efficiency of the economy.

Finally, from 18,000 B.P. the population is shown as beginning a slow decline as the exposed landmass gradually shrinks, but about 10 to 6,000 B.P. this is halted as a result of an assumed increase in extractive efficiency arising from the use of new varieties of tools. I have taken it that the population was at its recent maximum level about 5,000 years ago, and that it declined to almost 300,000 a few centuries before European colonization as a result of the reduced capacity of inland areas to sustain life. Even given these assumptions, this hump at 5,000 years might not be justified; the effect of new technology could have simply counteracted the effect of supposed recent climatic changes, resulting in a static although perhaps redistributed population since the end of glaciation. Alternatively, the innovations may have spread because of novelty or prestige rather than efficiency (see Mulvaney, 1969). This entire reconstruction is based on the assumption of a relationship between changes in land-mass, tool remnants and population size which is completely hypothetical, and changes in the variables themselves are not adequately documented. The embellishments between 8,000 B.P. and the present assume a detailed interaction which is quite unproven, and the possibility of similar detailed changes in earlier periods is totally ignored. The reader may wonder if such a tenuous model would have best been omitted altogether, since it is not based on any direct evidence at all. Nevertheless, I feel some model must be put forward, if only for the sake of completeness.

PART III

STATES AND TERRITORIES.

7. THE ABORIGINAL POPULATIONS OF THE STATES AND TERRITORIES.

In this chapter I have attempted to assemble the large number of small pieces of information about Aboriginal demography into a small number of large pieces. In the following chapters, these large sections of the jigsaw are fitted together to form a picture for Australia as a whole. As noted earlier, this approach is necessary because the adequacy of enumeration of the Aborigines at censuses has varied in different regions at different times, and because the only other sources of data, the State and Territory Aboriginal administrations, have repeatedly varied the definition of the population in attempting to give effect to absorptionist policies.

I have collected together, for each State and Territory, all available evidence relating to:

- 1: changes in the 'full-blood' population
- 2: changes in the 'half-caste' population
- 3: changes in the total Aboriginal population
- 4: changes in the sex ratio of the Aboriginal population
- 5: changes in the age composition
- 6: changes in the birth rates, death rates, and rates of natural increase

Complete documentation of every figure has not been possible; I have indicated in the graphs the series to which each estimate belongs, viz:

census estimates Colonial, State or Territory estimates annual Aboriginal
census estimates other miscellaneous estimates projections

Census estimates are in all cases taken from either the Census Reports or the appropriate Government Gazettes, Statistical Registers, Blue Books or Yearbooks.

Colonial, State and Territory estimates come from the Blue Books, the Annual Reports of the Aboriginal authorities, and from Statistical Registers or Yearbooks.

The annual Aboriginal census data similarly comes from the Annual Reports, Statistical Registers, Yearbooks and from special bulletins.

The sources of other miscellaneous estimates are documented separately for each State and Territory.

Most of this material has never been brought together before, so I have tried to summarize the data itself, as well as the conclusions drawn from it. Summary graphs are included in the text, while the tabular summaries are collected together in a short appendix at the end of the relevant State or Territory section.

A final caution needs to be inserted here. As F.L. Jones notes in his 1963 survey of Northern Territory data, what we are examining is not so much a history of the population, as a history of what different people said the population was. This may be a trivial distinction when considering the statistics of the general population, but it is a major problem here, as is indicated by the variability of the estimates available in the early years. Nor should it be assumed that the greater consistency of recent figures guarantees their validity. Acceptance and reiteration of an undocumented estimate does not make it any more valid. And even when complete individual enumerations are obtained, remember that they are based on a particular definition of the population which, as we have seen, has varied as a result of both the decisions of census takers and sociological changes in the Aboriginal population.

7.1 New South Wales

The Aboriginal population data for New South Wales is of comparatively good quality, as will be seen from the accompanying graphs and tables. Some Aborigines were included in the Censuses of 1871 and 1881, and they were fully enumerated from 1891. Estimates are also available for the total populations since 1861. Details are shown in table 7.1.1. and figure 7.1.1.

Between 1882 and 1941 a continuous series of annual censuses were taken, first by the Protection Board, then by the Welfare Board, in cooperation with the police. Between 1921 and 1941 the State and Commonwealth Statisticians were also involved. The results of these censuses are shown in table 7.1.2. and figure 7.1.2.#1

State and census figures both show a rapid decline in the 'full-bloods' and a rapid increase in the 'half-castes', that is, other persons of Aboriginal descent. According to the census figures, 'half-castes' outnumbered 'full-bloods' after 1901. By State figures, this occurred about 1896. But after about 1933 this distinction cannot be maintained. As shown in figure 7.1.3, the State and census estimates of 'full-bloods' diverge markedly after that date, State figures showing a continuing decrease to almost zero, while census figures show a very rapid increase. Clearly this must have resulted in part at least from persons declining to describe themselves as 'half-castes'. This does not necessarily mean they explicitly described themselves as 'full-bloods'. They may have simply called themselves 'Aborigines'; the census officials would then have coded them as 'full-bloods'. It is somewhat more difficult to explain why census 'full-blood' and total figures are higher in 1891 and 1901. It will be recalled that the exclusion of persons of less than 'half-caste' from the reserves, and from the Aboriginal population, began in 1910 and as figure 7.1.4 shows, this also had an effect on the census 'half-caste' populations in 1911 and 1921. By 1933, however, these people were re-identifying in large numbers: the intercensal growth rate between 1921 and 1933 was over 3 1/2% a year, reflecting high natural growth supplemented by ethnic in-migration (see also figure 7.1.9.).

Taking the overview, as presented in figure 7.1.10, which also includes estimates from 1788, it is clear that the population has passed through three stages since European occupation - rapid decline, relative stability and then rapid growth. Each of these stages must have been preceded by its own demographic transition. The decrease in the population between 1788 and 1860 is not documented, but it seems likely that it was extremely rapid at first, due particularly to a smallpox epidemic which spread from Sydney across the entire south-east of Australia long before European settlement had crossed the Great divide.

Grenfell Price (1949)#2 and Rowley (1970a) have both stressed the effect of the 'moving frontier' of European settlement, but from the point of view of depopulation, there were actually several moving frontiers. European epidemic, exploration, settlement and consolidation frontiers moved across the country one after the other, radiating from the port settlements, and each was probably characterized by its own effect on population.

Smallpox may in fact have been the only introduced disease, whose effect was not a result of, or exacerbated by, the local European presence. Syphilis and tuberculosis, the two major causes of death, were a result not of contagion as

#1

C.D. Rowley, (1970b: 9) in Outcasts in White Australia shows a diagram of the New South Wales Aboriginal population 1860-1961 which also seems to be based on these State and census figures.

#2

A. Grenfell Price (1949), White settlers and native peoples.

such, but of the types of changes forced upon the blacks by European occupation, and they were responsible not only for increased mortality, but also for a deficit of births due to poor health and sterility of the Aboriginal women.

The second 'mortality frontier', whose effect was possibly even more drastic than the smallpox, was the actual zone of new settlement. First in the Sydney region, then through the entire Six Counties, European occupation of tribal lands resulted in disruption, deprivation, resistance and drastic countermeasure. The establishment of a stable occupation involved both the imposition of a new environment on the blacks, and the destruction of their society and persons, and the rate of decrease of the Aboriginal population was probably proportional to the area of the zone of settled but not consolidated occupation. When the whole Colony was opened for settlement in 1836, this area increased rapidly until about 1860; but as the area of land in the process of being settled started to decrease (as the limits of the readily usable land were approached) so it appears the rate of depopulation of the blacks began to decrease, as they developed a new adjustment to the changed circumstances.

One aspect of that adjustment was a relative stability of numbers from the 1880s, which also marked the beginning of the Protectorate. Another aspect was that more and more of the reproductive potential of 'full-blood' women was devoted to the production of children of mixed race. Some writers have interpreted this rather differently, asserting that only the 'mixed-blood' women were fecund, and it certainly seems as though the population is composed of two segments, a declining 'full-blood' group and an increasing 'half-caste' one. But if the modern situation is any guide, this is more likely to be a result of the sexual dominance of European males than of the infecundity of the Aboriginal females.

From about 1925 the total population begins to increase, but note that in figures 7.1.4 and 7.1.5, there is a downward bulge between 1880 and 1930, the period when the Protection board flourished. During the depression, the N.S.W. Board made a determined effort to remove all unemployed Aborigines to the reserves, and this may have resulted in certain people who were not previously considered part of the Aboriginal population being included in it.

Moderate growth continued until about 1950, when an extraordinary rate of increase becomes evident, with the indicated population doubling in only fourteen years. It seems certain that part at least of this increase resulted from social migration into the Aboriginal population, migration from other States, or both. But rapid natural increase occurred as well, as is evidenced by the age structure and recorded vital events. The reasons for this increase are not really understood.

Figure 7.1.6. shows the changes that have occurred in the masculinity of the population since 1881. It will be recalled that Birdsell and others claimed that overall masculinity in pre-contact times would have been about 150 males per 100 females, and that this was achieved through differential female infanticide. The evidence here supports the former but not the latter view. Overall masculinity is uniformly high, right through to the 1930s, but the masculinity of children is never higher than 110 and in fact approximates 100 from 1910 on. Either higher adult female mortality, or differential loss of females through ethnic out-migration must have been responsible. There is in fact a very slight reduction in masculinity through the whole period to 1930, but after that it begins to drop rapidly, confirming that it was about then that the high growth of the population really began. Females re-identifying may also have contributed to the trend. Currently the masculinity of all groups is approximately the same: the Aboriginal population has an overall excess of males compared to the general population, but this is minute compared to the earlier situation.

Turning to the changes in the age distribution, summarized in figure 7.1.7, we see once again confirmation of the shift from a declining to a stationary population between 1880 and 1910 in the gradual increase in the proportion in the younger ages, from 27% under 15 in 1891 to 42% in 1911; we can also discern the distorting effect of the exclusion of 'non-nomadic half-castes' on the 1901 age distribution. After 1933 the move to rapid growth is reflected in the ever-increasing proportion of the population under 15, from 40% in 1933 to almost 52% in 1966. There is clear evidence that the rate of increase has now slackened; in 1971 the proportion under 15 is lower at 48% than it was in either 1961 or 1966. It still contains the potential for extremely rapid growth, however.

Finally we must consider the evidence of recorded vital events. Between 1882 and 1920 the New South Wales Board collected statistics on births, deaths and populations for the entire Aboriginal population of the State. Then from 1945 to 1968 the Welfare Board collected and published statistics of births, deaths and populations on all stations under their control. I have used these statistics to calculate 5-year average birth, death and natural increase rates from 1886 to 1911, and from 1946 to 1966 (figure 7.1.8). Rates from 1916 to 1941 are by linear interpolation. Naturally it cannot be assumed that the populations on stations are representative of the entire State Aboriginal population, of which they make up only about 10%. (table 7.1.2) Nevertheless the trends are indicative, and confirm the other sources. In 1890 the indicated birth rate only just exceeded the death rate amongst those Aborigines under the control of the Board. The birth rate seems to have stayed constant at about 33 per thousand until 1911, when the series ends. The death rate, on the other hand, declined from 30 per thousand in 1890 to 20 per thousand by 1911, and in fact seems to have continued to decline to about 9 per thousand in 1966, while the birth rate first rose to over 50 per thousand between 1946 and 1951, and then fell to about 36 per thousand by 1966 (figure 7.1.8.).

We can obtain some idea of how representative these station rates are of the total population by comparing the rate of natural increase they imply with the intercensal growth rates for the whole State Aboriginal population. Again however there are problems, because of the distorting effect of changing identification on the intercensal rates. From figure 7.1.9 and table 7.1.6, it would seem that the rate of increase calculated from vital events was too high up to 1910, probably due to under-notification of deaths, unless even then people were spontaneously ceasing to identify as aborigines. After 1921 the intercensal rates fluctuate greatly as Aborigines re-identified in bursts in 1933 and again in 1966, but note that the fluctuations are in general about the smooth line derived from the station statistics. My overall assessment is that the Board's statistics probably missed a number of deaths in the 1880s and 1890s, so that the intercensal rates are more accurate; I would think the shift from decline actually occurred about 1900, and that since then the real rate of growth increased to about 3% in the 1950s, and that it has declined somewhat since, to somewhere about 2 1/2% a year or perhaps even less.

It is possible that even the relatively modest 1966-71 intercensal growth rate still contains a component resulting from ethnic in-migration. At the 1971 Census a question was introduced to obtain details of internal migration, which asked people to state where they were at the time of the 1966 Census. Full details of this analysis are not yet available, and the response rate for Aborigines appears to have been only about 80%. But confining ourselves to this group, those who said they were in New South Wales in 1966 amounted to 78% of the total population enumerated in 1966, but those who said they lived in urban areas in 1966 actually exceeded by a small amount the numbers enumerated in urban areas in 1966. Not only does this throw doubt on the intercensal rate of change; it also leads us to question the accepted view that Aborigines are moving to urban

areas in large numbers. Changing identification of those already in urban areas may be an equally important factor in increasing the proportion of the population enumerated there.

This also bears on the question of underenumeration at the census. It has been claimed that in both 1966 and 1971 many Aborigines in Sydney avoided being enumerated, and some confirmation of this was obtained when in 1972, 15 months after the Census, a survey of all Aborigines in Sydney, based on chain referrals, was undertaken by W.D. Scott and Company for the New South Wales Minister for Community Welfare. (Scott, 1973a).#3 This study found 9,000 to 9,500 Aborigines, compared to 5,955 enumerated at the Census. However, as noted earlier, this does not prove underenumeration - the extra people may have been enumerated, but not identified as Aborigines. Given the evidence from the 1971 Census internal migration question, however, this does not seem very likely.

The W.D. Scott survey also seemed to confirm the conclusions of Gale (1969) and others that the high fertility of the Aboriginal population is largely a high provincial, or 'reserve' fertility. Aboriginal people in the capital cities tend to have a lower rate of natural increase, but their numbers are constantly supplemented by migrants coming from the more remote communities where fertility has remained at a very high level. Ages by section of State are not yet available from the 1971 Census, but in 1966 in all States the 'metropolitan' child-woman ratio was lowest, that for rural areas next, and for non-metropolitan urban areas it was highest of all. These country communities clearly hold the key to the future of the Aboriginal population.

Early in this study, while I was awaiting data from the Census, I took the opportunity to obtain some information on two such communities in the north-west of New South Wales. These were at Weilmoringle, a settlement on private property on the Culgoa river near the Queensland border, and at a reserve just outside the town of Collarenebri on the Barwon River. At that stage the overwhelming importance of changing identification had not become clear to me, and I was relying on the Census for basic demographic data; the information gathered in the surveys related primarily to social and economic factors and their significance to internal migration. However I also collected details of age and sex, and these demonstrate the tremendous potential for growth these communities contain. In both cases the proportion of children under 15 exceeded 50%, and at Collarenebri it was closer to 60%. There appeared to have been age-selective out-migration from both, but the effects were rather different. Both had lost young adults of working and reproductive ages, but those from Weilmoringle were couples who had taken their children with them to other rural and provincial locations in the north-west, while those from Collarenebri were mainly young men who had generally gone to the metropolitan area. Weilmoringle is probably the most isolated Aboriginal community in the State, and the residents did not at that time (1970) generally consider Sydney as a destination for direct migration, although some of those who left eventually found their way there. At Collarenebri, and almost every other community of which I have knowledge, migration direct to the metropolis seems to be by far the dominant path. Almost invariably, lack of employment or other opportunities lies behind these moves.

It will be noted that in contrast to the situation for the total State revealed by the censuses, masculinity remained high in both these communities, especially at the younger ages. There was little remaining of traditional Aboriginal life in either, and explicit female infanticide can be ruled out as a possibility; and despite the small sizes of the populations - under 200 in both cases - the high juvenile masculinity is unlikely to be a chance occurrence. In part it could be a

#3

W.D. Scott and Company (1973a) Problems and needs of the Aborigines of Sydney.

result of baby girls being less valued and less well cared for, but I could find no evidence of attitudes consonant with this. One thing is certain, though: whatever the cause, it is unlikely to persist, and the result will be an even greater number of women entering the fertile years in the future.

Figure 7.1.10 is a summary of all estimates of the total population, including F.L. Jones' projections to 2001. While the censuses indicate the total 'revealed' population, the dashed curve is an attempt to set a lower limit to the size of the total population of Aboriginal descent which is now starting to be revealed. This is entirely schematic; it may be considered as a combination of an early, declining logistic-type curve (although only the portion with a decreasing rate of change is documented) and a later increasing curve, which may or may not have had a point of inflexion somewhere between 1960 and 1970. Until 1950 these might have been considered the 'full-blood' and 'half-caste' sections respectively, but as noted this distinction can no longer be maintained.

The graph largely skims along the top of the estimates plotted in figure 7.1.5., on the assumption that most figures are underestimates of the total population of Aboriginal descent. However a proper reconstruction of the history of this population would almost certainly reveal that the low-point was considerably above the 10,000-odd indicated, and consequently that the rates of early decrease and recent increase were somewhat less than shown.

The most recent figures available are the 1971 Census total of 23,873 Aborigines plus Islanders, and a State estimate of 30 to 35,000 made in 1973. It seems undeniable from the evidence that the State's population is not a closed one, on account of both interstate and ethnic migration, so the application of model life table or stable population methods is not appropriate. Consequently I have not attempted a component projection for the individual States. Instead I have applied notional growth rates of 2.5 and 3% a year to the Census and State figures, to provide bracketing limits to the conceivable future growth of the population. These are contained between the dotted lines on figure 7.1.10. There does not really seem to be any evidence that the total population is any more than 30,000, but note that even a 1973 population of 35,000 and a growth rate of 3% cannot produce the sort of growth implied by F.L. Jones' (1970b) component projections. These were far too high, because they were based on the intercensal rate of growth between 1961 and 1966, which, as we have seen, was inflated by ethnic in-migration. Assuming no significant losses to the census population up to 2001 except as a result of death, the 23,813 persons enumerated at the 1971 Census would grow in my view to a maximum of 50,000, and even the 2.5% growth rate that this assumes may not be sustained. On the other hand the present age structure holds such potential for growth that even if the birth rate falls, the population revealed in 1971 is unlikely to grow to much less than 45,000 by 2001.

If 30,000 is accepted as the maximum discoverable population of Aboriginal descent, then it also seems unlikely that it will grow to more than 60,000 by 2001. It seems clear from the changes in the age distribution that were shown in figure 7.1.7, and specially in figure 7.2.7 in the section on Victoria, that the new ethnic in-migrants have an age structure and fertility level much closer to that of the general population than the core Aboriginal population that was revealed at earlier censuses, so the overall effect of changing identification is to make the population grow more rapidly, but to become older and have less potential for natural growth.

The actual intercensal growth that is obtained will then depend on how many of these extra 10 to 16,000 people move into the census population in the interval. However, as the graph indicates, even if all of them were identified by 2001, this would only represent an average intercensal growth rate between now and then

TABLE 7.1.1. NEW SOUTH WALES. CENSUS ESTIMATES OF ABORIGINAL POPULATION 1861 - 1971.

		FULL DESCENT			OTHERS			TOTAL		
		males	females	persons	males	females	persons	males	females	persons
1861	Enumerated	.	.	.	.	.	.	.	.	0
	Estimated	.	.	.	.	.	.	.	.	15,000
	Total	.	.	.	.	.	.	.	.	15,000
1871	Enumerated	.	.	.	.	.	.	709	274	983
	Estimated	.	.	.	.	.	.	.	.	11,017
	Total	.	.	.	.	.	.	.	.	12,000
1881	Enumerated	.	.	.	.	.	.	938	705	1,643
	Estimated	.	.	.	.	.	.	.	.	8,357
	Total	.	.	.	.	.	.	.	.	10,000
1891	Enumerated	2,896	2,201	5,097	1,663	1,520	3,183	4,559	3,721	8,280
1901	Included	2,192	1,586	3,778	259	250	509	2,451	1,836	4,287
	Excluded	.	.	.	1,642	1,505	3,147	1,642	1,505	3,147
	Total	2,192	1,586	3,778	1,901	1,755	3,656	4,093	3,341	7,434
1911	Enumerated	1,152	860	2,012	2,335	2,177	4,512	3,487	3,037	6,524 ^a
1921	Enumerated	923	674	1,597	2,367	2,221	4,588	3,290	2,895	6,185
1933	Enumerated	617	417	1,034	4,358	3,959	8,317	4,975	4,376	9,351
	Estimated	98	97	195	0	0	0	98	97	195
	Total	715	514	1,229	4,358	3,959	8,317	5,073	4,473	9,546
1947	Enumerated	546	407	953	5,498	5,109	10,607	6,044	5,516	11,560
1954	Aborigines	769	634	1,403	5,509	5,301	10,810	6,278	5,935	12,213
	T.S.Islanders	2	0	2	0	0	0	2	0	2
	Total	771	634	1,405	5,509	5,301	10,810	6,280	5,935	12,215
1961	Aborigines	791	697	1,488	6,703	6,525	13,228	7,494	7,222	14,716
	T.S.Islanders	2	0	2	1	1	2	3	1	4
	Total	793	697	1,490	6,704	6,526	13,230	7,497	7,223	14,720
1966	Aborigines:									
	$\frac{1}{2}$ or more	2,189	1,889	4,078	5,154	4,987	10,141	7,343	6,876	14,219
	less than $\frac{1}{2}$	.	.	.	3,220	3,162	6,382	3,220	3,162	6,382
	Total	2,189	1,889	4,078	8,374	8,149	16,523	10,563	10,038	20,601
	T.S.Islanders									
	$\frac{1}{2}$ or more	7	3	10	4	4	8	11	7	18 ^b
	Total	2,196	1,892	4,088	8,378	8,152	16,530	10,574	10,044	20,618 ^b
1971	Aborigines	.	.	.	.	.	.	11,682	11,419	23,101
	T.S.Islanders	.	.	.	.	.	.	409	363	772
	Total	.	.	.	.	.	.	12,091	11,782	23,873

notes: a - excluding 18 persons in the A.C.T.

b - persons 'less than half Aboriginal' whose main race was Torres Strait Islander are counted only once in the total.

TABLE 7.1.2 NEW SOUTH WALES. COLONIAL AND STATE ESTIMATES OF ABORIGINAL POPULATION.

		FULL DESCENT			OTHERS			TOTAL		
		On stations	Under Board	Total	On stations	Under Board	Total	On stations	Under Board	Total
1826	Settled districts	.	.	3,019	.	.	.	.	.	3,019
1827	Settled districts	.	.	2,710	.	.	.	.	.	2,710
1882	.	.	.	6,540	.	.	2,379	.	.	8,919
1883	.	.	.	6,126	.	.	2,345	.	.	8,471
1884	.	.	.	5,689	.	.	2,402	.	.	8,091
1885	.	.	.	5,362	.	.	2,622	.	.	7,984
1886	.	.	.	4,893	.	.	2,741	.	.	7,634
1887	.	.	.	5,042	.	.	2,860	.	.	7,902
1888	.	.	.	4,718	.	.	2,767	.	.	7,485
1889	.	.	.	4,652	.	.	2,877	.	.	7,529
1890	.	.	.	4,693	.	.	3,007	.	.	7,700
1891	.	.	.	4,458	.	.	3,015	.	.	7,473
1892	.	.	.	4,212	.	.	3,137	.	.	7,349
1893	.	.	.	3,982	.	.	3,273	.	.	7,255
1894	.	.	.	3,756	.	.	3,265	.	.	7,021
1895	.	.	.	3,660	.	.	3,386	.	.	7,046
1896	.	.	.	3,503	.	.	3,481	.	.	6,984
1897	.	.	.	3,422	.	.	3,663	.	.	7,085
1898	.	.	.	3,230	.	.	3,661	.	.	6,891
1899	.	.	.	3,203	.	.	3,689	.	.	6,892
1900	.	.	.	3,108	.	.	3,793	.	.	6,901
1901	.	.	.	3,036	.	.	3,897	.	.	6,915
1902	.	.	.	2,880	.	.	3,948	.	.	6,828
1903	.	.	.	2,786	.	.	4,148	.	.	6,934
1904	.	.	.	2,730	.	.	4,180	.	.	6,910
1905	.	.	.	2,656	.	.	4,477	.	.	7,133
1906	.	.	.	2,503	.	.	4,569	.	.	7,072
1907	.	.	.	2,347	.	.	4,613	.	.	6,960
1908	.	.	.	2,152	.	.	4,781	.	.	6,933
1909	.	.	.	2,123	.	.	5,247	.	.	7,370
1910	.	.	.	1,872	.	5,085 ^a	b	.	6,957 ^a	b
1911	.	.	.	2,076	.	5,253 ^a	b	.	7,329 ^a	b
1912	.	.	.	1,917	.	5,117 ^a	b	.	7,034 ^a	b
1913	.	.	.	1,861	.	5,054 ^a	b	.	6,915 ^a	b
1914	.	.	.	1,730	.	5,049 ^a	b	.	6,779 ^a	b
1915	.	.	.	1,597	.	4,983 ^a	b	.	6,580 ^a	b
1916	.	.	.	1,573	.	5,026 ^a	b	.	6,599 ^a	b
1917	.	.	.	1,326	.	4,921 ^a	b	.	6,247 ^a	b
1918	.	.	.	1,451	.	5,041 ^a	b	.	6,492 ^a	b
1920	.	.	.	1,238	.	4,532	5,990	.	5,770	7,228
1921	.	.	.	1,281	.	4,867	6,270	.	6,148	7,551
1922	.	.	.	1,231	.	4,740	6,143	.	5,971	7,374
1923	.	.	.	1,214	.	4,783	6,108	.	5,997	7,322
1924	.	.	.	1,085	.	5,185	6,425	.	6,270	7,510
1925	.	.	.	1,081	.	5,991	6,313	.	7,072	7,394
1926	.	.	.	1,031	.	6,021	6,312	.	7,052	7,343
1927	.	.	.	964	.	5,829	b	.	6,693	b
1928	.	.	.	1,201	.	.	6,844	.	.	8,045
1929	.	.	.	1,229	.	.	7,026	.	.	8,255
1930	.	.	.	992	.	.	7,928	.	.	8,920
1931	.	.	.	1,038	.	.	8,775	.	.	9,813
1932	.	.	.	913	.	.	8,767	.	.	9,680
1933	.	.	.	1,251	.	.	8,437	.	.	9,688
1934	.	.	.	1,008	.	.	9,373	.	.	10,381
1935	.	.	.	909	.	.	9,365	.	.	10,274
1936	.	.	.	976	.	.	9,884	.	.	10,860
1937	.	.	.	858	.	.	9,735	.	.	10,593
1938	.	.	.	805	.	.	9,610	.	.	10,415
1939	.	.	.	794	.	.	10,144	.	.	10,948
1940	.	.	.	690	.	.	10,171	.	.	10,861
1941	.	.	.	594	.	.	10,022	.	.	10,616
1943	.	.	.	b	.	.	b	2,561	.	b
1947	.	.	.	b	.	.	b	2,530	.	b
1948	.	.	.	b	.	.	b	2,484	.	b
1949	.	.	.	b	.	.	b	2,388	.	b
1950	.	.	.	b	.	.	b	2,703	.	b
1951	.	.	.	b	.	.	b	2,680	.	b
1952	.	.	.	b	.	.	b	2,903	.	b
1953	.	.	.	b	.	.	b	2,946	.	b
1954	.	.	.	b	.	.	b	2,968	.	b
1955	.	.	.	231	.	.	12,139	2,919	.	12,370
1956	.	.	.	b	.	.	b	2,860	.	b
1957	.	.	.	235	.	.	13,363	2,878	.	13,598
1958	.	.	.	b	.	.	b	2,935	.	b
1959	.	.	.	b	.	.	b	2,889	.	b
1960	.	.	.	b	.	.	b	2,821	.	b
1961	.	.	.	b	.	.	b	2,885	.	b
1962	.	.	.	b	.	.	b	2,981	.	b
1963	.	.	.	b	.	.	b	2,687	.	b
1964	.	.	.	b	.	.	b	2,563	.	b
1965	.	.	.	b	.	.	b	2,484	.	b
1966	.	.	.	130	.	.	23,000	2,181	.	23,130
1967	.	.	.	.	.	.	.	2,263	.	b
1968	.	.	.	.	.	.	.	2,158	.	25,000
1973	.	.	.	.	.	.	.	.	.	30,000
										to 35,000

notes: a - excluded are persons of less than 'half caste' not living on reserves.
b - not available.

TABLE 7.1.3 NEW SOUTH WALES. ANNUAL ABORIGINAL CENSUSES 1921 - 1941.

	FULL DESCENT			OTHERS			TOTAL		
	males	females	persons	males	females	persons	males	females	persons
1921	923	674	1,597	2,318	2,152	4,470	3,241	2,826	6,067
1924	675	409	1,084	2,871	2,516	5,387	3,546	2,925	6,471
1925	628	453	1,081	3,172	2,813	5,985	3,800	3,266	7,066
1926	592	439	1,031	3,223	2,812	6,035	3,815	3,251	7,066
1927	540	424	964	3,149	2,680	5,829	3,689	3,104	6,793
1928	685	512	1,197	3,732	3,114	6,846	4,417	3,626	8,043
1929	720	514	1,234	3,829	3,279	7,108	4,549	3,793	8,342
1930	582	410	992	4,318	3,608	7,926	4,900	4,018	8,918
1931	527	337	864	4,554	3,949	8,503	5,081	4,286	9,367
1932	559	356	915	4,771	4,038	8,509	5,330	4,394	9,424
1933	715	514	1,229	4,606	3,879	8,485	5,321	4,393	9,714
1934	607	401	1,008	5,050	4,323	9,373	5,657	4,724	10,381
1935	544	365	909	4,994	4,373	9,367	5,538	4,738	10,276
1936	513	356	869	5,234	4,543	9,777	5,747	4,899	10,646
1937	529	320	849	5,328	4,426	9,754	5,857	4,747	10,603
1938	498	311	809	5,161	4,450	9,611	5,659	4,761	10,420
1939	502	292	794	5,391	4,678	10,069	5,893	4,970	10,863
1940	416	274	690	5,357	4,814	10,171	5,773	5,088	10,861
1941	375	219	594	5,361	4,661	10,022	5,888	4,728	10,616

There was no census held in New South Wales in 1944.

TABLE 7.1.4. NEW SOUTH WALES. MISCELLANEOUS ESTIMATES.

1788 (up to)	26,000 30,500 36,600 40,000 45,000 47,809 48,000	F.L.Jones' (1970a) minimum. F.L.Jones' (1970a) maximum; Tindale's (1940) tribes by 500. Tindale's (1940) tribes by 600. Radcliffe-Brown's (1930) minimum and final estimate; Davidson's (1938) minimum. Radcliffe-Brown's (1930) maximum. Radcliffe-Brown's (1930) final estimate raised to Australian total of 300,000. Davidson's (1938) maximum; my best estimate.
1835	to 5,000 5,500	by addition from Archdeacon Broughton's evidence to the House of Commons Select Committee on Aborigines 1836 - far too low.

TABLE 7.1.5. NEW SOUTH WALES. ESTIMATES OF VITAL RATES 1886 - 1966.

5 Years centred on	Average population	Average annual births	Average annual deaths	Average natural increase	Average birth rate	Average death rate	Average rate of increase
1886	7,819.20	245.46	208.80	36.66	.0314	.0267	.0047
1891	7,461.20	247.80	233.80	14.00	.0332	.0313	.0019
1896	7,005.40	241.00	198.80	42.20	.0344	.0284	.0060
1901	6,893.60	242.00	201.00	41.00	.0351	.0292	.0059
1906	7,001.60	231.55	174.20	57.35	.0331	.0249	.0082
1911	7,121.00	212.20	141.20	71.00	.0298	.0198	.0100
1916	.	.	.	.	.0331	.0200	.0131
1921	.	.	.	.	.0364	.0202	.0162
1926	.	.	.	.	.0397	.0204	.0192
1931	.	.	.	.	.0430	.0207	.0223
1936	.	.	.	.	.0463	.0209	.0254
1941	2,561.00	127.00	54.00	73.00	.0496	.0211	.0285
1946	2,507.00	105.20	37.40	67.80	.0420	.0149	.0270
1951	2,724.00	115.30	37.70	77.60	.0423	.0138	.0285
1956	2,912.00	119.30	33.20	86.10	.0410	.0114	.0296
1961	2,852.60	115.80	34.80	81.00	.0406	.0122	.0284
1966	2,329.80	83.56	21.33	62.23	.0359	.0092	.0267

Sources: 1886-1911 based on records for total population published in the Annual Reports of the A.F.B.
1941-1966 based on records for population living on managed stations in the Reports of the A.W.B.
1916-1936 by linear interpolation.

TABLE 7.1.6. NEW SOUTH WALES. ESTIMATES OF TOTAL ABORIGINAL POPULATION, AND IMPLIED ANNUAL GROWTH RATES. 1788, AND CENSUSES 1861 - 1971.

	ENUMERATED POPULATION	TOTAL 'REVEALED' POPULATION						MINIMUM TOTAL POPULATION	
		Official estimates			Adjusted estimates			Estimated total	Growth rate
		Not enumerated	Estimated total	Growth rate	Not enumerated	Estimated total	Growth rate		
1788	-	-	-	-	-	48,000	-	48,000	-
1861	0	15,000	15,000	-	15,000	15,000	-.0159	16,000	-.0159
1871	983	11,017	12,000	-.0223	11,017	12,000	-.0223	12,000	-.0228
1881	1,643	8,357	10,000	-.0182	8,357	10,000	-.0182	10,000	-.0182
1891	8,280	0	8,280	-.0180	0	8,280	-.0180	8,280	-.0180
1901	7,434	0	7,434	-.0108	0	7,434	-.0108	7,434	-.0108
1911	6,524	0	6,524	-.0131	0	6,524	-.0131	8,650	.0151
1921	6,185	0	6,185	-.0053	0	6,185	-.0053	9,350	.0078
1933	9,351	195	9,546	.0355	0	9,351	.0355	11,000	.0133
1947	11,560	0	11,560	.0137	0	11,560	.0151	14,500	.0197
1954	12,215	0	12,215	.0079	0	12,215	.0079	17,500	.0269
1961	14,720	0	14,720	.0266	0	14,720	.0266	21,500	.0294
1966	20,601	0	20,601	.0674	0	20,601	.0674	24,500	.0261
1971	23,873	0	23,873	.0293	0	23,873	.0293	28,500	.0302

TABLE 7.1.7. NEW SOUTH WALES. NOTIONAL PROJECTIONS OF VARIOUS BASE POPULATIONS AT 2½% AND 3%, 1971 - 2001.

	CENSUS		STATE ESTIMATES				F.L.JONES	
	2½%	3%	Low		High		Low	High
			2½%	3%	2½%	3%		
1971	23,873		30,000 (1973)		35,000 (1973)		24,733	25,509
1976	27,010	27,675	32,307	32,782	37,691	38,245	29,943	31,433
1981	30,559	32,083	36,552	38,003	42,644	44,337	36,483	39,504
1986	34,575	37,193	41,355	44,056	48,248	51,399	44,505	49,217
1991	39,119	43,117	46,790	51,073	54,588	59,585	54,140	61,318
1996	44,259	49,985	52,938	59,208	61,761	69,076	65,708	76,447
2001	50,075	57,946	59,895	68,638	69,877	80,077	79,726	95,390

TABLE 7.1.8. COLLARENABRI AND WEILMORINGLE ABORIGINAL COMMUNITIES. SEX AND AGE COMPOSITION, 1970.

<u>Age group</u>	<u>COLLARENABRI (N = 193)</u>				<u>WEILMORINGLE (N = 154)</u>			
	<u>Percentage age distribution</u>				<u>Percentage age distribution</u>			
	<u>males</u>	<u>females</u>	<u>persons</u>	<u>Sex ratio</u>	<u>males</u>	<u>females</u>	<u>persons</u>	<u>Sex ratio</u>
0-4	13.99	8.81	22.80	158.82	9.40	5.37	14.77	175.00
5-9	9.84	9.33	19.17	105.55	9.40	11.41	20.81	82.35
10-14	9.84	5.18	15.03	190.00	11.41	5.37	16.78	212.50
15-19	3.11	2.07	5.18	150.00	5.37	4.03	9.40	133.33
20-24	3.11	6.74	9.84	46.15	3.36	4.03	7.38	83.33
25-29	3.63	4.67	8.29	77.78	1.34	2.01	3.36	66.66
30-34	3.63	2.07	5.70	175.00	2.01	2.68	4.70	75.00
35-39	2.07	1.55	3.63	133.33	0.67	2.68	3.36	25.00
40-44	-	0.52	0.52	-	3.36	1.34	4.70	250.00
45-49	1.04	-	1.04	-	2.01	2.01	4.03	100.00
50-54	0.52	3.11	3.63	16.67	2.01	1.34	3.36	150.00
55-59	1.04	0.52	1.55	200.00	2.01	-	2.01	-
60+	2.07	1.55	3.63	133.33	4.70	0.67	5.37	700.00
Total	53.89	46.11	100.00	116.85	57.05	42.95	100.00	132.81
0-14	33.68	23.32	56.90	144.44	30.20	22.15	52.35	136.36
15-29	9.84	13.47	23.32	73.08	10.07	10.07	20.13	100.00
30-44	5.70	4.15	9.84	137.50	6.04	6.71	12.75	90.00
45-59	4.66	5.18	9.84	90.00	6.04	3.36	9.40	180.00
60+	2.07	1.55	3.63	133.33	4.70	0.67	5.37	700.00
Total	53.89	46.11	100.00	116.85	57.05	42.95	100.00	132.81

FIGURE 7.1.10. NEW SOUTH WALES

ESTIMATES OF TOTAL ABORIGINAL POPULATION 1788 - 2001

- SOURCES
- = Census
 - △ = Colonial and State estimates
 - ◇ = Annual Aboriginal census
 - = Miscellaneous
 - = Projections (Jones)
 - = Notional projections based on 1971 Census
 - = Notional projections based on 1973 State figures
 - = Minimum population of Aboriginal descent

POPULATION IN THOUSANDS

of just over 3% a year, and a maximum turn-of-century population (assuming no net interstate or international migration) of about 60,000 for the State.

7.2 Victoria

Here again the data is of reasonably good quality, although not as plentiful as for New South Wales. Census estimates go back to 1836, Protection Board estimates to 1860. According to the census, 'full-bloods' were a minority of the population from about 1895. According to the Board, this did not occur until about 1906. (See figures and tables 7.2.1. and 7.2.2).

From 1856 to 1891, the census total tended to be somewhat below the Colonial figure, due presumably to underenumeration of wandering Aborigines at the census, as well as to the exclusion of 'part-Aborigines' from the legal Aboriginal population from 1886 on. Between 1891 and 1921 the two series seem to agree fairly well, indicating that the large numbers of 'part-Aborigines' excluded from the Board's figures either were not enumerated or, more probably, did not identify as Aborigines at the censuses, or were not so identified by the enumerators.

After 1921 we begin to see the contrast between the New South Wales and Victorian situations. The New South Wales Board had begun to give up its absorptionist policies in the late 1920s, and moved to a policy of actively collecting 'part-Aborigines' back onto settlements during the depression, but the Victorian authorities continued to promote the myth of absorption until the 1950s. As a result all the Board's figures - not just those for 'full-bloods' - stay well below the census figures until 1954, as figures 7.2.3, 4 and 5 indicate. The situation between 1954 and 1966 is similar in one respect to New South Wales, in that many more people identified as 'full-bloods' at the census than were recognized by the State, and correspondingly fewer were prepared to call themselves 'half-castes' at the census.

All the time the authorities were striving to keep the recognized population to an absolute minimum, the reservoir of 'invisible' Aborigines was swelling, apparently at the rate of about 3% a year. Only a fraction of these people were identified as Aborigines at the census, but even that was sufficient to bring the census 'half-castes' above the State figures between 1933 and 1954. (figure 7.2.4.) It is however clear that although not included in either the census or State populations, most of the excluded persons never ceased to consider themselves Aborigines. When as a result of the McLean Commission in 1957^{#4} it was recognized that Victoria did still have a substantial Aboriginal problem and Aboriginal population, the Government gradually came to accept responsibility for all persons of Aboriginal descent, and almost immediately State 'half-castes' increased dramatically, exceeding by fifty percent the Census figure in 1966. But as shown in figure 7.2.5, in the case of the total population, both the census and State figures went into an immediate, incredible climb in the 1950s. The State estimates as usual led the way, but the census followed with very little lag. Between 1954 and 1971 the census population more than quadrupled, as did the State estimates between 1955 and 1972. Current State estimates in Victoria are based on complete records of all Aboriginal families, and are very nearly complete counts of the total number of persons who acknowledge Aboriginal descent.

It will be recalled that in New South Wales the major movements back into the identified census population occurred in 1933 and in 1966. In Victoria the whole process was compressed into 1966 and, especially, 1971; the 1966-71

#4

Charles McLean (1957) 'Report upon the operation of the Aborigines Act 1928 and the regulations and orders made thereunder' (V.P.P. 1956-57, No 18)

intercensal growth rate was a preposterous 17% a year. Between 1966 and 1971 the Victorian situation actually moved ahead of New South Wales. The pressure to identify seems to have developed such momentum that Census and State figures in 1971 are almost identical, if the 715 Torres Strait Islanders are included in the Census population.

It seems clear that the reservoir of invisible Aborigines in Victoria has been just about emptied. It can be demonstrated that the high rate of increase is not a result of in-migration from other States. The 1971 Census internal migration question showed that of the 85% of Aborigines over 5 years of age enumerated in Victoria for whom information is available, 3,3558, or 90%, were stated to have been in Victoria at the time of the 1966 Census; there were in addition 279 persons in other States in 1971 who said they were in Victoria in 1966. So there were at least 3,837 '1971 Aborigines' in Victoria in 1966. The total enumerated in 1966 was 2,707.

The overall picture in the population revealed in figure figures 7.2.6 and 7.2.7 are once again similar to New South Wales. Barwick (1971) notes the marked deficit of children and females in all early records, and has concluded that there is no satisfactory explanation of the high masculinity in early times; she does not even consider that the ethnographic evidence established the practice of female infanticide in traditional times. Barwick has mentioned three possible reasons for high masculinity after European occupation: differential exposure of women to venereal infection, differential female mortality as a result of inter-tribal warfare and settler violence, and 'differences in mortality'. Her records show much higher female death rates at young ages, and she has collected cause of death, but unfortunately has never tabulated them by sex and age. Such an analysis would be very revealing. The consistently low masculinity in recent times is equally as difficult to explain, unless there has been a greater tendency for men to migrate out of the State. The small size of the population probably explains the variability of the estimates. Both the masculinity and age distributions must have been affected by ethnic out-migration and also by the small size of the Victoria Aboriginal population. For instance the dip in the cumulative ages after 1890 was almost certainly caused by young people having their children after they left the control of the Board, and not identifying either themselves or their children as Aborigines. Conversely, we can see clearly that the rapid increase in the census population between 1966 and 1971 was accompanied by a substantial ageing of the population. This is a sharp contrast to the process that occurred in 1966, where there was also substantial ethnic in-migration, but when those moving into the population apparently had a younger age composition than those already in the population. It seems that the groups that re-identified in 1971 were mainly 'assimilated' adults between 20 and 40, and that their family size was very much below that of the population they joined. These people are probably the last of the invisible Aborigines, and only in Victoria have most of them now apparently re-identified.

When we come to consider the evidence from recorded vital events summarized in figures 7.2.8 and 7.2.9, the effect of the exclusion of large numbers of people from the population makes interpretation very difficult. Because of the small numbers, these graphs show only 15-year averages. No figures are available after 1953, which is just as well because by that stage the base population had become minute. (table 7.2.2). Figures 7.2.8. and 7.2.9 would seem to indicate that the transition from decline to growth occurred as late as 1917, but this is an artefact of their being based only on 'station' and 'depot' statistics. Some people who were legally Aborigines resided on controlled stations managed by the Board for the Protection of Aborigines; others maintained sporadic contact through rationing depots; it is not clear to what extent the births and deaths derived from those in touch only through depots were properly collected, so

figures 7.2.8 and 7.2.9 show the rates both including and excluding this group. Barwick (1971) has said that station managers in general avoided reporting deaths if they occurred elsewhere, but the depot statistics indicate that a far greater proportion of deaths were recorded there than of the births, at least up to about 1910.

The overall effect of adult 'part-Aborigines' being forced to leave this population, seems to have been to reduce both the birth rate and the death rate on stations, while the death rate of the Aboriginal population in contact with the Board increased. Then in the early 1900s the disturbance due to these exclusions had begun to disappear, and the birth rate began to climb, to over 50 per thousand in 1940, while the death rate fluctuated about 35 per thousand. I do not believe these reflect the true rates for a closed population. Rather they represent the rates for a population which was constantly losing young adults, and was dominated by dependent children, women with families, and aged dependants. The implied natural increase rates correspond reasonably well with the intercensal rate of change up to 1961, as figure 7.2.9 shows, but after that, as noted earlier, the intercensal rate soars to very high values. The higher intercensal rates between 1921 and 1947 reflect the tendency of more people to identify at the census, and probably also mean that a greater proportion of deaths than births were included in the Board's statistics, which is exactly what we could expect, since young adults would probably be more mobile, and thus more likely to have their children elsewhere, than old people would be to die somewhere else than on a station.

Turning now to the summary in figure 7.2.10. there is a great profusion of estimates of the population in 1788, and in 1835 when Port Phillip was first settled. I have used 15,000 as the 1788 figure, which is close to Davidson's upper limit, and high by comparison with Radcliffe-Brown's conservative estimate of 11,500. In my view that must be considered an absolute minimum, given the evidence of decline up to 1850 summarized by Barwick (1971) and others.

The same factors were responsible for the decline in numbers as in New South Wales. Curr (1883), Smyth (1876), and numerous others, report that the initial smallpox epidemic reduced to one-half the tribes as far away from Sydney as the Murray estuary. And because settlement was closer and more complete, the Aborigines from 1830 on were more confined and hence subject to even higher mortality from tuberculosis, syphilis, and other diseases. Births were also very few. It should be noted that part of the decrease from about 1880 was due to persons excluded from the population by legislation, and that the actual minimum population of Aboriginal descent must have been considerably more than the 5-600 shown about 1920.

The most outstanding feature of this summary is of course the enormous gap that develops between the dashed line showing the minimum population of Aboriginal descent 'ancestral' to the population currently revealed, and the population revealed in the past. It is probably presumptuous, if not foolish of me to begin to comment on the detailed population history of the Aborigines in Victoria, in view of the amount of work Barwick has devoted to the reconstruction of the population from her genealogical studies.

Her research will eventually allow the complete history of the Aboriginal population to be reconstructed back to about 1870. Barwick has collected genealogical data from virtually all Aboriginal people in Victoria, and according to her most recently published report (Barwick, 1971) is using this data, in conjunction with the records and censuses of the Protection Board, to obtain cross-sections of the population at particular points of time. When this analysis becomes available it will give for the first time a direct measure of

TABLE 7.2.1 VICTORIA. CENSUS ESTIMATES OF ABORIGINAL POPULATION 1836 - 1971.

	FULL DESCENT			OTHERS			TOTAL		
	males	females	persons	males	females	persons	males	females	persons
1836 ^a Enumerated	.	.	.	.	.	.	.	.	0
Estimated	.	.	.	.	.	.	.	.	5,000
Total	.	.	.	.	.	.	.	.	5,000
1851 ^b In contact	.	.	.	.	.	.	c	c	1,409
Estimated	.	.	.	.	.	.	.	.	1,284
Total	.	.	.	.	.	.	.	.	2,693
1854 Enumerated	.	.	.	.	.	.	.	.	96 ^d
Estimated	.	.	.	.	.	.	.	.	2,404 ^e
Total	.	.	.	.	.	.	1,600	900	2,500 ^e
1857 In European households	.	.	.	.	.	.	f	f	40 ^f
'Wandering'	.	.	.	.	.	.	1,221 ^g	507 ^g	1,728 ^h
Total	.	.	.	.	.	.	1,152 ^g	616 ^g	1,768 ^h
1861 Enumerated	.	.	.	.	.	.	1,046	648	1,694
Estimated	.	.	.	.	.	.	.	.	306 ⁱ
Total	.	.	.	.	.	.	.	.	2,000 ^j
1871 Enumerated	.	.	.	.	.	.	784	546	1,330 ^j
1881 Enumerated	.	.	.	.	.	.	460	320	780
Estimated	.	.	.	.	.	.	.	.	120 ^k
Total	.	.	.	.	.	.	.	.	900 ^k
1891 Enumerated	192	125	317	133	115	248	325	240	565
Estimated	.	.	.	.	.	.	.	.	166 ^l
Total	.	.	.	.	.	.	.	.	731 ^l
1901 Enumerated	163	108	271	204	177	381	367	285	652
1911 Enumerated	103	93	196	237	210	447	340	303	643
1921 Enumerated	80	64	144	199	243	442	279	307	586
1933 Enumerated	55	37	92	400	373	773	455	410	865
1947 Enumerated	100	108	208	537	532	1,069	637	640	1,277
1954 Enumerated	73	68	141	618	636	1,254	691	704	1,395
1961 Enumerated	141	112	253	758	785	1,543	899	897	1,796
1966 Aborigines:									
$\frac{1}{2}$ or more	336	355	691	520	579	1,099	856	934	1,790
less than $\frac{1}{2}$	.	.	.	429	488	917	429	488	917
total	336	355	691	949	1,067	2,016	1,285	1,422	2,707
T.S. Islanders									
$\frac{1}{2}$ or more	0	1	1	4	3	7	4	4	8
Total	336	356	692	953	1,070	2,023	1,289	1,426	2,715
1971 Aborigines	.	.	.	.	.	.	2,855	2,801	5,656
T.S. Islanders	.	.	.	.	.	.	355	360	715
Total	.	.	.	.	.	.	3,210	3,161	6,371

- notes: a - 'At the founding of the Colony'; the estimate was made some time later, and the 1891 Census Report says it is too low.
- b - Not shown as a census in the Australian Yearbook; this is the year Victoria became a separate Colony.
- c - Sex of adults only available.
- d - 'that having been apparently the number in the regular employment of settlers' - Report: 4 (V.L.C.V. & P. 1856-57). Sex of those enumerated not published.
- e - 'the estimated number of aborigines is stated to be about 2,500, but no certain information respecting them has been obtained' - Report: viii (V.L.C.V. & P. 1854-55 vol 2). The sex breakdown was first estimated in the 1881 Census Report.
- f - Sex of those enumerated not published, and not available by subtraction because the Report presents two conflicting sets of male and female figures (see note g).
- g - One of these sex breakdowns must be wrong.
- h - Known to be an underestimate; see Report: 7, also 1861 Census Report: xiii.
- i - 'It is not pretended, ... notwithstanding the vigilance of the collectors, that all were enumerated ... It is pretty certain, however, that their total number does not exceed 2,000. - Report: xiii.
- j - 'It is not probable that all were enumerated' - 1881 Census Report: 25.
- k - 'It is, however, tolerably certain that, at the present time, there are not 1,000 Aborigines in the Colony' - Report: 25. The Report of the 1881 Queensland Census says that 'Perhaps the mean of the census figure and the B.P.A.'s figure of 1,067, say 900, may be taken as the present aboriginal population of Victoria' (p. ix).
- l - 'only 565 ... were enumerated. It is tolerably certain, however, that there are more ... than are shown by the figures.... some may have been missed by the sub-enumerators ... or they may have sometimes failed ... to note the fact of the person being an Aboriginal ... after the birthplace entry ... The ... Board state that they have information of the existence of 731 Aborigines in the colony' - Report: 25.

TABLE 7.2.2 VICTORIA. COLONIAL & STATE ESTIMATES OF ABORIGINAL POPULATION 1835 - 1973.

	FULL DESCENT			OTHERS			TOTAL		
	On stations	Under board	Total	On stations	Under board	Total	On stations	Under board	Total
1835	.	.	.	.	.	.	.	.	5,000
	.	.	.	.	.	.	.	.	6,000
	.	.	.	.	.	.	.	.	10,000
	.	.	.	.	.	.	.	.	15,000
1836	.	.	.	.	.	.	.	.	7,000
1845	.	.	.	.	.	.	.	.	5,000
1851	.	.	.	.	.	.	.	.	2,695 ^a
1852	.	.	.	.	.	.	.	.	2,500
1853	.	.	.	.	.	.	.	.	2,500
1854	.	.	.	.	.	.	.	.	2,500 ^b
1855	.	.	.	.	.	.	.	.	2,500
1856	.	.	.	.	.	.	.	.	2,500
1857	.	.	.	.	.	.	.	.	2,500
1858	.	.	.	.	.	.	.	.	2,500
1859	.	.	.	.	.	.	.	.	2,500
1860	.	.	.	.	.	.	.	.	2,000 ^c
1861	.	.	.	.	.	.	.	.	2,341 ^d
	.	.	.	.	.	.	.	.	2,384
1862	.	.	.	.	.	.	.	.	2,165 ^e
1863	.	.	1,720	.	.	200	.	.	1,920 ^k
1869	.	.	.	.	.	.	.	.	1,920 ^l
1872	.	.	.	.	.	.	.	.	1,834 ^l
1873	.	.	.	.	.	.	.	.	1,638
1874	.	.	.	.	.	.	.	.	1,600+
1876	.	.	774	.	.	293	557	.	1,553
1877	.	.	.	.	.	.	500	.	1,067
1878	.	.	.	.	.	.	527	.	1,067 ^k
1879	.	.	.	.	.	.	546	.	.
1880	.	.	.	.	.	.	555	.	.
1881	.	.	.	.	.	.	551	.	.
1882	298	538	538	258	318	318	537	.	870
1883	313	576	576	255	292	292	556	.	856
1884	324	.	.	261	.	.	568	868	868
1885	.	.	.	.	.	.	585	.	885
1886	.	.	550	.	.	.	294	844	844
1887	220	570?	.	233	233?	.	556	806	806
1888	.	.	.	.	.	.	453	803?	863?
1889	287	.	.	134	.	.	437	737?	817?
1890	.	.	.	.	.	.	421	.	.
1891	.	.	.	.	.	.	422	648	834?
1892	.	.	.	.	.	.	454	.	731
1893	.	.	.	.	.	.	363	499	731
1894	.	.	.	.	.	.	375	496	731
1895	.	.	.	.	.	.	394	502	.
1896	.	.	.	.	.	.	386	492	.
1897	.	.	.	.	.	.	389	488	.
1898	.	.	.	.	.	.	395	474	.
1899	.	.	.	.	.	.	386	479	719?
1900	.	.	.	.	.	.	366	449	.
1901	.	.	.	.	.	.	354	433	.
1902	.	.	.	.	.	.	306	407	652?
1903	.	.	.	.	.	.	302	388	652?
1904	.	.	.	.	.	.	274	382	652?
1905	.	.	.	.	.	.	253	365	652?
1906	.	194	.	.	81	.	259	365	652?
1907	.	189	.	.	81	.	223	275	652?
1908	.	.	.	.	.	.	219	270	.
1909	.	173	.	.	80	.	219	270	.
1910	143	156	.	80	100	.	207	253	.
1911	124	136	.	90	116	.	223	256	.
1912	123	133	.	111	136	.	220	252	.
1913	.	.	.	.	.	.	240	269	.
1914	.	.	.	.	.	.	.	250	.
1915	.	.	.	.	.	.	225	233	.
1916	.	.	.	.	.	.	228	283	.
1917	.	.	.	.	.	.	222	277	.
1918	.	.	.	.	.	.	186	320	.
1919	.	.	.	.	.	.	213	307	.
1920	64	73	.	186	294	.	244	312	.
1921	68	88	.	223	303	.	250	367	.
1922	64	84	.	224	278	.	291	391	.
1923	63	78	.	245	296	.	288	362	.
1924	56	72	.	227	282	.	308	374	.
1925	56	72	.	227	283	.	283	354	.
1926	50	55	55	252	282	554	283	355	.
1927	50	53	53	253	271	541	302	337	609?
1928	42	54	54	246	246	506	303	334	604
1929	39	47	47	263	281	531	288	300	560
1930	37	45	45	263	281	521	302	328	578
							300	326	566

TABLE 7.2.2 VICTORIA. COLONIAL & STATE ESTIMATES OF ABORIGINAL POPULATION 1835 - 1973. - page 2.

	FULL DESCENT			OTHERS			TOTAL		
	On stations	Under board	Total	On stations	Under board	Total	On stations	Under board	Total
1931	46	51	51	264	287	542	310	338	593
1933	42	51	51	263	296	536	305	347	587
	.	.	.	.	.	.	.	.	1,229
1934	44	56	56	249	290	559	293	346	615
1935	48	60	60	246	300	562	307	360	622
1936	46	55	55	244	246	625	290	301	680
1937	45	51	51	244	248	658	289	299	709
1938	46	48	48	261	268	688	307	316	736
1939	46	48	48	267	277	763	313	325	811
1940	40	41	41	258	266	715	298	307	756
1941	34	35	35	263	271	749	297	306	784
1942	26	27	27	249	252	720	275	279	747
1944	18	18	29	231	234	1,120	249	252	1,149
1945	11	11	19	147	149	656	158	160	675
1946	11	11	18	133	136	761	146	147	779
1947	8 ^f	8 ^a	17	115 ^f	118	755	123 ^f	126	772
1948	10 ^f	10 ^f	18	130 ^f	133 ^g	783	140 ^f	143 ^g	801
1949	4 ^r	9 ^g	16	169 ^f	172 ^g	812	173 ^f	181 ^g	828
1950	7 ^r	10 ^g	25	202 ^f	207 ^g	837	209 ^f	217 ^g	862
1951	5 ^r	8 ^g	26	97	184 ^h	804	102 ^r	192 ^h	830
1952	6 ^r	11 ^h	25	143	230 ^h	790	149 ^r	241 ^h	830
1953	7 ^r	10 ^h	25	200	266 ^h	800	207 ^r	276 ^h	825
1954	7 ^r	10 ^h	23	145	211 ^h	813	152 ^r	221 ^h	836
1956?	6 ^f	6 ^f	20	.	.	1,326 ⁱ	.	.	1,346 ⁱ
1958	Born in Victoria	6 ^f	15	192 ^f	272 ^h	815	198 ^f	278 ^h	830
	Elsewhere	.	10	.	.	500	.	.	510
	Total	6 ^f	25	.	.	1,315	.	.	1,340
1959	Born in Victoria	6 ^f	15	150 ^f	230 ^h	1,415	156 ^f	236 ^h	1,430
	Elsewhere	.	10	.	.	820	.	.	830
	Total	.	25	.	.	2,235	.	.	2,260
1960	10 ^f	10 ^f	20	137 ^f	217 ^h	2,240	147 ^f	227 ^h	2,260
1961	8 ^f	8 ^f	18	131 ^f	211 ^h	2,282	139 ^f	219 ^h	2,300
1962	7 ^f	7 ^f	18	116 ^f	196 ^h	2,482	123 ^f	203 ^h	2,500
1963?	.	.	0	.	.	3,000	.	.	3,000
1964	.	.	0	80 ^f	150 ^h	3,000	80 ^f	150 ^h	3,000
1965	.	.	0	40 ^f	110 ^h	3,500	40 ^f	110 ^h	3,500
1966	.	.	0	61 ^f	121 ^h	3,500	61 ^f	121 ^h	3,500
1967	Permanent residents	.	.	.	.	.	75 ^f	135 ^h	4,000
	Seasonal workers	.	.	.	.	.	.	.	432
	Total	.	.	.	.	.	75 ^f	135 ^h	4,432
1968	.	.	.	.	.	.	80 ^f	140 ^h	5,000
1969	.	.	.	.	.	.	.	.	5,000
1970	.	.	.	.	.	.	.	.	5,000
1971	.	.	.	.	.	.	.	.	.
1972	.	.	.	.	.	.	.	.	6,245
1973	.	.	.	.	.	.	.	.	.

notes: a - number of adult males, adult females and children available for 1,409 of these.
b - number of males and females also available.
c - 'perhaps 2,000'
d - preliminary - revised later
e - of whom the names of 1,140 were recorded
f - Lake Tyers only
g - Lake Tyers and institutions
h - Lake Tyers, Framlingham and institutions
i - not less than $\frac{1}{4}$ Aboriginal (McLean Report)
j - born in Victoria and not less than $\frac{1}{4}$ Aboriginal
k - descent groups x sex x 'children' and 'adults' also available
l - including 100 nomads

TABLE 7.2.3 VICTORIA. ANNUAL ABORIGINAL CENSUSES 1921 - 1944.

	FULL DESCENT			OTHERS			TOTAL		
	males	females	persons	males	females	persons	males	females	persons
1921	62	49	111	185	244	429	247	293	540
1924	43	31	74	271	164	435	314	195	509
1925	45	21	66	217	197	414	262	218	480
1926	37	18	55	243	216	459	280	234	514
1927	34	22	56	272	234	506	306	256	562
1928	34	19	53	325	282	607	359	301	660
1929 ^a	53 ^a	30 ^a	83 ^a	318 ^a	260 ^a	578 ^a	371 ^a	290 ^a	661 ^a
1930	31	22	53	274	239	513	305	261	566
1931	32	17	49	296	261	557	328	278	606
1932	29	21	50	291	262	553	320	283	603
1933	51	35	86	270	240	510	321	275	596
1934	31	22	53	288	271	559	319	293	612
1935	31	17	48	296	286	582	327	303	630
1936	38	17	55	304	282	586	342	299	641
1937	35	18	53	346	300	646	381	318	699
1938	57	35	92	341	306	647	398	341	739
1939	50	31	81	382	337	719	432	368	800
1940	47	30	77	342	331	673	389	361	750
1941	62	26	88	357	330	687	419	356	775
1944	19	10	29	474	451	925	493	461	954

note: a - as corrected by me; published tables repeated 1928 figures.

TABLE 7.2.4 VICTORIA. MISCELLANEOUS ESTIMATES.

1788 (up to)	3,000	Smyth, quoted by Radcliffe-Brown (1930)
	6,000+	Thomas, quoted by Radcliffe-Brown (1930)
	7,500	Parker, " " " " "
	11,500	Radcliffe-Brown (1930); Davidson's (1938) minimum
	13,500	F. L. Jones (1970a); Tindale's (1940) tribes x 500
	13,745	Radcliffe-Brown's (1930) estimate raised to give Australian total of 300,000
	15,000	My best estimate
	15,300	Davidson's (1938) maximum
	16,200	Tindale's (1940) tribes x 600
1828	1,000	Mitchell, quoted in <u>Australian Yearbook</u> 1924
	3,000	Brough-Smith, quoted in <u>Australian Yearbook</u> 1924
	7,500	Parker, quoted in <u>Australian Yearbook</u> 1924
1829	6,000	W. Thomson, quoted in <u>Australian Yearbook</u> 1924
	11,500	Radcliffe-Brown (1930) as dated by Barwick (1963), Rowley (1970a)
1835	3,000	'early settlers' - <u>Victorian Yearbook</u> 1965
	to 7,500	
	5,000	early estimates - <u>Victorian Yearbook</u> 1948-49
	15,000	
	7,000	McCombie, quoted by Radcliffe-Brown (1930)
1836	7,000	South Australia. Chief Protector of Aborigines. <u>Report</u> 1904
1838	7,500	Curr (1886)
1845	5,000+	Robinson, quoted by Radcliffe-Brown (1930)
1851	2,963	Foxcroft (1941) (a mistake)
	2,963	Barwick (1963)
1861	2,834	Barwick (1963) (a mistake)
1914	261	Queensland. Chief Protector of Aborigines. <u>Report</u> 1914 (source ?)
1935	654	Barwick (1963) (source ?)
1939	844	Barwick (1963) (a mistake)
1940	792	Barwick (1963) (a mistake)
1962	2,989	Barwick (1963, 1971)
	3,100	" (1971)
1967	4,000	Barwick (1971)
	4,432	Barwick (1971) - includes some seasonal workers from N.S.W.

TABLE 7.2.5. VICTORIA. ESTIMATES OF ABORIGINAL VITAL RATES 1886-1951 BASED ON STATION STATISTICS.

<u>5 Years centred on</u>	<u>Average population</u>	<u>Average annual births</u>	<u>Average annual deaths</u>	<u>Average natural increase</u>	<u>Average birth rate</u>	<u>Average death rate</u>	<u>Average rate of increase</u>
1881	555.40	22.60	23.70	-1.10	.0407	.0427	-.0020
1886	525.00	23.00	24.15	-1.15	.0438	.0460	-.0022
1891	393.60	12.90	17.40	-4.40	.0328	.0442	-.0114
1896	389.20	10.00	13.60	-3.60	.0257	.0349	-.0092
1901	324.00	6.61	12.15	-5.54	.0204	.0375	-.0171
1906	234.20	7.40	11.20	-3.80	.0316	.0478	-.0162
1911	219.15	7.00	9.40	-2.40	.0319	.0429	-.0110
1916	204.80	7.90	8.30	-0.40	.0386	.0405	-.0020
1921	276.20	9.10	9.60	-0.50	.0329	.0348	-.0018
1926	291.80	15.40	8.90	6.50	.0528	.0305	.0223
1931	303.80	12.95	12.55	0.40	.0426	.0413	.0013
1936	300.00	14.30	7.10	7.20	.0477	.0237	.0240
1941	279.75	14.90	16.25	-1.35	.0533	.0581	-.0048
1946	160.40	8.90	4.60	4.30	.0555	.0287	.0268
1951	168.00	8.30	2.60	5.70	.0494	.0155	.0339
1956	176.30	6.41	0.31	6.10	.0364	.0018	.0346

TABLE 7.2.6. VICTORIA. ESTIMATES OF ABORIGINAL VITAL RATES 1886-1936 BASED ON STATION AND DEPOT STATISTICS.

<u>5 Years centred on</u>	<u>Average population</u>	<u>Average annual births</u>	<u>Average annual deaths</u>	<u>Average natural increase</u>	<u>Average birth rate</u>	<u>Average death rate</u>	<u>Average rate of increase</u>
1886	795.00	23.00	32.63	-9.63	.0289	.0410	-.0121
1891	593.48	13.00	27.38	-14.38	.0219	.0461	-.0242
1896	483.00	10.50	22.70	-12.20	.0217	.0470	-.0253
1901	408.00	6.66	22.52	-15.86	.0163	.0552	-.0389
1906	305.40	7.60	14.30	-6.70	.0249	.0468	-.0219
1911	252.31	7.48	13.00	-5.52	.0296	.0515	-.0219
1916	274.00	7.90	9.20	-1.30	.0288	.0336	-.0047
1921	314.00	9.10	9.60	-0.50	.0290	.0306	-.0016
1926	315.00	15.40	8.90	6.50	.0489	.0283	.0206
1931	330.84	12.95	12.55	0.40	.0391	.0379	.0012
1936	320.40	14.30	7.10	7.20	.0446	.0222	.0225

TABLE 7.2.7. VICTORIA. ESTIMATES OF TOTAL ABORIGINAL POPULATION, AND IMPLIED ANNUAL GROWTH RATES, 1788, AND CENSUSES 1861 - 1971.

	<u>ENUMERATED POPULATION</u>	<u>TOTAL 'REVEALED' POPULATION</u>						<u>MINIMUM TOTAL POPULATION</u>	
		<u>Official estimates</u>			<u>Adjusted estimates</u>				
		<u>Not enumerated</u>	<u>Estimated total</u>	<u>Growth rate</u>	<u>Not enumerated</u>	<u>Estimated total</u>	<u>Growth rate</u>		
1788	-	-	-	-	-	15,000	-	15,000	-
1861	1,694	306	2,000	-	690	2,384	-.0252	2,384	-.0252
1871	1,330	0	1,330	-.0408	370	1,700	-.0338	1,700	-.0338
1881	780	120	900	-.0391	120	900	-.0636	1,200	-.0348
1891	565	166	731	-.0208	166	731	-.0208	900	-.0288
1901	652	0	652	-.0115	0	652	-.0115	850	-.0057
1911	643	0	643	-.0014	0	643	-.0014	1,000	.0162
1921	586	0	586	-.0093	0	586	-.0093	1,400	.0336
1933	865	0	865	.0318	0	865	.0318	2,000	.0291
1947	1,277	0	1,277	.0278	0	1,277	.0278	3,000	.0290
1954	1,395	0	1,395	.0126	0	1,395	.0126	3,800	.0338
1961	1,796	0	1,796	.0361	0	1,796	.0361	4,650	.0288
1966	2,715	0	2,715	.0826	0	2,715	.0826	5,500	.0336
1971	6,371	0	6,371	.1706	0	6,371	.1706	6,371	.0294

TABLE 7.2.8. VICTORIA. VARIOUS PROJECTIONS OF THE ABORIGINAL POPULATION 1971 - 2001.

	<u>CENSUS POPULATIONS</u>				<u>STATE ESTIMATES</u>		<u>F.L. JONES</u>	
	<u>Aborigines only</u>		<u>Aborigines + Islanders</u>					
	<u>2½%</u>	<u>3%</u>	<u>2½%</u>	<u>3%</u>	<u>2½%</u>	<u>3%</u>	<u>Low</u>	<u>High</u>
1971	5,656		6,371		6,245 (1972)		3,306	3,428
1976	6,399	6,555	7,208	7,386	6,893	7,029	4,082	4,355
1981	7,240	7,601	8,155	8,562	7,799	8,148	5,040	5,502
1986	8,192	8,812	9,227	9,926	8,824	9,446	6,169	6,884
1991	9,268	10,215	10,440	11,507	9,984	10,951	7,504	8,584
1996	10,486	11,842	11,811	13,339	11,296	12,695	9,112	10,721
2001	11,864	13,729	13,364	15,464	12,780	14,717	11,075	13,417

the relationship between the 'identified' or 'revealed' Aboriginal population and the total population acknowledging Aboriginal descent, and of the extent to which social migration into the census population has contributed to its growth in recent years.

Clearly, even at a sustained high rate of growth, the current population must have diverged from the revealed census and State populations a long time ago. It seems established that the present population of 5 to 6,000 or more is predominantly descended from people who lived in Victoria at the beginning of this century; Barwick (1971) has also stated that since 1870 only just over 100 European women have married Aborigines, so that cannot be a significant source of increase. And although she has not presented the actual figures, it appears from graphs of completed cohort fertility in the 1971 paper that total issue of Aboriginal women between 1897 and 1971 (i.e. of cohorts born between 1852 and 1926) averaged just on 5.0. During this period infant mortality declined from about 500 per thousand live births in the 1840s to about 65 per thousand at present. Rough calculation based on a sex ratio at birth of 1.02 and a man generation length of 27 years would imply a gross reproduction rate of about 2.47, a net reproduction rate of (say) 2.2, and thus an annual rate of increase of about 2.9%. The dashed curve in figure 7.2.10 is simply derived by taking the rate of increase as 3% and calculating backwards to 1911, when we obtain a population of between 960 (derived from the 5,656 Aborigines at the 1971 census) to 1081 (derived from the 6,371 Aborigines and Islanders). The 1972 State estimate gives 1029.

I cannot believe that the rate of growth was in fact any higher than 3% a year, even allowing for some net immigration gain from other States, and there is certainly no evidence that it was any higher. But even if it was as high as 4% the total population would not diverge from the State and census populations until 1921, and the total would still be over twice as large as the census population, and up to three times the State estimates, between 1947 and 1961.

As for the future growth potential of the population, F.L. Jones' projections implied an annual rate of growth of over 4%, which is far too high. However they were applied to the 1966 population, which we now know by hindsight was far too low, so his turn-of-century figures are in fact slightly lower than those implied by compounding the 1971 population at 2.5 to 3% annually. There is little reason to expect the death rate to fall to a greater extent than the birth rate; in fact at this stage the reverse seems more likely. Given the changes in the age distribution in 1971, and assuming no further ethnic in-migration, or gains from interstate, a 2.5% annual growth seems to me to be the maximum sustainable. Under these assumptions the population in Victoria may be expected to be at most 14,000 by 2001. On the other hand it is unlikely to grow to less than 11,000 even if fertility falls.

7.3 Queensland

With the Queensland figures we begin to see the major problems in the use and interpretation of Aboriginal population data.

For a start, there are no census estimates before 1881, and no Colonial estimates until 1898. No figures before about 1900 can be accepted as reliable, and the period of decline is almost entirely undocumented. As mentioned, 20,585 Aborigines were returned as living in the areas covered by the collectors at the 1881 Census, but a further 50-odd thousand were claimed to be in the remote north and north-west. If these people ever existed, two thirds of them died in the next twenty years. Only five years later in 1886 the number returned had dropped to just under 12,000 and the estimated total was reduced to only 20,000. I have arbitrarily separated the 19th century estimates into a 'high' and 'low' series in figure 7.3.1 in order to make the presentation clearer.

The census results in figure and table 7.3.1 give a reasonably sensible picture from 1901, with the decline in total numbers halting about 1921, and an increase beginning about 1933. Note that according to the census 'half-castes' have never exceeded 'full-bloods' in Queensland. But in contrast to the situation in New South Wales and Victoria, it is not until 1961 that the census is based on a complete enumeration: up to 1954, an estimate was always included of those 'full-blood' people in remote areas not enumerated. (table 7.3.1) In 1921, and probably also in 1954, these estimates seem to have been in error.

In addition, these were two distinct groups of indigenous people in Queensland, the mainland aborigines, and the Torres Strait Islanders. At first the Islanders were simply included as Aborigines, but as noted in section 3.5, after the enactment of the Torres Strait Islanders Act in 1939, the Queensland authorities insisted that Torres Strait Islanders were not Aboriginies and were not to be excluded from the State's population under s.127. At the census they were counted as Aborigines to 1933, then as Polynesians in 1947. From 1954 they were shown separately. Despite the fact that under the 1939 Act degree of descent was no longer distinguished for Islanders, the censuses to 1966 did show 'full-blood' and 'half-caste- Torres Strait Islanders separately; however very few people identified as 'half-castes'. Persons of less than half Torres strait Islander descent were not distinguished at the 1966 Census.

Although Torres Strait Islanders were not distinguished from other Pacific Islanders in 1947, Pacific Islanders excluding Torres Strait Islanders were tabulated separately in 1933 and again in 1954, so an estimate can be made of their numbers in 1947 by interpolation. Torres Strait Islanders can then be obtained by subtracting this estimate from published figures for Pacific Islanders in 1947 which include Torres Strait Islander. This method indicates there were about 3,500 Torres Strait Islanders in 1947, which would give a total of Aborigines and Islanders for the Census of about 19,311.

As noted earlier, 1971 was the first census at which 'Torres Strait Islander' was actually given as an option on the census form, and it seems clear from figure 7.3.1 that as a result some people identified as Torres strait Islanders in 1971 who had previously called themselves Aborigines. The rate of growth of the Aboriginal population between 1966 and 1971 looks too low, while that of the Islander population looks too high. Taken as one group, however, the change looks quite reasonable. As table 7.3.2 shows, a further development that occurred in 1971 was that a large number of people in States other than Queensland also identified as Torres Strait Islanders for the first time: in 1966 over 97% of the 5,403 Islanders were enumerated in Queensland. In 1971, of the 9,663 Islanders enumerated, 7,508, or only about 78% were in Queensland. Nevertheless the increase in the Islander population in Queensland alone was equivalent to an annual rate of growth of over 7%. For Australia as a whole it was over 11.6%.

The census figures are difficult enough, but the State population figures are incredibly complex. The Queensland Act of 1897, #5 which established a protectorate in the north of the State, created in conjunction with subsequent amendments the second model for native administration in Australia. The New South Wales and Victorian Acts were basically assimilationist or absorptionist; their prime concern was to exclude persons from the legal definition of 'Aborigine' if they were less than a certain minor fraction of Aboriginal descent, and to merge them with the general population. But the Queensland legislation was basically segregationist, and hence its aim was nominally at least just the opposite - to protect the white race from contamination by

#5

Aboriginals Protection and Restriction of the Sale of Opium Act, 1897.

requiring persons of mixed descent to 'marry back' into the Aboriginal population. The process of ethnic out-migration we have seen in New South Wales and Victoria did occur in Queensland, but it was a far more explicit and regulated affair. First, all 'part-Aborigines' not living as Aborigines at the time the 1897 Act was proclaimed were permanently excluded from the 'official' Aboriginal population, as were all their descendants. Second, 'part-Aboriginal' people could remove themselves from the control of managing their own affairs and living like white people. They could then be granted permission to assimilate, in the form of a certificate of exemption or 'dog licence' as it was universally known. On leaving the population, such persons took their families with them as passive ethnic migrants. Their descendants were also permanently exempted.

As table and figure 7.3.2 show, from 1896 to 1912 there was published a series of estimates of the total number of Aborigines and Torres Strait Islanders. This series was then discontinued until 1956. From 1908 the main series of annual statistics begins, showing, not the total population, but those 'under the Act'. However, as in the case of census statistics, the population revealed has changed over the years. From 1908 to 1912 the figures for persons not under protectors referred not to exempted people, but to tribal people in remote areas, especially Cape York, who had not yet been brought under control. After 1913, however, those not 'under the Act' are solely exempted persons, but as noted it is not until 1956 that we have an estimate of their numbers. From 1913 protected Aborigines can be separated from protected Islanders by use of regional breakdowns of the population, on the reasonable assumption that all Aborigines shown as resident on the Torres Strait Islands are Islanders, and that few Islanders were resident elsewhere.

From 1921 (when the first special Aboriginal census was held) State statistics also distinguish protected 'full-blood' Aborigines (including Torres Strait Islanders) from 'half-castes'. At the same time statistics appear each year showing the number of 'exemption certificates' issued, giving ordinary citizenship rights to persons formerly 'protected', but despite the losses resulting from the exclusion of exempted people, the total protected populations all show stability or slight increase from 1910. In the 1920s the Director of Native Affairs several times pointed out in his Annual Reports that the Queensland administration had demonstrated that given the right protective environment, the Aborigines need not die out at all. Actually, the protected 'full-blood' Aboriginal and Islander population shows a gradual decline until 1939, apparently as a result of extensive racial mixing in the Torres Strait Islands. When the Islanders were separated out in 1939, this trend was abruptly reversed, and from then on every sub-group increases continuously, including the protected 'full-blood' Aborigines. The rate of growth of the protected 'half-caste' Aborigines was however substantially less than had been the case with the protected 'half-caste' Aborigines plus Islanders, because a major component of that growth - children of 'part-Islander' descent - was transferred back to Torres Strait Islander population, which was now defined 'ethnically' or geographically, and in which degree of descent was not distinguished.

Between 1939 and 1965 Aborigines and Islanders were subject to completely separate Acts,^{#6} although the same department administered both. Some previous series of annual figures were modified; where before 1939 the statistics showed or would yield figures for:

^{#6}

The Aborigines Preservation and Protection Act, 1939 and the Torres Strait Islanders Act, 1939.

Aborigines:	protected total
Islanders:	protected total
Aborigines & Islanders:	protected 'full-blood'
	protected 'half-caste'
	protected total,

post-1939 reports tell us only of

Aborigines:	protected 'full-blood'
	protected 'half-caste'
	protected total
Islanders:	protected total
Aborigines & Islanders:	protected total.

So only three of the series continue after 1939:

total protected Aborigines
total protected Islanders
total protected Aborigines plus Islanders.

Between 1958 and 1966 figures were also published for

total 'full-blood' Aborigines
total 'half-caste' Aborigines
total Aborigines.

From 1966 the administration of Aboriginal and Torres Strait Islander affairs was again consolidated under one Act, #7 and presumably as a result of this, the only statistics now issued are for:

total Aborigines and Islanders
total protected Aborigines and Islanders.

So it is only for the latter than an unbroken series of population figures is available. But although the situation summarized in figure 7.3.2 is extremely complex, it should be remembered that similar shifts in definition have occurred in the other States as well, the only difference being that in Queensland these discontinuities were explicitly reflected in the statistics instead of being glossed over.

Since all this time more and more exemption certificates were being issued, the actual number of persons of Aboriginal descent should have become increasingly larger than the 'protected' population. In 1956 the Director stated for the first time that records of the Department of Native Affairs showed there were some 20,000 persons of Aboriginal descent living outside the Act. F.L. Jones (1970b:12) says a difference of this magnitude is 'difficult to understand'. Rowley (1970a:368) describes it as a mere guess. This estimate has now been reduced to 15,000, although it is not clear whether this reduced figure applies right back to 1956.

#7

Aborigines' and Torres Strait Islanders' Affairs Act, 1965.

The Department regards the records referred to as confidential, and I have not been able to examine them in any detail. But although the number does seem rather excessive, it is worth noting that in order to have reached the high estimate of 50,852 in 1969 the total population would have had to increase by an average of only 1.6% a year from the 1912 estimate of 20,000. To reach 47,465 by 1973 it would need to grow at only just over 1.4% a year.

Figures 7.3.4, 7.3.5 and 7.3.6, which bring together all available estimates, throw some light on these discrepancies, and also highlight the contrast between Queensland and the two States already examined, New South Wales and Victoria. The 'full-blood' estimates in figure 7.3.4 are complicated by the inclusion in censuses to 1954 of an estimate of those not enumerated; it would seem that the 1921 estimate was about 2,000 too low while the 1954 estimate was about 1,000 too high. The 1921 and 1933 estimates were obtained from the special Aboriginal censuses in those years, but in 1947 and 1954 the State 'protected full-blood' figure was used as the estimate of the total 'full-blood' population. 'Half-castes' were taken as enumerated. Details are shown in table 7.3.4. In 1947 this method apparently gave a reasonably adequate estimate of the total population, although there were some 750 more people enumerated as 'half-caste' Aborigines at the Census than there were protected 'half-caste' Aborigines according to the State. Some may have been Torres Strait Islanders, or exempted Aborigines, or persons who were 'full-bloods' according to the State. The State estimate of 5,000 Torres Strait Islanders in 1947 cannot be taken too seriously; the year before it was 3,800, while 5,000 was repeated every year until 1951.

By 1954, however, substantial changes had apparently occurred in the relationship between the Census and State estimates. Those identified as 'half-caste' Aborigines at the Census exceeded the State's protected 'half-caste' population by almost 1,800. It seems almost certain that some of these people were actually part of either the State 'full-blood' or Torres Strait Islanders populations, and that the difference of 2,300 between 'full-blood' Aborigines enumerated at the Census and State 'protected full-blood' Aborigines was not solely a result of underenumeration, but also of some State 'full-bloods' being enumerated but identified as 'half-castes'. Note that this is the reverse of the trend observed in New South Wales and Victoria.

Some Torres Strait Islanders may also have been identified as Aborigines in 1954; but overall it would seem that the total not enumerated was about 1,000 less than estimated, and only about 1,300 were actually omitted. This would mean that the Census 'full-blood' population was the same as the State 'protected full-blood' population in 1947, and again in 1966, but at the two intervening censuses about 1,300 State 'protected full-bloods' were identified as something else. This is rather difficult to explain, and indeed there is another possibility: that the 1954 estimate is correct, and that about 1,300 'full-bloods' Aboriginal population equal to the State 'protected full-blood' Aboriginal population at all censuses from 1947 to 1966. The difficulty is in suggesting where these 1,300 presumably tribal people could have been hidden in 1961. Or were they enumerated, but identified as Torres Strait Islanders? Note that in figure 7.3.3 there are more Islanders at the 1961 Census than would be expected on the basis of regular growth between 1954 and 1966, but the number involved is only about 330. It will probably never be possible to establish exactly what did happen, but some confirmation is provided later for the suggestion that the 1954 Census estimate is too high, when the intercensal growth rates are examined.

Apart from these discrepancies, which are fairly minor, it is noteworthy that since 1921, the total Aboriginal/Islander population enumerated or estimated at the census has been almost exactly equal to the State protected Aboriginal/Islander population. If the extra 15,000 to 20,000 exempted people do

exist, there has been almost no evidence of them re-identifying at the census, even as late as 1971.

Nor is there evidence of people switching from describing themselves as 'half-caste' to 'full-blood'. After 1947, census figures for 'half-caste' Aborigines are increasingly higher than State 'protected half-caste' Aborigines, but as in New South Wales and Victoria the census 'half-caste' are nowhere near as high as the State 'total half-caste' figures. Yet this is not a result of people calling themselves 'Aborigines' rather than 'half-castes' at the census: we have already seen this in 1947 and 1954, and as late as 1961 the Census 'full-blood' Aborigines figure is lower than the State figure for protected 'full-bloods'. Even in 1966, although the Census 'full-blood' figure is equal to the State 'protected full-blood' figure, it is still below the estimated State 'total full-blood'. For Aborigines, 'full-bloods' plus 'half-castes' at the census exceed the comparable State 'protected' group at all post-war censuses. But the State figures for protected Islanders exceed the census total Islanders, and curiously, the discrepancies all balance out almost exactly. Unless this is mere coincidence, it implies that up to 1966 a substantial number of State 'protected Islanders' were identified at the census as Aborigines, mostly as 'half-castes'. The fact that 'Torres Strait Islander' was not mentioned on the census forms before 1971 may explain this, as well as their sudden switch to Islanders in 1971.

But the greatest problem is to explain why almost none of the 15 to 20,000 exempted persons identify either as Aborigines or Islanders. If the State population figures are correct, it seems that the race relations situation in Queensland is such that most persons of Aboriginal descent not under the Act have either left the State or prefer not to even call themselves Aborigines. If the latter is true, it implies something of a paradox, because it means that assimilation in the sense of inducing people to cease identifying as Aborigines has been more successful under the originally segregationist policy in Queensland than under the explicitly absorptionist policies in New South Wales and Victoria.

I am not doubting that there is a sizeable number of persons of Aboriginal or Islander descent in Queensland who do not identify at the census. The whole working of the Queensland administration has been to encourage people to escape from the restriction of the Act by a process of assimilation which involves a rejection of the Aboriginal subculture and of family and personal associations with people still under the Act. And in contrast to the other States and Territories, these policies have been strongly maintained right up to the present day. The question is whether the figure of 15,000 to 20,000 is within the bounds of possibility, given the census figures.

There are a number of possible interpretations of the discrepancy. One is simply that the State figures are correct, that the population, especially that section not of full descent, has been increasing extremely rapidly, but that most of these persons no longer consider themselves as Aborigines, because as in the other States, they take the term as applying only to people 'under the Act'.

Another is that the State records are correct, except that many of the exempted persons have left the State, contributing to the rapid growth in New South Wales and Victoria for instance. The Department seems to have been adjusting for such losses when it reduced its estimate from 20,000 to 15,000 in 1973.

A third is that the 'protected' population figures are too high, because as Rowley (1970c) has suggested in an entirely different context, the distinction between protected and exempted persons has not been maintained at the local level. Officers of the Department submitting annual returns may have simply included all Aborigines from their area as being under the Act. If exempted persons are added later they would in fact be counted twice.

Or finally, the State figures for exempted persons may be much too high, as a result for instance of inadequate estimates of their deaths or inflated estimates of their births.

Only a detailed examination of the records on which the State 'total' figures are based can establish which of these interpretations is correct, but at this stage, it seems to me that it is probably one of the first two; however it seems unlikely that loss to other States has been a major factor. At the 1966 Census, of those Aborigines and Islanders who gave their State of birth as Queensland, only 1,225, or less than 5%, were enumerated in other States. In 1971 the corresponding figure was 1,682, just over 5%. Similarly, the results of the 1971 Census internal migration indicate that less than 600 people (just over 2%) had left Queensland for other States between 1966 and 1971. Children born after leaving the State would have to be added in order to make these figures comparable with the Queensland estimate of the exempt population, but clearly emigration of exempted persons could only account for 10 or at most 20% of the people not identified at the census; I am inclined to the view that the discrepancy does in fact result primarily from the existence of a substantial group of 'invisible' Aborigines in the State. Wherever studies have been made which enable the census population to be compared with the total Aboriginal population established by referrals or genealogical links, a discrepancy of this sort has been established. In South Australia the 'referral' population is about 30% higher than the 1971 Census figure; in Tasmania, at least 50%. It is probably the absolute number, rather than the relative size of the Queensland difference, which Jones and Rowley find so hard to accept; but Queensland does have the largest Aboriginal population of any State or Territory, even on census figures; in relative terms, the State population exceeded the census population in 1971 by 57%, which is only slightly outside the range of differences established in the smaller States; if the estimate of those not under the Act is reduced to 15,000, then the discrepancy is only 41%. The slightly higher proportion of 'invisible' Aborigines in Queensland is probably explicable by the fact that the restrictions on people in that State who are legally Aborigines have been more severe and have been maintained longer. If the situation should arise where identifying as an Aborigine or Islander brings more benefits and less costs, we may anticipate the same sort of inflow into the identified population in Queensland as has occurred in the past in New South Wales and Victoria.

Turning now to the changes in the sex and age composition of the population, a new problem arises because, in contrast to the south-eastern States, there remained until 1961 a section of the Queensland Aboriginal population, beyond the frontier of permanent settlement, which was not covered by the census. That section almost certainly differed in important respects from the enumerated population. As figure 7.3.7 shows, the masculinity of the population covered by the Census in 1881 and probably also 1901 seems too low compared to the population enumerated from 1911. Even in 1933 the indications are that the groups enumerated may have had a lower overall masculinity than the total population as revealed by the annual Aboriginal Census, implying in 1933, as apparently in 1901, a differential omission of adult males.

Nevertheless the picture is reasonably clear. The 19th century depopulation resulted in there being a gross excess of males in the population in settled areas in the early years of this century. The Aboriginal groups beyond the frontier of permanent settlement presumably also had a high level of masculinity as a result of traditional practices, but nowhere near as high as the remnant groups in pacified areas. In the last century the overtaking of Aboriginal groups by the frontier of settlement would have meant drastic depopulation through slaughter, disease and kidnapping, with - apparently always - greater losses of women than men. But in this century, remote Aboriginal groups brought under control were not

subjected to the same drastic assault and destruction, so their progressive inclusion in the censuses since 1901 may have even reduced the overall masculinity of the enumerated population throughout the age range. At young ages the gradual normalizing of the sex ratio would have resulted from the demographic recovery of the institutionalized section of the population.

Note that according to the Aboriginal censuses the masculinity of children becomes relatively normal about 1930, which is about when it is suggested the total population began to recover. For the census- enumerated population this does not occur until 1947. The masculinity of the total population, however, does not approach the normal level until about 1966. Presumably by then most of the highly masculine cohorts consisting of people who were alive during the period of depopulation had passed from the population.

On the evidence on the changes in the age distribution summarized in figure 7.3.8, it seems that recovery began somewhat earlier - possibly before 1920. This is almost certainly a result of the fact that the enumerated population was recovering while that in remote areas continued to decline. The influenza epidemics about 1920 had a severe impact even on the population under control, but it may have been even more severe on the remote groups. The 1901 Census age distribution is anomalous - only about 20 to 25% were enumerated, and it would seem that an undue proportion of those missed were men aged 40 to 60. But the youthfulness of the 1901 population may also indicate that it was those peoples who were a part of the general society who were enumerated, and that even in 1901 this section of the population was entering a stage of growth. The inclusion even of those near European settlements in 1911 apparently brought a much more precarious group into the equation.

The evidence from the special Aboriginal censuses seems to fit fairly well with the general censuses, although the proportion of children increases more rapidly, probably because of the inclusion of exempted persons in the A.A.C. Note that there is an overall increase in the proportion both of young and old people in the population as a result of the transition from decline; the masculinity also reflects this. There is also a slackening or at least stabilising of the rate of growth evidenced by the constant proportion of children between 1961 and 1971. The increase in 1966, followed by a decrease in 1971, is a result of changing identification. As will be demonstrated later, it appears that many parents were prepared to say that their children were a particular fraction of Aboriginal descent in 1966, but were not willing either to call them 'half-castes' (in 1961) or 'Aborigines' (in 1971).

The proportion to all ages to 40 is still apparently increasing, as a result of increasing fertility and/or decreasing mortality over the last 40 years (since 1931). But by the time this effect has been worked out of the population, declining fertility will have upset any tendency to stability. As was apparently the case with the transition from decline to growth, the 'stable' period is destined to be very short-lived.

When we come to examine changes in the birth, death and growth rates of the population, there is a further complication. In the south-eastern States, at least in this century, the censuses always covered the total population, but recorded vital events were based on an increasingly restricted section. In Queensland, however, the reverse in the case: the census until 1961 covers only a section of the population, so that the true rate of natural increase is obscured not only by changing identification but also by outright non-enumeration; while the proportion of the population for which vital records are available has increased over the years, reflecting the extent to which Aboriginal people in Queensland have been kept under government control.

The birth and death rates may be calculated in several different ways. Table 7.3.7 shows the results obtained by amalgamating records of births, deaths and populations for all communities for which substantial data is available. It includes Aborigines and Torres Strait Islanders. Table 7.3.8 is an approximation of the 'Aborigines only' rates obtained by eliminating Torres Strait and the Bamaga area of Cape York. Table 7.3.9 shows the results obtained by using the published records of births deaths and populations for the whole State as published in the Annual Reports between 1920 and 1938.

There are some interesting contrasts in the results. It would appear that the Torres Strait Islanders initially had a higher birth rate than the Aborigines, and now have a substantially lower one. Their death rate has been consistently lower. The result is that the Aboriginal Islander population begins in 1916 with a birth rate of about 35 per thousand but a death rate of over 40; the death rate has fallen steadily since, reaching about 11 per thousand by 1961, at which level it has remained. The birth rate meanwhile has risen, reaching about 42 per thousand by 1951, and falling subsequently to about 33 per thousand by 1971. The crossover from decline to growth occurred about 1921.

In contrast the Aborigines only population begins with about the same birth rate but substantially higher death rate (55 per thousand). The death rate falls more slowly than for the total population, reaching 11 per thousand in 1971. The birth rate drops below the combined level at first, falling to about 33 per thousand in 1931 before rising rapidly and crossing over the combined group's birth rate in 1950, and it reaches a high of 44 per thousand in 1956 before falling to the current level of about 40. The crossover to positive growth occurs much later, about 1939.

Records for the entire State show much lower levels, presumably because many births and deaths were not reported. However they seem to have been omitted to roughly the same extent, because the direction of change, and even perhaps the date of the crossover, confirm the other sources.

The implied rates of natural growth shown in figure 7.3.10 and tables 7.3.7, 8 and 9 do not vary greatly. The 'all communities' records go from zero growth about 1921 to about 2.8% a year in 1956, dropping to 2.2% in 1971. The 'Aborigines only' records go from a decline of 2 to 5% a year in 1916-21 through zero about 1939 to about 3% in 1961, showing little drop thereafter. The 'total State' records go from -0.5% a year in 1921 to 0.5% a year in 1936.

The intercensal growth rates, shown in table 7.3.10 and figure 7.3.10 also give a fairly consistent picture. If the 1921 and 1954 populations are corrected as suggested earlier, the intercensal growth rates go from -2% a year in 1871-81, passing from decline to growth about 1933, reach about 2.5% a year in 1961-66, and drop slightly thereafter. The curve lies about half-way between the 'all communities' and 'Aborigines only' natural growth curves, and close to that for the total State. It seems almost certain that the shift from negative to positive growth occurred somewhere between 1925 and 1935, and that the current rate of growth is between 2 and 3% a year.

In the case of the State estimates, the rate of increase of the populations in figure 7.3.2 seems to confirm that if there was a phase of rapid growth the population has now passed out of it. Increase in the claimed 'total' population between 1956 and 1969 is in fact quite moderate (about 1.36% a year) although the series that includes Torres Strait Islanders is affected by the vacillation that occurs in the State estimates after 1961. Note also that almost all the growth has been in the 'half-caste' section, which if the State figures are correct has been growing at about 5% a year since 1901. If the census figures are correct, however, this population has been increasing at only about 3.2% a year.

TABLE 7.3.1. QUEENSLAND. CENSUS ESTIMATES OF ABORIGINAL POPULATION 1881-1971.

		FULL DESCENT			OTHERS			TOTAL		
		males	females	persons	males	females	persons	males	females	persons
1881	Returned	.	.	.	.	.	.	10,719	9,866	20,585 ^a
	Estimated	.	.	.	.	.	.	.	.	49,415 ^b
	Total	.	.	.	.	.	.	.	.	70,000 ^c
1886	Returned	.	.	.	.	.	.	.	.	11,906 ^a
	Estimated	.	.	.	.	.	.	.	.	8,094 ^c
	Total	.	.	.	.	.	.	.	.	20,000 ^c
1901	Enumerated	3,089	2,048	5,137	773	760	1,533	3,862	2,808	6,670
	Estimated	9,911	10,089	20,000	0	0	0	9,911	10,089	20,000
	Total	13,000	12,137	25,137	773	760	1,533	13,773	12,897	26,670
1911	Enumerated	5,145	3,542	8,687	1,361	1,147	2,508	6,506	4,689	11,195
	Estimated	.	.	11,313	0	0	0	.	.	11,313
	Total	.	.	20,000	1,361	1,147	2,508	.	.	22,508
1921	Enumerated	4,501	3,026	7,527	1,604	1,486	3,090	6,105	4,512	10,617
	Estimated	3,536	2,951	6,487	0	0	0	3,536	2,951	6,487
	Total	8,037	5,977	14,014	1,604	1,486	3,090	9,641	7,463	17,104
1933	Enumerated	5,709	4,532	10,241	2,756	2,679	5,435	8,465	7,211	15,676
	Estimated	1,364	927	2,291	0	0	0	1,364	1,927	2,291
	Total	7,073	5,459	12,532	2,756	2,679	5,435	9,829	8,138	17,967
1947	Enumerated	3,504	2,822	6,326	3,684	3,527	7,211	7,188	6,349	13,537
	Estimated	1,537	1,237	2,774	0	0	0	1,537	1,237	2,774
	Total	5,041	4,059	9,100	3,684	3,527	7,211	8,725	7,586	16,311
1954	Aborigines									
	Enumerated	3,921 ^d	3,347 ^d	7,268	4,447	4,434	8,881	8,368 ^d	7,781 ^d	16,149
	Estimated	1,247 ^d	1,064 ^d	2,311	0	0	0	1,247 ^d	1,064 ^d	2,311
	Total	5,168 ^d	4,411 ^d	9,579	4,447	4,434	8,881	9,615 ^d	8,845 ^d	18,460
	T.S. Islanders	2,036 ^d	2,209 ^d	4,245	60	48	108	2,096 ^d	2,257 ^d	4,353
	Total	7,204 ^d	6,620 ^d	13,824	4,507	4,482	8,989	11,711 ^d	11,102 ^d	22,813
1961	Aborigines	4,686	4,000	8,686	5,460	5,550	11,010	10,146	9,550	19,696
	T.S. Islanders	2,444	2,526	4,970	129	108	237	2,573	2,634	5,207
	Total	7,130	6,526	13,656	5,589	5,658	11,247	12,719	12,184	24,903
1966	Aborigines									
	$\frac{1}{2}$ or more	5,493	5,146	10,639	4,151	4,213	8,364	9,644	9,359	19,003
	less than $\frac{1}{2}$				2,942	1,995	4,037	2,042	1,995	4,037
	Total	5,493	5,146	10,639	6,193	6,208	12,401	11,686	11,354	23,040
	T.S. Islanders									
	$\frac{1}{2}$ or more	2,458	2,681	5,139	76	62	138	2,534	2,743	5,277
	Total ^e	7,925 ^e	7,801 ^e	15,724 ^e	6,269	6,269 ^e	12,538 ^e	14,192 ^e	14,070 ^e	28,262 ^e
1971	Aborigines	.	.	.	.	.	.	12,306	12,108	24,414
	T.S. Islanders	.	.	.	.	.	.	3,607	3,901	7,508
	Total	.	.	.	.	.	.	15,913	16,009	31,922

notes: a - compiled from police returns; only a few Aborigines were actually enumerated, and they were not distinguished.
b - 'some persons ... have supposed there may be as many as 70,000. This however is a very crude estimate, and may be far wide of the truth'. Census 1881. Report: ix.
c - 'The Aborigines by the returns were estimated at 11,906, but it is believed that they number nearly 20,000' Australian Handbook 1888 to 1892.
d - those not enumerated distributed by sex in the same proportion as those enumerated.
e - persons 'less than Half Aboriginal' whose main race was Torres Strait Islander are counted only once in the total.

TABLE 7.3.2. QUEENSLAND. CENSUS ESTIMATES OF TORRES STRAIT ISLANDER POPULATION 1954 - 1971.

		FULL DESCENT			OTHERS			TOTAL		
		males	females	persons	males	females	persons	males	females	persons
1954	In Queensland	2,036	2,209	4,245	60	48	108	2,096	2,257	4,353
	Other States	7	1	8	0	1	1	7	2	9
	Total	2,043	2,210	4,253	60	49	109	2,103	2,259	4,362
1961	In Queensland	2,444	2,526	4,970	129	108	237	2,573	2,634	5,207
	Other States	2	0	2	5	3	8	7	3	10
	Total	2,446	2,526	4,972	134	111	245	2,580	2,637	5,217
1966	$\frac{1}{2}$ or more:									
	In Queensland	2,458	2,681	5,139	76	62	138	2,534	2,743	5,277
	Other States	97	11	108	10	8	18	107	19	126
	Total	2,555	2,692	5,247	86	70	156	2,641	2,762	5,403
1971	In Queensland	.	.	.	.	.	.	3,607	3,901	7,508
	Other States	.	.	.	.	.	.	1,208	948	2,055
	Total	.	.	.	.	.	.	4,815	4,849	9,663

TABLE 7.3.3. QUEENSLAND. COLONIAL AND STATE ESTIMATES OF ABORIGINAL
AND TORRES STRAIT ISLANDER POPULATION 1898-1973. - page 2.

		ABORIGINES			TORRES STRAIT ISLANDERS		ABORIGINES AND TORRES STRAIT ISLANDERS		
		Full			Total		Full		
		Descent	Others	Total			Descent	Others	Total
1950	Protected	9,165	6,692	15,857	5,000	.	.	.	20,857
1951	Protected	9,529	6,846	16,375	5,000	.	.	.	21,375
1952	Protected	9,540	6,875	16,415	5,150	.	.	.	21,565
1953	Protected	9,653	6,864	16,517	5,150	.	.	.	21,667
1954	Protected	9,579	7,106	16,685	5,150	.	.	.	21,835
1955	Protected	9,762	7,039	16,801	5,551	.	.	.	22,352
1956	Protected	9,804	7,123	16,927	5,663	.	.	.	22,590
	Others	.	.	20,000	0	.	.	.	20,000
	Total	.	.	36,927	5,663	.	.	.	42,590
1957	Protected	9,975	7,133	17,070	6,084	.	.	.	23,174
	Others	.	.	20,000	0	.	.	.	20,000
	Total	.	.	37,090	6,084	.	.	.	43,174
1958	Protected	9,960	7,143	17,103	6,084	.	.	.	23,187
	Others	1,000	19,300	20,300	0	.	.	.	20,300
	Total	10,960	26,443	37,403	6,084	.	.	.	43,487
1959	Protected	9,970	7,400	17,370	7,100	.	.	.	24,470
	Others	1,040	19,500	20,540	0	.	.	.	20,540
	Total	11,010	26,900	37,910	7,100	.	.	.	45,010
1960	Protected	10,284	7,920	18,204	7,250	.	.	.	25,454
	Others	1,080	19,700	20,780	0	.	.	.	20,780
	Total	11,364	27,620	38,984	7,250	.	.	.	46,234
1961	Protected	10,325	7,944	18,269	8,009	.	.	.	26,278
	Others	1,120	20,050	21,170	0	.	.	.	21,170
	Total	11,445	27,994	39,439	8,009	.	.	.	47,448
1962	Protected	.	.	18,231	10,669	.	.	.	28,900
	Others	1,100	20,000	21,100	0	.	.	.	21,100
	Total	.	.	39,331	10,669	.	.	.	50,000
1963	Protected	.	.	19,270	8,000	.	.	.	27,270
	Others	1,100	20,000	21,100	0	.	.	.	21,100
	Total	.	.	40,370	8,000	.	.	.	48,370
1964	Protected	10,345	7,994	18,289	9,508	.	.	.	27,847
	Others	1,100	20,000	21,150	0	.	.	.	21,150
	Total	11,445	27,994	39,439	9,508	.	.	.	48,997
1965	Protected	.	.	.	.	.	.	.	28,436
	Others	1,100	20,000	21,100	.	.	.	.	21,100
	Total	.	.	.	.	.	.	.	49,536
1966	Protected	10,900	9,700	20,600	8,107	.	.	.	28,707
	Others	1,100	20,000	21,100	0	.	.	.	21,100
	Total	12,000	29,700	41,700	8,107	.	.	.	49,807
1967	Protected	.	.	.	.	.	.	.	29,367
	Others	.	.	.	.	.	.	.	20,633
	Total	.	.	.	.	.	.	.	50,000
1968	Protected	.	.	.	.	.	.	.	29,908
	Others	.	.	.	.	.	.	.	20,092
	Total	.	.	.	.	.	.	.	50,000
1969	Protected	.	.	.	.	.	.	.	30,852
	Others	.	.	.	.	.	.	.	20,000
	Total	.	.	.	.	.	.	.	50,852
1970	Protected	.	.	.	.	.	.	.	30,514
1971	Protected	.	.	.	.	.	.	.	31,562
1972	Protected	.	.	.	.	.	.	.	31,165
1973	Protected	.	.	.	.	.	.	.	32,465
	Others	.	.	.	.	.	.	.	15,000 ^o
	Total	.	.	.	.	.	.	.	47,465

notes: a - male and female figures also available.
b - descent groups x male and female figures also available.
c - from D.A.I.A. (not published)

FIGURE 7.3.7. QUEENSLAND. TOTAL ABORIGINAL POPULATION. MASCULINITY 1881-1971.

FIGURE 7.3.8. QUEENSLAND. TOTAL ABORIGINAL POPULATION. CUMULATIVE PERCENTAGE AGE DISTRIBUTIONS 1901-1971.

FIGURE 7.3.9. QUEENSLAND. ESTIMATES OF CRUDE BIRTH AND DEATH RATES OF ABORIGINAL POPULATION 1911-1971.

FIGURE 7.3.10. QUEENSLAND. ESTIMATES OF GROWTH RATE OF TOTAL ABORIGINAL POPULATION 1876-1971.

TABLE 7.3.4. QUEENSLAND. METHOD USED TO ESTIMATE TOTAL ABORIGINAL POPULATION AT CENSUSES IN 1947 and 1954.

	Aborigines			Islanders	Total
	Full	Others	Total		
<u>1947 CENSUS:</u>					
Enumerated	6,326	7,211	13,537	3,500 ^a	17,037
Estimated	2,774	0	2,774	0	2,774
Total	9,100	7,211	16,311	3,500	19,811
<u>State estimate:</u>					
Protected persons	9,100	6,460	15,560	5,000	20,560
<u>State 'protected'</u> <u>less Census enumerated</u>	2,774	-751	2,023	1,500	3,523
<u>State 'protected'</u> <u>less Census total</u>	0	-751	-751	1,500	749
	Aborigines			Islanders	Total
	Full	Others	Total		
<u>1954 CENSUS:</u>					
Enumerated	7,268	8,881	16,149	4,353	20,502
Estimated	2,311	0	2,311	0	2,311
Total	9,579	8,881	18,460	4,353	22,813
<u>State estimate:</u>					
Protected persons	9,579	7,106	16,685	5,150	21,835
<u>State 'protected'</u> <u>less Census enumerated</u>	2,311	-1,775	536	797	1,333
<u>State 'protected'</u> <u>less Census total</u>	0	-1,775	-1,775	797	-978
<u>Note:</u> a - Estimated; Islanders were enumerated, but not distinguished from other 'Polynesians'.					

TABLE 7.3.5. QUEENSLAND. ANNUAL ABORIGINAL CENSUSES 1921 - 1944.

		FULL DESCENT			OTHERS			TOTAL		
		males	females	persons	males	females	persons	males	females	persons
1921		8,037 ^a	5,977 ^a	14,014 ^a	1,604	1,486	3,090	9,641 ^a	7,463 ^a	17,104 ^a
1924		8,606	6,469	15,075	1,545	1,294	2,839	10,151	7,763	17,914
1926		7,871	5,733	13,604	2,112	1,935	4,047	9,983	7,668	17,651
1927		7,712	5,811	13,523	2,224	1,986	4,210	9,936	7,797	17,733
1928		7,576	5,617	13,193	2,213	2,208	4,421	9,789	7,825	17,614
1929		8,187	5,990	14,177	1,951	1,918	3,869	10,138	7,908	18,046
1930		8,039	6,003	14,041	1,962	1,927	3,889	10,001	7,930	17,931
1931		7,786	5,868	13,654	2,096	1,956	4,052	9,882	7,824	17,706
1932		7,599	5,773	13,372	2,123	1,945	4,068	9,722	7,718	17,440
1933		7,073	5,459	12,532	2,292	2,133	4,425	9,365	7,592	16,957
1934		6,997	5,309	12,306	2,508	2,408	4,916	9,505	7,717	17,322
1935		6,888	5,182	12,070	2,807	2,618	5,425	9,695	7,800	17,495
1936		6,992	5,345	12,337	2,917	2,868	5,785	9,909	2,213	18,122
1937		6,742	5,370	12,112	2,972	2,940	5,912	9,714	8,310	18,024
1938		7,761	5,399	12,160	3,319	3,142	6,461	10,080	8,541	18,621
1939		6,685	5,345	12,030	3,469	3,309	6,778	10,154	8,654	18,808
1940	Aborigines	5,006	3,760	8,766	3,141	3,023	6,164	8,147	6,783	14,930
	T.S. Islanders	.	.	.	.	.	.	1,903	1,824	3,727
	Total	.	.	.	.	.	.	10,050	8,607	18,657
1941	Aborigines	5,107	3,870	8,977	3,293	3,158	6,451	8,400	7,028	15,428
	T.S. Islanders	.	.	.	.	.	.	1,887	1,788	3,675
	Total	.	.	.	.	.	.	10,287	8,816	19,103
1944	Aborigines	4,537	3,442	7,979	2,808	2,738	5,546	7,345	6,180	13,525
	T.S. Islanders	.	.	.	.	.	.	2,030	1,870	3,900
	Total	.	.	.	.	.	.	9,375	8,050	17,425

Note: a - including 1,400 persons estimated out of contact and distributed by sex in the same proportion as those enumerated.

TABLE 7.3.6. QUEENSLAND. MISCELLANEOUS ESTIMATES OF ABORIGINAL POPULATION 1788-1971.

1788	100,000	Radcliffe-Brown (1930)
	100,000	Davidson (1938)
	to 120,000	
1800 (say)	50,000	'first contact' - <u>Queensland Yearbook</u> 1969
1909	18,000	<u>Australian Yearbook</u> 1909. Source?
1912	22,000	South Australia. Chief Protector of Aborigines. <u>Report</u> 1912. (20,000 'full-blood', 2,000 'half-caste'). Source?
1913	22,000	Evidence of Q.C.P.A. to S.A. Royal Commission on Aborigines.
1920	18,000	Northern Territory. Acting Administrator. <u>Report</u> 1920. Source?
1971	60,000	A. & R. Dobov (1971). (50,000 Aborigines, 10,000 Torres Strait Islanders) - too high.

TABLE 7.3.7. QUEENSLAND. ALL COMMUNITIES WITH SUBSTANTIAL DATA. ESTIMATES OF VITAL RATES 1901-1971.

<u>5 years centred on</u>	<u>Average population</u>	<u>Average annual births</u>	<u>Average annual deaths</u>	<u>Average natural increase</u>	<u>Average birth rate</u>	<u>Average death rate</u>	<u>Average rate of increase</u>
1901	188.50	4.50	16.00	-11.50	.0239	.0849	-.0610
1906	40.65	5.23	5.40	-0.17	.1287	.1328	-.0042
1911	498.44	26.32	72.33	-46.01	.0528	.1451	-.0923
1916	3,081.94	129.78	109.00	+20.78	.0421	.0354	+.0067
1921	4,373.72	155.46	152.87	+2.59	.0355	.0350	+.0006
1926	5,470.75	199.47	154.50	+44.97	.0365	.0282	+.0082
1931	6,237.27	239.75	191.50	+48.25	.0384	.0307	+.0077
1936	7,598.47	274.66	189.20	+85.46	.0361	.0249	+.0112
1941	7,913.13	308.46	224.81	+83.65	.0390	.0284	+.0106
1946	8,230.01	343.49	183.59	+159.90	.0417	.0223	+.0194
1951	9,035.54	381.04	158.71	+222.33	.0422	.0176	+.0246
1956	9,935.20	410.84	131.90	+278.94	.0414	.0133	+.0281
1961	10,875.32	421.49	123.03	+298.46	.0388	.0113	+.0274
1966	11,042.81	387.93	129.94	+257.99	.0351	.0118	+.0234
1971	11,136.29	365.46	120.37	+245.09	.0328	.0108	+.0220

Sources: based on records from Cherbourg from 1909. Woorabinda from 1919, Palm Island from 1919, Weipa from 1934, Yarrabah for 1901 and then from 1934, Aurukun from 1904, Doomadgee from 1934, and Torres Strait and Cape York from 1914.

TABLE 7.3.8. QUEENSLAND. ALL COMMUNITIES AVAILABLE EXCLUDING TORRES STRAIT AND CAPE YORK.

<u>5 years centred on</u>	<u>Average population</u>	<u>Average annual births</u>	<u>Average annual deaths</u>	<u>Average natural increase</u>	<u>Average birth rate</u>	<u>Average death rate</u>	<u>Average rate of increase</u>
1916	700.14	29.18	64.60	-35.42	.0417	.0923	-.0506
1921	1,814.32	61.86	99.27	-37.41	.0341	.0547	-.0206
1926	2,180.95	76.27	104.10	-27.83	.0350	.0477	-.0128
1931	2,850.07	94.05	119.60	-25.55	.0330	.0420	-.0090
1936	3,982.97	137.21	131.55	+5.67	.0344	.0330	+.0014
1941	4,323.93	157.83	161.98	-4.15	.0365	.0375	-.0010
1946	4,474.89	179.67	115.57	+64.10	.0402	.0258	+.0143
1951	4,767.04	204.04	85.51	+118.53	.0428	.0179	+.0249
1956	5,044.12	228.89	83.90	+144.99	.0454	.0166	+.0287
1961	5,258.07	231.74	76.51	+155.23	.0441	.0146	+.0295
1966	5,281.53	225.68	79.32	+146.36	.0427	.0150	+.0277
1971	5,599.49	227.58	65.91	+161.67	.0406	.0118	+.0289

Sources: as above, excluding Torres Strait and Cape York.

TABLE 7.3.9. QUEENSLAND. ESTIMATES OF VITAL RATES FOR TOTAL ABORIGINAL POPULATION 1921-1936.

<u>5 years centred on</u>	<u>Average population</u>	<u>Average annual births</u>	<u>Average annual deaths</u>	<u>Average natural increase</u>	<u>Average birth rate</u>	<u>Average death rate</u>	<u>Average rate of increase</u>
1921	16,730.00	280.00	360.00	-80.00	.0167	.0215	-.0048
1926	17,702.10	320.80	315.20	+5.60	.0181	.0178	+.0003
1931	17,681.40	363.60	342.40	+21.20	.0206	.0194	+.0012
1936	17,730.40	432.00	322.80	+109.20	.0244	.0182	+.0062

Sources: Queensland, Aborigines Department. Reports 1920 to 1938.

TABLE 7.3.10. QUEENSLAND. OFFICIAL ESTIMATES OF TOTAL ABORIGINAL POPULATION, ADJUSTED ESTIMATES, AND IMPLIED ANNUAL GROWTH RATES. 1788, AND CENSUSES 1861 - 1971.

	ENUMERATED POPULATION	'REVEALED' POPULATION						MINIMUM TOTAL POPULATION	
		Official estimates			Adjusted estimates				
		Not enumerated	Estimated total	Growth rate	Not enumerated	Estimated total	Growth rate	Estimated total	Growth rate
1788	.	.	.		.	120,000	-.0095	120,000	-.0095
1861	.	.	.		.	60,000	-.0182	60,000	-.0182
1871	.	.	.		.	50,000	-.0223	50,000	-.0223
1881	20,585 ^a	49,415	70,000	-.2506	19,415	40,000	-.0223	40,000	-.0223
1886	11,906 ^a	8,094	20,000		.	.	-.0223	.	-.0223
1891	0	.	.	.0192	32,000	32,000	-.0182	32,000	-.0152
1901	6,670	20,000	26,670	-.0170	20,000	26,670	-.0170	27,500	-.0116
1911	11,195	11,313	22,508	-.0275	11,313	22,508	-.0164	24,500	-.0085
1921	10,617	6,487	17,104	.0040	8,487	19,104	-.0050	22,500	.0000
1933	15,676	2,291	17,967	.0070	2,291	17,967	.0070	22,500	.0143
1947	13,537 ^b	2,774	19,811 ^c	.0202	2,774	19,811	.0138	27,500	.0217
1954	20,502	2,311	22,813	.0125	1,311	21,813	.0189	32,000	.0227
1961	24,903	0	24,903	.0253	0	24,903	.0253	37,500	.0203
1966	28,262	0	28,262	.0244	0	28,262	.0244	41,500	.0206
1971	31,922	0	31,922		0	31,922		46,000	

notes : a - compiled from police returns.

b - Aborigines only.

c - including an estimate of 3,500 Torres Strait Islanders.

TABLE 7.3.11. QUEENSLAND. NOTIONAL PROJECTIONS OF VARIOUS BASE POPULATIONS, 1971-2001.

	CENSUS POPULATIONS				STATE POPULATION ESTIMATES								F.L.JONES	
	Aborigines		Aborigines + Islanders		Protected Aborigines + Islanders		New Total Aborigines + Islanders		Old Total Aborigines + Islanders					
	2½%	7½%	2½%	7½%	2½%	7½%	2½%	7½%	2½%	7½%	Low	High		
1971	24,414		31,922		32,465 (1973)		47,465 (1973)		53,426	53,949	26,765	27,492		
1976	27,622	28,303	36,117	37,006	34,961	35,475	51,115	51,866	60,447	62,542	31,442	33,047		
1981	31,252	32,810	40,863	42,900	39,555	41,126	57,831	60,127	68,390	72,503	37,309	40,010		
1986	35,359	38,036	46,233	49,733	44,753	47,676	65,431	69,704	77,377	84,051	44,421	48,563		
1991	40,005	44,094	52,308	57,655	50,634	55,269	74,029	80,806	87,545	97,438	52,718	58,009		
1996	45,262	51,117	59,182	66,838	57,288	64,072	83,757	93,676	99,050	112,957	62,353	71,415		
2001	51,210	59,259	66,959	77,483	64,816	74,278	94,764	108,596	112,065	130,948	73,693	86,614

In Queensland, the overall trend has probably been one of continuous loss from the census-identified population, rather than alternating losses and gains. Consequently, there is little indication except between 1966 and 1971, of the fluctuations due to changing identification that were observed in the other States' figures. Nevertheless, if the State estimates are correct, ethnic out-migration must have been a significant factor in Queensland as well, keeping the apparent growth rate lower than it really is. Whether return in-migration will be equally important in the future, and will result in an apparently high rate of growth, will depend on the way in which the Queensland race relations situation develops.

Looking at the overall summary in figure 7.3.11, it is not easy to judge the history of the population prior to about 1920. Most estimates of the population in 1788 agree on the remarkably round figure of 100,000, which represents about a third of Radcliffe-Brown's total for Australia, but I have taken it as 120,000, Davidson's upper limit and the figure obtained by raising Radcliffe-Brown's estimates to an Australian total of 300,000. It is not clear whether these writers' estimates included the Torres Strait Islanders, but that is probably not an important consideration. Beckett (1972) estimates that the population of the Islands before extensive depopulation had set in, was only about 3 to 4,000. Between 1788 and 1900 we have only two estimates of the Queensland Aboriginal population - both official figures. The Queensland Yearbook estimate of 50,000 in 1800 may have been intended as an alternative to the figure of 100,000 in 1788; if so it cannot be defended. Radcliffe-Brown's own assessment was that an initial figure of at least 100,000 was necessary, if only to allow for the known and extensive destruction of Aboriginal life by settlers and the Native Police in the second half of the nineteenth century. Up to 1891 I have simply used interpolation, but note that the decline portrayed roughly parallels the decline in the 'enumerated' section of the population. The estimate of 70,000 at the Census of 1881 is almost certainly far too high. It is known that the early southern epidemics spread to Queensland, although the Queensland people may have been better able to resist exotic diseases, since they probably had more contact with outsiders. But at any rate there must have been a rapid decline until about 1910 or 1920, when the revealed population stabilized at about 17,000. If the State 'total' figures are correct, this must have been immediately followed by a period of rapid growth, all of which, however, occurred as noted in that invisible portion of the population excluded from official statistics, for the 'protected' population does not begin to increase till about 1940, and then only slowly.

Actually, apart from the minor adjustments to the estimated numbers not enumerated, the revealed population is quite well documented; the problem is to assess the claimed total population. The dotted line indicating the minimum population of Aboriginal descent is based on nothing more substantial than the minima set by known statistics and a series of educated guesses about the period of decline and growth. I have assumed that the depopulation occurred as a result of the systematic destruction of some 50,000 or more people, between 1840 and 1880; that the minimum population was about 22,500; that the true size of the present population is correctly estimated by the current, reduced State estimates; and that the true population has been diverging from the 'protected' and census populations since about 1900.

Again I have included a set of notional projections at 2.5 and 3% a year, using as the base population

- 1) the Aboriginal (only) population at the 1971 Census
- 2) the Aboriginal plus Islander population at the 1971 Census
- 3) the State protected Aborigines & Islanders (almost the same as (2))
- 4) the reduced State estimate of total Aborigines Islanders

5) the old, higher State estimate.

as well as F.L. Jones' component projections. Note that obtained growth rates vary from 2 to 3%. I have used 2.5 to 3% because I cannot reconcile a rate of growth less than 2 1/2% with the age composition of the population. Jones' projections are based on the census Aboriginal (only) population, and show a very rapid rate of increase - the population doubles in twenty years. This may well occur, but if it does it will be a result not of natural increase but of changing identification. Natural increase can continue indefinitely, but the size of the reservoir of non-identifiers places a limit on the amount of growth that can arise from ethnic in-migration. Jones' projections as usual were based on birth rates and expectations of life which can now be seen to have been much too high, but he excluded Islanders, and his upper projection falls between my figures based on 'Census Aborigines Islanders' and 'Total State Aborigines Islanders'. It looks as if the census-based population could grow to about 66-79,000, by 2001, while the State-based projection reaches 90-110,000. My own guess is that the census population could indeed grow at 3% or even more as a result of ethnic in-migration for the rest of the century, and that a census population of 75-85,000 may be expected by then. But it all depends on the way in which the Queensland race relations situation develops.

7.4 South Australia

South Australia has the longest history of inclusion of Aborigines in census counts, but unfortunately the results obtained were extremely erratic. Looking at table and figure 7.4.1, it will be seen that the censuses of 1851, 1861, 1866, 1871, 1876, 1891, 1921, 1933, 1954 and 1961 were apparently quite deficient in coverage. In addition, the estimated number of 'half-castes' in 1947 was almost certainly too high. Consequently, the censuses can at most establish minimum figures. The early census Reports show populations by Counties, but it seems clear that those figures were obtained by a compilation of regional estimates rather than individual enumeration. I have never seen an explanation of the impossibly low 1921 figure, to which reference has been made in earlier sections.

The most difficult aspect of the South Australian census data is that people in remote areas in the north and west of the State seem periodically to have been omitted altogether, not only from enumeration, but also from the estimated totals, just as was the case in the annual Aboriginal censuses. But no mention was ever made of this in the census Reports. As noted earlier, at the 1945 Statisticians' Conference the South Australian representative not only opposed the continuation of the Aboriginal censuses, but considered that it was not worth the trouble of attempting to estimate the number of Aborigines beyond settled areas, even at the time of the general censuses.

The Colonial and State series in table and figure 7.4.2 are equally problematical. A Protectorate was not established in South Australia until 1897, and in the years between 1901 and 1910 estimates were obtained by adding births to and subtracting deaths from the 1901 Census figures, even though it was realized that 'doubtless many deaths and some births which occur in the bush go unrecorded' and that there may have been 'an influx of natives from the interior of the continent'.^{#8} Apparently more births than deaths were missed, because the 1910 figure was over 1,000 below the 1911 Census estimate. The same procedure was adopted between 1911 and 1921, yielding a picture of relative stability of numbers, which may or may not have reflected reality. The 1921 Census figure was too low, and provided no check.

#8

South Australia. Chief Protector of Aborigines. Reports: 1901, 1909.

Up until 1925 the annual Aboriginal census results continue to portray relative stability at just under 5,000 persons. However between 1926 and 1938 a rider was added to the statistics published in the South Australian Statistical Register to the effect that an unknown number of Aborigines in the north-west of South Australia were not included in the figures shown. This accounts for the dip in the 'total' and 'full-blood' graphs between those years. Between 1940 and 1960 no serious attempt was made to obtain realistic estimates; in 1956 it was merely stated that there were about 5,000 Aborigines in the State of whom half were 'full-bloods'.#9

In 1968, however, the administration of Aboriginal Affairs was reorganized and a comprehensive census was undertaken by the Department of Aboriginal Affairs in cooperation with Dr. F. Gale of the University of Adelaide. Degree of descent was not distinguished, at least in the published figures. This special census revealed a population of about 8,000, which has increased to almost 10,000 in 1972.

A sensible interpretation of the separate 'full-blood' population is extremely difficult, as will be clear from figure 7.4.3. The central portion of the graph is comprised of known underestimates and excludes the north-west. It may be that the population of full descent declined from about 4,000 in 1901 to just under 2,500 by 1954, subsequently to increase to over 3,000 by 1966. But given data as variable as this, it is really impossible to say. The census figures for 1921, 1933, 1947 and 1961 form an attractive looking curve, but are almost certainly too low, presumably because of underenumeration in remote areas. By far the most anomalous feature of figure 7.4.3 is the manner in which the census total rises from 1947 to 1954, then falls in 1961 to only just above the 1947 total, and then rises again sharply to 1966. No other State shows a decrease in the 'full-blood' or 'Aboriginal' population between 1954 and 1961, and the decrease is entirely in the 'estimated' portion. As will be seen, the 1954 estimate corresponds to the estimated State total at the time, while the 1961 figure relates entirely to those enumerated. The enumeration was greatly improved in 1961, but it seems almost certain that some people in remote areas were still omitted; the problem is to determine how many.

Some insight into the overall change in the 'full-blood' population may be obtained from the figures for those enumerated. These indicate an apparent decline from 1901 to 1947, but if the State total figures between 1912 and 1925 are correct, the actual decline in the total population was much shallower, perhaps reflecting the fact that the 1901 figure was not based on individual enumeration. If the decline in the number enumerated between 1911 and 1947 is assumed to relate to a roughly constant area, and if the size of the population beyond that area remained relatively constant throughout, then the actual changes in the revealed 'full-blood' population would seem to lie between limits set by two curves. The upper curve passes through the 1901 and 1911 Census totals and the State estimates to about 1925, falls to a low of about 3,000 in 1947 and 1954, and rises to a little over 3,000 in 1961 before rejoining the official curve in 1966. The lower curve would begin in 1901 with those enumerated only, follow the lower State estimates to about 1910, pass through the 1933 Census total, below that for 1947 and 1954, passing through a minimum of under 2,000 in 1947, and rejoining the official curve in 1961.

My own assessment, based on a detailed examination of changes in the population in sections of the State, and of the census survival ratios, is that the actual population change was closer to the upper than the lower limit, that the total figures to 1925 were only slightly too high if at all, that substantial numbers -

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South Australia. Aborigines Protection Board. Report 1956.

between 2,000 and 2,500 - were missed between 1911 and 1954, that the 'half-castes' said to have been missed in 1947 were in fact 'full-bloods' in the census usage, and that about 850 people were missed in 1961. This would mean that a minimum of something under 3,000 was reached about 1947, and that the 'full-blood' population stayed at that level until 1961, rising to just over 3,000 in 1966.

The 'half-caste' figures in figure 7.4.4 are much more straight-forward, since non-enumeration is not a problem, except perhaps in 1921. Clearly, however, the estimate of 826 'half-castes' not enumerated in 1947 is incompatible with the rest of the figures. Perhaps the State authorities who made the estimate were really referring to 'part-Aborigines' who, although enumerated, did not identify, since the 1947 total estimate does fit rather well with the State total figures of the 1960s and 1970s. However, as noted earlier, it is equally possible that the figure referred to people normally considered 'full-bloods'. In assessing the total 'revealed' populations I have used 'half-castes' as enumerated in 1901, 1911 and 1947, while I have assumed that about 150 people normally so described were omitted in 1921. There seems to be a tendency to understate numbers between 1953 and 1961; the 1966 State figure of almost 5,000 is reasonably correct and complete; as in other States, there must have been a tendency for persons of Aboriginal descent to avoid identifying in this period, but the extent of this was much more limited in South Australia than in the other States examined to date. It also began much later. As Rowley (1970b) has pointed out, this is largely because it was not until 1939, as part of the new look Elkin approach to native administration, that South Australia really introduced 'restrictive' as opposed to protective legislation, and no effort was made to segregate 'half-castes' in that State.

The total population as shown in figure 7.4.5 (and 7.4.10) reflects the erratic 'full-blood' data. It is hard to see any pattern in the estimated totals, but the curve of those enumerated as usual provides a useful lower limit and an indication of the relative changes that have occurred. Again, a curve passing through the high early estimates - to which we must now add 1881 -, slightly below that for 1947, but above those for 1954 and 1961, gives in my assessment the best approximation to the true overall change.

The picture is not initially made any clearer by the changes in the masculinity and age distributions presented in figures 7.4.1 and 7.4.7. Note that the overall masculinity of the South Australian population remains high right up to 1971. The increase in 1961 may indicate that more women than men were not enumerated in 1961, and that an undue proportion of them were young women aged 15 to 19.

I can offer no explanation for the consistently low masculinity of children from 1911 to 1947, except to suggest that it reflects differential identification, since the adult populations descended from these groups have very high masculinity. However, note that the Aboriginal census, although erratic, also seems to show this same characteristic, at least after 1933. Nor can I explain the sudden convergence of the child and adult curves in 1961, but the greatly improved enumeration in 1961 must surely have been partly responsible. Either differential enumeration and/or non-identification of male children has occurred, or else the mortality among male children must have been extraordinarily high during this period. On the other hand there is some indication in the 19th century masculinities of higher female child mortality, perhaps as a result of the practice of female infanticide.

The changes in the age distribution indicates that the enumerated population began to recover early this century, when the proportion of 'children' began to increase slowly, after staying steady at about 15% since 1876. Again there is

clear evidence of a slackening of growth since 1961, in the decreasing proportions at young ages.

Unfortunately the analysis relating to vital rates in South Australia cannot be taken past 1936. The State authorities ceased publishing vital statistics for reserves after 1939. However, the transition from decline to growth in the controlled population is clearly documented. The numbers before 1901 are too small to be taken seriously but the population on reserves (primarily Pt McLeay, Pt Pearce and Koonibba) during the period 1901 - 1936 varied from 500 to 1,000. During that time, as figure 7.4.8 shows, the crude birth rate rose from 40 to 50 per thousand, while the death rate fell from (about) 40 per thousand to 20-25 per thousand, so that the rate of natural increase went from around zero to 3% in 1931, dropping slightly in 1936. (figure 7.4.9). As in Queensland, there are also some figures available relating to the entire State - in South Australia, for the period 1900 to 1916. These are certainly under-estimates, but again it would seem that births and deaths were omitted to roughly the same extent. The total State birth rate declined very slightly, from about 13 per thousand in 1901 to about 12 in 1916, but the death rate fell from 27 per thousand to under 14 in the same period, resulting in a rate of natural increase which rose from about -1.4% in 1901 to about -0.2% in 1916, somewhat more plausible in fact than that derived from the station statistics.

The intercensal growth rates in figure 7.4.9 based on the official census totals fluctuate to an absurd degree. It may be questioned, however, whether the adjusted rates portrayed are too smooth. It is always possible that a part of the fluctuations assumed to have resulted from inadequate coverage may in fact have resulted from changing identification. A somewhat less damped version of the official curve would in fact be very similar to the New South Wales picture. The adjusted curve looks relatively plausible however, and it lies very close to the rates derived from the 'whole State' vital records, but I would not want to defend it too strongly. The transition from decline to growth occurs somewhere between about 1910 and 1920. The sharp increase from about 1% in 1947 to almost 3% in 1954-61 is assumed to result from changing identification, as is the drop to the 1966-71 rate of just over 2%. The reason is the same: inclusion of children and young adults in 1966 who were not identified in either 1961 or 1971. The true rate of growth again seems to be about 2 1/2%.

I have already discussed the problem of evaluating the estimates of numbers in 1788. 12,000 seems low, but 21,500 (tribes x 500) seems far too high. Gale (1964) quotes a figure of 11,048 persons as receiving rations in the southern Agricultural belt in 1860, but this almost certainly refers to the number of rations rather than individuals. She has also presented a graph of population from 1840 to 1960 which is quite different from mine; no detailed sources are acknowledged, but I do not think it could have been based on more than one or two figures, and I doubt whether she would now want to defend it. I have superimposed it on figure 7.4.10, for purposes of comparison. The graph shows 15,000 as the pre-contact population, roughly half-way between the highest and lowest sensible estimates. If this is correct it indicates that at its lowest, the South Australian population had been reduced to a third of its pre-contact level.

The figure of 12,000 quoted in table 7.4.3 under both 1836 and 1843 may have been intended as an estimate of the stable pre-European population, but if so the dates could not be correct. It is well established that smallpox reached the lower Murray long before South Australia was founded, so the pre-European population was almost certainly higher than when the settlement actually began.

Once the known underestimates are taken into account it appears that an initial decline of numbers lasted until about 1900, followed by relative stability of the census-revealed population at about 5,000 until as late as 1947. Between 1843

FIGURE 7.4.10. SOUTH AUSTRALIA. ESTIMATES OF TOTAL ABORIGINAL POPULATION 1788-2001.

TABLE 7.4.1 SOUTH AUSTRALIA. CENSUS ESTIMATES OF ABORIGINAL POPULATION.

		FULL DESCENT			OTHERS			TOTAL		
		males	females	persons	males	females	persons	males	females	persons
1851	Settled districts	.	.	.	.	.	.	.	.	3,730
1861	Settled districts	.	.	.	.	.	.	2,642	2,404	5,046
1866	Settled districts	.	.	.	.	.	.	2,375	2,022	4,397
1871	Settled districts	.	.	.	.	.	.	1,833	1,536	3,369
1876	Settled districts	.	.	.	.	.	.	2,203	1,750	3,953
1881	Settled districts	.	.	.	.	.	.	3,478 ^a	2,868 ^a	6,346 ^a
1891	Settled districts	.	.	.	.	.	.	1,661	1,473	3,134
1901	Enumerated	1,745	1,640	3,385	262	241	503	2,007	1,881	3,888
	Estimated	.	.	1,000	.	.	297 ^b	.	.	1,297
	Total	.	.	4,385	.	.	800 ^b	.	.	5,185
1911	Enumerated	802	637	1,439	346	346	692	1,148	983	2,131
	Estimated	.	.	2,561	.	.	125	.	.	2,686
	Total	.	.	4,000	.	.	817	.	.	4,817
1921	Enumerated	539	419	958	407	404	811	946	823	1,769
	Estimated	337	314	651	0	0	0	337	314	
	Total	876	733	1,609 ^c	407	404	811	1,283	1,137	2,420 ^c
1933	Enumerated	330	239	569	806	764	1,570	1,136	1,003	2,139
	Estimated	804	615	1,675	0	0	0	804	615	1,419
	Total	1,134	854	1,988 ^d	806	764	1,570	1,940	1,618	3,558 ^d
1947	Enumerated	259	205	464	1,103	1,054	2,157	1,362	1,259	2,621
	Estimated	935	740	1,675	422	404	826	1,357	1,144	2,501
	Total	1,194	945	2,139	1,525	1,458	2,983	2,719	2,403	5,122
1954	Aborigines:									
	enumerated	396 ^e	344 ^e	740	1,279	1,193	2,472	1,675 ^e	1,537 ^e	3,212
	estimated	942 ^e	818 ^e	1,760	0	0	0	942 ^e	818 ^e	1,760
	total	1,338 ^e	1,162 ^e	2,500	1,279	1,193	2,472	2,617 ^e	2,355 ^e	4,972
	T.S.Islanders	0	1	1	0	0	0	0	1	1
	Total	1,338 ^e	1,163 ^e	2,501	1,279	1,193	2,472	2,617 ^e	2,356 ^e	4,973
1961	Aborigines	1,181	966	2,147	1,426	1,311	2,737	2,607	2,277	4,884
	T.S.Islanders	0	0	0	1	0	1	1	0	1
	Total	1,181	966	2,147	1,427	1,311	2,738	2,608	2,277	4,885
1966	Aborigines:									
	$\frac{1}{2}$ or more	1,666	1,443	3,109	1,248	1,148	2,396	2,914	2,591	5,505
	less than $\frac{1}{2}$	.	.	.	518	561	1,079	518	561	1,079
	total	1,666	1,443	3,109	1,766	1,709	3,475	3,432	3,152	6,584
	T.S.Islanders:									
	$\frac{1}{2}$ or more	0	0	0	0	0	0	0	0	0
	Total	1,666	1,443	3,109	1,766	1,709	3,475	3,432	3,152	6,584
1971	Aborigines	.	.	.	.	.	.	3,697	3,443	7,140
	T.S.Islanders	.	.	.	.	.	.	87	72	159
	Total	.	.	.	.	.	.	3,784	3,515	7,299

Notes: a - all official abstracts show these figures as 'Total South Australia'; however the 'Australian Handbooks', 1887 & 1888, show it broken down to South Australia: 3,198 males, 2,480 females, 5,628 persons; Northern Territory: 280 males, 438 females, 718 persons; however I cannot find any official documentation of this.

b - this may be too high; the Tasmanian 1901 Census report says there are a total of 690 'half-castes' in South Australia.

c - definitely too low; the Chief Protector gave the population in 1921 as 3,787 'full-bloods', 957 'half-castes', total 4,744.

d - probably too low.

e - those not enumerated distributed by sex in same proportion as those enumerated.

TABLE 7.4.2 SOUTH AUSTRALIA. COLONIAL AND STATE ESTIMATES OF ABORIGINAL POPULATION 1836 - 1972.

		FULL DESCENT			OTHERS			TOTAL		
		males	females	persons	males	females	persons	males	females	persons
1836		.	.	.	.	.	.	.	.	12,000
1840	Adelaide area	.	.	.	.	.	.	405	245	650
1841	"	.	.	.	.	.	.	403	243	646
1843	Settled districts	.	.	.	.	.	.	.	.	1,600
1844	'in contact'	.	.	.	.	.	.	.	.	1,600
1845	Settled districts	.	.	.	.	.	.	.	.	1,600
1846	Settled districts	.	.	.	.	.	.	.	.	2,400
1847	Settled districts	.	.	.	.	.	.	.	.	3,680
1848	Settled districts	.	.	.	.	.	.	.	.	3,730
1849	Settled districts	.	.	.	.	.	.	.	.	3,730
1850	Settled districts	.	.	.	.	.	.	.	.	3,730
1851	Settled districts	.	.	.	.	.	.	.	.	3,780
1852	Settled districts	.	.	.	.	.	.	.	.	3,670
1853	Settled districts	.	.	.	.	.	.	.	.	3,640
1854	Settled districts	.	.	.	.	.	.	.	.	3,450
1855	Settled districts	.	.	.	.	.	.	.	.	3,540
1898		.	.	.	.	.	.	.	.	3,000
1900		.	.	.	.	.	.	.	.	2,861
1901		.	.	.	.	.	.	.	.	3,888
1903		.	.	3,236	.	.	537	.	.	3,773
1904		.	.	3,208	.	.	555	.	.	3,763
1905		.	.	3,174	.	.	571	.	.	3,745
1906		.	.	3,136	.	.	591	.	.	3,727
1907		.	.	3,097	.	.	606	.	.	3,703
1908		.	.	3,097	.	.	627	.	.	3,697
1909		.	.	2,841	.	.	650	.	.	3,491
		.	.	.	.	.	766	.	.	.
1910		.	.	2,810	.	.	800	.	.	3,610
1911		.	.	4,000	.	.	817	.	.	4,817
1912		.	.	4,000	.	.	836	.	.	4,836
1913		.	.	3,972	.	.	855	.	.	4,827
		.	.	.	.	.	.	.	.	5,000
1914		.	.	.	.	.	.	.	.	4,636
1915		.	.	3,902	.	.	906	.	.	4,808
1916		.	.	3,872	.	.	921	.	.	4,793
1917		.	.	3,852	.	.	920	.	.	4,772
1918		.	.	3,836	.	.	942	.	.	4,778
1919		.	.	3,787	.	.	957	.	.	4,774
1920		.	.	3,680	.	.	975	.	.	4,655
1921		.	.	3,787	.	.	957	.	.	4,744
1922		.	.	3,779	.	.	982	.	.	4,761
1923		.	.	3,757	.	.	1,001	.	.	4,758
1924		1,957	1,984	3,941	603	563	1,166	2,560	2,547	5,107
1925		.	.	3,897	.	.	1,196	.	.	5,093
1926		1,444	1,087	2,531	774	678	1,452	2,218	1,765	3,983
1927		1,204	945	2,149	826	728	1,554	2,030	1,673	3,703
1928		1,417	1,198	2,615	836	729	1,565	2,253	1,927	4,180
1929		1,451	1,179	2,630	798	548	1,456	2,249	1,837	4,086
1930		1,384	1,042	2,426	843	126	1,569	2,227	1,768	3,995
1931		914	743	1,657	898	794	1,692	1,812	1,537	3,349
1932		953	769	1,722	925	760	1,685	1,878	1,529	3,407
1933		1,134	854	1,988	865	726	1,591	1,999	1,580	3,579
1934		992	748	1,740	946	823	1,769	1,038	1,571	3,509
1935		951	790	1,741	1,040	1,007	2,047	1,991	1,797	3,788
1936		916	627	1,543	939	875	1,814	1,855	1,502	3,357
1937		1,003	731	1,734	1,106	997	2,103	2,109	1,728	3,837
1938		1,183	898	2,081	1,090	1,058	2,148	2,273	1,956	4,229
1939		1,460	1,224	2,684	1,145	1,052	2,197	2,605	2,276	4,881
1940		1,439	1,265	2,704	1,193	1,057	2,250	2,632	2,322	4,954
1941		1,463	1,335	2,798	1,146	1,074	2,220	2,609	2,409	5,018
1944		.	.	2,868	.	.	2,208	.	.	5,076
1953		.	.	2,500	.	.	2,500	.	.	5,000
1954		.	.	2,500	.	.	2,500	.	.	5,000
1955		.	.	2,500	.	.	2,500+	.	.	5,000
1956		.	.	2,500	.	.	2,500+	.	.	5,000
1957		.	.	2,500	.	.	2,500+	.	.	5,000
		.	.	2,400	.	.	2,600	.	.	5,000
1958		.	.	2,500	.	.	2,500+	.	.	5,000
1959		.	.	2,500	.	.	2,500+	.	.	5,000
1960		.	.	2,000	.	.	4,000	.	.	6,000
1961		.	.	2,000	.	.	4,000	.	.	6,000
1962		.	.	2,000	.	.	4,000	.	.	6,000
1963		.	.	2,000	.	.	4,000	.	.	6,000
1964		.	.	2,250	.	.	3,850	.	.	6,100
1965		.	.	.	.	.	.	.	.	6,200
1966		.	.	3,128	.	.	4,632	.	.	7,760
1967		.	.	.	.	.	.	.	.	8,015
1968		.	.	.	.	.	.	.	.	7,870
1969		.	.	.	.	.	.	.	.	8,240
1970		.	.	.	.	.	.	.	.	9,044
1971		.	.	.	.	.	.	.	.	9,450
1972		.	.	.	.	.	.	.	.	9,780

From 1924 to 1944 the figures shown in the Annual Reports come from the Annual Aboriginal Censuses, so these are not shown separately.

TABLE 7.4.3. SOUTH AUSTRALIA. MISCELLANEOUS ESTIMATES OF ABORIGINAL POPULATION 1788-1973.

1788	10,000	Radcliffe-Brown (1930); F.L.Jones (1970a).
	to 10,000	Davidson (1938).
	12,000	
	11,952	Radcliffe-Brown's estimate raised to give Australian total of 300,000.
	15,000	My best estimate.
	21,500	Tindale's (1940) tribes x 500.
	25,800	Tindale's (1940) tribes x 600.
1836	12,000	'At the foundation of the Colony' <u>Australian Handbook</u> 1887, etc. Also in South Australia. Chief Protector of Aborigines. <u>Report</u> 1904.
1843	12,000	J.D.Woods, quoted in <u>Australian Yearbook</u> 1924.
1907	3,800	Queensland. Chief Protector of Aborigines. <u>Report</u> 1907.
1908	3,800	" " " " " " 1908.
	3,386	<u>Australian Yearbook</u> 1924.
1910	4,600	Queensland. Chief Protector of Aborigines. <u>Report</u> 1910.
1912	4,820	" " " " " " 1913.
1915	4,842	" " " " " " 1915.
1957	5,635	Gale (1964). Compiled estimate. (1935 'full-blood', 3635 others)
1973	10,140	Scott (1973).

TABLE 7.4.4. SOUTH AUSTRALIA. ESTIMATES OF ABORIGINAL VITAL RATES 1901-1936 BASED ON RESERVE STATISTICS.

5 Years centred on	Average population	Average annual births	Average annual deaths	Average natural increase	Average birth rate	Average death rate	Average rate of increase
1901	525.83	22.43	17.58	4.85	.0427	.0334	.0093
1906	623.03	31.26	31.30	-0.04	.0502	.0502	.0000
1911	707.60	25.20	27.03	-1.87	.0356	.0382	-.0026
1916	699.35	28.85	23.50	5.35	.0413	.0336	.0077
1921	734.50	29.83	21.00	8.83	.0406	.0286	.0120
1926	703.80	33.00	19.20	13.80	.0469	.0273	.0196
1931	827.40	41.30	16.10	25.20	.0499	.0195	.0304
1936	929.30	45.70	24.80	20.90	.0492	.0267	.0225

Sources: Based on records from Kopperamanna 1900-1914, Pt. Pearce 1900-1939, Pt. McLeay 1900-1939, Manunka 1904-1909, and Koonibba 1904-1939.

TABLE 7.4.5. SOUTH AUSTRALIA. ESTIMATES OF ABORIGINAL VITAL RATES FOR WHOLE STATE 1901-1916.

5 Years centred on	Average population	Average annual births	Average annual deaths	Average natural increase	Average birth rate	Average death rate	Average rate of increase
1901	3,286.76	43.29	91.29	-48.00	.0132	.0278	-.0146
1906	3,794.05	49.20	65.10	-15.90	.0130	.0172	-.0042
1911	4,625.92	51.70	68.90	-17.20	.0112	.0149	-.0037
1916	4,788.58	57.10	65.30	-8.20	.0119	.0136	-.0017

Sources: South Australia. Aborigines Department. Chief Protector of Aborigines. Reports 1900-1919.

TABLE 7.4.6. SOUTH AUSTRALIA. ESTIMATES OF TOTAL ABORIGINAL POPULATION, AND IMPLIED ANNUAL GROWTH RATES, 1788, AND CENSUSES 1861 - 1971.

	ENUMERATED POPULATION	TOTAL 'REVEALED' POPULATION						MINIMUM TOTAL POPULATION	
		Official estimates			Adjusted estimates			Estimated total	Growth rate
		Not enumerated	Estimated total	Growth rate	Not enumerated	Estimated total	Growth rate		
1788	-	-	-	-	-	15,000	-	15,000	-
1861	5,046	0	5,046	-.0275	3,954	9,000	-.0070	9,000	-.0070
1866	4,397	0	4,397	-.0533			-.0182		-.0182
1871	3,369	0	3,369	.0320	4,131	7,500		7,500	
1876	3,953	0	3,953	.0947			-.0167		-.0167
1881	6,346	0	6,346	-.0705	0	6,346		6,346	
1891	3,134	0	3,134	.0504	2,466	5,600	-.0125	5,600	-.0125
1901	3,888	1,297	5,185	-.0074	1,000	4,888	-.0136	4,888	-.0136
1911	2,131	2,686	4,817	-.0688	2,561	4,692	-.0041	4,692	-.0041
1921	1,769	651	2,420	.0321	2,829	4,598	-.0020	4,598	-.0020
1933	2,139	1,419	3,558	.0260	2,560	4,699	.0018	4,699	.0018
1947	2,621	2,501	5,122	-.0042	2,501	5,122	.0062	5,600	.0125
1954	3,213	1,760	4,973	-.0026	2,160	5,373	.0068	6,300	.0168
1961	4,885	0	4,885	.0597	850	5,735	.0093	7,200	.0191
1966	6,584	0	6,584	.0206	0	6,584	.0276	8,100	.0236
1971	7,299	0	7,299		0	7,299	.0206	9,450	.0308

TABLE 7.4.7. SOUTH AUSTRALIA. VARIOUS PROJECTIONS OF ABORIGINAL POPULATION 1971 - 2001.

	CENSUS POPULATION (Aborigines + Islanders)		STATE ESTIMATES.		F.L. JONES.	
	2½%	3%	2½%	3%	Low	High
1971	7,299		9,780 (1972)		7,620	7,819
1976	8,258	8,462	10,795	11,007	8,906	9,352
1981	9,343	9,809	12,214	12,761	10,517	11,266
1986	10,571	11,372	13,819	14,793	12,460	13,608
1991	11,960	13,183	15,635	17,149	14,730	16,445
1996	13,532	15,282	17,689	19,881	17,368	19,880
2001	15,310	17,717	20,014	23,047	20,473	24,058

and 1881 the estimates are by interpolation. From 1881 to about 1933 the 'revealed' and 'total' populations are both the same, as described when discussing figure 7.4.5. Thereafter, I have assumed that 'minimum total' population diverges gradually, joining the State estimates in 1971 and 1972. The downward bulge in the 'revealed' population between 1940 and 1966 is relatively minor, and the extent to which non-identifiers have re-identified is not really particularly marked. The South Australian picture, as noted before, is rather like that for New South Wales, but somewhat less extreme. Jones' projections here again are too high, being based on the 1961-66 rate of growth. His high projection by 2001 is greater than that obtained by compounding the State estimates at 3% annually. Again, however, Jones' projections may well be realized, but as a result of changing identification rather than natural growth. There were apparently some 2,000 people of Aboriginal descent who did not identify at the 1971 census, and a gradual (or sudden) movement of these people back into the identified population could result in an apparent rate of growth of from 3.5 to 4% a year, if the non-identifying section has the same rate of natural increase as those identified. A population of from 17 to 18,000 by the end of the century seems almost certain.

7.5 Western Australia

There are also great problems in interpreting the Western Australian data. Once again the nineteenth century decline is totally undocumented, but in addition the history of the population in the twentieth century is complicated by the inclusion in published estimates since 1919 of an estimated 10,000 persons out of contact. These were supposed to be people living tribally in the west and north-west, beyond the area of European occupation; but as settlement spread, very few of this large number materialized, and it seems clear that a more accurate picture of the population history is obtained if these 10,000 are entirely excluded.

As mentioned earlier, at censuses from 1921 the number of 'full-bloods' enumerated was compared with estimates provided by the 'States, and adjusted upwards if the State figure was higher. Western Australian State estimates from 1921 to 1947 included this extra 10,000 persons, reduced to 6,000 from 1948 to 1958, then to 4,000, 2,000 and finally zero within the space of four years. As a result some massive upward adjustments of census figures were made, as shown in table 7.5.1. As late as 1961, 2,000 persons were added to the census enumeration. These adjustments have distorted the 'total' and 'full-blood' curves in figure 7.5.1, and I have tried to separate out those enumerated from those estimated in order to make the actual situation clearer.

The 'half-caste' curve in figure 7.5.1 looks reasonable, apart from the inclusion of about 1,300 people estimated not enumerated in 1947. As in South Australia, the reasoning behind this apparent violation of the Constitution and the census Act is quite obscure. A somewhat clearer picture of the effect of the inclusion of the extra 10,000 people is obtained from the State estimates in figure and table 7.5.2. In 1919 the State authorities began an annual census-type count of the Aborigines in the State, based on regional compilations by police officers. This was continued as the joint annual census of Aborigines from 1921 to 1944, and after the second world war the records were maintained by the local officers of the Department of Native Affairs. Note that there is no sign, in the years when the estimated number out of contact was reduced, of any corresponding increase in the number of those enumerated; nor (except in the 1920s) of any such increase in the years preceding; it appears that if these 10,000 people ever existed, they disappeared before anyone was able to enumerate them. J.P.M. LONG (1966:2) doubts whether there were more than a few hundred not enumerated at the 1961 census.

For a few years during the 1920s and 1930s figures were published showing the number of persons of Aboriginal descent not legally under the control of the Government, but this was abandoned in 1936 when a new Act with much wider application was enacted, and only in 1968 was the practice resumed. However, on the basis of the figures available, it is at least possible to make a guess as to the contributions of incomplete coverage vis-a-vis changing identification to population movements since 1920.

Figures 7.5.3 and 7.5.5 clearly show the way in which census estimates of 'full-bloods' were adjusted upwards to correspond with the total population as estimated by the State at all censuses to 1961. It is difficult to even guess what really happened to the 'full-bloods' up to 1966; the 'half-caste' figures are as usual reasonably consistent, with the same slight downward bulge in the 1950s noted in other States (figure 7.5.4). The 1961 and 1966 Census 'half-caste' and 'half and less' figures are some 2,000 below the State figures for those under the Act. Western Australia applied until recently a somewhat wider definition than used in most other States in the application of restrictive laws, and as a result there may have been a considerable number of 'part-Aboriginal' people who were legally 'natives' but who preferred not to identify as Aborigines at the census.

Given the relative consistency of these 'half-caste' figures, we can put aside figure 7.5.4 and concentrate on understanding the history of the 'full-blood' and 'total' population. Working backwards, and using the changes in the number enumerated as an indication of the changes that occurred in the total population, it would seem that if only people considered 'full-bloods' for State purposes were identified as 'full-bloods' at the census, then there were at most 1,000 people not enumerated in 1961. Since 1961, the State-estimated 'full-blood' population has been increasing slowly, but it still does not equal the 1961 Census figure, which included an estimated 2,000 not enumerated.

Of course, as clearly occurred in 1966, some people not 'full-bloods' by the State definition may have described themselves simply as 'Aborigines' in 1961; if so the number of State 'full-bloods' not enumerated may have been higher than I have suggested. In 1954, 1947 and 1933 it seems that the State figures for those 'in contact' are also the best estimate of the total 'full-blood' population, which yields a curve, parallel to the enumerated one, which when projected back through 1921 and 1911 indicates about 20,000 and 24,000 respectively. This would imply that about 6,000 people were missed in 1921, 1933, and 1947, 2,000 to 2,500 in 1954, and about 1,000 in 1961, and that those returned at the joint censuses in 1931, 1932 and 1944 represented virtually the entire Aboriginal population of the State. If there were actually some extra people enumerated as 'full-bloods' in 1961, the 1954 and 1947 totals may need to be about 1,000 higher, and since this assumption would make both the 1954 and 1961 official estimates the best estimated, I have adopted it for estimating the total revealed population.

As mentioned earlier, Schapper (1970) attempted to reconstruct the history of the Western Australian Aboriginal population back to 1946 by backward projection based on the same hypothetical vital rates he used for his projections to 2001. This is not a valid procedure; it is clear from all the data that the rate of increase has been increasing since the 1940s, so not surprisingly the backward projections based on constant rates and the 1966 age distribution are progressively too low as they move further back in time.

Figures 7.5.3, 7.5.4 and 7.5.5 also show a series of estimates of the population presented by Biskup (1973). The precise method used to establish these figures is not clear, but they are in general agreement with my own assessment.

The outline just presented would indicate that the population decline in Western Australia lasted until about 1947, but a very different picture emerges from an examination of the changes in the masculinity and age distribution summarized in figure 7.5.6 and 7.5.7. According to the age distribution, the shift from decline to growth seems to have occurred between 1911 and 1933. The difficulty here again is in assessing the effect of incomplete enumeration. The masculinity of children shows a similar shift at the beginning of the century to that noted in South Australia, and again the cessation of differential female infanticide may have been responsible. During this century masculinity at all ages has gradually fallen from about 115 males per hundred females to about 105. Note that during the entire period the masculinity of children at the censuses has remained both relatively constant and relatively normal at between 100 and 109. Adult census masculinity has been somewhat higher, but nowhere near as high as that indicated by the Aboriginal censuses or the State population estimates. I cannot explain the discrepancy.

On the other hand the difference between the census age distributions and those based on the Aboriginal censuses and State estimates is readily explained. When the special censuses began, a 'child' meant someone under 12 years of age. But the meaning of the term changed first to 15 and later to 16 years in the State series (when the changes occurred is not made clear). The gradual increase in the proportion of 'children' is thus a result of a gradual shift in definition.

Note however that according to the Aboriginal censuses the proportion 0-11 was still under 15% in 1925, even though the proportion to age 10 enumerated at the general census had risen by then to over 20%; the enumerated population was probably beginning to recover while the total population was still declining. The plateau in the age distribution between 1933 and 1947 may reflect the same thing - that is, the population enumerated at those censuses may have been reasonably representative, and the stable proportions may confirm the earlier suggestion that recovery did not begin until after 1947.

In the case of Western Australia the slackening of growth in the proportion at young ages since 1961 is not nearly as marked as in the States considered so far. Western Australia's Aboriginal population may not yet have passed out of the rapid growth stage, but unfortunately there are no accessible vital records against which to check this assumption. Births, deaths and populations have been collected and published sporadically for particular communities, but never over a long enough time-span to enable meaningful rates to be calculated. The official intercensal rates shown in figure 7.5.8 reflect the disturbing effect of the estimated numbers out of contact, but as in the case of South Australia there is a danger in correcting these estimates of also eliminating the genuine effects of changing identification. In addition, in the case of Western Australia, there is no firm anchor in the early years of this century, and if the 1901 and 1911 Census estimated totals were used a much steeper decline would result, while if the number enumerated in 1921 was taken as the total at that time, a much longer stationary period and an earlier transition to growth would be obtained. My own adjusted estimates lie between these extremes.

The high rate of growth between 1961 and 1966, and the very low rate between 1966 and 1971, result from changing identification of young children. The 1961-71 rate of growth is about 2% a year, which is almost certainly substantially below the rate of natural growth, as a result of a continuing overall tendency for there to be a net loss to the population as a result of people ceasing to identify. There were apparently at least 8,000 persons of Aboriginal descent in Western Australia who did not identify at the census, reflecting the serious discrimination and derision that is still brought to bear on Aboriginal people, especially in rural and provincial areas of the State.

TABLE 7.5.1. WESTERN AUSTRALIA. CENSUS ESTIMATES OF ABORIGINAL POPULATION 1848-1971.

	FULL DESCENT			OTHERS			TOTAL		
	males	females	persons	males	females	persons	males	females	persons
1848 Settled districts									
In employ	.	.	.	.	.	.	418	123	541
Others	.	.	.	.	.	.	.	.	1,419
Total	.	.	.	.	.	.	.	.	1,960
1854 In employ	.	.	.	.	.	.	195	38	233
1859 In employ	.	.	.	.	.	.	176	69	245
1870 Settled districts									
In employ	.	.	.	.	.	.	759	269	1,028
Others	.	.	.	.	.	.	.	.	2,322
Total	.	.	.	.	.	.	.	.	3,000
1881 Settled districts	.	.	.	.	.	.	1,640	706	2,346
1891 Settled districts	3,223	2,447	5,670	293	282	575	3,516	2,729	6,245
1901 Settled districts	2,933	2,328	5,261	492	459	951	3,425	2,787	6,212
Estimated	.	.	23,888	.	.	0	.	.	23,888
Total	.	.	29,049	.	.	951	.	.	30,000
1911 Enumerated	3,433	2,936	6,369	760	715	1,475	4,193	3,651	7,844
Estimated	9,516	8,138	17,654	0	0	0	9,516	8,138	17,654
Total	12,949	11,074	24,023	760	715	1,475	13,709	11,789	25,498
1921 Enumerated	8,611	6,976	15,587	1,101	859	1,960	9,712	7,835	17,547
Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
Total	13,611	11,976	25,587	1,101	859	1,960	14,712	12,835	27,547
1933 Enumerated	3,570	3,093	6,663	1,735	1,709	3,444	5,305	4,806	10,107
Estimated	10,038	8,922	18,960	0	0	0	10,038	8,922	18,960
Total	13,608	12,015	25,623	1,735	1,709	3,444	15,343	13,724	29,067
1947 Enumerated	2,664	2,269	4,933	2,359	2,215	4,574	5,023	4,484	9,507
Estimated	.	.	15,405	.	.	1,322	.	.	16,727
Total	.	.	20,338	.	.	5,896	.	.	26,234
1954 Enumerated	3,540	3,139	6,679	3,024	2,996	6,020	6,564	6,135	12,699
Estimated	.	.	3,516	0	0	0	.	.	3,516
Total	.	.	10,195	3,024	2,996	6,020	.	.	16,215
1961 Enumerated	4,243	3,878	8,121	4,103	4,047	8,155	8,351	7,925	16,276
Estimated	.	.	2,000	0	0	0	.	.	2,000
Total	.	.	10,121	4,103	4,047	8,155	.	.	18,276
1966 Aborigines:									
$\frac{1}{2}$ or more	5,878	5,549	11,427	3,627	3,385	7,012	9,505	8,934	18,439
less than $\frac{1}{2}$	.	.	.	1,362	1,345	2,707	1,362	1,345	2,707
total	5,878	5,549	11,427	4,989	4,730	9,719	10,867	10,279	21,146
T.S. Islanders:									
$\frac{1}{2}$ or more	87	5	92	1	0	1	88	5	93
Total	5,964 ^a	5,554	11,518 ^a	4,990	4,730	9,720	10,954 ^a	10,284	21,238 ^a
1971 Aborigines	.	.	.	.	.	.	11,250	10,653	21,903
T.S. Islanders	.	.	.	.	.	.	210	68	278
Total	.	.	.	.	.	.	11,460	10,721	22,181

Note: a - Persons of less than half Aboriginal descent whose main race was 'Torres Strait Islander' or 'half-caste Torres Strait Islander are counted only once in the total.

TABLE 7.5.2 WESTERN AUSTRALIA. COLONIAL AND STATE ESTIMATES OF ABORIGINAL POPULATION 1838 - 1974.

	FULL DESCENT			OTHERS			TOTAL				
	Settled districts	Beyond settlement	Total	Under Act	Not	Total	Settled districts Under Act	Beyond settlement	Total	Under Act	Total
1838	.	.	.	.	.	.	.	750	a	.	a
1848	.	.	.	.	.	.	.	1,960	a	.	a
1886	.	.	.	.	.	.	.	4,439	a	.	a
1896	.	.	.	.	.	.	.	15,000	a	.	a
1898	.	.	.	.	.	.	.	a	a	.	30,000
1899	.	.	.	.	.	.	.	12,183	17,817	.	30,000
1901	11,830	17,170	29,000	.	.	1,000	.	12,830	17,170	.	30,000
1902	a	a	a	.	.	.	.	a	a	.	30,000
1903	13,144	18,000	31,144	.	.	856	.	12,000	18,000	.	30,000
1904	a	a	29,000	.	.	1,000	.	a	a	.	30,000
1905	a	a	29,100	.	.	900	.	a	a	.	30,000
1906	a	a	a	.	.	a	.	a	a	.	30,000
1907	a	a	a	.	.	a	.	a	a	.	27,000
1908	11,000	20,000	31,000	.	.	1,000	.	12,000	20,000	.	32,000
1909	a	a	a	.	.	a	.	a	a	.	27,000
1910	a	a	a	.	.	a	.	a	a	.	27,000
1911	a	a	a	.	.	a	.	a	a	.	27,000
1912	a	a	a	.	.	a	.	a	a	.	26,000
1913	a	a	a	.	.	a	.	a	a	.	32,000
1914	a	a	a	.	.	a	.	a	a	.	32,000
1915	a	a	a	.	.	a	.	13,813	18,187	.	32,000
1916	a	a	a	.	.	a	.	12,806	a	.	a
1917	12,888	10,000	22,888	.	.	1,603	.	14,491	10,000	.	24,491
1918	15,767	10,000	25,767	.	.	826	.	16,593	10,000	.	26,593
1920	a	a	a	.	.	a	.	a	a	.	24,000
1921	15,587	10,000	25,587	.	.	2,084	.	17,671	10,000	.	27,671
1927	12,942	10,000	22,942	2,343	404	2,747	15,285	15,689	10,000	25,285	25,689
1928	12,759	10,000	22,759	2,507	247	2,754	15,266	15,513	10,000	25,266	25,513
1929	12,815	10,000	22,815	2,502	331	2,833	15,317	15,648	10,000	25,317	25,648
1930	a	a	a	.	.	a	.	a	a	.	a
1931	13,197	10,000	21,197	3,097	433	3,530	16,294	16,727	10,000	26,294	26,727
1932	14,766	10,000	24,766	3,165	550	3,715	17,931	18,481	10,000	27,931	28,481
1933	15,130	10,000	25,130	3,338	553	3,891	18,468	19,021	10,000	28,468	29,021
1934	12,513	10,000	22,513	3,453	552	4,005	15,966	16,518	10,000	25,966	26,518
1935	12,197	10,000	22,197	3,422	823	4,245	15,619	16,442	10,000	25,619	26,442
1936	12,036	10,000	22,036	3,690 ^b	583	4,273	15,726	16,309	10,000	25,726 ^b	26,309
1937	12,118	10,000	22,118	4,209	a	a	16,327	a	10,000	26,327	a
1938	11,882	10,000	21,882	4,602	a	a	16,484	a	10,000	26,484	a
1939	11,878	10,000	21,878	4,688	a	a	16,566	a	10,000	26,566	a
1943	11,449	10,000	21,449	5,471	a	a	16,920	a	10,000	26,920	a
1944	11,532	10,000	21,532	5,520	a	a	17,052	a	10,000	27,052	a
1945	10,891	10,000	20,891	4,748	a	a	15,639	a	10,000	25,639	a
1947	10,338	10,000	20,338	4,896	a	a	16,234	a	10,000	26,234	a
1949	10,724	6,000	16,724	6,039	a	a	16,763	a	6,000	22,763	a
1950	9,943	6,000	15,943	6,446	a	a	16,389	a	6,000	22,389	a
1951	8,606	6,000	14,606	6,486	a	a	15,092	a	6,000	21,092	a
1952	9,081	6,000	15,081	5,970	a	a	15,051	a	6,000	21,051	a
1953	7,872	6,000	13,872	6,914	a	7,000 ⁺	14,786	a	6,000	20,786	a
1954	8,195	6,000	14,195	7,262	a	a	15,457	a	6,000	21,457	a
1955	8,522	6,000	14,522	6,840	a	a	15,362	a	6,000	21,362	a
1956	8,351	6,000	14,351	6,947	a	a	15,298	a	6,000	21,298	a
1957	8,536	6,000	14,536	6,963	a	a	15,499	a	6,000	21,499	a
1958	8,655	6,000	14,655	7,196	a	a	15,851	a	6,000	21,851	a
	8,655	4,000	12,655	7,196	a	a	15,851	a	4,000	19,851	a
	8,655	2,000	10,655	7,196	a	a	15,851	a	2,000	17,851	a
1959	8,625	2,000	10,625	7,673	a	a	16,298	a	2,000	18,298	a
1960	8,872	2,000	10,872	8,160	a	a	17,032	a	2,000	19,032	a
1961	a	a	10,000	9,416	a	a	a	a	a	19,416 ^c	a
1962	8,854	.	8,854	10,703	a	a	19,557	a	.	19,557	a
1963	9,205	.	9,205	11,249	a	a	20,454	a	.	20,454	a
1964	9,411	.	9,411	11,579	a	a	20,990	a	.	20,990	a
1965	9,737	.	9,737	11,490	a	a	21,227	a	.	21,227	a
1966	9,905	.	9,905	11,985	a	a	21,890	a	.	21,890	a
1967	9,466	.	9,466	13,017	a	a	22,483	a	.	22,488	a
1968	9,706	.	9,706	13,230	3,000	16,230	22,936	25,936	.	22,936	25,936
1969	9,246	.	9,246	14,181	4,073	18,254	23,427	27,500	.	23,427	27,500
1970	9,349	.	9,349	14,465	a	a	23,814	a	.	23,814	a
1971	9,453	.	9,453	14,939	3,608	18,547	24,392	28,000	.	24,392	28,000
1972	9,414	.	9,414	16,000	3,586	19,586	25,414	29,000	.	25,414	29,000
1973	10,354	.	10,354	.	.	18,538	.	28,892	.	.	28,892
1974	10,636	.	10,636	.	.	19,344	.	29,980	.	.	29,980

Notes: a - not available

b - excluded are 'adult quadrooms'

c - including my estimate of 6,000 in Northern Division and 2,000 in Eastern

TABLE 7.5.3

WESTERN AUSTRALIA. ANNUAL ABORIGINAL CENSUSES 1921 - 1944.

		FULL DESCENT			OTHERS			TOTAL		
		males	females	persons	males	females	persons	males	females	persons
1921	Returned	8,611	6,976	15,587	1,199	885	2,084	9,810	7,861	17,671
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	13,611	11,976	25,587	1,199	885	2,084	14,810	12,861	27,761
1924	Returned	6,557	5,703	12,260	934	834	1,768	7,491	6,537	14,028
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	11,557	10,703	22,260	934	834	1,768	12,491	11,537	24,028
1925	Returned	6,830	5,641	12,471	1,238	1,085	2,323	8,068	6,726	14,794
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	11,830	10,641	22,471	1,238	1,085	2,323	13,068	13,726	24,794
1926	Returned	6,662	5,560	12,222	1,341	1,079	2,420	8,003	6,639	14,642
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	11,662	10,560	22,222	1,341	1,079	2,420	13,003	11,639	24,642
1927	Returned	7,027	5,968	12,995	1,332	1,255	2,587	8,359	7,223	15,582
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	12,027	10,968	22,995	1,332	1,255	2,587	13,359	12,223	25,582
1928	Returned	6,689	5,908	12,597	1,288	1,149	2,437	7,977	7,057	15,034
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	11,689	10,908	22,597	1,288	1,149	2,437	12,977	12,057	25,034
1929	Returned	6,941	5,975	12,916	1,416	1,295	2,711	8,357	7,270	15,627
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	11,941	10,975	22,916	1,416	1,295	2,711	13,357	12,270	25,627
1930	Returned	7,112	6,062	13,174	1,679	1,447	3,126	8,791	7,509	16,300
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	12,112	11,062	23,174	1,679	1,447	3,126	13,791	12,509	26,300
1931	Returned	7,207	5,903	13,110	1,738	1,659	3,397	8,945	7,562	16,507
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	12,207	10,903	23,110	1,738	1,659	3,397	13,945	12,562	26,507
1932	Returned	8,147	6,736	14,883	1,745	1,606	3,351	9,892	8,342	18,234
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	13,147	11,736	24,883	1,745	1,606	3,351	14,892	13,342	28,234
1933	Returned	8,608	7,015	15,623	1,927	1,748	3,675	10,535	8,763	19,298
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	13,608	12,015	25,623	1,927	1,748	3,675	15,535	13,763	29,298
1934	Returned	6,916	5,587	12,503	2,071	1,941	4,012	8,987	7,528	16,515
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	11,916	10,587	22,503	2,071	1,941	4,012	13,987	12,528	26,515
1935	Returned	6,780	5,408	12,188	2,258	1,996	4,254	9,038	7,404	16,442
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	11,780	10,408	22,188	2,258	1,996	4,254	14,038	12,404	26,442
1936	Returned	6,820	5,227	12,047	2,297	1,969	4,266	9,117	7,196	16,313
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	11,820	10,227	22,047	2,297	1,969	4,266	14,117	12,196	26,313
1937	Returned	6,850	5,268	12,118	2,172	2,037	4,209	9,022	7,305	16,327
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	11,850	10,268	22,118	2,172	2,037	4,209	14,022	12,305	26,327
1938	Returned	6,657	5,225	11,882	2,382	2,220	4,602	9,039	7,445	16,484
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	11,657	10,225	21,882	2,382	2,220	4,602	14,039	12,445	26,484
1939	Returned	7,166	4,712	11,878	2,473	2,215	4,688	9,639	6,927	16,566
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	12,166	9,712	21,878	2,473	2,215	4,688	14,639	11,927	26,566
1940	Returned	7,152	4,669	11,821	2,507	2,274	4,781	9,659	6,943	16,602
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	12,152	9,669	21,821	2,507	2,274	4,781	14,659	11,943	26,602
1941	Returned	7,017	4,692	11,709	2,319	2,088	4,407	9,336	6,780	16,116
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	12,017	9,692	21,709	2,319	2,088	4,407	14,336	11,780	26,116
1944	Returned	6,903	5,307	12,210	2,578	2,304	4,882	9,481	7,611	17,092
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	11,903	10,307	22,210	2,578	2,304	4,882	14,481	12,611	27,092

TABLE 7.5.4. DOWLEY AND SCHAPPER'S ESTIMATES OF WESTERN AUSTRALIAN ABORIGINAL POPULATION.

<u>Pre-contact</u>	1788	to 50,000 100,000
<u>Backward projections</u>	1946 1947 1951 1954 1956 1961	12,616 12,787 13,542 14,788 15,652 18,101
<u>Base population</u>	1966	20,743
<u>Projections</u>	1971 1976 1981 1986 1991 2001	24,198 28,688 34,434 41,362 49,924 73,832
Source: Schapper (1970)		

TABLE 7.5.5. BISKUP'S (1973) ESTIMATES OF WESTERN AUSTRALIAN ABORIGINAL POPULATION 1830-1960.

	<u>FULL DESCENT</u>	<u>OTHERS</u>	<u>TOTAL</u>
1830 (up to)	.	.	55,000
1890	.	600	.
1900	23,000	1,000	24,000
1910	21,500	1,500	23,000
1920	19,400	2,100	21,500
1930	14,500	3,500	19,000
1940	12,700	4,800	17,500
1950	10,000	6,500	16,500
1960	8,900	8,100	17,000

TABLE 7.5.6. WESTERN AUSTRALIA. OTHER MISCELLANEOUS ESTIMATES OF ABORIGINAL POPULATION 1788-1973.

1788	40,000	F.L.Jones (1970a).
	to 52,000	Radcliffe-Brown's (1930) initial estimate. (Final estimate 55,000).
	to 55,000	
	to 55,000	Davidson (1938)
	to 63,000	
'perhaps 60,000'		Western Australia. Select Committee on Native Matters. <u>Report</u> 1958.
	62,000	My best estimate.
	62,151	Radcliffe-Brown's final estimate raised to Australian total of 300,000.
	63,000	Tindale's (1940) tribes x 500.
	75,600	Tindale's (1940) tribes x 600.
	100,000	Grenfell Price (1949), quoting Radcliffe-Brown. (a mistake.)
1909	24,000	Dr Roth, quoted in <u>Australian Yearbook</u> 1909.
1912	33,475	South Australia. Chief Protector of Aborigines. <u>Report</u> 1913.
1920	24,000	Northern Territory. Acting Administrator. <u>Report</u> 1920.
1968	25,000	Best estimate by Commonwealth and State officials.
1973	28,910	Scott (1973).

TABLE 7.5.7. WESTERN AUSTRALIA. CALCULATION OF AGE-SPECIFIC BIRTH RATES FROM HOSPITAL STATISTICS.

Age of mother	Number of confinements ^a	1971 CENSUS AS BASE		1971 STATE ESTIMATE AS BASE	
		No. of women	Rate	No. of women ^b	Rate
15-19	346 ^c	1,045	.3311	1,336	.2590
20-24	405	865	.4682	1,106	.3662
25-29	252	639	.7387	817	.3084
30-34	158	576	.2743	736	.2147
35-39	89	498	.1787	637	.1397
40-44	32	455	.0703	582	.0550
45-49	4	355	.0113	454	.0088
Total	1,286		10.3630		6.7590
(Crude rate)		(21,903)	(.0507)	(28,000)	(.0459)

Notes: a - From W.A. Commissioner of Public Health Report, 1971: 131. 35 unstated ages distributed.
b - Obtained by applying 1971 Census age distribution to 1971 State estimate of total population.
c - Including 11 where age of mother was stated as under 15.

TABLE 7.5.8. WESTERN AUSTRALIA. ESTIMATES OF TOTAL ABORIGINAL POPULATION, AND IMPLIED ANNUAL GROWTH RATES, 1788, AND CENSUSES 1861 - 1971.

	ENUMERATED POPULATION	TOTAL 'REVEALED' POPULATION						MINIMUM TOTAL POPULATION	
		Official estimates			Adjusted estimates				
		Not enumerated	Estimated total	Growth rate	Not enumerated	Estimated total	Growth rate	Estimated total	Growth rate
1788		-	-	-	-	62,000		62,000	
1861	245 ^a	-	-	-	44,255	44,500	-.0045	44,500	-.0045
1871	3,000 ^b	-	-	-	37,000	40,000	-.0107	40,000	-.0107
1881	2,346	-	-	-	33,154	35,500	-.0119	35,500	-.0119
1891	6,245	-	-	-	24,755	31,000	-.0135	31,000	-.0135
1901	6,212	23,888	30,000	-	20,288	26,500	-.0157	26,500	-.0157
1911	7,844	17,654	25,498	-.0163	14,654	22,498	-.0164	22,498	-.0164
1921	17,547	10,000	27,547	.0078	2,000	19,547	-.0141	19,547	-.0141
1933	10,107	18,960	29,067	.0044	7,191	17,298	-.0100	17,500	-.0090
1947	9,507	16,727	26,234	-.0073	6,727	16,234	-.0045	18,250	.0030
1954	12,699	3,516	16,215	-.0687	3,516	16,215	-.0002	20,000	.0131
1961	16,276	2,000	18,276	.0171	2,000	18,276	.0171	22,500	.0168
1966	21,238	0	21,238	.0300	0	21,238	.0300	25,000	.0211
1971	22,181	0	22,181	.0087	0	22,181	.0087	28,000	.0227

Notes: a - Census actually held in 1859.
b - Census actually held in 1870.

TABLE 7.5.9. WESTERN AUSTRALIA. VARIOUS PROJECTIONS OF ABORIGINAL POPULATION 1971 - 2001.

	<u>CENSUS POPULATION</u> <u>(Aborigines + Islanders)</u>		<u>STATE ESTIMATES</u>		<u>F.L. JONES</u>		<u>SCHAPPER</u>
	<u>25%</u>	<u>7%</u>	<u>25%</u>	<u>7%</u>	<u>Low</u>	<u>High</u>	
1971	22,181		29,709 (1974)		24,068	24,588	24,198
1976	25,096	25,714	31,213	31,518	27,793	28,936	28,688
1981	28,394	29,809	35,315	36,538	32,499	34,437	34,434
1986	32,125	34,557	39,955	42,358	38,202	41,169	41,362
1991	36,346	40,061	45,206	49,104	44,840	49,241	49,924
1996	41,122	46,442	51,146	56,926	52,540	58,916	60,558
2001	46,526	53,839	57,867	65,992	61,570	70,594	73,832

There is one significant piece of information about Aboriginal demography available in Western Australia and nowhere else. Since 1971 the Department of Public Health has been collecting hospital statistics which distinguish Aborigines, and from these statistics it is possible to obtain the number of births to Aboriginal women by the mother's age. There remains however the problem of establishing the base population to which these events relate. The Department holds medical records of some 28,000 Aborigines, and considers that this is the population to which the births relate - and indeed, that is a plausible proposition, since even related to that population the records imply a crude birth rate of 43 per thousand, as table 7.5.7 shows. Age-specific birth rates may also be calculated, if the 1971 Census age distribution is applied to the State population; this yields a total fertility of about 5. This is the only set of Aboriginal age-specific birth rates which are based on a reasonably large and representative population. Note that although high at age 20-24, fertility drops rather sharply thereafter. This is an unusual circumstance and almost certainly indicates a high incidence of secondary sterility in the population.

The summary in figure 7.5.9 reflects the many uncertainties already mentioned. Between 1898 and 1918 the Colonial and State figures are gross estimates. They are probably all too high, although the relative decline they depict, from 30,000 to 25,000 in twenty years, may be reasonably correct. Before 1898, no estimates are available at all. I have used a figure of 62,000 in 1788; it is the figure obtained by raising Radcliffe-Browns' final estimates to an Australian total of 300,000, and slightly less than Davidson's upper estimate. It is about half way between the extreme figures, if Schapper's upper limit of 100,000 is included, and implies a tribal size of just under 500. The 19th century section is entirely hypothetical.

The 'revealed' population is depicted as described above, while the minimum total population of Aboriginal descent is portrayed as diverging from the census-identified population in 1920s, passing from decline to growth about 1940, and joining the State total population to which it is ancestral in 1968. The main out-movement would thus have occurred between 1930 and 1945, and the pool of invisible Aborigines would have been relatively constant until about 1966 at roughly 5,000, increasing to about 8,000 currently. Needless to say this is only slightly less speculative than the 19th century picture, especially given the uncertainty about the numbers not enumerated.

The projections by both Jones and Schapper are much too high, implying rates of natural growth of over 3.5% a year. Even the State population compounded at 3% falls below Schapper's projection and Jones' high alternative by 2001. If no further in-movement occurs, the maximum attainable by 2001 would seem to be less than 55,000, while even if the current State-identified population grows at 3%, and they all identify at the census by then, the population will reach only 65,000. As in Queensland, whether that occurs will depend not only on the demography of the population, but also on whether the race relations situation changes in Western Australia. At present, there is little indication of this. A turn-of-century census population of about 50,000 is probably a minimum, however, which again represents a more than doubling of the current census population.

7.6 Tasmania

Hormann (1949) considers the case of Tasmania as representing one of the three extremes in his typology of native adjustment to colonization: outright extinction, which he sees as occurring with the inexorability of a Greek tragedy. R.M. Jones (1970a) takes a similar position; to him, the history of the population ends in 1876, when the last 'full-blood' died.

Nevertheless, as figure 7.6.1 shows, there are today a substantial number of 'part-Aboriginal' people in Tasmania. Most of them are descendants of the original Tasmanians; others are migrants or the descendants of migrants. As early as 1858 there are Tasmanian women included in returns married to European men, with children of mixed descent, and there were also populations of mixed descent on the Bass Strait Islands (and Kangaroo Island.)

I have only included one graph for the Tasmania population estimates. It falls into two parts. To 1876 the figures refer almost exclusively to 'full-bloods', while after that date they refer almost entirely to persons of mixed descent. The initial figure of 4,500 is probably very close to the truth; as R.M. Jones (1970a) has pointed out, a similar figure (from 3 to 5,000) has been calculated using several different methods. This figure refers to the supposed stable pre-European population; it may have been reduced prior to settlement by diseases introduced by maritime explorers in the early eighteenth century. Apart from the fact that I have chosen 4,500 as the initial population, the first half of figure 7.6.1 is similar to Jones' reconstruction. 4,500 is above the mid-point of his suggested range, and would imply an average tribal size of 500 based on Jones' own assessment of the number of tribes.

The settlement of Tasmania by Europeans was marked by an unprovoked massacre of blacks in the first year, (1804) and by continuing and systematic genocide for the next twenty-five years (Bonwick 1870). As occurred in the other Colonies at later dates, the period of deliberate destruction was followed by one of protection and confinement, in a situation of total dispossession and European control. If anything this probably increased the death rate due to the disease of close living. The island of Tasmania provided a unique opportunity for 'protection', and every living Aborigine - some 200 persons - was collected together by the mid 1830s and removed to Flinders Island, 'for their own safety'. By 1847 only 40 survived, and they were transferred back to the mainland; the last 'full-blood' died in 1876. Since the earliest period of the occupation very few women had had children, and deaths occurred at a rate of between 10% and 15% a year (R.M. Jones, 1971a).

At the Census of 1891 there were 139 'part-Aborigines' enumerated in Tasmania; by 1944 the Annual Aboriginal census showed almost 400. Between 1947 and 1971 we see in Tasmanian exaggerated version of the situation in other States: 'part-Aboriginal' people increasingly declining to describe themselves as Aborigines, so that in 1961 only were identified. This increased slightly to 80 in 1966, (including one Torres Strait Islander), and then there was a dramatic increase to 671 to 1971, including 96 persons returned as Torres Strait Islanders, most of whom were probably Bass Strait Islanders.

These new identifiers are drawn from a reservoir of invisible Aborigines in Tasmania which is of considerable magnitude. An as yet incomplete survey by referral being conducted by B. Mollison of the University of Tasmania has to date revealed some thousands of persons in Tasmania who acknowledge Aboriginal descent and Mollison anticipates finding at least 10,000 people by the time the survey is complete. (Mollison, 1974). Many are no longer living in Tasmania, but there are certainly at least 3,000 potential identifiers in the State. The history of these people in Tasmania should provide some unique insights into Aboriginal population processes when it is reconstructed. The most interesting aspect is that although they occurred in complete isolation, with no special Aboriginal administration since 1950, demographic changes in Tasmania are so similar to those on the mainland. The only difference is that they are far more extreme.

To my knowledge there is no information currently available on which an analysis of the fertility or mortality of the Tasmanian Aboriginal population could be based. Mollison's study will presumably provide such data. The great

fluctuations in the numbers enumerated probably make it unwise to rely too much on the census age distribution as an indicator of demographic change, but still it seems clear that although they may have been invisible, the Tasmanian people were not demographically assimilated. Overall, throughout the period covered by the censuses, about 40% of those identified as Aborigines have been under 15 years of age, as figure 7.6.3 shows. However, many children must have had one parent who was not Aboriginal, so the population to which this percentage refers is not a closed one, and conclusions about the rate of growth implied by this large proportion are difficult to reach. It seems that in 1947 and, especially, 1961 (when only 38 Aborigines were identified) the greatest omission was of young adults; and, as noted in other States, the masculinity changes in figure 7.6.3 indicate that it was particularly women who did not identify.

The shift from very low masculinity last century to high levels this century certainly results from the fact that in early times it was mainly women who survived, as the wives or consorts of Europeans, while in recent times, as noted, it has apparently been mainly women of mixed descent who have not identified. Why the masculinity of children should have been so high between 1933 and 1954 is less easily explained; presumably parents of children of mixed descent were also less willing to describe their daughters as 'half-castes' than they were for their sons. The small numbers involved make it difficult to be sure of the significance of these aspects, but note that even in 1971, while the masculinity of all ages has converged, it is still remarkably high; some such process as I have suggested must still be operating.

I am unsure whether it is sensible to consider possible future changes in the Tasmanian population, given the size of the discrepancy between the census and Mollison's estimates, and the total lack of meaningful data on rates of growth. Two points may be made, however. First, I feel there will be an acceleration of the process of re-identifying at the next few censuses. Mollison's survey itself has resulted in a growing consciousness of and valuing of Aboriginal ancestry, and as in Victoria a majority of the Tasmanian Aboriginal people live in urban areas, are sophisticated enough to see the benefits of asserting their Aboriginality, and secure enough not to be ashamed of it. The second point is that I would guess that the population of Aboriginal descent in Tasmania has had and still has a growth rate higher than that of the general population, even after allowing for those spouses not of Aboriginal descent. What we cannot assess, however, is the extent to which children of marriages where one partner is of fairly remote Aboriginal ancestry will continue to consider themselves Aborigines.

Simply to bracket what I see as the possibilities, figure 7.6.1 shows the results of compounding the 1971 Census population and Mollison's absolute minimum of 3,000 at 1% and 2.5% a year - the lower rate taken as a rough approximation to the average rate of natural growth for the State as a whole during the remainder of this century, the upper rate being the maximum differential I can conceive between the Aborigines and the general population. Clearly, even if the minimum Mollison population is only growing at 1% a year, the potential for rapid apparent growth in the census population is enormous.

The line attempting to portray the minimum population of Aboriginal descent in figure 7.6.1 is of course entirely hypothetical; it is based on an assumed rate of growth of about 4% a year, implying not only a high rate of natural growth, but also that the majority of children of mixed marriages consider themselves Aborigines, no matter how remote their Aboriginal ancestry.

TABLE 7.6.1. TASMANIA. CENSUS ESTIMATES OF ABORIGINAL POPULATION 1847 - 1971.

	FULL DESCENT			OTHERS			TOTAL		
	males	females	persons	males	females	persons	males	females	persons
1847 Enumerated	.	.	.	.	.	.	15	23	38
Not	.	.	.	.	.	.	.	.	7
Total	.	.	.	.	.	.	.	.	45
1857	.	.	.	.	.	.	5	9	14
1881	.	.	.	.	.	.	51	46	97
1891	0	0	0	73	66	139	73	66	139
1901	0	0	0	79	78	157	79	78	157
1911	2	1	3	123	104	227	125	105	230
1921	0	0	0	83	69	152	83	69	152
1933	0	0	0	147	123	270	147	123	270
1947	0	0	0	127	87	214	127	87	214
1954	0	0	0	50	43	93	50	43	93
1961	0	0	0	24	14	38	24	14	38
1966 Aborigines:									
$\frac{1}{2}$ or more	1	0	1	18	17	35	19	17	36
less than $\frac{1}{2}$	.	.	.	27	16	43	27	16	43
total	1	0	1	45	33	78	46	33	79
T.S.Islanders									
$\frac{1}{2}$ or more	0	0	0	1	0	1	1	0	1
Total	1	0	1	46	33	79	47	33	80
1971 Aborigines	.	.	.	.	.	.	307	268	575 ^a
T.S.Islanders	.	.	.	.	.	.	58	38	96
Total	.	.	.	.	.	.	365	306	671

Note: a - Most of these people are almost certainly Bass Strait Islanders.

TABLE 7.6.2. TASMANIA. COLONIAL AND STATE ESTIMATES OF ABORIGINAL POPULATION 1832 - 1972.

	FULL DESCENT			OTHERS			TOTAL		
	males	females	persons	males	females	persons	males	females	persons
1832 Flinders Island	.	.	.	.	.	.	61	45	106
'wandering'	.	.	.	.	.	.	.	.	50
Total	.	.	.	.	.	.	.	.	156
1833 Flinders Island	.	.	.	.	.	.	62	60	122
1834 Flinders Island	.	.	.	.	.	.	52	59	111
1835 Flinders Island	.	.	.	.	.	.	52	59	111
1836 Flinders Island	.	.	.	.	.	.	54	62	116
1837 Flinders Island	.	.	.	.	.	.	50	47	97
1838 Flinders Island	.	.	.	.	.	.	42	40	82
1839 Flinders Island	.	.	.	.	.	.	24	25	49
1840 Flinders Island	.	.	.	.	.	.	.	.	60
1847	.	.	.	.	.	.	15	23	38
1848	.	.	.	.	.	.	15	23	38
1849	.	.	.	.	.	.	12	24	36
1850	.	.	.	.	.	.	15	23	38
1857	.	.	.	.	.	.	5	9	14
1858	5	11	16	1	0	1	6	11	17
1964	.	.	.	.	.	.	.	.	200
1972	.	.	.	.	.	.	.	.	2,500

TABLE 7.6.3. TASMANIA. ANNUAL ABORIGINAL CENSUSES 1934 - 1944.

	FULL DESCENT			OTHERS			TOTAL		
	males	females	persons	males	females	persons	males	females	persons
1934	0	0	0	a	a	270	a	a	270
1935	0	0	0	131	132	263	131	132	263
1936	1	0	1	146	124	270	147	124	271
1937	1	0	1	160	149	309	161	149	310
1938	1	0	1	141	115	256	142	115	257
1939	1	0	1	146	127	273	147	127	274
1940	1	0	1	151	131	282	152	131	283
1941	1	0	1	151	133	284	152	133	285
1944	2	0	2	194	181	375	196	181	377

Note: a - Not available.

TABLE 7.6.4. TASMANIA. MISCELLANEOUS ESTIMATES OF ABORIGINAL POPULATION 1788-1974.

1788	to 500 600	G.W.Walker, quoted by Roth(1899) and R.M. Jones(1971a).
	to 700 1,000	Backhouse, quoted by Radcliffe-Brown (1930).
	2,000	Walker (1898), quoted by R.M. Jones (1971a); Milligan (1890) quoted by Radcliffe-Brown, etc.
	to 2,000 2,500	Davidson (1938).
	to 2,000 3,000	Radcliffe-Brown's (1930) initial estimates.
	2,500	Radcliffe-Brown's (1930) final figure; F.L. Jones (1970a).
	to 3,000 5,000	R.M. Jones (1971a).
	4,000	Plomley (1966); F.L.Jones (1970a).
	to 4,000 5,000	<u>Australian Handbook</u> 1888 etc.
	4,500	R.M. Jones' (1971a) tribes x 500; my best estimate.
	5,000	Captain Kelly, quoted by Radcliffe-Brown.
	to 6,000 8,000	Robinson, quoted in <u>Australian Yearbook</u> 1924 etc.
	20,000	Melville, quoted by Roth (1899), R.M. Jones (1971a).
1803	5,000	Witness to Aborigines Committee, 1830.
1830	to 280 300	G.A. Robinson, quoted by R.M. Jones (1971a).
1831	485	G.A. Robinson, quoted by Hormann (1949).
1832	to 220 230	Walker & Backhouse, quoted by Hormann (1949).
1836	116	Walker & Bonwick, quoted by Hormann (1949).
1847	44	Walker & Bonwick, quoted by Hormann (1949).
1854	16	'Census' say R.M. Jones (1971a) & Hormann (1949). But no census held that year.
1859	14	Hormann (1949), quoting Walker & Bonwick.
1863	6	R.M. Jones (1971a).
1868	to 80 90	Hormann (1949): estimate by the Surveyor-General of descendants of Tasmanian women living on Bass Strait Islands.
1876	0	<u>Victorian Yearbook</u> 1882 etc.
1970	395	Abschol estimate, quoted by Lovejoy (1971).
1971	2,000	Mollison (1971).
1974	10,000 or more	Mollison (1974).

TABLE 7.6.5. TASMANIA. ESTIMATES OF TOTAL ABORIGINAL POPULATION, AND IMPLIED ANNUAL GROWTH RATES. 1788, AND CENSUSES 1861 - 1971.

	<u>ENUMERATED POPULATION</u>	<u>TOTAL 'REVEALED' POPULATION</u>						<u>MINIMUM TOTAL POPULATION</u>	
		<u>Official estimates</u>			<u>Adjusted estimates</u>			<u>Estimated total</u>	<u>Growth rate</u>
		<u>Not enumerated</u>	<u>Estimated total</u>	<u>Growth rate</u>	<u>Not enumerated</u>	<u>Estimated total</u>	<u>Growth rate</u>		
1788	-	-	-	-	-	4,500	-	4,500	-
1861	14 ^a	4?	18	-	4?	18	-.0756	18	-.0756
1871	-	-	85	.1552	-	85	.1552	85	.1552
1881	97	0	97 ^b	.0132	23 ^b	120	.0345	120	.0345
1891	139	0	139	.0360	0	139	.0147	139	.0147
1901	157	0	157	.0122	0	157	.0122	157	.0122
1911	230	0	230	.0382	0	230	.0382	230	.0382
1921	152	0	152	-.0414	0	152	-.0414	400	.0553
1933	270	0	270	.0469	0	270	.0469	675	.0428
1947	214	0	214	-.0166	0	214	-.0166	1,175	.0396
1954	93	0	93	-.1191	0	93	-.1191	1,525	.0372
1961	38	0	38	-.1279	0	38	-.1279	2,000	.0387
1966	80	0	80	.1702	0	80	.1702	2,450	.0406
1971	671	0	671	.4040	0	671	.4040	3,000	.0405

Notes: a - Census actually held in 1857.

b - Only Aborigines living on Bass Strait Islands were distinguished.

TABLE 7.6.6. TASMANIA. NOTIONAL PROJECTIONS OF VARIOUS BASE POPULATIONS AT 1% AND 2½%, 1971 - 2001.

	CENSUS POPULATIONS				MOLLISON'S (1974) ESTIMATES			
	Aborigines only		Aborigines + Islanders		Minimum		Maximum	
	1%	2½%	1%	2½%	1%	2½%	1%	2½%
1971	575		671		3,000		10,000	
1976	604	651	705	759	3,153	3,394	10,510	11,314
1981	635	736	741	859	3,314	3,840	11,046	12,801
1986	668	833	779	972	3,483	4,345	11,610	14,483
1991	702	942	819	1,100	3,661	4,916	12,202	16,386
1996	737	1,066	861	1,244	3,847	5,562	12,824	18,539
2001	775	1,206	904	1,407	4,044	6,293	13,478	20,976

7.7 Northern Territory

Everything occurred later in the Northern Territory. It was settled later, the growth of the 'half-caste' population began later, and the 'full-blood' decline as well. Unfortunately reliable statistics also began later - really, not until the 1920s. Aborigines were included (presumably by regional estimates) in the South Australian Censuses of 1891 and 1901, but as with the figures for South Australia proper, they vary so much that their validity must be seriously doubted. Figure 7.7.1 indicates that the total for 1891 is much too low, as is also probably that for 1901. The fluctuations in the totals based on the Commonwealth census are also reminiscent of the South Australian picture; the 1933 figure is almost certainly much too high. As an examination of table 7.7.1 will show, it was not until 1947 that those Aborigines enumerated in the Northern Territory represented a substantial proportion of the estimated total, so unlike South Australia and Western Australia, it is not possible to use changes in the numbers enumerated as an indicator of changes in the total. From 1947 on, however, the movement in the census figures looks quite sensible.

The 'half-caste' curve in figure 7.7.1 is extremely regular, and also much further below the 'full-blood' curve than has been the case in the States. The segregation and separation policies were particularly successful in the Northern Territory, because very large reserves were set aside where substantial numbers of tribal people continued to live completely cut off from contact with the general white population. But note that even in the Northern Territory, with a much lower proportion of 'part-Aboriginal' people than in the States, there was a reduction in the rate of growth of the total census population between 1966 and 1971. Just as was the case in the States with the majority of the population of mixed descent, this was a result of 'part-Aboriginal' people changing their identification.

Like the census totals, Territory estimates also vary considerably in the early years, as seen in figure & table 7.7.2. The five early series shown - 'high total', 'medium total' and 'medium full-blood', 'low-total' and 'low full-blood' - are arbitrary groupings which I have used in an attempt to put order into what seems to have been a series of wild guesses which eventually stabilized in the middle of the range. As with the census estimates, figure 7.7.2 seems to indicate that either the 1921 figures were too low, or the 1933 ones too high. Since 1955 a complete register has been maintained of the tribal Aboriginal population in the Northern Territory, which has been continuously updated and corrected, and the Territory estimates since then may be accepted as very accurate.

As is seen in figure 7.7.3, the agreement between Territory and census estimates of 'full-bloods' is quite reasonable. The cluster of Territory estimates between 1950 and 1955 is probably too low, while in 1961 and even 1966 the census totals may still have been too low. I am inclined to believe the 1921 Census figure, and doubt the annual Aboriginal census figures up to 1937, as well as the census total for 1933. Such an abrupt switch from rapid decline to rapid growth seems extremely unlikely, and it is more plausible that the decrease resulted from the gradual adjustment of overestimates. Nevertheless, the decline may still have been very steep compared with the situation in all other parts of Australia at that time. This was a period of considerable development in the North, and also a time of widespread conflict between the settlers and the tribes, until the major reserves were created. But the Territory does clearly differ from the States - except perhaps Western Australia - in lacking a period of extended stability between the initial depopulation and final growth stage (excluding the unlikely possibility that all known estimates to 1940 are 5 to 10,000 too high).

The 'half-caste' present a fairly consistent picture. There were apparently hardly any people of mixed descent before about 1890, and Territory and census figures are in reasonable agreement up to 1940. The 1944 Aboriginal census figure is low because many 'part-Aborigines' were evacuated to southern States during the war. The census figures from 1921 to 1966 form a beautiful exponential progression, with Territory estimates tending in recent years to be progressively higher. Enough has been said of the caste structure of the Northern Territory to make it understandable that many 'part-Aborigines' would prefer not to be identified as such at censuses, and apparently about 2-3,000 did not identify in 1971.

When we examine the total picture in figure 7.7.5 the wild nature of the estimates from 1900 and 1925 is soon apparent. The censuses are the only guide through this maze, since at least they must have been based on separate estimates for each region, rather Aboriginal censuses are fairly accurate from about 1938. This would mean that the population was declining until 1933, and roughly stationary between about 1933 and 1947, after which it began to increase quite rapidly.

This general outline is compatible with the evidence from the changes in masculinity and ages summarized in figures 7.7.6 and 7.7.7. The extremely high masculinity of the populations enumerated to 1947 reflects both the fact that frontier conditions still prevailed until the Second World War, and the relatively late recovery of the population. As elsewhere, the masculinity of the enumerated minority up to 1947 may also have been exaggerated by the fact that those in the employ of Europeans - and hence more likely to be enumerated - were mainly men. The gradual drop in the masculinity of children at the Aboriginal censuses agrees with the overall drop in census masculinity, but the extraordinary increase in adult masculinity at the Aboriginal censuses is completely anomalous, and I cannot explain it. Nor can I account for the crossover of child and adult masculinity that occurs after 1961. Apparently either male adult mortality has increased, or adult males are less likely to identify (or be enumerated).

Although the suggested shift to growth about 1947 is confirmed by the normalizing of the sex ratio by then, the changes in the age distribution are not quite so clearcut. The Aboriginal censuses, together with the nineteenth century South Australian censuses, seem in fact to indicate a relatively stable age distribution, and that could be correct. The age pyramid is severely undercut in 1911, and is still slightly so in 1933; from then on the middle (20-40) range is progressively squeezed from the top and the bottom, shrinking from over 50% in 1911 to less than half that proportion in 1971. Note also the stabilizing of the distribution between 1966 and 1971. As with Western Australia, there is not yet in the age distribution any indication of slackening growth.

There is no substantial body of vital records which can be used to confirm or refute the suggested timing of the changes in the population of the Northern Territory. It is only since the population register was established in 1955 that any information is available. But from then on the vital data is of extremely high quality, and covers a substantial proportion of the population (all 'full-bloods' plus all 'part-Aborigines' living as Aborigines). Figure 7.7.8 summarizes the crude birth and death rates and the infant mortality rates calculated from the register (known as the Aboriginal Population Record). Also included are some comparable estimates made by the Department of Health and the Australian Bureau of Statistics. (see also table 7.7.5.)

What we see is a remarkably stable situation, with the birth rate constant at about 37 per thousand, the death rate at about 17, and the rate of natural increase about 2%. The infant mortality rate fluctuates somewhat about a level of roughly 110 per thousand. Unfortunately, age-specific birth and death rates

FIGURE 7.7.10. NORTHERN TERRITORY. ESTIMATES OF TOTAL ABORIGINAL POPULATION 1788 - 2001.

are not readily available from the records. F.L. Jones, in the first major study of Aboriginal demography (1963), was able to extract age specific rates from the register. At that stage it contained many incorrect entries and a substantial number of omissions, but the results he obtained were broadly indicative of the situation of the Aboriginal population of the Northern Territory in 1960. The analysis indicated an expectation of life of just under 50 for males and just over 50 for females, an infant mortality rate of 132-143 per thousand, age-specific fertility rates as shown in table 7.7.6, and total fertility of about 4.25. In a later study, Jones (1971)^{#10} again attempted to estimate the age-specific fertility rates of the Northern Territory Aboriginal population, by projecting the 1966 birth statistics for the Northern Territory (which excluded 'full-blood' Aborigines) to 1967, and subtracting the projected figures from published 1967 statistics which included Aborigines. These estimates are also presented in table 7.7.6. They yielded substantially higher rates than the earlier study, and a total fertility of about 6.59, leading Jones to conclude that

'it seems clear that Aboriginal fertility has increased very rapidly in recent years in the Northern Territory, and presumably in other parts of Australia as well.' (Jones, 1971:8)

It will be clear from the crude rates in figures 7.7.8 however, that in the Northern Territory there is no evidence whatsoever of an increase in the population covered by the register. Inadequate coverage at the time of Jones' original study seems a more likely explanation of the apparent increase, and for Australia as a whole, as will be clear from comments on the States, it seems most likely that fertility has if anything fallen in the 1960s.

The differences between the official and adjusted growth rates summarized in figure 7.7.9 indicate the extent to which the census estimates to 1947 seem to have been in error. As figure 7.7.10 shows, I have accepted the census estimates for 1911, 1921 and 1947. On the other hand, if the high Territory and Aboriginal census figures of the 1920s and 30s were not entirely in error, my best estimates may be too low; a series which passed through the middle of the available estimates of that period would lie somewhat above the 1911, 1921 and 1947 Census estimates, and somewhat less below the 1933 Census estimates than the series I have adopted. The differences are not major, and I have simply preferred the lower series because it is closer to the official estimates.

The pre-contact population is taken as 50,000, but this may be too high. It is above any of the estimates presented by Radcliffe-Brown or Davidson, but still implies a tribal size of less than 500; the difficulty of defining 'tribes' in Arnhem Land, and the small size of the groups generally so called, has already been mentioned. From 1850 to 1901 the estimates are by simple interpolation.

The projections show in figure 7.7.10 are from three sources. There is F.L. Jones' original single projection to 1975 based on his 1963 study; then his high and low projections from the 1970b study. As well, there is the series produced by the former Welfare Branch of the Northern Territory Administration about 1960, based on an annual growth rate of 1.7%. It is difficult to know what bracketing growth rates to use in the notional projections: I have settled on 2% and 3%, although there is no indication whatsoever that the population for which statistics are available has ever gone much above 2%, and the already young age distribution holds little potential for transitionally higher growth. So for higher growth to be achieved either fertility will have to rise substantially

#10

F.L. Jones (1971) Fertility patterns among Aboriginal Australians. paper presented at the Twelfth Pacific Science Congress, Canberra.

TABLE 7.7.1. NORTHERN TERRITORY. CENSUS ESTIMATES OF ABORIGINAL POPULATION 1881-1971.

	FULL DESCENT			OTHERS			TOTAL		
	males	females	persons	males	females	persons	males	females	persons
1881 Enumerated	.	.	.	.	.	.	280	438	718 ^a
Estimated	.	.	.	.	.	.	.	.	13,282 ^b
Total	.	.	.	.	.	.	.	.	14,000 ^b
1891 Total ^c	.	.	.	.	.	.	12,839	7,806	20,655
1901 Total ^c	12,331	10,717	23,048	87	100	187	12,418	10,817	23,235
1911 Enumerated	743	480	1,223	117	127	244	860	607	1,467
Estimated	.	.	20,533	0	0	0	.	.	20,533
Total	.	.	21,756	117	127	244	.	.	22,000
1921 Enumerated	1,184	866	2,050	202	258	460	1,386	1,124	2,510
Estimated	8,282	7,017	15,299	0	0	0	8,282	7,017	15,299
Total	9,466	7,883	17,349	202	258	460	9,668	8,141	17,809
1933 Enumerated	3,127	2,720	5,847	389	354	743	3,516	3,074	6,590
Estimated	6,911	5,885	12,796	0	0	0	6,911	5,885	12,796
Total	10,038	8,605	18,643	389	354	743	10,427	8,959	19,386
1947 Enumerated	5,615	5,370	10,985	660	587	1,247	6,275	5,957	12,232
Estimated	1,490	1,425	2,915	0	0	0	1,490	1,425	2,915
Total	7,105	6,795	13,900	660	587	1,247	7,765	7,382	15,147
1954 Aborigines:									
enumerated	5,167	4,964	10,131	823	834	1,657	5,990	5,798	11,788
estimated	2,738	2,631	5,369	0	0	0	2,738	2,631	5,369
total	7,905	7,595	15,500	823	834	1,657	8,728	8,429	17,157
T.S.Islanders	5	0	5	0	1	1	5	1	6
Total	7,910	7,595	15,505	823	834	1,658	8,733	8,430	17,163
1961 Aborigines:									
enumerated	7,857	7,585	15,442	1,156	1,162	2,318	9,013	8,747	17,760
estimated	989	955	1,944	0	0	0	989	955	1,944
total	8,846	8,540	17,386	1,156	1,162	2,318	10,002	9,702	19,704
T.S.Islanders	0	0	0	3	0	3	3	0	3
Total	8,846	8,540	17,386	1,159	1,162	2,321	10,005	9,702	19,707
1966 Aborigines:									
$\frac{1}{2}$ or more	9,651	9,420	19,071	1,000	1,048	2,048	10,651	10,468	21,119
less than $\frac{1}{2}$	.	.	.	597	590	1,187	597	590	1,187
total	9,651	9,420	19,071	1,597	1,638	3,235	11,248	11,058	22,306
T.S.Islanders:									
$\frac{1}{2}$ or more	3	2	5	0	1	1	3	3	6
Total	9,654	9,422	19,076	1,597	1,639	3,236	11,251	11,061	22,312
1971 Aborigines	.	.	.	.	.	.	11,686	11,567	23,253
T.S.Islanders	.	.	.	.	.	.	88	40	128
Total	.	.	.	.	.	.	11,774	11,607	23,381

Notes: a - See note a to table 7.4.1.

b - 'In the whole colony (South Australia including the Northern Territory) there are probably quite as many aborigines as in Queensland.' - *Victorian Yearbook* 1887-8, etc. The figure given for Queensland was 20,000, and for South Australia proper 6,346 was quoted.

c - As with the South Australian figures, it is not possible to tell whether these numbers were actually derived from nominal enumerations, or from a compilation of regional estimates. However the latter seems more likely.

TABLE 7.7.2 NORTHERN TERRITORY. TERRITORY ESTIMATES OF ABORIGINAL POPULATION 1898 - 1973.

	FULL DESCENT			OTHERS			TOTAL		
	males	females	persons	males	females	persons	males	females	persons
1898 Total	.	.	.	.	.	.	.	.	20,000
1905 Total	.	.	.	.	.	.	.	.	15,000 ^a
Total	.	.	.	.	.	.	.	.	to 20,000 ^b 22,000)
1907 Total	.	.	.	.	.	.	.	.	16,600
1908 Total	.	.	.	.	.	.	.	.	16,000
1909 Total	.	.	.	54	58	112 ^c	.	.	13,600 ^d
Total	.	.	.	.	.	.	.	.	to 20,000 ^e 25,000)
1910 In contact	.	.	.	60	65	125 ^c	.	.	.
Estimated	.	.	.	.	.	75	.	.	.
Total	.	.	13,600	.	.	200	.	.	13,800
1911 Total	.	.	.	.	.	.	.	.	20,000
1912 Total	.	.	.	.	.	to 200	.	.	20,000
Total	.	.	.	.	.	to 300	.	.	to 25,000 30,000
1913 Total	.	.	.	.	.	.	.	.	20,000
Total	.	.	.	.	.	.	.	.	30,000 40,000
1917 Total	.	.	.	.	.	.	.	.	to 20,000 50,000
1920 Total	.	.	.	.	.	.	.	.	17,340
Total	.	.	.	.	.	.	.	.	35,000
1921 Total	10,500	9,500	20,000	258	292	550	10,785	9,792	20,550
1925 Total	.	.	.	.	.	.	.	.	to 20,000 40,000
1926 Total	.	.	.	.	.	.	.	.	20,000
1928 In contact	.	.	.	.	.	.	.	.	7,000
Nomads	.	.	.	.	.	.	.	.	14,000
Total	.	.	20,200	.	.	800	.	.	21,000
1929 N.T.	8,678	6,792	15,470	239	262	501	8,917	7,054	15,971
C.A.	.	.	.	.	.	.	.	.	4,684
Total	.	.	.	.	.	.	.	.	20,655
1930 N.T.	8,711	6,822	15,533	279	234	513	8,990	7,056	16,046
C.A.	.	.	.	.	.	.	.	.	5,760
Total	.	.	.	.	.	.	.	.	21,806
1931 N.T.	8,364	6,556	14,920	304	258	562	8,668	6,814	15,482
C.A.	.	.	.	.	.	.	.	.	4,918
Total	.	.	.	.	.	.	.	.	20,400
1932 Total	10,175	8,502	18,677	370	360	730	10,545	8,862	19,407
1933 Total	10,039	8,604	18,643	394	387	781	10,433	8,991	19,424
1934 Total	9,304	7,934	17,238	375	395	770	9,679	8,329	18,008
1935 Total	9,422	8,000	17,422	413	409	822	9,833	8,409	18,244
1936 Total	9,171	7,675	16,846	445	439	884	9,616	8,114	17,730
1937 Total	.	.	.	.	.	.	.	.	17,315
1938 Total	7,975	6,379	16,354	482	425	907	8,457	6,804	15,261
1940 Total	7,774	6,124	13,898	473	420	902	8,247	6,553	14,800
1941 Total	.	.	13,000	.	.	.	.	.	.
1944 Total	.	.	13,331	.	.	.	.	.	.
1945 In contact	.	.	12,050	.	.	.	.	.	.
Estimated	.	.	950	.	.	.	.	.	.
Total	.	.	13,000	.	.	.	.	.	.
1947 In contact	.	.	.	.	.	.	.	.	10,976
Estimated	.	.	.	.	.	.	.	.	4,024
Total	.	.	.	.	.	.	.	.	15,000
1948 Total	.	.	14,000	.	.	2,000	.	.	16,000
1951 Controlled ^f	.	.	12,200	.	.	2,000	.	.	14,200
1952 Total	.	.	12,314	.	.	.	.	.	.
1953 Total	.	.	13,490	.	.	.	.	.	.
1954 Total	.	.	13,744	.	.	1,659	.	.	15,403
1955 Total	.	.	13,962	.	.	.	.	.	.
1956 Controlled ^f	.	.	.	.	.	.	.	.	17,042 ^g
1957 Controlled ^f	.	.	.	.	.	.	.	.	17,371 ^g
Total	.	.	16,000	.	.	1,400	.	.	17,400
1958 Controlled ^f	.	.	.	.	.	.	.	.	17,718 ^g
Total	.	.	16,100	.	.	2,400	.	.	18,500

TABLE 7.7.2. NORTHERN TERRITORY. TERRITORY ESTIMATES OF ABORIGINAL POPULATION 1898-1973. - page 2.

	FULL DESCENT			OTHERS			TOTAL		
	males	females	persons	males	females	persons	males	females	persons
1959 Controlled ^f	.	.	.	.	.	.	.	.	18,035 ^g
1960 Controlled ^f	.	.	.	.	.	.	.	.	18,329 ^g
Total	.	.	18,200	.	.	2,000	.	.	20,200
1961 Controlled ^f	.	.	.	.	.	.	.	.	18,677 ^g
1962 Controlled ^f	.	.	.	.	.	.	.	.	18,875 ^g
1963 Controlled ^f	.	.	.	.	.	.	.	.	19,195 ^g
Total	.	.	19,334	.	.	4,000	.	.	23,334
1964 Controlled ^f	.	.	.	.	.	.	.	.	19,370 ^g
1965 Controlled ^f	.	.	.	.	.	.	.	.	19,681 ^g
1966 Controlled ^f	.	.	.	.	.	.	.	.	20,134 ^g
Total	.	.	20,120	.	.	4,000	.	.	24,120
1967 Controlled ^f	.	.	.	.	.	.	.	.	20,549 ^g
1968 Controlled ^f	.	.	.	.	.	.	.	.	20,956 ^g
Total	.	.	.	.	.	.	.	.	25,000
1969 Controlled ^f	.	.	.	.	.	.	.	.	21,394 ^g
1970 Controlled ^f	.	.	.	.	.	.	.	.	21,929 ^g
1971 Controlled ^f	.	.	.	.	.	.	.	.	22,396 ^g
Total	.	.	22,500	.	.	6,000	.	.	28,500
1972	.	.	.	.	.	.	.	.	23,718 ^h
1973	.	.	.	.	.	.	.	.	24,192 ^h

Notes: a - 'Official figures'. A.P.P. 1905, No 37.
b - 'Estimate by late Chief of Police'. A.P.P. 1905, No 37.
c - On register of 'half-castes'.
d - From police returns.
e - Memorandum on transfer to the Commonwealth.
f - These are the people coming under the control of the former Welfare Division of the Northern Territory Administration - basically, all 'full-bloods' plus any 'part-Aborigines' living as Aborigines.
g - As revised to 31/12/1971.
h - N.T. Medical Service estimates - definition basically the same as in note f.

TABLE 7.7.3. NORTHERN TERRITORY. ANNUAL ABORIGINAL CENSUSES 1921 - 1944.

	FULL DESCENT			OTHERS			TOTAL		
	males	females	persons	males	females	persons	males	females	persons
1921	9,466	7,883	17,349	284	340	624	9,750	8,223	17,973
1924	11,183	8,798	19,981	334	373	707	11,517	9,171	20,688
1925	11,069	8,691	19,760	305	361	666	11,374	9,052	20,426
1926	11,102	8,715	19,817	324	365	689	11,426	9,080	20,506
1927	11,251	9,007	20,258	403	379	782	11,654	9,386	21,040
1928	11,457	9,551	21,008	481	461	942	11,938	10,012	21,950
1929	11,407	9,384	20,791	438	440	878	11,845	9,824	21,669
1930	11,427	9,620	21,047	413	361	774	11,840	9,981	21,821
1931	10,605	8,962	19,567	424	389	813	11,029	9,351	20,380
1932	10,275	8,502	18,777	370	360	730	10,645	8,862	19,507
1933	10,038	8,605	18,643	394	387	781	10,432	8,992	19,424
1934	9,304	7,934	17,238	375	395	770	9,679	8,329	18,008
1935	9,422	8,000	17,422	413	409	822	9,835	8,409	18,244
1936	9,171	7,675	16,846	445	439	884	9,616	8,114	17,730
1937	8,671	7,297	15,968	463	456	919	9,134	7,753	16,887
1938	7,975	6,379	14,354	482	425	907	8,457	6,804	15,261
1939	7,882	6,207	14,089	497	416	913	8,379	6,623	15,002
1940	7,774	6,127	13,901	473	429	902 ^a	8,247	6,556	14,803 ^a
1941	7,546	5,905	13,451	550	487	1,037	8,096	6,392	14,488
1944	7,493	5,838	13,331	473	349	822	7,966	6,187	14,153

Note: a - As corrected by me. The published results had the N.T. and A.C.T. 'half-caste' figures transposed.

TABLE 7.7.4. NORTHERN TERRITORY. MISCELLANEOUS ESTIMATES OF ABORIGINAL POPULATION 1788-1967.

1788	35,000	Radcliffe-Brown (1930)
	to 35,000	Davidson (1938)
	42,000	
	57,000	Tindale's (1940) tribes x 500
	68,400	Tindale's (1940) tribes x 600.
1896	20,000	Western Australia. Aborigines Department. <u>Report</u> 1898.
1905	15,000	<u>Report of the Governor of South Australia on the Northern Territory.</u> <u>A.P.P.</u> 1905, No 37.
	to 20,000	'Estimate by late chief of police.' <u>A.P.P.</u> 1905, No 37.
	22,000	
	30,000	'Estimate by private persons' <u>A.P.P.</u> 1905, No 37.
1907	16,600	Queensland. Chief Protector of Aborigines. <u>Report</u> 1907.
1908	16,000	Queensland. Chief Protector of Aborigines. <u>Report</u> 1908.
1909	16,000	Queensland. Chief Protector of Aborigines. <u>Report</u> 1909.
	20,000	Memorandum on transfer to Commonwealth. <u>A.P.P.</u> 1909, No 20.
	to 20,000	Dr Roth, quoted in <u>Australian Yearbook</u> 1909.
	22,000	
1910	16,000	Queensland. Chief Protector of Aborigines. <u>Report</u> 1910.
	22,000	'Official estimate' (Foxcroft 1941)
1911	20,000	South Australia, Chief Protector of Aborigines. <u>Report</u> 1911.
	20,000	Queensland. Chief Protector of Aborigines. <u>Report</u> 1911.
1912	25,000	Queensland. Chief Protector of Aborigines. <u>Report</u> 1912.
1913	40,000	Queensland. Chief Protector of Aborigines. <u>Report</u> 1913.
1914	3,000	Queensland. Chief Protector of Aborigines. <u>Report</u> 1914. Did they mean 30,000?
1915	3,000	Queensland. Chief Protector of Aborigines. <u>Report</u> 1915. Did they mean 30,000?
1958	17,926	<u>The Australian Aborigines</u> (15,971 'full-blood', 1,955 others).
1967	24,659	Tatz, quoted in Saini (1967) - 20,159 'full-blood', 4,500 others).

TABLE 7.7.5. NORTHERN TERRITORY. VITAL RATES OF TRIBAL ABORIGINAL POPULATION 1957-1971.

Calendar year	Midyear population	Births	Deaths	Natural increase	Infant deaths	Birth rate	Death rate	Rate of increase	Infant mortality rate
1957	17,207.5	637	259	378	60	.0370	.0151	.0220	.0094
1958	17,544.5	656	265	391	61	.0374	.0151	.0223	.0093
1959	17,876.5	687	319	368	51	.0384	.0178	.0206	.0074
1960	18,182.0	625	297	328	82	.0344	.0163	.0180	.0131
1961	18,503.0	689	299	390	87	.0372	.0162	.0211	.0126
1962	18,776.0	601	376	225	113	.0320	.0200	.0120	.0188
1963	19,035.0	636	276	360	78	.0334	.0145	.0189	.0122
1964	19,282.5	661	444	217	68	.0343	.0230	.0113	.0103
1965	19,525.5	661	306	355	67	.0339	.0157	.0182	.0101
1966	19,907.5	774	339	435	96	.0389	.0170	.0219	.0124
1967	20,341.5	761	343	418	85	.0374	.0169	.0205	.0112
1968	20,752.5	773	371	402	71	.0372	.0179	.0194	.0092
1969	21,175.0	816	377	439	66	.0385	.0178	.0207	.0081
1970	21,620.5	837	385	452	108	.0387	.0178	.0209	.0129
1971	22,052.0	779	367	412	127	.0353	.0166	.0187	.0163

Source: Unpublished records of Department of Aboriginal Affairs.

TABLE 7.7.6. NORTHERN TERRITORY. ESTIMATES OF ABORIGINAL AGE-SPECIFIC BIRTH RATES BY F.L. JONES.

Age of mother	1958-60 rates ^a		1967 ^c	1968 ^c	1967-68 ^c
	Registered	Adjusted ^b			
10-14	.015	.017	-	-	-
15-19	.152	.172	.269	.218	.242
20-24	.188	.212	.315	.466	.391
25-29	.139	.157	.240	.253	.247
30-34	.130	.147	.229	.211	.220
35-39	.071	.080	.163	.130	.146
40-44	.042	.047	.042	.053	.048
45-49	.012	.014	.022	.027	.025
Total fertility	3.745	4.230	6.400	6.670	6.590

Notes: a - From F.L. Jones (1963).

b - To allow for estimated under-registration of births.

c - From F.L. Jones (1971).

TABLE 7.7.7. NORTHERN TERRITORY. ESTIMATES OF TOTAL ABORIGINAL POPULATION, AND IMPLIED ANNUAL GROWTH RATES, 1788, AND CENSUSES 1861 - 1971.

	ENUMERATED POPULATION	TOTAL 'REVEALED' POPULATION						MINIMUM TOTAL POPULATION	
		Official estimates			Adjusted estimates			Estimated total	Growth rate
		Not enumerated	Estimated total	Growth rate	Not enumerated	Estimated total	Growth rate		
1788	-	-	-	-	-	50,000	-	50,000	-
1861	-	-	-	-	-	48,500	-.0004	48,500	-.0004
1871	-	-	-	-	-	44,000	-.0097	44,000	-.0097
1881	718?	13,282?	14,000	-	37,782?	38,500	-.0134	38,500	-.0134
1891	20,655	0	20,655	.0389	12,845	33,000	-.0154	33,000	-.0154
1901	23,235	0	23,235	.0118	4,000	27,235	-.0192	27,235	-.0192
1911	1,467	20,533	22,000	-.0055	20,533	22,000	-.0213	22,000	-.0213
1921	2,510	15,299	17,809	-.0211	15,299	17,809	-.0211	17,809	-.0211
1933	6,590	12,796	19,386	.0071	8,796	15,386	-.0120	15,386	-.0120
1947	12,232	2,915	15,147	-.0176	2,915	15,147	-.0011	16,875	.0066
1954	11,794	5,369	17,163	.0179	5,369	17,163	.0179	18,750	.0151
1961	17,763	1,944	19,707	.0197	1,944	19,707	.0197	22,000	.0228
1966	22,312	0	22,312	.0248	0	22,312	.0248	25,000	.0256
1971	23,381	0	23,381	.0094	0	23,381	.0094	28,500	.0262

TABLE 7.7.8. NORTHERN TERRITORY. VARIOUS PROJECTIONS OF ABORIGINAL POPULATION 1971 - 2001.

	<u>CENSUS</u>			<u>TERRITORY ESTIMATES</u>			<u>F.L. JONES</u>	
	<u>2%</u>	<u>3%</u>	<u>A.B.S.^a</u>	<u>2%</u>	<u>3%</u>	<u>N.T.A.^b</u>	<u>Low</u>	<u>High</u>
1971	23,381		23,256	28,500		21,773	24,785	25,380
1976	25,815	27,105	26,545	31,466	33,039	23,768	27,740	28,988
1981	28,501	31,422	31,161	34,741	38,302	25,947	31,316	33,337
1986	31,468	36,427	34,829	38,357	44,402	28,326	35,474	38,509
1991	34,743	42,229	40,024	42,349	51,474	30,922	40,064	44,494
1996	38,359	48,955	46,082	46,757	59,673	33,757	45,121	51,393
2001	42,351	56,752	53,181	51,624	69,177	36,851	50,762	59,384

Notes: a - Based on 1971 Aborigines only, e_0^o of 45.0 and fertility estimated by F.L. Jones' (1971) method.
b - Based on 1962 'full-blood' population and an annual growth rate of 1.77%.

TABLE 7.8.1. A.C.T. CENSUS ESTIMATES OF ABORIGINAL POPULATION 1911 - 1971.

	FULL DESCENT			OTHERS			TOTAL		
	males	females	persons	males	females	persons	males	females	persons
1911	5	5	10	4	4	8	9	9	18
1921	0	0	0	17	16	33	17	16	33
1933	0	0	0	40	28	68	40	28	68
1947	0	0	0	58	42	100	58	42	100
1954	1	0	1	99	73	172	100	73	173
1961 Aborigines	0	0	0	78	65	143	78	65	143
T.S.Islanders	0	0	0	0	2	2	0	2	2
Total	0	0	0	78	67	145	78	67	145
1966 Aborigines:									
½ or more	14	5	19	38	39	77	52	44	96
less than ½	.	.	.	34	39	73	34	39	73
total	14	5	19	72	78	150	86	83	169
T.S.Islanders:									
½ or more	0	0	0	0	0	0	0	0	0
Total	14	5	19	72	78	150	86	83	169
1971 Aborigines	.	.	.	.	.	.	136	112	248
T.S.Islanders	.	.	.	.	.	.	1	6	7
Total	.	.	.	.	.	.	137	118	255

TABLE 7.8.2. A.C.T. ANNUAL ABORIGINAL CENSUSES 1934 - 1944.

	FULL DESCENT			OTHERS			TOTAL		
	males	females	persons	males	females	persons	males	females	persons
1934	0	0	0	a	a	68	a	a	68
1935	0	0	0	35	22	57	35	22	57
1936	0	0	0	44	35	79	44	35	79
1937	0	0	0	58	40	98	58	40	98
1938	0	0	0	46	40	86	46	40	86
1939	0	0	0	42	33	75	42	33	75
1940	0	0	0	52	36	88	52	36	88
1941	1	1	2	46	37	83	47	38	85
1944	1	0	1	53	48	101	54	48	102

Note: a - Not available.

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(which does not really seem very likely to me), or else mortality will have to fall while fertility stays closer to its current level. That may happen, but I doubt whether it will sustain a rate of growth of 3% for long. The big unknown is the demographic performance of the assimilated, mainly urban, group not covered by the population register. If the dashed line indicating the growth of this section in figure 7.7.10 is anywhere near the truth, the inclusion of this group would bring the rate of growth to over 3% during most of the last 20 to 30 years, largely, it would seem, as in Tasmania, as a result of a high incidence of mixed marriages. The present census-identified population is probably unlikely to grow to more than 45,000, but the population which identifies by 2001 could well be up to 10,000 higher; whether that happens will depend mainly on the attitude of the 'part-Aboriginal' people to their Aboriginality, and that in turn will depend on the social changes that occur in the Northern Territory in the next twenty-five years. If there are no such changes, it is unlikely that many, if any, of the population descended from those not currently identifying will ever do so.

7.8 Australian Capital Territory

To complete the picture, brief mention must be made of the Aborigines in the Australian Capital Territory. There has been an Aboriginal settlement at Wreck Bay, near Jervis Bay, since last century, and the community there has an extremely interesting history some of which is outlined by J.P.M. Long (1970a).#11

Regional figures from early New South Wales censuses and Board reports could probably give a complete population history, but the summary of available data in tables 7.8.1 and 7.8.2 goes back only to the 1911 census, when 18 Aborigines were shown as resident in the Federal Capital Territory. Despite the fact that the Jervis Bay area was not transferred to the Commonwealth until 1915, it is almost certain that these were people living on the coast.

But it would be inappropriate here to attempt a separate treatment of the A.C.T. population. It is too small and subject to excessive migration. People from Wreck Bay have moved up and down the South Coast, and to Sydney as well. In addition, in recent times, the A.C.T. population also includes an increasing number of migrants to Canberra itself.

The most sensible method of treating the A.C.T. data would be to amalgamate it with New South Wales; however by convention the A.C.T. and Tasmania have generally been omitted when detailed State analyses of census Aboriginal population data are performed, so this is not always possible.

#11

J.P.M. Long (1970a) Aboriginal settlements: a survey of institutional communities in eastern Australia.

5. THE TOTAL ABORIGINAL POPULATION

5.1 Changes Indicated by Census, State and Territory estimates

Given the many uncertainties about early estimates, the task of compiling an Australian population history is daunting indeed. The only viable way of approaching this task is by an aggregation of the fit-est method. Having put together those pieces available for each State, it now becomes possible to attempt to put the State sections together. The completed picture relating to changes in the size of the Aboriginal population is compared with all the available evidence consolidated from the various sources, including characteristics such as fertility, fecundity and.

PART IV

First, however, the direct evidence relating to Australia as a whole must be considered. Table 5.1.1 shows the populations enumerated since the first simultaneous Empire Census of 1901, as well as the estimated total populations. Figure 5.1.1 shows the estimated totals at census since 1901, which is the first for which they are available for the whole of Australia. As noted earlier, it was not until 1921 that an official estimate was actually produced in conjunction with the Census; in 1911 the Statisticians merely noted in the Report (p.59) that the most reliable estimates placed the number of 'full-bloods' at somewhat under 100,000, while in 1901 each State conducted its own census, treating Aborigines in different ways, and no estimate of the total was made in Western Australia. However, in conjunction with the 1926 Aboriginal Census, the Statisticians obtained from each State and Territory an estimate of the total Aboriginal population in 1901 and 1911 for inclusion in a time series. In the event, the figures were never published, and for some reason the 1901 total proposed was 102,370, comprising 95,000 'full-bloods' and 7,370 'half-bloods'. Although the State and Territory figures provided actually indicated 100,000 'full-bloods'. It may be that the usual extra 10,000 were given to Western Australia; I have used the sum of the State and Territory estimates.

AUSTRALIA

The 1921, 1933 and 1947 total and 'full-blood' populations include the 10,000 persons said to be out of contact in Western Australia, although a much more regular progression is obtained if these are excluded, while all the estimates to 1901 have other, smaller defects as noted in the State and Territory sections.

The census 'half-caste' series looks quite reasonable, although slightly too low in 1921 and too high in 1947, but note that the rate of growth is only moderate. It has taken 45 years for the population to double in size, and according to the census 'half-castes' have never exceeded 'full-bloods'. Between 1961 and 1966 the two groups were almost the same size and were growing at almost the same rate.

The effect of changing identification is clearly seen if we examine the rates of growth of the various sub-groups of the population at census since 1954, presented in table 5.1.2. Note again that there is no continuity between the official population of 'full-blood plus half-caste' Aborigines in 1966 and any of the populations enumerated in either 1961 or in 1971. 'Total Aborigines' provides a reasonable series in 1966, but there are too few of them in 1971; Torres Strait Islanders, on the other hand, show the little increase between 1954 and 1966, then increase at an impossibly rapid rate between 1966 and 1971, presumably, as suggested earlier, as a result of people previously identified as Aborigines being identified as Islanders. The smoothest and most believable transition through this entire period 1954-71 is obtained by combining all Aborigines and Islanders into a single group, although even then the rate of growth 1961 and 1966 seems too high, while that between 1966 and 1971 seems too low.

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Item 5.1.1. (11a)

8. THE TOTAL AUSTRALIAN ABORIGINAL POPULATION.

8.1 Changes indicated by census, State and Territory estimates.

Given the many uncertainties which apply to each State, the task of compiling an Australian population history is daunting indeed. The only valid way of approaching this task is by an extension of the jig-saw method. Having put together those pieces available for each State, it now becomes possible to attempt to put the State sections together; the completed picture relating to changes in the size of the Aboriginal population can then be compared with all the available evidence consolidated from the States, on particular characteristics such as fertility, masculinity etc.

First, however, the direct evidence relating to Australia as a whole must be considered. Table 8.1.1 shows the populations enumerated since the first simultaneous Empire Census of 1861, as well as the estimated total populations. Figure 8.1.1 shows the estimated totals at censuses since 1901, which is the first for which they are available for the whole of Australia. As noted earlier, it was not until 1921 that an official estimate was actually produced in conjunction with the Census; in 1911 the Statistician merely noted in the Report (p.99) that the most reliable estimates placed the number of 'full-bloods' at somewhat under 100,000, while in 1901 each State conducted its own census, treating Aborigines in different ways, and no estimates of the total was made in Western Australia. However, in conjunction with the 1936 Aboriginal Census, the Statistician obtained from each State and Territory an estimate of the total Aboriginal populations in 1901 and 1911 for inclusion in a time series. In the event, the figures were never published, and for some reason the 1901 total proposed was 102,370, comprising 95,000 'full-bloods' and 7,370 'half-castes', even though the State and Territory figures provided actually only added to about 85,000 'full-bloods'.#1 It may be that the usual extra 10,000 were added in Western Australia; I have used the sum of the State and Territory estimates.

The 1921, 1933 and 1947 total and 'full-blood' populations include the 10,000 persons said to be out of contact in Western Australia, although a much more regular progression is obtained if these are excluded, while all the estimates to 1961 have other, smaller defects as noted in the State and Territory sections.

The census 'half-caste' series looks quite reasonable, although slightly too low in 1921 and too high in 1947, but note that the rate of growth is only moderate. It has taken 40 years for the population to double in size, and according to the censuses 'half-castes' have never exceeded 'full-bloods'. Between 1961 and 1966 the two groups were almost the same size and were growing at almost the same rate.

The effect of changing identification is clearly seen if we examine the rates of growth of the various sub-groups of the population at censuses since 1954, presented in table 8.1.2. Note again that there is no continuity between the official population of 'full-blood plus half-caste' Aborigines in 1966 and any of the populations enumerated in either 1961 or in 1971. 'Total Aborigines' produce a reasonable series to 1966, but there are too few of them in 1971; Torres Strait Islanders, on the other hand, show too little increase between 1954 and 1966, then increase at an impossibly rapid rate between 1966 and 1971, presumably, as suggested earlier, as a result of people previously identified as Aborigines indentifying as Islanders. The smoothest and most believable transition through this entire period 1954-71 is obtained by combining all Aborigines and Islanders into a single group, although even then the rate of growth 1961 and 1966 seems too high, while that between 1966 and 1971 seems too low.

#1

from A.B.S. files.

The figures compiled from State and Territory estimates give rather a different picture, as will be seen figure 8.1.2. Before 1921 only total figures are obtainable, and mostly only in terms of a very wide range rather than a single figure. As in the Northern Territory, I have put these into a set of arbitrary series, which are continued after 1921 by separating out the 10,000 estimated out of contact in Western Australia. The range is reduced to zero by 1962 as Western Australia's estimate of those out of contact was progressively reduced from 10,000 to 6,000 to 4,000 to 2,000 to zero. According to the State and Territory figures most of the growth has been in the 'half-caste' section; the numbers have doubled in the last 20 years, and State and Territory 'half-castes' exceeded 'full-bloods' some time in the 1950s. In total by 1966 there were said to be 23,400 more persons of mixed descent than of full descent. Note that according to these figures, there was virtually no change in the size of the total population between 1920 and 1955. The holding down of the numbers of 'part-Aborigines' from 1940 (when assimilation was affirmed as the national policy) and the mid 1950s is also quite clearly seen, as is the rapid increase since then, in both the 'half-caste' population and the total, as the States have progressively abandoned their absorptionist policies and recognized the continued existence of their 'part-Aboriginal' populations.

Because enumeration was not complete, the census totals as well as the State and Territory estimates partly reflect what governments wanted to happen to the populations as much as they reflect actual demographic changes. In the summaries in figures 8.1.3, 8.1.4 and 8.1.5, we see that except in 1911, (when Western Australia and the Northern Territory seemed to have inflated ideas of the size of their populations), the census figures correspond well with the 'high' State series for both 'full-bloods', 'half-castes' and total. From 1921 to 1947 both series included Western Australia's 10,000 out of contact. Thereafter, until about 1966, the census 'full-bloods' tend to be a few thousand lower. It has already been noted that in several States there was a divergence of State and census 'full-blood' populations in the postwar period, with the census figure higher in New South Wales, Victoria and Queensland, lower in Western Australia and the Northern Territory; but by 1966, the overall excess in the State 'full-blood' figures had been removed, as a joint result of the elimination of the estimates of persons not enumerated, and the increasing tendency of 'part-Aboriginal' people in New South Wales, Victoria and Queensland to be returned simply as 'Aborigines' and hence be coded as 'full-bloods'. If 'full-bloods' had been distinguished at the 1971 census, it is certain that the number would have substantially exceeded the State and Territory estimates.

In the shift that has occurred since the 1950's from the States claiming more 'full-bloods' than the census revealed, to claiming more 'part-Aborigines', the latter has been far more significant, and the overall excess of State and Territory over census estimates has increased from only 1,500 in 1954 to about 40,000 in 1971. (Table 8.1.5) The question that still remains, of course, is whether these people really do exist. In particular, the fact that almost half of them are said to be in Queensland (table 8.1.7), throws some doubt on the total figure. It is certainly possible that the Queensland estimate was too high; the fact that it has now been reduced by 5,000 attests to that. But I do not think over-estimation was a major factor. As tables 8.1.5 and 8.1.6 show, the actual size of the Queensland excess, its size relative to the census populations, and also the proportion it makes up of the total Australian excess, have all decreased since 1954. In part this reflects the fact that the State estimates remained stationary from 1961 while the census populations increased, but it was also a result of the fact that Queensland was the first State to explicitly estimate the size of the total population of Aboriginal descent. The size of the excess over the census, that is of the reservoir of assimilated non-identifiers, which looked preposterous in 1961, is looking more and more believable as the other States and Territories produce similar estimates of their own.

TABLE 8.1.1. AUSTRALIA. CENSUS ESTIMATES OF ABORIGINAL POPULATION 1861 - 1971.^a

		FULL DESCENT			OTHERS			TOTAL		
		males	females	persons	males	females	persons	males	females	persons
1861 ^b	Enumerated	.	.	.	.	.	.	3,864	3,121	6,985
	Estimated	.	.	.	.	.	.	.	.	15,166 ^c
	Total	.	.	.	.	.	.	.	.	22,151
1871 ^d	Enumerated	.	.	.	.	.	.	4,085	2,625	6,710
	Estimated	.	.	.	.	.	.	.	.	11,017 ^c
	Total	.	.	.	.	.	.	.	.	17,727
1881	Enumerated	.	.	.	.	.	.	17,286	14,511	31,797
	Estimated	.	.	.	.	.	.	.	.	57,862 ^c
	Total	.	.	.	.	.	.	.	.	89,659
1891	Enumerated	.	.	.	.	.	.	22,983	16,035	39,018
	Estimated	.	.	.	.	.	.	.	.	9,379 ^c
	Total	.	.	.	.	.	.	.	.	48,397
1901	Enumerated	22,453	18,427	40,880	3,789	3,570	7,368	26,251	21,997	48,248
	Estimated	.	.	44,788	.	.	297	.	.	45,085 ^e
	Total	.	.	85,668	.	.	7,665	.	.	93,333 ^e
1911	Enumerated	11,385	8,554	19,939	5,283	4,830	10,113	16,668	13,384	30,052
	Estimated	.	.	50,061	0	0	0	.	.	50,061
	Total	.	.	70,000	5,283	4,830	10,113	.	.	80,113
1921	Enumerated	15,838	12,025	27,863	5,980	5,556	11,536	21,818	17,581	39,399
	Estimated	17,155	15,282	32,437	0	0	0	17,155	15,282	32,437
	Total	32,993	27,307	60,300	5,980	5,556	11,536	38,973	32,863	71,836
1933	Enumerated	13,408	11,038	24,446	10,631	9,989	20,620	24,039	21,027	45,066
	Estimated	19,211	16,444	35,655 ^f	0	0	0	19,211	16,444	35,655 ^f
	Total	32,619	27,482	60,101	10,631	9,989	20,620	43,250	37,471	80,721
1947 ^g	Enumerated	12,688	11,181	23,869	14,026	13,153	27,179	26,714	24,334	51,048
	Estimated	12,281	10,488	22,769 ^f	1,104	1,044	2,148	13,385	11,532	24,917 ^f
	Total	24,969	21,669	46,638	15,130	14,197	29,327	40,099	35,866	75,965
1954	Aborigines:									
	Enumerated	13,867	12,496	26,363	15,849	15,510	31,359	29,716	28,006	57,722
	Estimated	6,791	6,165	12,956	0	0	0	6,791	6,165	12,956
	Total	20,658	18,661	39,319	15,849	15,510	31,359	36,507	34,171	70,678
	T.S. Islanders	2,043	2,210	4,253	60	49	109	2,103	2,259	4,362
	Total	22,701	20,871	43,572	15,909	15,559	31,468	38,610	36,430	75,040
1961	Aborigines:									
	Enumerated	18,899	17,238	36,137	19,713	19,459	39,172	38,612	36,697	75,309
	Estimated	2,028	1,916	3,944	0	0	0	2,028	1,916	3,944
	Total	20,927	19,154	40,081	19,713	19,459	39,172	40,640	38,613	79,253
	T.S. Islanders	2,446	2,526	4,972	134	111	245	2,580	2,637	5,217
	Total	23,373	21,680	45,053	19,847	19,570	39,417	43,220	41,250	84,470
1966	Aborigines:									
	$\frac{1}{2}$ or more	25,228	23,807	49,035	15,756	15,416	31,172	40,984	39,223	80,207
	Less than $\frac{1}{2}$	.	.	.	8,229	8,196	16,425	8,229	8,196	16,425
	Total	25,228	23,807	49,035	23,985	23,612	47,597	49,213	47,419	96,632
	T.S. Islanders:									
	$\frac{1}{2}$ or more	2,555 ^h	2,692 ^h	5,247 ^h	86	70	156	2,641	2,762	5,403
	Total	27,754 ^h	26,472 ^h	54,226 ^h	24,071	23,681 ^h	47,752 ^h	51,825 ^h	50,153 ^h	101,978 ^h
1971	Aborigines	.	.	.	.	.	.	53,919	52,371	106,290
	T.S. Islanders	.	.	.	.	.	.	4,815	4,848	9,663
	Total	.	.	.	.	.	.	58,734	57,219	115,953

Notes: a - Tables 3.1.2, 7.1.1, 7.2.1, 7.3.1, 7.4.1, 7.5.1, 7.6.1, 7.7.1, and 7.8.1 show details by States and Territories.

b - Including Western Australian Census of 1859.

c - Table 3.1.2 shows details of the regions to which these estimates relate.

d - Including the Western Australian Census of 1870.

e - By addition. In 1937 the C.B.C.S. estimated the total at 102,370 but this is too high.

f - Includes an estimated 10,000 persons beyond settled areas in Western Australia.

g - Excludes Torres Strait Islanders.

h - There were 57 persons identified as of less than half Aboriginal descent whose main race was either 'Torres Strait Islander' or 'half-caste Torres Strait Islander'. They are counted only once in the Total.

TABLE 8.1.2. AUSTRALIA. GROWTH RATES OF VARIOUS SUB-GROUPS OF THE ABORIGINAL POPULATION. CENSUSES 1954-1971.

	CENSUS POPULATIONS				ANNUAL GROWTH RATES		
	1954	1961	1966	1971	1954-61	1961-66	1966-71
ABORIGINES:							
'Full-blood'							
official total	39,319	40,081	49,035	a	.0027	.0403	-
adjusted total	38,793	40,931	49,035	a	.0077	.0361	-
'Half-caste'							
enumerated	31,359	39,172	31,172	a	.0318	-.0457	-
'Full-blood' + 'half-caste'							
official total	70,678	79,253	80,207	106,290	.0164	.0024	.0563
adjusted total	70,152	80,103	80,207	106,290	.0189	.0003	.0563
Others less than $\frac{1}{2}$							
enumerated	b	b	16,425	a	-	-	-
'Half-caste' + less than $\frac{1}{2}$							
enumerated	(31,359) ^c	(39,172) ^c	47,597	a	.0318	.0390	-
All identified							
official total	70,678	79,253	96,632	106,290	.0164	.0397	.0191
adjusted total	70,152	80,103	96,632	106,290	.0189	.0375	.0191
TORRES STRAIT ISLANDERS:							
'Full-blood'							
enumerated	4,253	4,972	5,247	a	.0223	.0108	-
'Half-caste'							
enumerated	109	245	156	a	.0990	-.0903	-
'Full-blood' + 'half-caste'							
enumerated	4,362	5,217	5,403	9,663	.0256	.0070	.1163
ABORIGINES + ISLANDERS:							
'Full-blood'							
official total	43,572	45,053	54,282	a	.0048	.0373	-
adjusted total	43,046	45,903	54,282	a	.0092	.0335	-
'Half-caste'							
enumerated	31,460	39,417	31,328	a	.0322	-.0459	-
'Full-blood' + 'half-caste'							
official total	75,040	84,470	85,610	115,953	.0169	.0027	.0607
adjusted total	74,514	85,320	85,610	115,953	.0193	.0007	.0607
Others less than $\frac{1}{2}$							
enumerated	b	b	16,368 ^a	a	-	-	-
'Half-caste' + less than $\frac{1}{2}$							
enumerated	(31,460) ^c	(39,417) ^c	47,696	a	.0322	.0381	-
All identified							
official total	75,040	84,470	101,978	115,953	.0169	.0377	.0257
adjusted total	74,514	85,320	101,978	115,953	.0193	.0357	.0257
Notes: a - Not distinguished. b - Not available: even if so returned, coded as European or whatever the main racial origin was. c - Those less than 'half-caste' only included if returned and coded as 'half-caste'. d - Excludes 57 persons who are already counted under their main race of 'Torres Strait Islander' or 'half-caste Torres Strait Islander'.							

TABLE 6.1.2. STATES, TERRITORIES AND AUSTRALIA. ABORIGINAL POPULATIONS FROM STATE AND TERRITORY ESTIMATES 1926-1974.

		N.S.W.	VIC.	Q.L.D.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.
1898	Full descent	3,230								
	Others	3,661								
	Total	6,891	719	20,000	3,000	30,000		20,000		80,610 ^a
1899	Full descent	3,203								
	Others	3,689								
	Total	6,892	449 ^b			30,000				
1900	Full descent	3,108								
	Others	3,793								
	Total	6,901	443 ^b	15,000	2,861					
1901	Full descent	3,036	271							
	Others	3,879	381			1,000-				
	Total	6,915	652							
1902	Full descent	2,880								
	Others	3,948								
	Total	6,828	652			30,000				
1903	Full descent	2,786			3,236	31,144				
	Others	4,148			537	856				
	Total	6,934	652	25,000	3,773	32,000		23,000 ^c		91,359 ^a
1904	Full descent									
	Others									
	Total	6,910	652	20,000	3,763	30,000		23,000 ^c		84,325 ^a
1905	Full descent	2,656	271	17,670	3,174	29,100		14,800 ^c		67,671 ^a
	Others	4,477	381	2,330	571	900		200 ^c		8,859 ^a
	Total	7,133	652	20,000	3,745	30,000		15,000		76,530 ^a
	Full descent							19,800		72,671 ^a
	Others							200		8,859 ^a
	Total							20,000		81,530 ^a
	Full descent							21,800		74,671 ^a
	Others							200		8,859 ^a
	Total							22,000		83,530 ^a
	Full descent							29,800		82,671 ^a
	Others							200		8,859 ^a
	Total							30,000		91,530 ^a
1906	Full descent	2,503	271		3,136					
	Others	4,569	382		591					
	Total	7,072	652	20,000	3,727	30,000		23,000		84,451 ^a
1907	Full descent	2,347			3,097					
	Others	4,613			606					
	Total	6,960	270 ^b	20,000	3,703	27,000		16,600		74,533 ^a
1908	Full descent	2,152			3,070	31,000				
	Others	4,781			627	1,000				
	Total	6,933	265 ^b	20,000	3,800	32,000		16,000		78,998 ^a
1909	Full descent	2,123	173 ^b		2,841					
	Others	5,247	80 ^b		650					
	Total	7,370	253 ^b	18,000	3,491	24,000		20,000		73,114 ^a
	Total			20,000		27,000		16,000		74,114 ^a
	Total			18,000		24,000		22,000		75,114 ^a
	Total			20,000		27,000		20,000		78,114 ^a
	Total			20,000		27,000		25,000		83,114 ^a
1910	Full descent	1,872						13,600		
	Others	5,085						200		
	Total	6,957	256 ^b	20,000	4,600	27,000		13,800		72,613 ^a
	Total							16,000		74,813 ^a
	Total							22,000		80,813 ^a
1911	Full descent	2,076	136 ^b		4,000					
	Others	5,253	116 ^b		817					
	Total	7,329	252 ^b	20,000	4,817	27,000		20,000		79,398 ^a
1912	Full descent	1,917	133 ^b	20,000	4,000	24,525 ^c		19,750 ^c		70,325 ^a
	Others	5,117	136 ^b	2,000	836	1,475 ^c		250 ^c		9,814 ^a
	Total	7,034	269 ^b	22,000	4,836	26,000		20,000		80,139 ^a
	Full descent					24,525 ^c		24,750 ^c		75,325 ^a
	Others					1,475 ^c		250 ^c		9,814 ^a
	Total					26,000		25,000		85,139 ^a
	Full descent					32,000		19,750 ^c		77,800 ^a
	Others					1,475		250 ^c		9,814 ^a
	Total					33,475		20,000		87,614 ^a
	Full descent					32,000		24,750 ^c		82,800 ^a
	Others					1,475		250 ^c		9,814 ^a
	Total					33,475		25,000		92,614 ^a
	Full descent					24,525 ^c		49,750 ^c		100,325 ^a
	Others					1,475		250 ^c		9,814 ^a
	Total					26,000		50,000		110,139 ^a
	Full descent					32,000		49,250 ^c		107,800 ^a
	Others					1,475		250 ^c		9,814 ^a
	Total					33,475		50,000		117,614 ^a
1913	Full descent	1,861								
	Others	5,054								
	Total	6,915	250 ^b	16,000	5,000	32,000		20,000		80,165 ^a
	Total							30,000		90,165 ^a
	Total							40,000		100,165 ^a
1914	Full descent	1,730								
	Others	5,049								
	Total	6,779	233 ^b	15,000	4,636	32,000		30,000 ^d		88,648 ^a
1915	Full descent	1,597			3,902					
	Others	4,983			906					
	Total	6,580	283	15,000	4,808	32,000		30,000 ^d		88,671 ^a
1916	Full descent	1,573			3,872					
	Others	5,026			921					
	Total	6,599	277 ^b	16,700	4,793	12,806				

TABLE 8.1.3. STATES, TERRITORIES AND AUSTRALIA. ABORIGINAL POPULATIONS FROM STATE AND TERRITORY ESTIMATES 1898-1974. - page 2.

		N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.	V.A. estimate excluded -	
											Number	AUST.
1917	Full descent	1,326			3,852	22,888					10,000	
	Others	4,921			920	1,603					0	
	Total	6,247	320	16,600	4,772	24,491		20,000		72,430 ^a	10,000	62,430 ^a
	Total							50,000		102,430 ^a	10,000	92,430 ^a
1918	Full descent	1,451			3,836	25,767					10,000	
	Others	5,040			942	826					0	
	Total	6,491		16,500	4,778	26,593					10,000	
1919	Full descent				3,787							
	Others				957							
	Total		312	16,500	4,774							
1920	Full descent	1,238	73		3,680							
	Others	5,990	294		975							
	Total	7,228	367	16,400	4,655	24,000		17,340		69,990 ^a	10,000	59,990 ^a
	Total			18,000				17,340		71,590 ^a	10,000	61,590 ^a
	Total			16,400				35,000		87,650 ^a	10,000	77,650 ^a
	Total			18,000				35,000		89,250 ^a	10,000	79,250 ^a
1921	Full descent	1,281	85 ^c	12,000 ^c	3,787	25,578 ^b		20,000		62,738 ^a	10,000	52,738 ^a
	Others	6,270	319 ^c	5,000 ^c	957	2,084 ^b		550		15,180 ^a	0	15,180 ^a
	Total	7,551	402 ^c	17,000	4,744	27,671 ^b		20,550		77,918 ^a	10,000	67,918 ^a
1922	Full descent	1,231	88 ^c	12,000 ^c	3,779	22,000 ^c		20,000 ^c		59,098 ^a	10,000	49,098 ^a
	Others	6,143	303 ^c	5,000 ^c	982	2,000 ^c		600 ^c		15,028 ^a	0	15,028 ^a
	Total	7,374	391 ^c	17,000	4,761	24,000 ^c		20,600 ^c		74,126 ^a	10,000	64,126 ^a
1923	Full descent	1,214	78 ^c	11,000	3,757	22,000 ^c		20,000 ^c		58,049 ^a	10,000	48,049 ^a
	Others	6,108	296 ^c	5,000	1,001	2,000 ^c		600 ^c		15,005 ^a	0	15,005 ^a
	Total	7,322	374 ^c	16,000	4,758	24,000 ^c		20,600 ^c		73,054 ^a	10,000	63,054 ^a
	Full descent			12,000						59,049 ^a	10,000	49,049 ^a
	Others			5,000						15,005 ^a	0	15,005 ^a
	Total			17,000						74,054 ^a	10,000	64,054 ^a
1924	Full descent	1,085	74 ^c	15,075	3,941	22,260 ^b		19,981 ^b		62,416 ^a	10,000	52,416 ^a
	Others	6,425	435 ^c	2,839	1,166	1,768 ^b		707 ^b		13,340 ^a	0	13,340 ^a
	Total	7,510	509 ^c	17,914	5,107	24,028 ^b		20,688 ^b		75,756 ^a	10,000	65,756 ^a
1925	Full descent	1,081	66 ^c	15,069 ^c	3,897	22,471 ^b		19,348 ^b		61,932 ^a	10,000	51,932 ^a
	Others	6,313	414 ^c	2,838 ^c	1,196	2,323 ^b		652 ^b		13,736 ^a	0	13,736 ^a
	Total	7,394	480 ^c	17,907	5,093	24,794 ^b		20,000		75,668 ^a	10,000	65,668 ^a
	Total							40,000		95,668 ^a	10,000	85,668 ^a
1926	Full descent	1,031	55	13,604	2,531 ^f	22,222 ^b		19,328 ^b		58,771 ^a	10,000	48,771 ^a
	Others	6,312	554	4,047	1,452 ^f	2,420		672 ^c		15,457 ^a	0	15,457 ^a
	Total	7,343	609	17,651	3,983 ^f	24,642 ^b		20,000		74,228 ^a	10,000	64,228 ^a
1927	Full descent	964 ^a	63	13,523	2,145 ^f	22,942		20,258 ^b		59,899 ^a	10,000	49,899 ^a
	Others	5,829 ^a	541	4,210	1,554 ^f	2,747		782 ^c		15,663 ^a	0	15,663 ^a
	Total	6,793 ^a	604	17,733	3,703 ^f	25,689		21,040 ^b		75,562 ^a	10,000	65,562 ^a
1928	Full descent	1,201	54	13,190	2,615 ^f	22,759		20,099 ^b		59,918 ^a	10,000	49,918 ^a
	Others	6,844	506	4,421	1,565 ^f	2,754		901 ^c		16,911 ^a	0	16,911 ^a
	Total	8,045	560	17,611	4,180 ^f	25,513		21,000		76,909 ^a	10,000	66,909 ^a
1929	Full descent	1,229	47	14,177	2,630 ^f	22,815		19,816 ^b		60,716 ^a	10,000	50,716 ^a
	Others	7,026	531	3,869	1,456 ^f	2,833		837 ^c		16,552 ^a	0	16,552 ^a
	Total	8,255	578	18,046	4,086 ^f	25,648		20,655		77,268 ^a	10,000	67,268 ^a
1930	Full descent	992	45	14,042	2,426 ^f	23,174		21,033 ^b		61,712 ^a	10,000	51,712 ^a
	Others	7,928	521	3,889	1,569 ^f	3,126		773 ^c		17,806 ^a	0	17,806 ^a
	Total	8,920	566	17,931	3,995 ^f	26,300		21,806		79,518 ^a	10,000	69,518 ^a
1931	Full descent	1,038	51	13,654	1,651 ^f	23,197		19,586 ^b		59,183 ^a	10,000	49,183 ^a
	Others	8,775	542	4,052	1,692 ^f	3,530		814 ^c		19,405 ^a	0	19,405 ^a
	Total	9,813	593	17,706	3,349 ^f	26,727		20,400		78,588 ^a	10,000	68,588 ^a
1932	Full descent	913	50 ^b	13,372	1,722 ^f	24,766		18,677		59,500 ^a	10,000	49,500 ^a
	Others	8,767	553 ^b	4,068	1,685 ^f	3,715		730 ^c		19,518 ^a	0	19,518 ^a
	Total	9,680	603 ^b	17,440	3,407 ^f	28,481		19,407		79,018 ^a	10,000	69,018 ^a
1933	Full descent	1,251	51	12,532	1,988 ^f	25,130		18,643		59,595 ^a	10,000	49,595 ^a
	Others	8,437	536	4,425	1,591 ^f	3,891		781 ^c		19,661 ^a	0	19,661 ^a
	Total	9,688	587	16,957	3,579 ^f	29,021		19,424		79,256 ^a	10,000	69,256 ^a
1934	Full descent	1,008	56	12,306	1,740 ^f	22,513		17,238	0 ^b	54,861	10,000	44,861
	Others	9,373	559	4,916	1,769 ^f	4,005	270 ^b	770	68 ^b	21,730	0	21,730
	Total	10,381	615	17,222	3,509 ^f	26,518	270 ^b	18,008	68 ^b	76,591	10,000	66,591
1935	Full descent	909	60	12,070	1,741 ^f	22,197	0 ^b	17,422	0 ^b	54,399	10,000	44,399
	Others	9,365	562	5,425	2,047 ^f	4,245	263 ^b	822	57 ^b	22,786	0	22,786
	Total	10,274	622	17,495	3,788 ^f	26,442	263 ^b	18,244	57 ^b	77,185	10,000	67,185
1936	Full descent	976	55	12,337	1,545 ^f	22,306	1 ^b	16,846	0 ^b	53,794	10,000	43,794
	Others	9,884	625	5,785	1,814 ^f	4,273	270 ^b	884	79 ^b	23,614	0	23,614
	Total	10,860	680	18,122	3,357 ^f	26,579	271 ^b	17,730	79 ^b	77,408	10,000	67,408
1937	Full descent	858	51	12,112	1,734 ^f	22,118	1 ^b	16,373 ^c	0 ^b	53,242	10,000	43,242
	Others	9,735	658	5,312	2,103 ^f	4,209	309 ^b	942	98 ^b	23,966	0	23,966
	Total	10,593	709	18,024	3,837 ^f	26,327	310 ^b	17,315	98 ^b	77,213	10,000	67,213
1938	Full descent	805	48	12,160	2,081 ^f	21,882	1 ^b	14,354	0 ^b	51,331	10,000	41,331
	Others	9,610	688	6,461	2,148 ^f	4,602	256 ^b	913	86 ^b	24,758	0	24,758
	Total	10,415	736	18,621	4,229 ^f	26,484	257 ^b	15,267	86 ^b	76,089	10,000	66,089
1939	Full descent	794	48	12,030	2,684 ^f	21,878	1 ^b	14,089 ^c	0 ^b	51,524	10,000	41,524
	Others	10,144	763	6,778	2,197 ^f	4,688	273 ^b	913	75 ^b	25,831	0	25,831
	Total	10,938	811	18,808	4,881 ^f	26,566	274 ^b	15,002 ^c	75 ^b	77,355	10,000	67,355
1940	Full descent	690	41	12,493	2,704 ^f	21,821 ^c	1 ^b	13,898	0 ^b	51,648	10,000	41,648
	Others	10,171	715	6,164	2,290 ^f	4,781 ^c	282 ^b	902	88 ^b	25,353	0	25,353
	Total	10,861	756	18,657	4,994 ^f	26,602 ^c	283 ^b	14,800	88 ^b	77,001	10,000	67,001
1941	Full descent	594	35	12,652	2,798 ^f	21,705 ^c	1 ^b	13,451 ^c	2 ^b	51,242	10,000	41,242
	Others	10,022	749	6,451	2,220 ^f	4,407 ^c	284 ^b	1,037 ^c	83 ^b	25,253	0	25,253
	Total	10,616	784	19,103	5,018 ^f	26,116 ^c	285 ^b	14,488	85 ^b	76,495	10,000	66,495
1942	Full descent		27									
	Others		720									
	Total		747									
1943	Full descent					21,449						
	Others					5,471						
	Total					26,920						

TABLE 8.1.3. STATES, TERRITORIES AND AUSTRALIA. ABORIGINAL POPULATION COMPILED FROM STATE AND TERRITORY ESTIMATES 1898-1974. - page 3.

		N.S.W.	VIC.	Q.L.D.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.	W.A. estimate excluded -	
											Number	AUST.
1944	Full descent	692 ^a	29	12,652	2,868	21,532	2	13,331	1	51,107	10,000	41,107
	Others	10,182 ^a	1,120	6,451 ^c	2,208	5,520	375	822	101	26,779	0	26,779
	Total	10,874 ^a	1,149	19,103 ^c	5,076 ^c	27,052	377	14,153 ^b	102	77,886	10,000	67,886
1945	Full descent		19	12,937		20,891					10,000	
	Others		656	6,451		4,748					0	
	Total		675	19,388		25,639		13,000			10,000	
1946	Full descent		18	13,100								
	Others		761	6,480								
	Total		779	19,580								
1947	Full descent		17			20,338					10,000	
	Others		755			5,896					0	
	Total		772	20,560		26,234		15,000			10,000	
1948	Full descent		18					14,000				
	Others		783					2,000				
	Total		801					16,000				
1949	Full descent		16	14,185		16,724					6,000	
	Others		812	6,672		6,039					0	
	Total		828	20,857		22,763					6,000	
1950	Full descent		25	14,185		15,943					6,000	
	Others		837	6,672		6,446					0	
	Total		862	20,857		22,389					6,000	
1951	Full descent		26	14,529		14,606		12,200			6,000	
	Others		804	6,846		6,486					0	
	Total		830	21,375		21,092					6,000	
1952	Full descent	953	25	14,690	2,139	15,081		13,900		46,788 ^a	6,000	40,788 ^a
	Others	10,607	790	6,875	2,983	5,970		1,347		28,572 ^a	0	26,572 ^a
	Total	11,560	815	21,565	5,122	21,051		15,247		75,360 ^a	6,000	69,788 ^a
1953	Full descent		25	14,803	2,500	13,872		13,490			6,000	
	Others		800	6,864	2,500	6,914					0	
	Total		825	21,667	5,000	20,786					6,000	
1954	Full descent	224 ^c	23	14,729	2,500	14,195		13,744		45,415 ^a	6,000	39,415 ^a
	Others	11,776 ^c	813	7,106	2,500	7,262		1,559		31,116 ^a	0	31,116 ^a
	Total	12,000	836	21,835	5,000	21,457		15,403		76,531 ^a	6,000	70,531 ^a
1955	Full descent	231		15,313	2,500+	14,522		13,885			6,000	
	Others	12,139		7,039	2,500+	6,840					0	
	Total	12,370		22,352	5,000	21,362					6,000	
1956	Full descent		20	2,500+	2,500+	14,351		15,971			6,000	
	Others		1,326	2,500+	6,947						0	
	Total		1,346	42,590	5,000	21,298					6,000	
1957	Full descent	235	20	17,041	2,400	14,536	0	16,000	0	50,232	6,000	44,232
	Others	13,363	1,326	26,133	2,600	6,963	0	1,400	0	51,785	0	51,785
	Total	13,598	1,346	43,174	5,000	21,499	0	17,400	0	102,017	6,000	96,017
1958	Full descent	235	25	17,044	2,500+	14,655		16,100		50,559 ^a	6,000	44,559 ^a
	Others	13,363	1,315	26,443	2,500+	7,196		2,400		41,190 ^a	0	41,190 ^a
	Total	13,598	1,340	43,487	5,000	21,851		18,500		91,749 ^a	6,000	85,749 ^a
	Full descent					12,655				48,559 ^a	4,000	44,559 ^a
	Others					7,196				41,190 ^a	0	41,190 ^a
	Total					19,851				89,749 ^a	4,000	85,749 ^a
	Full descent					10,655				46,559 ^a	2,000	44,559 ^a
	Others					7,196				41,190 ^a	0	41,190 ^a
	Total					17,851				87,749 ^a	2,000	85,749 ^a
1959	Full descent	235 ^c	25	18,110	2,500	10,625		18,035			2,000	
	Others	13,363 ^c	2,235	26,900	2,500	7,673					0	
	Total	13,598 ^c	2,260	45,010	5,000	18,298					2,000	
1960	Full descent	235 ^c	20	18,614	2,000	10,872		18,200		49,941 ^a	2,000	47,941 ^a
	Others	13,363 ^c	2,240	27,620	4,000	8,160		2,000		57,383 ^a	0	57,383 ^a
	Total	13,598 ^c	2,260	46,234	6,000	19,032		20,200		107,324 ^a	2,000	105,324 ^a
1961	Full descent	235 ^c	18	19,454	2,000	10,000		18,677		50,384 ^a	0	50,384 ^a
	Others	13,363 ^c	2,282	27,994	4,000	9,416		3,000 ^c		60,055 ^a	0	60,055 ^a
	Total	13,598 ^c	2,300	47,448	6,000	19,416		21,677		110,439 ^a	0	110,439 ^a
1962	Full descent	235 ^c	18	20,500 ^c	2,000	8,854		18,875		50,482 ^a	0	
	Others	13,363 ^c	2,482	29,500 ^c	4,000	10,703		3,000 ^c		63,048 ^a	0	
	Total	13,598 ^c	2,500	50,000	6,000	19,557		21,875		113,530 ^a	0	
1963	Full descent	235 ^c	0	20,734 ^a	2,000	9,205		19,334		51,508 ^a	0	
	Others	13,363 ^c	3,000	27,636 ^c	4,000	11,249		4,000		63,248 ^a	0	
	Total	13,598 ^c	3,000	48,370	6,000	20,454		23,334		114,756 ^a	0	
1964	Full descent	235 ^c	0	21,003	2,250	9,411	0	19,370		32,269		
	Others	13,363 ^c	3,000	27,994	3,850	11,579	200	4,000 ^c		63,986		
	Total	13,598 ^c	3,000	48,997	6,100	20,990	200	23,370		116,255		
1965	Full descent	235 ^c	0	21,234 ^c	2,287 ^c	9,737		19,681		33,174 ^a		
	Others	13,363 ^c	3,500	28,302 ^c	3,915 ^c	11,490		4,000 ^c		64,568 ^a		
	Total	13,598 ^c	3,500	49,536	6,200	21,227		23,681 ^c		117,742 ^a		
1966	Full descent	130	0	20,107	3,128	9,905		20,120		33,390 ^a		
	Others	23,000	3,500	29,700	4,632	11,985		4,000		76,817 ^a		
	Total	23,130	3,500	49,807	7,760	21,890		24,120		130,207 ^a		
1967	Full descent					9,466		20,549				
	Others					13,017		4,000 ^c				
	Total					22,488		24,549				
1968	Full descent					9,706						
	Others					16,230						
	Total					25,936						
1969	Full descent					9,246		21,394				
	Others					18,254		4,000				
	Total					27,427		25,394				
1970	Full descent					9,349		21,846				
	Others					14,465		4,000				
	Total					25,846						
1971	Full descent					9,453		22,500				
	Others					18,547		6,000				
	Total					28,000		28,500				
	Total	30,000	5,600 ^c	50,000	9,450	28,000	1,000	28,500	250	152,800		
		35,000								157,800		

TABLE 8.1.3. STATES, TERRITORIES AND AUSTRALIA. ABORIGINAL POPULATION COMPILED FROM STATE AND TERRITORY ESTIMATES 1898-1974 - page 4.

		N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.
1972	Full descent					9,414				
	Others					19,585				
	Total		6,245	45,000	9,780	29,000		23,718		
1973	Full descent					10,354				
	Others					18,538				
	Total			47,465		28,892		24,192		
1974	Full descent					10,636				
	Others					19,344				
	Total					29,980				

Notes: a - Excludes Tasmania and A.C.T.
b - Those under the control of the B.P.A. only.
c - Estimated.
d - Excludes A.C.T.
e - From annual Aboriginal census.
f - Excluding an unknown number in the north-west.

TABLE 8.1.4. COMPARISON OF CENSUS WITH STATE AND TERRITORY ESTIMATES OF ABORIGINAL POPULATION, 1954-1971.

		N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.
1954	Census	12,215	1,395	22,813	4,973	16,215	93	17,163	173	75,040
	State and Territory	12,000	836	21,835	5,000	21,457	0?	15,403	0?	76,531
1961	Census	14,720	1,796	24,903	4,885	18,276	38	19,707	145	84,470
	State and Territory	13,598	2,500	50,000	6,000	19,416	200?	21,677	200?	113,591
1966	Census	20,618	2,715	28,262	6,584	21,238	80	22,312	169	101,978
	State and Territory	23,130	3,500	49,807	7,760	21,890	250	24,120	100	130,557
1971	Census	23,873	6,371	31,922	7,299	22,181	671	23,381	255	115,953
	State and Territory	32,500?	5,600?	50,000	9,450	28,000	1,000	28,500	250	155,300

TABLE 8.1.5. EXCESS OF STATE AND TERRITORY ESTIMATES OVER CENSUS ABORIGINAL POPULATION, 1954-1971.

	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.	(+ve)	(-ve)
1954	-215	-559	-978	27	5,242	-93	-1,760	-173	1,491	+5,269	-3,778
1961	-1,122	704	25,097	1,115	1,140	162	1,970	+55	29,121	+30,243	-1,122
1966	2,512	785	21,543	1,176	652	170	1,808	-69	28,577	+28,646	-69
1971	8,627	-771	18,078	2,151	5,819	329	5,119	-5	39,347	+40,123	-776

TABLE 8.1.6. STATE AND TERRITORY EXCESSES AS PERCENTAGE OF CENSUS POPULATION, 1954-1971.

	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.
1954	-1.8%	-40.1%	-4.3%	+0.5%	+32.3%	0%	-10.3%	0%	+2.0%
1961	-7.6%	+39.2%	+100.8%	+22.8%	+6.2%	+426.3%	+10.0%	+37.9%	+34.5%
1966	+12.2%	+28.9%	+76.2%	+17.9%	+3.1%	+212.5%	+8.1%	-40.8%	+28.0%
1971	+36.1%	-12.1%	+56.6%	+29.5%	+26.2%	+49.0%	+21.9%	-2.0%	+33.9%

TABLE 8.1.7. PERCENTAGE OF STATE AND TERRITORY EXCESSES IN EACH STATE AND TERRITORY, 1954-1961.

	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.	(N =)
1954	-	-	-	0.5%	99.5%	-	-	-	100.0%	5,269
1961	-	2.3%	83.0%	3.7%	3.8%	0.5%	6.5%	0.2%	100.0%	30,243
1966	8.8%	2.7%	75.2%	4.1%	2.3%	0.6%	6.3%	-	100.0%	28,646
1971	21.5%	-	45.1%	5.4%	14.5%	0.8%	12.8%	-	100.0%	40,123

TABLE 8.1.8. PERCENTAGE OF CENSUS EXCESSES IN EACH STATE AND TERRITORY, 1954-1971.

	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.	(N =)
1954	5.7%	14.8%	25.9%	-	-	2.5%	46.6%	4.6%	100.0%	3,778
1961	100.0%	-	-	-	-	-	-	-	100.0%	1,122
1966	-	-	-	-	-	-	-	100.0%	100.0%	69
1971	-	99.4%	-	-	-	-	-	0.6%	100.0%	776

TABLE 8.1.2. AUSTRALIA. ANNUAL ABORIGINAL CENSUSES 1921 - 1944.

		FULL DESCENT			OTHERS			TOTAL		
		males	females	persons	males	females	persons	males	females	persons
1921	Returned	27,172	21,695	48,867	6,133	5,446	11,579	33,305	27,141	60,446
	Estimated	5,803	5,597	11,400	0	0	0	5,803	5,597	11,400
	Total	32,975	27,292	60,267	6,133	5,446	11,579	39,108	32,738	71,846 ^a
1924	Returned	29,021	23,394	52,415	6,558	5,744	12,302	35,579	29,138	64,717
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	34,021	28,394	62,415	6,558	5,744	12,302	40,579	32,138	74,717 ^a
1925	Returned	c	c	52,350	c	c	13,423	c	c	65,773
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	c	c	62,350	c	c	13,423	c	c	75,773 ^{a,b}
1926	Returned	27,708	21,552	49,260	8,017	7,085	15,102	35,725	28,637	64,362
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	32,708	26,552	59,260	8,017	7,085	15,102	40,725	33,637	74,398 ^{a,d}
1927	Returned	27,768	22,177	49,945	8,206	7,262	15,468	35,974	29,439	65,413
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	32,768	27,177	59,945	8,206	7,262	15,468	40,974	34,974	75,413 ^{a,d}
1928	Returned	27,858	22,805	50,663	8,875	7,943	16,818	36,733	30,748	67,481
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	32,858	27,805	60,663	8,875	7,943	16,818	41,733	35,748	77,481
1929	Returned	28,759	23,072	51,831	8,750	7,850	16,600	37,509	30,922	68,431
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	33,759	28,072	61,831	8,750	7,850	16,600	42,509	35,922	78,431 ^{a,e}
1930	Returned	28,575	23,159	51,734	9,489	8,308	17,797	38,064	31,467	69,531
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	33,575	28,159	61,734	9,489	8,308	17,797	43,064	36,467	79,531 ^{a,d}
1931	Returned	22,071	16,830	48,901	10,006	9,008	19,014	32,077	25,838	67,915
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	27,071	21,830	58,901	10,006	9,008	19,014	37,077	30,838	77,915 ^{a,d}
1932	Returned	27,562	22,157	49,719	10,225	8,971	19,196	37,787	31,128	68,915
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	32,562	27,157	59,719	10,225	8,971	19,196	42,787	36,128	78,915 ^{a,d}
1933	Returned	27,619	22,482	50,101	10,354	9,113	19,467	37,973	31,595	69,568
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	32,619	27,482	60,101	10,354	9,113	19,467	42,973	36,595	79,568 ^{a,d}
1934	Returned	24,847	20,001	44,848	c	c	21,737	c	c	66,585
	Estimated	5,000	5,000	10,000	c	c	0	c	c	10,000
	Total	29,847	25,001	54,848	c	c	21,747	c	c	76,585 ^a
1935	Returned	24,616	29,762	44,378	11,974	10,843	22,817	36,590	30,605	67,195
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	29,616	24,762	54,378	11,974	10,843	22,817	41,590	35,605	77,195 ^a
1936	Returned	24,451	20,247	43,698	12,326	11,135	23,461	36,777	30,382	67,159
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	29,451	24,247	53,698	12,326	11,135	23,461	41,777	35,382	77,159 ^a
1937	Returned	23,831	19,004	42,835	12,605	11,345	23,950	36,436	30,349	66,785
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	28,831	24,004	52,835	12,605	11,345	23,950	41,436	35,349	76,785 ^a
1938	Returned	23,132	18,247	41,379	12,962	11,756	24,718	36,094	30,003	66,097
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	28,132	23,247	51,379	12,962	11,756	24,718	41,094	35,003	76,097 ^a
1939	Returned	23,746	17,811	41,557	13,545	12,167	25,712	37,291	29,978	67,269
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	28,746	22,811	51,557	13,545	12,167	25,712	42,291	34,978	77,269 ^a
1940	Aborigines:									
	Returned	21,835	16,125	37,960	13,216	12,095	25,311	35,051	28,220	63,271
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	26,835	21,125	47,960	13,216	12,095	25,311	40,051	33,220	73,271
	T.S. Islanders	.	.	.	.	.	.	1,903	1,824	3,727
	Total	.	.	.	.	.	.	41,954	35,044	76,998
1941	Aborigines:									
	Returned	21,572	16,048	37,620	13,223	11,968	25,191	34,795	28,016	62,811
	Estimated	5,000	5,000	10,000	0	0	0	5,000	5,000	10,000
	Total	26,572	21,048	47,620	13,223	11,968	25,191	39,795	33,016	72,811
	T.S. Islanders	.	.	.	.	.	.	1,887	1,788	3,675
	Total	.	.	.	.	.	.	41,682	34,804	76,486
1944	Aborigines:									
	Returned	c	c	37,014	c	c	24,881	c	c	61,895
	Estimated	.	.	10,000	.	.	0	.	.	10,000 ^f
	Total	c	c	47,014	c	c	24,881	c	c	71,895 ^f
	T.S. Islanders	.	.	.	.	.	.	2,030	1,870	3,900
	Total	.	.	.	.	.	.	c	c	75,795

Notes: a - Excluding Tasmania and A.C.T.

b - using the 1924 figure for Queensland, and correcting published tables which repeated the 1924 figures for South Australia.

c - not available

d - excluding an unknown number in the Musgrave and Everard ranges of South Australia

e - as corrected by me. Published tables repeated the 1928 figures for Victoria.

f - using the 1941 figure for N.S.W.

TABLE 8.1.10. AUSTRALIA. MISCELLANEOUS ESTIMATES OF ABORIGINAL POPULATION 1788-1973.

1788	150,000	<u>Australian Handbook</u> 1881 etc., <u>Australian Yearbook</u> 1924, etc.
	160,000	Roberts, quoted by Hormann (1949).
	215,000	F.L.Jones' (1970a) minimum. Excludes Tasmania.
	227,000	F.L.Jones' (1970a) minimum by addition.
	231,500	F.L.Jones' (1970a) maximum by addition.
	248,000	Hormann (1949), quoting Radcliffe-Brown.
	248,500	" " " " "
	250,000	Radcliffe-Brown's (1930) final absolute minimum.
	250,500	Radcliffe-Brown's (1930) lower initial estimate.
	251,000	Radcliffe-Brown's (1930) actual final figure.
	253,500	Davidson's (1938) minimum.
	259,500	Radcliffe-Brown's (1930) upper initial estimate.
	290,000	Tindale's (1940) and R.M.Jones' (1971a) tribes x 500.
	300,000	Radcliffe-Brown's (1930) final assessment of minimum.
	302,800	Davidson's (1938) maximum.
	314,500	My best estimate.
	348,000	Tindale's (1940) and R.M.Jones' (1971a) tribes x 600.
	1,000,000	Philip, quoted in <u>N.S.W. Yearbook</u> 1904-05; Bleakley, quoted in Bennett (1929).
1898	80,370	by addition, from Western Australia. Aborigines Department. <u>Report</u> 1898.
1903	66,098	by addition, from Queensland. Northern Protector of Aborigines. <u>Report</u> 1903. Excludes Northern Territory.
1904	61,062	by addition from Queensland. Chief Protector of Aborigines. <u>Report</u> 1904. Excludes Northern Territory.
1905	61,020	by addition from Queensland. Chief Protector of Aborigines. <u>Report</u> 1905. Excludes Northern Territory.
1906	61,020	by addition from Queensland. Chief Protector of Aborigines. <u>Report</u> 1906. Excludes Northern Territory.
1907	74,630	by addition from Queensland. Chief Protector of Aborigines. <u>Report</u> 1907.
1908	73,998	by addition from Queensland. Chief Protector of Aborigines. <u>Report</u> 1908.
1909	74,114	by addition from Queensland. Chief Protector of Aborigines. <u>Report</u> 1909.
	62,000	by addition from Dr Roth, quoted in <u>Australian Yearbook</u> 1909.
	to 64,000	(Queensland, Western Australia and Northern Territory only.)
1910	74,753	by addition from Queensland. Chief Protector of Aborigines. <u>Report</u> 1910.
1911	78,552	by addition from South Australia. Chief Protector of Aborigines. <u>Report</u> 1911.
	67,598	by addition from South Australia. Chief Protector of Aborigines. <u>Report</u> 1912. (excludes Northern Territory)
1912	80,866	by addition from Queensland. Chief Protector of Aborigines. <u>Report</u> 1912.
1913	100,001	by addition from Queensland. Chief Protector of Aborigines. <u>Report</u> 1913.
1914	61,676	by addition from Queensland. Chief Protector of Aborigines. <u>Report</u> 1914.
1915	61,705	by addition from Queensland. Chief Protector of Aborigines. <u>Report</u> 1915.
1921	60,479	F.L.Jones (1970a), quoting 1921 Census. (a mistake)
	77,481	Grenfell Price (1949), quoting 1921 Census. (a mistake)
	less than 60,000	<u>Australian Yearbook</u> 1921 ('full-bloods' only).
1952	76,826	<u>Annual Report</u> of the Victorian Aboriginal Group.
1961	98,953	Fink (1964). Source?
	80,000	Long, quoted by Rowley (1970a)
1964	100,000	<u>Our Aborigines</u> (1964)
1966	90,000	'problem population' J.P.M.Long, quoted by Rowley (1970a)
	300,000	Perkins, from Sharp & Tatz (1966)
1967	129,888	Tatz, quoted by Saini (1967)
1970	137,649	Lovejoy (1971)
	200,000	Schapper (1970)
1973	142,800	Scott (1973a)

Except for Tasmania, all States and Territories now claim the maximum discoverable population, although because of local attitudes the Northern Territory authorities still only publicize the figures relating to people 'living as Aborigines'. There is no significance in the fact that in Victoria the 1971 Census figure was higher than the State estimate. In 1972 the Victorian Ministry estimated the size of its population at 6,245, roughly the same as the Census. What this does indicate, however, is that the process of 'coming out' or re-identifying is almost complete in Victoria, and that the reservoir of 'invisible' Aborigines there has been almost emptied.

8.2. Reconstructing the total Aboriginal population

Table 8.2.1 draws together the changes suggested in the 'revealed' populations of the States and Territories, to give a schematic history of the 'revealed' population of Australia as a whole. Tables 8.2.2, 8.2.3 and 8.2.4 summarize the relative changes and rates involved, for Australia, the States and Territories. Remember that the 'revealed' population is actually the census population corrected for errors in the official estimates of those not enumerated. The figures exclude persons of Aboriginal descent who were enumerated, but who, for whatever reason, were not identified as Aborigines. As noted earlier, the effect of this exclusion is to exaggerate both the population decline and the subsequent recovery.

Other, more all-embracing, populations may of course be defined. In the State and Territory sections I attempted to reconstruct the minimum size of the populations ancestral to those currently identifiable, and these estimates are summarized in table 8.2.5. However this by no means exhausts the entire population of Aboriginal descent, to which the estimates by Schapper and Perkins shown in table 8.1.3 and figure 8.1.5 presumably refer. Such estimates embrace the total number of people with any Aboriginal ancestry at all, attempting not only to sweep away entirely any effects of the assimilation policies, but also to suggest that assimilation should work in reverse.

Now there are two limiting possibilities for the definition of the Aboriginal population: either persons all of whose ancestors are Australoid; or persons at least one of whose ancestors is Australoid. It is probably no more defensible to extend the limit to the latter than to confine it to the former, yet presumably at any given time the number of persons identifying could vary right up to the upper limit. If that occurred, every person with any Australoid ancestors would be considered an Aborigine, and if marriage outside the population were widespread, the population so defined could grow at a very rapid rate indeed, by assimilation in reverse. These two extremes were well illustrated in Tasmania, where according to conventional wisdom there are now no Aborigines, or where according to Mollison there may be over 10,000.

Fortunately, however, the range of variation is in general much narrower than in Tasmania. It is certainly to be hoped that people affected by the pressures to pass as white will eventually come to reject the feeling of shame that the white society has succeeded in engendering in people of mixed descent. But at this stage very many such people are still strongly affected by these absorptionist pressures, and if they decline to identify, this must be accepted. That is why I have not attempted to reconstruct beyond the population from which those persons currently identified are descended.

Table 8.2.6 compares the changes that have occurred in the 'revealed' populations with those in this minimum total population. Three points may be noted in these comparisons. The minimum 'revealed' populations are in general lower than the minimum 'total' populations, the 'revealed' minima usually occur later, and the difference between the ratio of the 'revealed' to the 'total' at their minima and at present, is an indication of the overall direction in which changing

TABLE 8.2.1. ESTIMATED CHANGES IN THE 'REVEALED' ABORIGINAL POPULATIONS^a OF THE STATES, TERRITORIES AND AUSTRALIA, 1788 - 1971.

	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.	+ N.S.W. A.C.T.
1788 ^b	48,000	15,000	120,000	15,000	62,000	4,500	50,000 ^c		314,500	48,000
1861	15,000 ^d	2,384 ^d	60,000 ^c	9,000 ^e	44,500 ^c	18	48,500 ^c		179,402	15,000
1871	12,000 ^d	1,700 ^d	50,000 ^c	7,500 ^e	40,000 ^c	85	44,000 ^c		155,285	12,000
1881	10,000 ^d	900 ^d	40,000 ^c	6,346 ^d	35,500 ^c	120	38,500 ^c		131,366	10,000
1891	8,280	731 ^d	32,000 ^c	5,600 ^e	31,000 ^c	139	33,000 ^a		110,750	8,280
1901	7,434	652	26,670 ^d	4,888 ^f	26,500 ^r	157	27,235 ^a		93,536	7,434
1911	6,524	643	22,508 ^d	4,692 ^f	22,498 ^r	230	22,000 ^d	18	79,113	6,542
1921	6,185	586	19,104 ^d	4,598 ^f	19,547 ^r	152	17,809 ^d	33	68,014	6,218
1933	9,546 ^d	865	17,967 ^d	4,699 ^d	17,298 ^r	270	15,386 ^f	68	66,099	9,614
1947	11,560	1,277	19,811 ^r	5,122 ^e	16,234 ^d	214	15,147 ^d	100	69,465	11,660
1954	12,215	1,395	21,813 ^r	5,373 ^e	16,215 ^d	93	17,163 ^d	173	74,514	12,388
1961	14,720	1,796	24,903 ^r	5,735 ^e	18,276 ^d	38	19,707 ^r	145	85,320	14,865
1966	20,618	2,715	28,262	6,584	21,238	80	22,312	169	101,978	20,787
1971	23,873	6,371	31,922	7,299	22,181	671	23,381	255	115,953	24,128

notes: a - as enumerated at censuses unless otherwise noted; includes Torres Strait Islanders.
b - based on Radcliffe-Brown (1930), Davidson (1938), Tindale (1940) and R.M.Jones (1971).
c - estimated.
d - official estimate.
e - official estimate adjusted upward.
f - official estimate adjusted downward.

TABLE 8.2.2. ESTIMATED ABORIGINAL POPULATIONS 1788 - 1971 AS PERCENTAGE OF ESTIMATED PRE-EUROPEAN POPULATION.

	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.	+ N.S.W. A.C.T.
1788	100.00	100.00	100.00	100.00	100.00	100.00	100.00		100.00	100.00
1861	31.25	15.89	50.00	60.00	71.77	0.40	97.00		57.04	31.25
1871	25.00	11.33	41.67	50.00	64.52	1.89	88.00		49.38	25.00
1881	20.83	6.00	33.33	42.31	57.26	2.67	77.00		41.77	20.83
1891	17.25	4.87	26.67	37.33	50.00	3.09	66.00		35.21	17.25
1901	15.49	4.35	22.23	32.59	42.74	3.49	54.47		29.74	15.49
1911	13.59	4.29	18.76	31.28	36.29	5.11	44.00		25.16	13.63
1921	12.89	3.91	15.92	30.65	31.53	3.38	35.62		21.63	12.95
1933	19.89	5.77	14.97	31.33	27.90	6.00	30.77		21.02	20.03
1947	24.08	8.51	16.51	34.15	26.18	4.76	30.29		22.09	24.29
1954	25.45	9.30	18.18	35.82	26.15	2.07	34.33		23.69	25.81
1961	30.67	11.97	20.75	38.23	29.48	0.84	39.41		27.13	30.97
1966	42.95	18.10	23.55	43.89	34.25	1.78	44.62		32.43	43.31
1971	49.74	42.47	26.60	48.66	35.78	14.91	46.76		36.87	50.27

TABLE 8.2.3. ESTIMATES OF PERCENTAGE OF AUSTRALIAN ABORIGINAL POPULATION IN EACH STATE AND TERRITORY 1788 - 1971.

	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.	+ N.S.W. A.C.T.
1788	15.26	4.77	38.16	4.77	19.71	1.43	15.90		100.00	15.26
1861	8.36	1.33	33.44	5.02	24.80	0.01	27.03		100.00	8.36
1871	7.73	1.09	32.20	4.83	25.76	0.05	28.33		100.00	7.73
1881	7.61	0.69	30.45	4.83	27.02	0.09	29.31		100.00	7.61
1891	7.48	0.66	28.89	5.06	27.99	0.13	29.80		100.00	7.48
1901	7.95	0.70	28.51	5.23	28.33	0.17	29.12		100.00	7.95
1911	8.25	0.81	28.45	5.93	28.44	0.29	27.81	0.02	100.00	8.27
1921	9.09	0.86	28.09	6.76	28.74	0.22	26.18	0.05	100.00	9.14
1933	14.44	1.31	27.18	7.11	26.17	0.41	23.28	0.10	100.00	14.54
1947	16.64	1.84	28.52	7.37	23.37	0.31	21.81	0.14	100.00	16.78
1954	16.39	1.87	29.27	7.21	21.76	0.12	23.03	0.23	100.00	16.62
1961	17.25	2.11	29.19	6.72	21.42	0.04	23.10	0.17	100.00	17.42
1966	20.22	2.66	27.71	6.46	20.83	0.08	21.88	0.17	100.00	20.39
1971	20.59	5.49	27.53	6.29	19.13	0.58	20.16	0.22	100.00	20.81

TABLE 8.2.4. ESTIMATED GROWTH RATES OF ABORIGINAL POPULATION 1788 - 1971.

	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.	+ N.S.W. A.C.T.
1788-1861	-.0159	-.0252	-.0095	-.0070	-.0045	-.0756	-.0004		-.0077	-.0159
1861-1871	-.0223	-.0338	-.0182	-.0182	-.0107	.1552	-.0097		-.0144	-.0223
1871-1881	-.0182	-.0636	-.0223	-.0167	-.0119	.0345	-.0134		-.0167	-.0182
1881-1891	-.0180	-.0208	-.0223	-.0125	-.0135	.0147	-.0154		-.0171	-.0189
1891-1901	-.0108	-.0115	-.0182	-.0136	-.0157	.0122	-.0192		-.0169	-.0108
1901-1911	-.0131	-.0014	-.0170	-.0041	-.0164	.0382	-.0213		-.0167	-.0128
1911-1921	-.0053	-.0093	-.0164	-.0020	-.0141	-.0414	-.0211	.0606	-.0151	-.0051
1921-1933	.0355	.0318	-.0050	.0018	-.0100	.0469	-.0120	.0591	-.0023	.0356
1933-1947	.0137	.0278	.0070	.0062	-.0045	-.0166	-.0011	.0275	.0036	.0138
1947-1954	.0079	.0126	.0138	.0068	-.0002	-.1191	.0179	.0783	.0100	.0087
1954-1961	.0266	.0361	.0189	.0093	.0170	-.1279	.0197	-.0252	.0193	.0260
1961-1966	.0674	.0826	.0253	.0276	.0300	.1702	.0248	.0306	.0357	.0671
1966-1971	.0293	.1706	.0244	.0206	.0087	.4040	.0094	.0823	.0257	.0298

TABLE 8.2.5. ESTIMATES OF THE MINIMUM POPULATION OF ABORIGINAL DESCENT 1788-1971.

	N.S.W.	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	A.C.T.	AUST.
1788	48,000	15,000	120,000	15,000	62,000	4,500	50,000	-	314,500
1861	16,000	2,384	60,000	9,000	44,500	18	48,500	-	180,402
1871	12,000	1,700	50,000	7,500	40,000	85	44,000	-	155,285
1881	10,000	1,200	40,000	6,346	35,500	120	38,500	-	131,666
1891	8,280	900	32,000	5,600	31,000	139	33,000	-	110,919
1901	7,434	850	27,500	4,888	26,500	157	27,235	-	94,564
1911	8,650	1,000	24,500	4,692	22,498	230	22,000	18	83,588
1921	9,350	1,400	22,500	4,598	19,547	400	17,809	33	75,604
1933	11,000	2,000	22,500	4,699	17,500	675	15,386	68	73,828
1947	14,500	3,000	27,500	5,600	18,250	1,175	16,875	100	87,000
1954	17,500	3,800	32,000	6,300	20,000	1,525	18,750	173	100,048
1961	21,500	4,650	37,500	7,200	22,500	2,000	22,000	145	117,495
1966	24,500	5,500	41,500	8,100	25,000	2,450	25,000	169	132,219
1971	28,500	6,371	46,000	9,450	28,000	3,000	28,500	255	150,076

TABLE 8.2.6. SUMMARY OF CHANGES IN THE 'REVEALED' AND MINIMUM TOTAL ABORIGINAL POPULATIONS 1788-1971.

	N.S.W. ^a	VIC.	QLD.	S.A.	W.A.	TAS.	N.T.	AUST.
Pre-contact population	48,000	15,000	120,000	15,000	62,000	4,500	50,000	314,500
Lowest total population	7,434	850	22,500	4,598	17,500	18	15,386	73,828
Date	1901	1901	1927	1921	1933	1861	1933	1933
% of pre-contact	15.5%	5.7%	18.8%	30.7%	28.2%	0.4%	30.8%	23.5%
Lowest 'revealed' population	6,218	586	17,967	4,598	16,215	18	15,147	66,099
Date	1921	1921	1933	1921	1954	1861	1947	1933
% of pre-contact	13.0%	3.9%	15.0%	30.7%	26.1%	0.4%	30.3%	21.0%
Difference between dates	20	20	6	0	21	0	14	0
Lowest 'revealed' as % of lowest total	83.6%	68.9%	79.9%	100.0%	92.7%	100.0%	98.4%	89.5%
1971 total population	28,775	6,371	46,000	9,450	28,000	3,000	28,500	150,076
% of pre-contact	59.9%	42.5%	38.3%	63.0%	45.2%	66.7%	57.0%	47.7%
% increase over min.	286.8%	649.5%	104.4%	105.5%	60.0%	1567%	85.2%	103.3%
1971 'revealed' population	24,128	6,371	31,922	7,299	22,181	671	23,381	115,953
% of pre-contact	50.3%	42.5%	26.6%	48.7%	35.8%	14.9%	46.8%	36.9%
% increase over min.	288.0%	987.2%	77.7%	58.7%	36.8%	3626%	54.4%	75.4%
1971 'revealed' as % of 1971 total	83.8%	100.0%	69.4%	77.2%	79.2%	22.4%	82.0%	77.3%

Note: a - Including A.C.T.

TABLE 8.2.7. AUSTRALIA. ESTIMATES OF TOTAL ABORIGINAL POPULATION, AND IMPLIED ANNUAL GROWTH RATES. 1788, AND CENSUSES 1861 - 1971.

	<u>ENUMERATED POPULATION</u>	<u>TOTAL 'REVEALED' POPULATION</u>						<u>MINIMUM TOTAL POPULATION</u>	
		<u>Official estimates</u>			<u>Adjusted estimates</u>				
		<u>Not enumerated</u>	<u>Estimated total</u>	<u>Growth rate</u>	<u>Not enumerated</u>	<u>Estimated total</u>	<u>Growth rate</u>		
1788	-	-	-	-	-	314,500	-	314,500	-
1861	6,985	-	-	-	172,417	179,402	-.0077	180,402	-.0076
1871	6,710	-	-	-	148,575	155,285	-.0144	155,285	-.0150
1881	31,797	-	-	-	99,569	131,366	-.0167	131,666	-.0165
1891	39,018	-	-	-	71,732	110,750	-.0171	110,919	-.0171
1901	48,248	45,085	93,333	-	45,288	93,536	-.0169	94,564	-.0160
1911	30,052	50,061	80,113	-.0153	49,061	79,113	-.0167	83,588	-.0123
1921	39,399	32,437	71,836	-.0109	28,615	68,014	-.0151	75,604	-.0100
1933	45,066	35,655	80,721	.0095	21,033	66,099	-.0023	73,828	-.0019
1947	51,048	24,917	75,965 ^a	-	18,417	69,465	.0036	87,000	.0117
1954	62,084	12,956	75,040	-	12,430	74,514	.0100	100,048	.0200
1961	80,526	3,944	84,470	.0169	4,794	85,320	.0193	117,495	.0230
1966	101,978	0	101,978	.0377	0	101,978	.0357	132,219	.0236
1971	115,953	0	115,953	.0257	0	115,953	.0257	150,076	.0253

Note: a - Excludes Torres Strait Islanders.

identification has occurred. One difficulty, however, is that the minimum 'total' populations may well be too low, simply because in the absence of direct evidence. I have set them as low as possible, consistent only with the requirement that the rate of growth since then should be at least conceivable.

The differences between the size and timing of the two minima reflect the different circumstances in the different parts of the country, including such factors as whether absorptionist policies were introduced to further the myth of total extinction (Victoria), or only to exclude the growing 'part-Aboriginal' section of the population in settled areas (Western Australia). The differences between the ratios of the two populations at the minima and in 1971 reflect the extent to which these absorptionist policies continue to have their effect. In New South Wales, roughly the same proportion holds now as at the minima; in Victoria it has increased substantially, reflecting the extent of re-identification that has occurred there. But everywhere else the ratio has dropped, indicating that overall, up to 1971, the net effect of changing identification continued to be to produce a loss to the census-revealed population.

Not too much weight can be attached to the changes shown in tables 8.2.1 and 8.2.6 as occurring in the period of demographic proto-history between 1788 and 1880-1920. Adequate data only became available when the decline was slowing down, and the State and Territory estimates in these tables all begin with simple interpolations between the assumed pre-contact figures and the first reasonable estimates. This covers a period of over a hundred years in most cases. In addition, the pre-contact figures themselves are not based on a direct assessment of the evidence available, but only on my synthesis of assessments made by others.

Assuming however that the changes suggested do at least approach in general outline the real changes that have occurred, some significant differences emerge between the different regions. Because European occupation was established at different beachheads at different times, and progressed at different rates in different places, the rate and extent of the Aboriginal population decline was quite different in the various States and Territories. A series of depopulation (and repopulation) frontiers moved across the continent, and each had its effect on the size, distribution and structure of the Aboriginal population. With the exception of Queensland, the extent of depopulation seems to have been greatest in the areas of closest European settlement, but even in South Australia, Western Australia and the Northern Territory, the populations fell to something under a third of the pre-contact level before recovery began. The dates at which the minimum levels were reached also roughly follow the order and closeness of European settlement, and the areas of greatest depopulation are now in general the areas of greatest repopulation. At present the 'revealed' populations are just over a third of the pre-contact figure, while the 'total' populations are just under a half.

Compared to the other States and Territories, the populations in Victoria and Tasmania declined more rapidly and to a lower level. (Their subsequent recovery was also more rapid). This steep decline was a result of the complete and close European settlement that took place, and of the 'concentration' policies that these States put into effect, under which all Aborigines, even from remote areas, were collected together in controlled institutions. This resulted both in a more rapid rate of depopulation, and a more rapid development of a 'part-Aboriginal' population, many of whom subsequently ceased to identify as Aborigines. The 'total' populations in Victoria and Tasmania fell to very low levels indeed, to under 6% of the original in Victoria, and under 1% in Tasmania. New South Wales' population decline was not to such a low level, but the timing of the fall and the recovery was similar, as was also the case in South Australia. In New South Wales, Victoria and Tasmania there was an extended period during which the 'revealed'

populations remained relatively constant, reflecting the fact that it was precisely when the recovery was beginning that the pressures to assimilate, in the sense of ceasing to identify, were mounting. Actual recovery may have been slightly more rapid when it began subsequently in Queensland, South Australia and Western Australia, but apparent recovery certainly was, since the same sort of holding-down was just not possible once the demographic recovery spread throughout all the Aboriginal groups. In the Northern Territory the assimilators began to separate out so late that both the total and the 'revealed' populations shift from decline to recovery without any discernible period of stationary numbers at all.

The decline that took place in settled areas was probably very similar in timing and extent in all the southern States, with the differences between them arising from the different extents to which people were pressured to cease identifying. This seems to have been greatest in Tasmania and Victoria, a little less in New South Wales and Western Australia, and least in South Australia. In addition, the existence of groups in remote areas, whose numbers were far less affected by European occupation, placed a lower limit on the level to which the 'revealed' populations could fall. These people were very few in New South Wales, but there were some thousands of them in South Australia, and even after the official estimates are scaled down, they probably numbered up to 10,000 in Western Australia. But there were absolutely none in Victoria or Tasmania.

Queensland, Western Australia and the Northern Territory are to a certain extent similar to each other and different from the south-eastern States. The minimum population was reached later, and there has been in general less recovery. Queensland is really an intermediate case; widespread settlement occurred early there, but as native policy was initially segregationist, the pressures to assimilate arose later, and were of a different kind. But even under these somewhat different circumstances, the situation in Queensland by the 1950s was similar to the south-eastern States, with a large number of people of Aboriginal descent not identifying as such at the census; however there was little tendency for them to re-identify. In a similar way, in the case of Western Australia and the northern Territory, the lower rate of recovery may in part be a result of the fact that the process of re-identifying as an Aborigine has not yet become so extensive among 'part-Aborigines' in these regions, presumably because this still involves an excess of social costs over social benefits. In fact, as suggested earlier, it is possible that in all States and Territories except New South Wales, Victoria and Tasmania, there may still be occurring a net loss to the census population, as a result of changing identification.

So both actual population decline, and changes in identification occurring at different times and to different extents, have affected over the years the proportion of the 'revealed' Australian Aboriginal population in each of the States and Territories. Queensland's share declined from almost 40 per cent originally to about 26-28 per cent, at which level it has remained since 1933. The early settled States - New South Wales, Victoria, Tasmania and South Australia - declined as a proportion until about 1891, increasing gradually thereafter, but with a massive increase in New South Wales' share between 1921 and 1933 as large numbers of 'part-Aborigines' re-identified. Since 1961, Tasmania, Victoria and New South Wales have increased their proportion substantially, while South Australia's has dropped. Higher natural growth has played a part, but the existence of a larger reservoir of potential ethnic in-migrants has also been a significant factor. In Western Australia and the northern Territory, the decline occurred later, so the populations in these two regions increased as a proportion of the total until about 1891, after which their share decreased as a joint result of their own decline and the recovery in the other States. This decline in the share has continued to the present, accelerating since 1961.

Table 8.2.7 summarizes, for Australia as a whole, the changes in the 'official', 'revealed', and minimum total populations. There was a rapid decline until about 1890, almost entirely a result of actual depopulation. Between 1890 and 1930 the rate of decline of both the 'revealed' and minimum total populations dropped slowly to zero, with the 'revealed' population levelling off in about 1933 at about a fifth of its original size, and the total about 6,000 higher. At that stage, the Aboriginal populations in the later-settled States were still falling slightly, but this was counterbalanced by the increase in the south-east. Since 1933, the 'revealed' population's rate of increase has climbed, slowly up to the 1961 Census, more rapidly between 1961 and 1966, and is currently at about 2.5% a year. The total population has had a somewhat higher overall rate of growth, but of course this merely reflects the fact that it is a very rough backward projection of the current State and Territory estimates, all of which have been increased substantially over the last twenty years.

This serves to remind us that all the proposed reconstructions are hypothetical to a greater or lesser extent. They are only an attempt to depict likely overall trends. Obviously, short-term fluctuations and reversals must have occurred, but even up to the present, the data is too poor to allow such fine variations to be detected. It should also be recalled that a nominally consistent definition of the population as the total census-revealed one is extremely complex, because of the fact that changes in social circumstances, community and Aboriginal attitudes, legal frameworks and census methods have resulted in the population being revealed in a variety of ways at different times and places. That process of revelation is probably the central problem of this study, and this is why it is impossible to isolate the study of the Aboriginal population from the study of the place of the Aboriginal people in Australian society.

8.3. Sex Composition

The ratio of males to females in the Aboriginal population may have been high in traditional times, as a result of differential female infanticide or deaths at child-birth. High masculinity certainly was commonly observed among tribes whose numbers had been reduced as a result of European contact. This high masculinity of the Aboriginal population persists to the present, and it poses some important problems of interpretation. However, analysis of the census trends in masculinity is made difficult by the fact that the adequacy of enumeration decreases as we go further back in time. Figure 8.3.1 summarizes the census masculinity ratios from 1861 to 1971, and if females were more likely to be omitted than males in earlier censuses this could explain at least part of the reduction in masculinity shown. The higher values shown in 1871 and 1891 are obtained if all persons enumerated are included, while the lower values exclude those Colonies which only enumerated those Aborigines in the employ of whites. Most of those in employ were men.

The widening of the difference between adults and children in 1911 in figure 8.3.1 is a result of a shift in the population enumerated. In 1901, the Northern Territory population had a 'low' masculinity of about 115, compared to about 165 in 1891 and 142 in 1911. In fact, the 1911 and 1921 censuses, which included only those 'full-bloods' near European settlements, are almost certainly too high, even though the 1921 ratios fit well with the Aboriginal censuses. The maintenance of the high levels for adults at the Aboriginal censuses, while the general census masculinity was falling, has already been noted in the States, as has my inability to offer any sensible explanation. However, the general census is clearly more correct, even though the coverage was supposedly better at the Aboriginal censuses. According to figure 8.3.1, the masculinity of children has been relatively normal (that is, under about 105) since about 1920, and this corresponds reasonably well with the transition from decline suggested previously. Note also that masculinity is now roughly the same for children and adults (see also figure 8.3.5). If correct, this may indicate that the levels of

FIGURE 8.3.1. AUSTRALIA. TOTAL ABORIGINAL POPULATION. MASCULINITY 1861-1971.

TABLE 8.3.1. AUSTRALIA. AGE-SPECIFIC MASCULINITY RATIOS. CENSUSES 1891-1971.

<u>Age</u>	<u>1891^a</u>	<u>1901</u>	<u>1911</u>	<u>1933</u>	<u>1947^b</u>	<u>1961</u>	<u>1966</u>	<u>1971</u>
0-4	111.68	101.94	97.60	102.35	105.22	103.24	104.52	102.59
5-9	124.40	107.64	104.40	100.18	101.96	101.15	102.67	102.51
10-14	169.66	130.67	116.61	107.71	101.50	100.16	100.20	103.02
15-19	143.94	114.56	119.24	104.44	104.19	103.46	98.49	98.14
20-24	149.65	117.09	123.20	109.86	107.00	102.31	106.00	101.04
25-29	128.68	130.50	132.79	112.59	105.06	100.67	97.73	105.70
30-34	124.49	102.97	135.28	117.37	99.83	100.47	97.59	97.77
35-39	145.22	119.24	132.79	111.84	102.52	98.98	97.91	99.24
40-44	137.87	95.47	140.77	117.95	112.19	106.66	106.09	101.28
45-49	174.62	165.42	153.11	137.22	122.29	110.26	109.84	108.30
50-54	148.54	140.02	128.36	147.56	129.86	121.80	114.30	106.60
55-59	160.45	174.23	173.31	152.10	159.11	137.41	113.47	113.29
60-64	226.29	150.91	150.14	162.48	136.56	103.37	97.24	93.23
65-69	230.25	121.48	144.78	178.49	174.85	148.96	128.40	130.05
70-74	153.54	159.24	132.20	127.86	156.91	142.70	129.70	115.63
75+	466.67	138.93	129.41		144.44	142.97		111.04
Total	143.33	119.34	124.54	114.32	109.78	104.81	103.33	102.65

Note: a - Queensland is completely excluded.

b - Excludes Torres Strait Islanders.

male and female mortality, or at least the losses resulting from mortality plus changing identification, are now roughly the same.

Table 8.3.1 is a summary of the changes in the age-specific masculinity of the Australian Aboriginal population at censuses since 1891. Note that masculinity increases with age, which is the reverse of the trend found in most developed countries, and certainly the reverse of the general Australian situation. This could be a result of differential past or present enumeration of identification of females, high current female mortality, or of higher female mortality at younger ages in earlier years.

Figures 8.3.2 to 8.3.5 attempt to throw some light on these alternatives, by tracing (by graphical interpolation) the changes in the masculinity of the various cohorts enumerated at the censuses in table 8.3.1. It would appear that it is unlikely that women were omitted from the early enumerations to any significantly greater extent than men, and that in the areas covered by the censuses there was in fact an extraordinary death rate among women lasting well into the second third of the century. Of course, it is still likely that the sex ratio in regions not covered by the census may have been much lower, but the point is that by the time the frontier of settlement had overtaken these groups and they were included in the censuses, they had already been affected by high losses of women, and joined a population from which they did not apparently differ greatly. With improving enumeration, the masculinity of most cohorts in fact increases overall.

The cohorts in figure 8.3.2 were from 20 to 50 years old at the 1891 Census, and had masculinity ratios of over 120 even then. But with few exceptions this increased at subsequent enumerations. The reversals probably do reflect sex-selective non-inumeration, as well as the difficulty of estimating ages for these people. Those in figure 8.3.3 are much better enumerated, and again the same increase is clear. These people were born between 1871 and 1896, and also share the characteristic of having been over 65 by the time the payment of old-age pensions to Aborigines became widespread. It can be seen that the curves move gradually down the scale as the cohorts become more recent, and this trend continues for those shown in figure 8.3.4, with the added complication that although the same increase in masculinity with age continues at the lower overall levels, major reversals occur when the cohorts enter the 60-64 age group, which tends to be skipped by men but in which there is a heaping of women. This is because women become eligible for pensions at age 60, while men do not become eligible until they are 65. Women also tend to skip age group 55-59, but this reinforces the cohort trend, instead of working against it.

In figure 8.3.5 we see that while there still remains a slight tendency for masculinity to increase with age, it has become relatively insignificant for cohorts born since 1921. The consistent increase at age 20-24 may reflect maternal mortality, or women changing their identification when they marry outside the population, or a combination of the two. But compared to the earlier cohorts, the changes are very small. In all, it would seem that the differential between male and female mortality in the groups on the European side of the settlement frontier has been decreasing throughout the period for which statistics are available, so that decreasing masculinity has been one continuing feature of the Aboriginal demographic transition. This has had, and will have, an important effect on the birth rate, since considerably more females are now surviving to and through the child-bearing period.

To my knowledge there is no substantial data available on the sex ratio at birth in the Aboriginal population, but the indications are that it may be low by world standards, possibly about 1.02 males per female. This may reflect a higher loss of male conceptions through miscarriage, which would be consistent with the high

mortality, and poor health, hygiene and nutrition conditions under which most Aboriginal pregnancies still develop.

8.4 The age distribution

A population which, like the Aboriginal population, has gone through a process of rapid decline and rapid growth, will also undergo radical changes in its age composition. Age data is available for Aborigines at various censuses from 1871, but because of the extent of non-enumeration, as well as non-statement of age by those who were enumerated, caution must be exercised in interpreting the data. The information available is summarized in the age pyramids in figure 8.4.1. Because of the large amount of detail in each and the many possibilities of variation, it is difficult to present a summary comparison of such a large number of distributions without some reduction in the amount of information. I have used the convention of comparing the proportions in the young (0-14), middle (15-59) and old (60+) age groups, as shown in figures 8.4.2 and 8.4.3. Ages for 'full-blood' Aborigines were not tabulated in 1921 or 1954, but nevertheless the trend is quite clearly revealed. Tasmania and the Capital Territory are not included, because the numbers are so small. In addition, the Tasmanian distribution has been seriously blighted by highly age-specific out-movement, as the pyramids clearly show.

The overall tendency has been for the percentage over 60 to remain within broad limits between 3 and 9%. Within that bank all State populations have moved down the triangle, from a low of less than 20% under 15 to a high of over 50%. The different states and Territories start at higher or lower percentages under 15, but all increase by at least 20% over the period covered by the censuses. In every case, the States and Territories reach the highest proportion under 15 in 1966, and retreat somewhat in 1971.

The figures for New South Wales in 1901 are anomalous because age is only available for the 'full-blood plus nomadic half-caste' population. Excluded are probably the youngest section of the population - 'half-castes' not living as Aborigines. On this occasion persons enumerated and identified as Aborigines were deliberately excluded, and the distorting effect of this is clear. Apparently the age distribution of those excluded through non-enumeration was not so biased, or else the bias was systematically related to time, because the progression shown in figure 8.4.3, are extremely regular. In fact, the greatest irregularity occurs in the populations nominally best enumerated, Victoria and New South Wales.

A number of clusters can be distinguished in figure 8.4.2, and these are useful in categorizing the age distributions. Ignoring for the moment changes in the proportion over 60, the four main clusters are those in which the percentage under 15 stands at under 22, 22 to 29, 30 to about 42, and 43 to 52. However, within the second, two further clusters should probably be distinguished, with those under 15 between 20 and 24%, and 25 to 29% respectively. Similarly within the 4th, two groups can be distinguished, with those under 15 under and over 50%.

This gives us 6 groups, which occur at various stages of the demographic transition; they are shown in figure 8.4.4, labelled from 'a' to 'f'. These groupings have no absolute significance. They are based on convenience of categorization and on the discontinuities caused at least in part by missing censuses. Their utility is that they allow us to compare different States at different times.

Stage A is represented by Western Australia in 1891 and 1901, Queensland in 1901, and the Northern Territory in 1911. If complete it depicts a population well on the way to extinction, with a drastic deficiency in the younger ages and a base less than half as wide as the middle.

FIGURE 8.4.1. TOTAL ABORIGINAL POPULATION. 5-YEAR PERCENTAGE AGE PYRAMIDS.
STATES, TERRITORIES AND AUSTRALIA. CENSUSES 1871 - 1971.

- page 1.

FIGURE 8.4.1. TOTAL ABORIGINAL POPULATION. 5-YEAR PERCENTAGE AGE PYRAMIDS.
STATES, TERRITORIES AND AUSTRALIA. CENSUSES 1971 - 1971.

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FIGURE 8.4.2. TOTAL ABORIGINAL POPULATION. SUMMARY GRAPH OF CENSUS PERCENTAGE AGE DISTRIBUTIONS.

- = New South Wales
- ◊ = Victoria
- = Queensland
- △ = South Australia
- ◇ = Western Australia
- ▽ = Northern Territory
- ⊠ = Australia

FIGURE 8.4.3. TOTAL
ABORIGINAL POPULATION.
GRAPHS OF CENSUS PERCENTAGE
AGE DISTRIBUTION. STATES
TERRITORIES AND AUSTRALIA.

FIGURE 8.4.4. STATES AND TERRITORIES. CONTOUR DIAGRAM OF CHANGES IN THE AGE DISTRIBUTION 1871-1971.

Stage B, which includes Victoria in 1871, Western Australia in 1911 and the Northern Territory in 1933, still has a lack of young people, but presents a picture of slackening decline compared to Stage A, with the base of the pyramid now over half as wide as the middle. Stage C includes New South Wales in 1891, and Queensland, South Australia and Australia in 1911. The 'pyramid' has almost vertical sides, and the population enumerated would probably be just replacing itself.

Stage D has many members: Victoria from 1881 to 1947, New South Wales from 1901 to 1933, Queensland, South Australia, Western Australia and Australia in 1933 and 1947, and the Northern Territory in 1961. Stage D is beginning to increase; 30 to 40% of persons are under 15, 50 to 60% are in the middle group. It is a moderate growth distribution, with straight sides from base to peak and from 12 to 15% of the population under five.

Stage E is the high growth stage, with approximately equal numbers in the young and middle ages, and hollow sides to the pyramid. It includes Victoria and New South Wales in 1961 and 1971, Queensland, South Australia, Western Australia and Australia in 1961, 1966 and 1971, and the Northern Territory in 1966 and 1971.

Finally, Stage F is the population explosion stage, with over half the population under 15. It includes New South Wales and Victoria in 1966. It is doubtful if the situation can advance very much further than this without some slackening. In Gale's (1969) reconstruction of the Point McLeay population, the age distribution reached this form between 1935 and 1939, and has since been contracting at the base, until in 1960-64 the pyramid had returned to Stage D conformation.

Figure 8.4.4 shows the way in which these stages occur first in Victoria and New South Wales, followed by Queensland, South Australia, Western Australia, with the Northern Territory last of all. It also shows the correspondence between the age-pyramids and the reconstructed population changes in chapter 7. Note for instance the long period of moderate growth in Victoria, and the absence of the stationary Stage C distribution in the Northern Territory. It is also clear that the time-lag needed for these changes to spread from the south-eastern States is shortening all the time. The Northern Territory achieved a type B distribution possibly 80 years after Victoria. It had a type E conformation at most 30 years and possibly only 10 years after Victoria.

When the States and Territories are examined separately in figure 8.4.3, it can be clearly seen that in every case the 1971 age distribution has retreated from the peak youthfulness of 1966. In New South Wales, Victoria and South Australia the proportion under 15 in 1971 was lower than it was in 1966 or 1961. This almost certainly reflects some reduction of the birth rate, but it is also in part a result of changing identification. As will be seen later, it appears that many children returned as having a certain fraction of Aboriginal descent in 1966, were not returned as 'Aborigines' in 1971, nor as 'half-castes' in 1961. Consequently, the proportion of children was inflated between 1961 and 1966, and reduced between 1966 and 1971.

The earlier reversals in the trend to increasing juvenility are less easily explained, apart from New South Wales in 1901. None of them are major, and differential enumeration plus self-exclusion on the part of younger 'part-Aborigines' at the earlier censuses may account for these discrepancies. Then again, they may reflect genuine reversals in the overall trend.

The most surprising aspect of these comparisons is that they all look so good, despite the fact that those stating ages at censuses are in some cases as low as 20% of the estimated total and in one case only 5%. There is a disturbing possibility that under-enumeration may be age-selective, with the probability of non-enumeration being inversely proportional to age. If this were so, the entire

FIGURE 8.4.5. AUSTRALIA. CUMULATIVE PERCENTAGE AGE DISTRIBUTIONS 1871-1971.

Sources: O-----O = Census (to age specified).
 ————— = A.A.C. 'children' (0-11)

picture I have been painting could be illusion, resulting not from increasing juvenility, but from improved enumeration. However I believe this possibility can be discounted, because the trend is the same even in those States - such as New South Wales - where enumeration has been complete for the greater part of the transition. This is not to say, however, that the age distribution of those groups living beyond the 'enumeration frontier' was the same as that of the enumerated groups. As with the changes in masculinity, it seems likely that by the time the more remote groups were enumerated they had been so affected by being overtaken by the frontier of permanent occupation that their age composition had become similar to that of the earlier enumerated groups they were joining.

The picture for Australia as a whole, presented in figure 8.4.5 in slightly more detail, summarizes this continuing trend to a younger population, reaching the peak in 1966. Note that the proportion over 60 has barely altered over the entire period, while the proportion under 15 has increased from just over 20% to just under 50%. If there has in fact been some reduction on fertility in the last few years, it may be anticipated that the entire set of curves will move slowly downwards, producing for the first time an increase in the older age groups. On the other hand, a greater concentration of effort on the reduction of infant mortality could result in the proportion at older ages staying at the present level for a very long time, even in the face of a continuing fertility decline.

8.5. The Aboriginal demographic transitions.

8.5.1. The first transition.

Very little information is available about the changes in the incidence of births and deaths which constituted the first post-European Aboriginal demographic transition, producing the early population decline. To explain the depopulation in demographic terms it would be necessary to trace the changes that have occurred in the schedules of vital events since settlement, particularly in the causes of death. This information is simply not available. However there is one documented case, of the two tribes in the Port Phillip region at the time Melbourne was established. William Thomas, the Guardian of Aborigines, recorded the numbers of births, deaths and persons alive in each of the eleven years 1839-1849. During that period the Yarra and Western-port tribes decreased from 207 persons to 76; the average annual crude birth rate was only 8 per thousand and the death rate 71 per thousand, so that the population fell at the rate of 6.3 per cent a year. Curiously, both the death rate and the birth rate increased over the period, the birth rate from 4 per thousand in 1839-41 to 17 per thousand in 1848-50, the death rate from 48 per thousand in 1839-41 to almost 160 per thousand in 1848-50. Masculinity also increased, from 146 males per hundred females in 1839 to over 180 in 1851.

Since it is almost certain that Aboriginal populations in pre-European times maintained their numbers relatively constant as a result of a balance between a fairly high birth rate and a fairly high death rate, this evidence would seem to indicate that the depopulation was caused as much by a reduction in the birth rate as an increase in the death rate, unless the children born died or were destroyed without being recorded. The fact that the female population fell more rapidly than the male would itself have contributed to the reduced birth rate, as would the general social disruption and ill-health that followed European occupation. Apparently the effect on the birth rate was extremely drastic at first, for these vital records begin only 5 years after Port Phillip was settled, yet the birth rate was even then very low indeed, slowly rising through the period. The much steeper rise in the death rate, however, meant the eventual extinction of the whole group. The Guardian noted that 18 of the 19 causes of death recorded (out of a total of 158 deaths) were by violence and of those, five were executions, but commented, incredibly, that

'The Almighty only knows the Cause'(of the depopulation)...they have not diminished through ill usage. Their dissipated habits have, I may say, been their executioners.' (Victoria Statistical Register, 1854)

Many other early reports also referred to a conspicuous absence of children among dispossessed groups, which may have been a result of infant or maternal morbidity, or of the destruction of children it was impossible to support. High masculinity is also universally reported; as noted this appears to have been characteristic of the Aboriginal population in pre-European times, possibly reflecting both a higher loss of female babies and maternal or other differential adult female mortality; but the deficit of females was very much greater during the period of population decline. This is one of the few aspects of the first transition that it is possible to detect from the censuses, because it is possible to pick up the survivors at later ages; in general the censuses did not begin to collect data on Aborigines until the decline was almost over.

A number of authors, such as Hormann (1949), Grenfell Price (1949), #2 Gale (1964), Rowley (1970a) and Barwick (1971) have tried to summarize the various factors conventionally held responsible for the decline, many of which, as Barwick notes, are so familiar as to have become almost clichés. In the latter part of the nineteenth and early years of the twentieth century, when social Darwinism was the accepted justification for colonial expansion, the superior adaptation of European race and culture was stressed. In this century various psychological explanations gained currency. At the moment it is probably true that the introduction of exotic diseases is the favoured explanation, although Foxcroft (1941), #3 Hasluck (1942), #4 Grenfell Price (1949) and Rowley (1970a) have stressed the power-political factors involved.

However the critical issue, which to my knowledge has never been given anything but the most casual or superficial study, is the relative contribution, in quantitative terms, of massacre, disease, loss of lands, and social and psychological factors, to the depopulation that occurred. All the different interpretations probably convey part of the truth, but in many cases they also distort or at least understate it. Underlying, and presumably motivating, this constant re-writing of the history of colonization and native administration, there seems always to have been a need felt to mask the brutal reality of the manner in which this country was wrested from its original occupants. As Grenfell Price was aware (1949:105), there has been a general tendency for modern researchers to minimize the role of genocide. The extent of outright slaughter has been constantly played down, as indeed has the use of force in general. Instead, researchers and commentators have tended to emphasize the role of various exotic diseases on the one hand, plus on the other hand, a collection of more fanciful mechanisms, including: natural selection, excessive masculinity, impotence and sterility resulting from a lack of control over their own destiny, the immunity of women to fertilization by Aboriginal men as a result of sexual intercourse with Europeans, and, what must surely rate as the height of

#2

A. Grenfell Price (1949). White settlers and native peoples.

#3

E.J.B. Foxcroft (1941). Australian Native Policy: Its history, especially in Victoria.

#4

P.M. Hasluck (1942). Black Australians: A survey of Native Policy in Western Australia 1829-1897.

pseudo-psychological rationalization of genocide, the Aboriginal 'loss of the will to live'.

This is not the place to investigate the psychological and sociological basis of the myth building that surrounds the area of race relations in situations of dominance and subjection. It is sufficient to comment that in general the overall tenor of the bland explanations which have gained wide acceptance has been that the decline of the Aboriginal population was something mysterious and inevitable, a process which did not result directly from the actions of the invading settlers, but which was merely set in train by their presence, and continued inexorably under its own momentum, completely beyond European control. Sauvy's (1966)#5 concept of 'unpremeditated extermination' captures the essence of these views. He sees this as embodying a form of 'social hypocrisy' by means of which colonists were able to satisfy the demands of both conscience and greed, and Governments were able to lay down humane policies which were completely incompatible with the colonial enterprises these Governments were at the same time promoting.

This 'social hypocrisy' has led to some grotesque distortions and suppressions, but the truth about the causes of the decline is still readily available from historical sources. No-one has ever attempted to assess the total number of Aborigines throughout Australia who were killed by the Military, the Native Police, or settlers, but it is quite clear that this was in itself a major cause of depopulation. In Queensland, for instance, although the records of the Native Police, the most significant agent of extermination, have apparently been destroyed, it has been established on the basis of various other sources that in the second half of the nineteenth century at least 10,000 Aborigines were killed by Europeans in that Colony alone (Reynolds, 1973).#6 Since, despite being officially sanctioned, the pacification program was always conducted surreptitiously and in remote areas, the total number of such deaths was certainly very much higher than this.

Even in the case of introduced diseases, the most serious were not the epidemics which spread over the continent in the first few years of settlement, but those in which lack of biological adaptation was only one and often a minor factor, and in which the sort of social and ecological changes wrought on the Aborigines by European occupation were generally far more significant. Such conditions varied from malnourishment and starvation resulting from the destruction or alienation of native plants and animals in the course of pastoral development, through pulmonary and gastro-intestinal disorders arising from or exacerbated by confinement in unhygienic living conditions, to sterility and abortion-proneness due to venereal infections.

It may never be possible to explicate fully the population mechanisms involved in the decline. It seems fairly certain, however, that in groups displaced by Europeans there would have been a sharp drop in the birth rate, and a rise in the death rate, from their pre-European levels of perhaps 40 per thousand. Mortality probably continued to rise, especially among women, reaching a peak if and when a very few in the fittest ages survived. Fertility probably bottomed rapidly and then recovered slowly, in the main merely contributing immediately to mortality through almost total infant mortality. If mortality did begin to turn down as a result of adjustment to new conditions, a continuing rise in fertility would lead

#5

Alfred Sauvy (1966). General theory of population.

#6

H. Reynolds (1973). 'Aboriginal resistance to European settlement in 19th Century Queensland'. Paper presented to 45th ANZAAS Conference, Perth.

to a reduced rate of decline, and possibly to a crossover to a stationary or growth situation if the population was not already too depleted to survive the interval. In general, it seems to be groups that have just passed the peak of mortality that are picked up by the first Colonial censuses. They have very high masculinity among both children and adults, and a very small proportion of children, but each succeeding cohort appears to have a slightly more balanced sex composition, and each succeeding census reveals at least no lower, and in general a slightly higher, proportion of children.

8.5.2 The second and third transitions: from decline to growth

By consolidating the information on births, deaths and populations presented for each State and Territory, it is possible to document the second transition, this time to a stationary state. This was literally a transition: it was followed immediately by a shift to growth. Table 8.5.1 and figures 8.5.1 and 8.5.2 show the birth rates, death rates, and implied rates of natural increase calculated from this data. Obviously these aggregated rates only reflect the experience of the populations they are based on, and the mix of groups that contribute to the aggregate has changed constantly over the years as the collection of statistics in local areas has been instituted and then abandoned, but it can be seen that the groups for which vital records are available were in aggregate stationary by about 1880, with birth and deaths rates at about 35 per thousand. Then the birth rate first rose to over 40 per thousand between 1940 and 1950; it is now again at about 35 per thousand. The death rate has however fallen to about 16 per thousand, and as a result the growth rate has increased, reasonably smoothly, to a level currently somewhere between 2 and 2.5 per cent a year.

In contrast, the adjusted intercensal growth rates, which are also shown in figure 8.5.2, indicate that the overall 'revealed' population was still declining at the rate of about 1.5 per cent annually in 1880, and did not progress from decline to growth until the early 1930s. The discrepancy between the vital events and census data probably results from the fact that in the late nineteenth and early twentieth centuries the 'controlled' populations in the southern and eastern States, for which some vital statistics are available, were all increasing, while those in the north and west, for whom vital records are not available, were still declining at a very high rate. The vital records since 1956 are heavily weighted towards the Northern Territory, so the growth rate based on vital records since then is based on the experience of a somewhat different section of the population, with a lower growth than the groups, mainly from the south and east, on which the earlier rates are based.

The crossover of the two growth curves about 1958 results from both the downturn in the vital record-based growth rate, and the increased contribution of ethnic in-migration to the intercensal rate. The rates calculated from the changes in the minimum population of Aboriginal descent must be interpreted with suitable caution, since they are themselves based on a priori assumptions about the feasible limits of the rates of change in the individual States and Territories. Note however that they are not greatly divergent from the rates based on vital events after about 1940, with some indication that the controlled groups had a higher rate of growth up to 1961, and that the total population has grown faster since. This may merely reflect the fact that the growth rates I have assumed were necessary to produce the currently claimed population of over 150,000 were unduly affected by the need to encompass the greatly increased estimates the States have put forward in the last 20 years; it is possible that the populations in the first half of this century were in fact much higher than the estimated minima I have adopted. Those minima were simply based on the most conservative figure compatible with conceivable growth rates and the current claimed populations.

TABLE 8.5.1. AUSTRALIA. ESTIMATES OF ABORIGINAL VITAL RATES 1876-1971.

<u>5 years centred on</u>	<u>Average population</u>	<u>Average annual births</u>	<u>Average annual deaths</u>	<u>Average natural increase</u>	<u>Average birth rate</u>	<u>Average death rate</u>	<u>Average rate of increase</u>
1876	388.00	21.00	39.00	-18.00	.0541	.1005	-.0464
1881	555.40	43.89	58.42	-14.53	.0790	.1052	-.0262
1886	8,614.20	290.03	271.86	18.17	.0337	.0316	.0021
1891	8,054.68	282.66	287.33	-4.67	.0351	.0357	-.0006
1896	7,488.40	273.64	243.36	30.28	.0365	.0325	.0040
1901	8,015.93	275.59	257.10	18.49	.0344	.0321	.0023
1906	7,970.68	275.64	225.20	50.44	.0346	.0283	.0063
1911	8,579.35	271.20	253.56	17.60	.0316	.0296	.0021
1916	10,416.29	364.53	268.37	96.16	.0350	.0258	.0092
1921	11,023.22	378.19	295.60	82.59	.0343	.0268	.0075
1926	11,330.55	417.47	280.20	137.27	.0368	.0247	.0121
1931	11,476.51	449.40	303.22	146.18	.0392	.0264	.0127
1936	12,169.17	475.86	289.63	186.23	.0391	.0238	.0153
1941	10,753.88	450.36	295.06	155.30	.0419	.0274	.0144
1946	10,897.41	457.59	225.59	232.00	.0420	.0207	.0213
1951	11,927.54	504.64	199.01	305.63	.0423	.0167	.0256
1956	30,230.00	1,179.88	426.41	753.47	.0390	.0141	.0249
1961	32,054.72	1,186.89	470.13	716.76	.0370	.0147	.0224
1966	33,158.41	1,183.79	502.37	681.42	.0357	.0152	.0206
1971	32,749.79	1,170.75	495.94	674.81	.0357	.0151	.0206

My best guess is that the true rate of natural increase of the Aboriginal population is currently between 2.5 and 3% a year. This is discussed more fully in the last chapter, but it may be mentioned that the 1966-71 intercensal growth rate was probably affected by the loss of children and young adults through ethnic out-migration, while as noted the rates based on vital events are too low because they are biased towards the high-mortality rural situation in the Northern Territory. 2.5% a year is over twice the rate of natural growth of the Australian population as a whole, and would result in a doubling of the population in less than 30 years. But even 3% a year is considerably less than the rate of over 3.5% suggested by F.L. Jones on the basis of his analysis of the changes between the 1961 and 1966 Censuses (Jones 1970a, b). The very high rate of growth he discerned was produced, not by the rather high birth rate and expectation of life he suggested, but by movement of people into the population as a result of changing identification.

A certain amount of extra insight can be obtained into the dynamics of the shift from decline to growth by an examination of changes in particular communities. By far the most significant study is that of Gale (1969).

By reconciling genealogical and documentary sources, Gale was able to obtain an almost complete history of the population originating from Point McLeay, spanning most of the post-frontier period. She found that from 1870 to 1894 the population was still declining, with a crude death-rate that increased from 28 to 49 per thousand, and a crude birth-rate which increased during the same period from 19 to 53 per thousand. This led to a period of increasing growth until about 1940, with the birth rate staying in the high 40s, while the death rate dropped gradually to about 20 per thousand. After this the death rate continued to fall, to 6 per thousand by 1964, but a more rapid fall in the birth rate, to 28 per thousand by the same year, resulted in a gradual reduction in the rate of increase from 3% to about 2% a year. Gale has shown that there is no decline in fertility among those people still living on the reserve, but that it is quite marked among the large number who have left the reserve to live in the Adelaide area. She suggests that this is a result of greater awareness and use of contraceptive methods. In 1968, the overall birth and death rates of these metropolitan Aborigines were only slightly higher than the general population.

It is probable that a similar sequence of events has occurred at different times all over the continent. We can discern what seems to be an earlier stage of the transition in Yengoyan's (170) study of the Pitjandjara people at Ernabella and Amata, which indicated that although the birth rate was high (about 50 per thousand) and apparently still rising slightly, it had been a reduction in mortality, particularly infant mortality, 'due to increasing control of disease and sickness, and more ample diet' (1970:74), which had been responsible for the present rate of increase of about 2.5% a year. Another factor was apparently a shift from planned to unplanned infant mortality over the past twenty-five years—that is, a change from deliberate sex-selective neo-natal infanticide, to a delayed, less sex-selective 'natural' infant mortality resulting from the diseases of poor nutrition and crowded and insanitary living. This shift had reduced the high masculinity of the population, and this in itself may be sufficient to account for the slight increase in the birth rate, although any improvement in the general health of the community would also certainly have some effect.

In attempting to explain the cessation of the decline, Hasluck (1942), Grenfell Price (1949) and Rowley (1970a) all give some credit to the English Philanthropic movement. But just as the anti-slavery movement in the United Kingdom did not arise until the slave trade, having brought considerable wealth to that country, had passed into other hands, so acceptance of the sentiments of the Philanthropic movement in Australia did not occur until European settlement was complete, and

Aboriginal numbers sufficiently reduced to enable pastoral activity to be carried on with ease and profit. This completion of settlement happened to coincide with the Exeter Hall movement in south-east Australia, but a similar coincidence did not occur in the north, where surreptitious but officially condoned genocide continued until as late as the 1930s (Grenfell Price 1949; Rowley 1970a). When each State is examined it is in general true that the halt in the decline does coincide with the establishment of settlements and missions, but these institutions were not so much responsible for halting the decline as symptoms of the fact that the country had been largely settled, and only the remnants of the Aboriginal population, not destroyed in the process of settlement, now needed to be catered for.

Once the decline in the population stops, the period of rapid growth may follow immediately or after a level period. This may be a function of nothing more complex than the amount of life-supporting resources made available to the Aborigines, e.g. shelter, medical assistance, sanitation or just food. Recovery clearly could not occur while population adaptation to new pathogens was still going on, but it seems certain that the new environment created by European occupation continued to be the limiting factor long after biological controls became insignificant. Native policy in Australia has always been characterized by what Rowley (1970a) calls its low priority in budget allocation and Grenfell Price (1949) refers to as persistent Government meanness; since in the majority of cases Aboriginal people were compelled to live on reserves, the adequacy of provisioning and other services must have been an important determinant of life expectancy. Perhaps there is no need to look beyond this for an explanation.

8.5.3. A fourth transition?

There are several indications that the Aboriginal population is moving to a stage of lowered growth. It has been noted that in every State and Territory the proportion at young ages was lower in 1971 than in 1966, (although changing identification complicates this trend). It was also seen in figure 8.5.1 and table 8.5.1 that both birth and death rates in those groups for which vital statistics are available have declined since the 1940s. This decrease would have been even greater were it not for the inclusion since 1956 of the records from the Northern Territory. The crude birth and death rates there have remained virtually constant at about 40 and 20 per thousand respectively, and because the Territory population accounts for over half of the population for which vital records are available, this has obscured some dramatic declines in the birth and death rates in the States. Birth rates of 35 per thousand, and death rates of 10 or under, are common in many Queensland communities, and while the birth rates are apparently still falling, the death rates, which basically reflect the very young age structure of the population, are unlikely to go much lower, and the rate of increase seems certain to decline in the future. The Northern Territory population may be expected to follow a similar path in due course, and for Australia as a whole, the experience of the people from Pt. McLeay is almost certainly a pointer to the demographic future of the Aboriginal population. The Aborigines, it would seem, may have already passed the peak of their population explosion; however the momentum of growth still contained in the population by virtue of its very young age structure is enormous. Even if fertility falls rapidly, the population will almost certainly double within the next thirty years, and the bulk of the natural increase will certainly occur in the rural reserve communities which have the least capacity to absorb it.

8.5.4. An overview of the transitions.

Despite the great variety of situations in which Aboriginal people live and have lived, the processes involved in the move through population decline to population growth seem reasonably uniform. Under frontier conditions, births are few and deaths at all ages are high, and the population has a high masculinity and a

deficit of young people, whether as a general result of disease or a specific result of sterility or reduced capacity to carry children. Or it may be a result of conscious population control through abortion or infanticide. Gradually, presumably as a result of improved maternal and general health, and the achievement of some sort of cultural adjustment to new circumstances, live births increase. But because this is accompanied by increasing infant deaths, either a stationary population or only moderate growth ensue. The period of rapid growth results from continuing high fertility and declining child and infant mortality. Finally, growth may be slowed by the birth rate following the death rate downwards as a result of some sort of control being exercised over fertility.

This implies that, in the recent past at least, all the various Aboriginal populations have had the potential for very rapid growth, which has been limited solely by mortality restraints. Depending on the extent to which these restraints are removed, stability, or moderate to explosive growth may occur. Of course, spontaneous and induced abortions, still births and other losses between conception and live birth must also have been very important; but neither contraceptive methods nor cultural restraints on intercourse seem to have been significant until very recently. (Jones 1963, Barwick 1971). It seems that the Aboriginal people all have in common a tradition of not needing to exercise fertility control because in one form or another pregnancy wastage or mortality has always been such an effective limiting factor.

Figures 8.5.3 and 8.5.4 contain a schematic summary of the overall changes in the vital rates of the entire Aboriginal population since European occupation. In any given tribe or region, the transitions would be more extreme and more compressed in time - the total Australian picture is heavily damped as a result of the fact that only a small proportion of the population was passing through a particular stage at any given time. The rate of growth shown in figure 8.5.3 is basically that of the reconstructed 'minimum population of Aboriginal descent'; as noted already, the early rates of decline, and the later rates of increase, of even this population may still be too high. However the picture they produce looks very attractive.

The birth and death rates in figure 8.5.4 are quite subjective. They are a synthesis of the evidence from vital records, growth rates, and changes in particular communities. The assumption of a pre-contact birth and death rate of 40 per thousand is based only on guesswork. The crucial aspect is that the birth rate is assumed to have undergone an earlier and less severe change than the death rate; the subsequent rise in the birth rate has however been slower and of less amplitude than the decline in the death rate. They cross about 1930, and both seem to be roughly stable at present, with however a possibility of a downward turn in the birth rate.

The concept of a demographic transition normally implies a shift from one stable state to another, and it may be questioned whether the four stages I have outlined really are transitions in this sense. In principle, a population may be stable and declining (although not for long), so the first Aboriginal transition, between about 1800 and 1870, does come close to a complete transition even though the vital rates moved in the opposite direction to that normally encountered. But the stages I have called the second and third transitions probably do not deserve to be separated, since the crude rates apparently crossed without pause, en route to the stage of rapid growth. I separated the two only because there was evidence that in some States a stationary period did intervene.

There are a number of major differences between the Aboriginal demographic transitions and those that occurred in Europe, or are now beginning in the developing countries. These differences arise from the position of the Aborigines as a depressed and oppressed minority in white Australia. The most obvious is the

historical difference, that the transition encompasses an additional stage involving a dramatic decline in numbers. It is often suggested that the reason for the population explosions that have occurred in the developing countries in recent times is that the public health measures which reduced mortality from major infectious diseases were imposed on the populations from above, while the mechanisms which could reduce fertility and keep population increase within manageable limits must depend on a slow process of social change and the development of new values within the population itself. In the case of the Aboriginal transitions, not only was the depopulation external in its origins, but so also was the recovery; the entire process has in a sense been 'managed' by the majority society, and it is no accident that the terms in which Aboriginal population changes are commonly described are taken directly from animal husbandry.

The large family is not a traditional Aboriginal norm, but a relatively recent phenomenon. Yet it is probably more strongly entrenched as a result, representing as it does not only the survival, but the resurgence and regeneration of the Aboriginal people in the face of repeated attempts by the white society to declare them doomed to extinction. Hormann (1949) has noted similar developments among other native groups, such as the Maoris, Fijians and Hawaiians, although the Australian situation is in a way unique, since it apparently occurred at a time when the Aborigines still had no discoverable stake in the country whatsoever. A growing population may help to establish some such claim, but that can hardly explain how the recovery began in the first place.

Nevertheless, everything that is known about the relationship between social and economic development and fertility, whether among Aborigines in Australia, or in the world in general, indicates that as the conditions under which Aboriginal people live begin to approach those of the general society, so too will their fertility. Projections of the Aboriginal population based on a continuation of the present high level of fertility are not therefore any cause for satisfaction, for they carry with them the depressing implication of minimal improvement in overall Aboriginal living conditions.

8.6 Summary.

Figure 8.6.1 summarizes the population history of the Australian Aboriginal population as I have reconstructed it. It also includes F.L. Jones' and my own projections of the population to 2001, but these are not considered until the next chapter. The surprising thing about this summary is that, apart from the wild estimates made by the States and Territories between 1916 and 1920, most available estimates do not diverge to any great extent from the reconstructed population. Compensating errors in the different States and Territories have been in part responsible for this, especially in the case of the Western Australian estimate of those beyond settled areas, but it also implies that, as with the question of the size of the pre-European population, we can be fairly certain that the general orders of magnitude portrayed are reasonably correct. Note that despite the many detailed revisions made in the States and Territories, the 1933 Census figure is the only one that is significantly different from my reconstructed 'revealed' population; in this case there were no major underestimates in other regions, so the Western Australian overestimate was not compensated for.

Figure 8.6.1 also shows clearly the way in which the State and Territory estimates have shifted from parity with the census in 1954, to about 40,000 above it in 1971. The minimum total population is shown as diverging from the 'revealed' (adjusted census) population from about 1901, joining the State-and-Territory-claimed populations to which it is supposedly ancestral by about 1970. As mentioned on several occasions, it is quite likely that the point of divergence was somewhat earlier than shown, and the overall rate of growth somewhat less.

FIGURE 8.6.3. RELATIONSHIP BETWEEN CHANGES IN THE VARIOUS 'TOTAL' ABORIGINAL POPULATIONS.

Figure 8.6.2 shows the result of grafting the suggested post-European changes from figure 8.6.1 onto the (entirely hypothetical) pre-European changes from figure 6.2.1. The dramatic nature of the recent decline is certainly highlighted by this presentation, but as was stated in chapter 6, this picture is not based on any direct evidence whatsoever, except for the last fraction of the time-scale.

This entire study is based on the premise, strongly argued in part I, that the total Aboriginal population alone is suitable for logical or systematic examination. It will be obvious by now, however, that this was in no way a 'simplifying' assumption, because there is such a diversity of 'total' populations, all interrelated, but all different. Figure 8.6.3 is an attempt to summarize the suggested changes in the various total populations that have been referred to throughout the text. It is not intended to convey their actual sizes, but only to depict the logical relationships between them, in order both to clarify the differences between the census, State and Territory populations in the past, and to provide a framework for considering possible changes in the future. These various 'total' populations are of three types. The first group are completely theoretical; they are real populations, but there is no anchor which would enable us to know their size at even a single point in time. The second set are 'ancestral populations', anchored only in population currently distinguishable. The third are the 'reconstructed' the period, and are defined as at the date they refer to.

There are four 'theoretical' populations shown, whose size is simply a matter of conjecture. The upper limit is the total population of any Aboriginal ancestry; then, at progressively lower levels, are the populations aware of Aboriginal descent, those acknowledging Aboriginal descent, and those who consider themselves Aborigines.

Partly overlapping with these theoretical populations are the two reconstructed populations: the State-and-Territory-claimed population, and the census-revealed population. Both are defined in different ways at different times.

The third reconstructed population, the minimum population of Aboriginal descent, is actually an estimate of the population ancestral to that currently claimed by the States and Territories. The theoretical population of which the minimum total is an estimate is also shown. Note that it and the 'any ancestry' population are the only truly 'ancestral' ones shown.

All we can say about the size of the population of persons with any Aboriginal ancestry at all, is that, throughout the period, it cannot have been smaller than any of the others. The figures of 200,000 or 300,000 that have been quoted for its current size are possible, but not probable. Such a population is 'closed', in the sense that it can only be entered at birth and left at death, and that the child of a member of the population must itself be a member. But it is 'open' in the sense that not both parents need be members. As noted earlier, it could grow at a very rapid rate if outmarriage from it were extensive. In this way the reproductive capacity of women (and, to a considerably lesser extent, of men) outside the population may contribute to its growth.

However, the evidence seems to indicate that, except in Tasmania, the overwhelming majority of children of mixed unions have had non-Aboriginal fathers and Aboriginal mothers. It is doubtful whether this has contributed greatly to the reproductivity of the population of any Aboriginal descent, and so it is difficult to see how a population anywhere near 300,000 could ever have arisen; 200,000 is perhaps just possible.

The population aware of Aboriginal ancestry is a subset of the 'any ancestry' population, and its size and growth are certainly somewhat less. In fact, any increase in the 'any ancestry' population as a result of outmarriage has almost

certainly been more than outweighed at this and all lower levels by Pool's (1964) 'passive ethnic out-migration' - that is, by parents who cease to identify not informing their children of their Aboriginal ancestry. The 'aware' population is also closed in the sense that it can only be entered at birth and left at death (with the minor exception of people who forget or remember, and people who are told, or reminded, or find out, for example as a result of genealogical research). But at the generation interface there is less closure than in the 'any ancestry' population, because some children born may never enter the population although one or both parents are members, if they are never told of their Aboriginal ancestry. This is most likely to occur when 'part-Aboriginal' people 'assimilate' by marrying out of the Aboriginal population - in fact, the occurrence of some such cutoff is implicit in the theory of assimilation, just as the mechanisms of shame and denial of Aboriginal ancestry are implicit in its practice.

The gap between the 'any ancestry' and the 'aware' populations must have increased progressively up to the present, as a result of a continuing attrition through passive out-movement and adoption as well as through the natural increase of those who are not aware of their descent (which may be high because they would be most likely to marry non-Aborigines; this would imply that the proportion not aware has also increased). I would imagine that entries to the population other than at birth are relatively few; the widespread genealogical surveys that have been undertaken in the south-eastern States may have directly or indirectly resulted in some people becoming aware of their Aboriginal ancestry for the first time; but the numbers involved are probably so small relative to the total 'aware' population, and even to the natural increase of the 'unaware' group, that the difference between the 'aware' population and the upper limit has probably increased continuously right up to the present.

All the lower populations in this series are based on a progressive restriction of the extent to which people aware of their Aboriginal ancestry actually 'identify'. The third theoretical population consists of persons of Aboriginal descent, who are aware of it, and acknowledge it. Once again the prime determinant seems to be a sense of uncertainty, embarrassment or shame, which leads 'assimilated' people to deny they are of Aboriginal descent. With this population we have for the first time the possibility of non-trivial entry into the population other than at birth, as a result of the 'coming out' process which has been gathering momentum since the 1930s, with people increasingly valuing and asserting their Aboriginal heritage, at least in the south-eastern States. The gap between the 'acknowledging' and the 'aware' population, that is, the proportion not acknowledging, probably widened progressively as a result of exits only up until about 1900. This would probably be the only significant source of additions to the 'not acknowledging' population; since those not acknowledging are presumably assimilating by 'passing', they would in all probability be the parents of those children who are not aware, so such natural increase would not accrue to their own group.

People are almost certainly still leaving the 'acknowledging' population, but such losses have probably been increasingly offset by new acknowledgers. The number aware but not acknowledging may not have increased greatly since the 1940s, and may even have dropped. Those currently in this category are the first significant group of invisible Aborigines or potential new identifiers, because they may decide to 'come out' at any time. There is no way of knowing how many of them there are, but if 200,000 is accepted as the current upper limit, and the number currently claimed by the States and Territories - 150,000 or 160,000 - is the maximum number currently identifying in any way, then it hardly seems possible, given that some people acknowledge Aboriginal descent but do not identify as Aborigines, that there could be more than ten or twenty thousand people who really do consciously pass as white, or at least as something other than Aboriginal.

Next I have distinguished the total population of people considering themselves Aborigines ('identifying'). As noted, this is not a unitary phenomenon; the 'identifying' population is really a complex of overlapping populations or categories into which people place themselves at different times or in different circumstances. Of course, the same applies to 'acknowledging', and it may be that the two could more sensibly be left as one; what I want to convey by distinguishing them is that there are some people - I know several such families in the Northern Territory - who consider that while they are certainly of Aboriginal descent, there is no sense in which they are 'Aborigines'.

The 'propensity to identify' is apparently constrained by a whole range of subjective, situational and more general external influences, including the legal definition current at the time, and the 'attitude' of the administration' commonly in the past, people were prohibited from identifying in many contexts, even if they wanted to. It is also affected by the internalized consequences of being subjected to these restriction, and by the extent to which people have accepted a stereotype (whether favorable or unfavorable) of what a 'real' Aborigine is. Such residual influences are apparently now preventing many people from identifying in particular situations, even though the authorities are currently not only permitting it, but encouraging it.

Here again it seems likely that the gap between the 'identifying' and all the higher populations widened until at least the 1930s, but has narrowed in recent years, as a result of people coming to value the Aboriginal part of their ancestry more. Identifying out of the population is still occurring, but it has been more than offset by the streams of re-entrants which appeared, first in New South Wales and Victoria, later in Tasmania, and probably to a lesser extent in the urban areas of all the other States and Territories as well. Both the number and the proportion not identifying have almost certainly fallen since the 1940s.

Genealogical studies seem to have contributed to this change. In Victoria, for instance, almost all people of Aboriginal descent are now apparently aware of their ancestry, acknowledge it, and consider themselves Aborigines, and the family surveys of Barwick and of the Victorian Ministry seem to be the main factor responsible, although the fact that few of the Victorian 'part-Aboriginal' people were ever socially or economically assimilated must have made re-identifying very easy, once it was permitted. There were also few 'full-blood' and no 'tribal' people in Victoria against whom they could be contrasted by themselves or others.

I am sure that a similar process of large-scale re-identification will occur in the other States and Territories as well, assuming that the race relations situation in Australia, and the commitment of governments to the elimination of discrimination and the provision of equal opportunity, are at least maintained at the present level. In relative terms, Tasmania would seem to have the greatest potential for increase as a result of re-identification, and Mollison's surveys will probably accelerate the process, but given the length of time some families there have been assimilated, and the remoteness of their Aboriginal ancestry, it seems highly unlikely that re-identification could ever be as complete as in Victoria. In absolute terms, Queensland has the largest apparent reservoir of non-identifiers; as in the other States and Territories with large 'tribal' or 'full-blood' populations, however, the main factor preventing re-identification is the serious discrimination against 'natives' in rural and provincial areas, and the fact that many 'part-Aboriginal' people accept the unfavorable stereotype of the 'native' and do their best not to be associated with it.

The censuses represent one set of situations at which people were presented with the opportunity of identifying or not, so the census-revealed population, while not a 'theoretical' population, is in general terms a subset of all the 'theoretical' populations described above. It includes people who stated they

were of one of the degrees of Aboriginal descent allowed for at the censuses, and/or were coded as such. Thus it is not strictly speaking a perfect subset of all the higher level populations, since, as apparently applies to the 'all-identified' population in 1966, it may include some persons who acknowledge Aboriginal descent, but do not consider themselves Aborigines. Some people may also have responded in such terms - for instance, by returning themselves as 'quarter-caste', etc - that they were coded out of the Aboriginal population by the census officials.

There also seem to be some people, not of Aboriginal or Torres Strait Islander descent, who identify as Aborigines at the census. In some cases this may be because they have married Aborigines or live in Aboriginal communities, and such people may also belong to the 'identifying' population. But lack of comprehension of the census question, or errors in answering it, are probably far more significant here than true trans-ethnic or trans-racial identification. Even in the cases just mentioned, it may be the enumerator who merely assumes that all people in Aboriginal households are Aborigines, especially if they are not Europeans, and enumerator or respondent error certainly seems to be the reason for most of the 1000-odd persons at the 1971 Census identified as Aborigines or Islanders who were returned as having been born overseas, mostly in southern and eastern Europe. However, this is probably a minor consideration; for most purposes, the populations may be regarded as being related hierarchically through decreasing degrees of identification.

Like all the higher populations, the 'revealed' population fell increasingly below the upper limit, as a result of 'part-Aboriginal' people accepting the dicta of the authorities, and either not identifying at all, or at least not at the censuses. Then, whether as a cause or a consequence, it has moved back up towards the limit as the population recovery has gained momentum and the authorities have relaxed their exclusionist or absorptionist policies.

To a minor extent, the census-revealed population was affected directly by government policies, for instance through the definitions used, or when enumerators who were also officers of the Aboriginal administrations filled out people's forms for them on the basis of the current legal definition. But basically, even when people were being excluded, and certainly now that they are re-entering, the 'revealed' population depends on the operation of subjective factors, that is on the way in which people themselves define the Aboriginal population. By contrast, the changes in the population claimed by the States and Territories, which can be seen in figure 8.6.3, moving up and down through the levels just described, are a direct result of the changes in government policy. The fluctuations are more extreme than the census-revealed changes partly because only the latter have been adjusted for errors in estimating the numbers of people in remote areas but it is mainly because, simply by enacting new laws or regulations, the authorities were able to impose changes in the population boundaries at a stroke. Only later, when the effect had filtered through to people's own conception of their race, did these changes begin to be seen in the 'revealed' population.

For Australia as a whole, State and Territory estimates are only available from about 1900, but we know that from the 1880s on the Colonial authorities had become increasingly concerned to preserve the myth of extinction, especially when it appeared that the remnant populations were stabilizing or beginning to increase. This led them to exclude all but an irreducible minimum of people from their 'official' populations; the legally defined population in New South Wales, for instance, initially fell to a lower level than the censuses, although the census population soon fell to an even lower level, as the people themselves came to accept that they were no longer supposed to call themselves Aborigines. From then on, the State population acted like a moveable ceiling to the census population: while the State estimates were kept low, the census stayed just below it; when the

State estimates were raised, the census population responded a little later by rising as well.

A similar sequence occurred in every State and Territory, although it is often only clearly seen in the statistics for settled areas. In the total Australian picture it is somewhat obscured, not only because of overestimation of the number of people in remote areas, but also because the different stages were occurring at different times in different places. From 1911 to 1921, the upper estimates for the Northern Territory and Western Australia were very high indeed, so the total population 'claimed' by the States and Territories is very much higher than that 'revealed' by the censuses. Then, between 1921, when the two were roughly equal at about the same level as 1911, and 1954, the inclusion, and subsequent elimination, of the estimate of 10,000 persons beyond settled areas in Western Australia, resulted in the 'claimed' population first rising to a high in 1933, then falling to about the 1921 level by 1940, and staying roughly stationary thereafter. The same hump in 1933 occurs for the same reason in the official census estimates and in the Aboriginal censuses, of course. Once the effects of these overestimates are taken into account, however, it can be seen that the 'claimed' population stayed at about the same level throughout the entire period from 1911 to 1954.

Between 1954 and 1971 the 'claimed' population has more than doubled, and it now apparently includes almost all persons of Aboriginal descent who consider themselves Aborigines in any context. The effect of this lifting of the lid, which had been kept on the census population for such a long time, was to produce rapid growth there as well, after a short delay. But although the 'claimed' and 'revealed' populations seem to have grown at about the same rate since 1961, it is puzzling to note that the 37,000-odd people added by the States between 1954 and 1961 still do not seem to have entered the census population, or to have had any natural growth. (Tables 8.1.4 and 8.1.5). This would mean that, if the figures are correct, the net gain to the census population through the period as a result of ethnic in-migration has been roughly equal to (but not necessarily composed of) the natural increase of the 'invisible' group.

It is no accident that the 'claimed' population began to be held down from about 1911. Just as the actual population changes were in a sense managed or manipulated by the white society, so too were the legal changes introduced when the animal-husbandry approach showed signs of going astray, and it is about 1911 that I would guess that the 'any ancestry' and 'aware' populations began to recover. The whole effect of the increasing restrictions placed on the legal population, and of the changes in identification which followed, has been to produce a fanning-out of the various populations, so that the initial declines appeared more rapid, the stationary stages occurred later and at a lower level, and the recoveries were delayed and initially less rapid.

Since the 1940s, however, this process has reversed. The period of population growth seems to be associated with a re-assertion of Aboriginal identity among the excluded groups, as well as with an eventual liberalization of State laws and a reduction in the social costs of identifying, and as a result people begin to be accepted back into the claimed population, and to place themselves in higher level identifying groups. All the populations have begun to move up closer to the upper limit, and, especially in the south-east, the size of the 'invisible' groups has shrunk, certainly as a proportion, and possibly in absolute terms as well.

Just as it is difficult to satisfactorily explain the actual Aboriginal demographic recovery, neither can the change in the attitude of the State and Territory authorities, or the resurgence of identifying, be readily accounted for. All three are clearly interrelated, but in what way is far from clear. For instance, was it the increase in the number of excluded persons, or their growing resistance to being excluded, that resulted in the authorities abandoning the twin

myths of extinction and absorption? One crucial factor was clearly the visibility or otherwise of the nominal assimilies: in Tasmania, where absorption came closer to being a reality and there was only one visible Aboriginal community in the whole State, no pressures for change arose, despite the apparently rapid growth of the population. In New South Wales, on the other hand, the existence in almost every country town of a small group of unemployed Aborigines not under Board control, led to overwhelming demands during the 1930s to have them declared legally Aborigines and removed to reserves. Similarly in the 1950s, the simple fact that there were growing communities of visibly unassimilated people, for whom the Aboriginal administrations would accept no responsibility, in virtually every part of settled Australia, must have been the major reason both for the authorities being forced to recognize their existence, and for the people themselves asserting their identity and origins. Of the two, however, I think it may be taken for granted that it was pressures from the general population, to whom the 'invisible' Aborigines were becoming increasingly visible, rather than those from the Aborigines themselves, which led to them being accepted back into the population.

Now for any population at a given point in time there may be defined a unique pair of populations, one which is ancestral to it, and another which is descended from it. In the present context, an ancestral population contains all the ancestors of the current population, provided the ancestors themselves have at least one ancestor of Aboriginal descent, so neither population is closed at birth. I have not included in figure 8.6.3 only the population ancestral to the 'claimed' population, because it is the highest current actual population, and the size of its ancestral population in the past would indicate the size of the reservoir of non-identifiers at that time, regardless of how, or whether, they identified themselves. The minimum population of Aboriginal descent is a probably attenuated estimate of the size of this ancestral group; it is shown as falling below the 'identifying' population, while the true ancestral population lies above it, but of course both these are entirely hypothetical. The true size of the ancestral population could however be determined by comprehensive genealogical research.

I have not included any 'descendant' populations in figure 8.6.3, apart from the 'any ancestry' population, simply because I do not believe any of the other populations will retain the degree of closure required. The projections in figure 8.6.1 are however descendant populations of the current census and State groups. I have tried to portray in the last part of figure 8.6.3 the changes that may occur in the next few years: it is unlikely that there will be any significant reduction in the size of the group not aware of their Aboriginal ancestry, so both the 'any ancestry' and the 'aware' populations may be expected to increase by the total natural increase supplemented by any extra fertility resulting from out-marriage or out-unions. I have suggested that the 'aware but not identifying' group will not increase at all, and may in fact decrease, and that those acknowledging but not identifying will virtually disappear, either by identifying or, to a lesser extent, by ceasing to acknowledge. Remember that all this assumes no worsening of the overall race relations situation in Australia.

The population 'claimed' by the States and Territories in 1971 included all but a few thousand of the population identifying as Aborigines, and I believe that the two may probably be assumed to have become coextensive. In the relatively short term, then, it may only be necessary to take account of four total Aboriginal populations: the total with any Aboriginal ancestry, the total aware of Aboriginal descent, the total acknowledging/identifying/claimed, and the total revealed by the censuses. moreover, it seems likely that the gap between the 'identifiable' (acknowledging, identifying and claimed) population and the census-revealed population will also narrow substantially over the next few censuses. If the total 'claimed' population of 155,000 in 1971 is accepted as the best available

estimate of the size of this 'identifiable' population, then the difference of about 40,000 between it and the 1971 Census population can be taken as a rough estimate of the size of the reservoir of 'invisible' Aborigines in 1971. These people, plus natural increase and net new recruits (either from the population formerly 'revealed', or from the higher, less identifiable groups), will form the pool from which future ethnic migrants into the census population will be drawn, and into which out-migrants will move; I assume the latter will be relatively few, the former relatively many, and that the populations 'revealed' at the next few censuses will continue to have their natural growth supplemented by a net gain due to changing identification. The censuses may move up towards the 'identifiable' population gradually, as I have shown in figure 8.6.1, or they may do so in bursts, as seems to have been the pattern in the past. Let me repeat again that if the much talked-of 'white backlash' against Aborigines receiving special assistance should ever change from myth to reality, the very reverse of the process I am outlining could well occur.

There will come a time when movement between the census population and the 'invisible' Aboriginal population will cease to be a significant factor, and at that stage it will be necessary to take into account only three populations; the census will then have become the only identifiable population, either because all persons aware of Aboriginal descent identify at the census, or because there remains a group who do not and will never identify. At that stage it may be necessary for the States and Territories to write down their totals, which probably even now include some people permanently lost to the population.

The projections of the population in the next chapter also attempt to explore the effect that changing identification may have on the population 'revealed' at the next few censuses, and to a certain extent the interpretation I am putting forward will be tested by those censuses. However, certain problems are bound to arise, no matter how the census population behaves, because all I am saying is that if my assessment of current trends in fertility and mortality and my assessment of current trends in changing identification are correct, and if these assessed trends continue, certain changes in the Aboriginal population, sketched above and detailed later, will follow. The difficulty is that, unless a determined effort is made in the interval to institute a system for the collection of reliable Aboriginal vital statistics, the censuses will only be able to test this 'prediction' (actually a deduction) in toto, and whether the high rate of growth of the population continues, increases or decreases, it may not be possible, at least in the medium term, to tell with any certainty whether natural increase, or changing identification, or both, are responsible.

9. THE RECENT PAST AND THE IMMEDIATE FUTURE

In this final section, an attempt is made to summarize the current distribution and vital profile of the Aboriginal population, as well as what is known about changing identification, and to produce some adequately based projections for the next 30 years.

9.1 Distribution

Table 3.1.2 summarized the recent changes in the distribution of the official census population in the States and Territories, while table 8.1.3 did the same for the State and Territory estimates. Table 8.1.4 compared these different versions, demonstrating the degree to which the relative distributions of the two populations first diverged when Queensland increased its estimate in 1956, and then converged again as the other States progressively did the same. Confining ourselves from now on to the census populations, it may be noted that broadly speaking the Aboriginal population distribution is the reverse of the non-Aboriginal pattern. Areas of close European settlement are areas of sparse Aboriginal occupancy, and vice versa. Absolute numbers, proportion of Aborigines in local areas, and proportion of Aborigines living in rural as opposed to urban areas, all increase with distance from the south-east corner of the continent, which is the focus of European settlement.

The Aborigines and Islanders are a tiny minority of the Australian population - the proportion has fluctuated under 1 per cent through the post-war period, standing currently at about 0.9 of a per cent. The proportion they make up of each State and Territory varies from less than one per cent in New South Wales, Victoria, South Australia, Tasmania and the A.C.T., to 1.7% in Queensland, 2.15% in Western Australia, and 27% in the Northern Territory. They are also, as table and figure 9.1.1 indicate, a primarily (through decreasingly) rural minority in a country which is overwhelmingly urban. Although the rate of natural growth of the Aboriginal population is probably over twice that of the general population, the Aborigines have in fact only just maintained constant their proportion of the total population, because the natural growth of the non-Aboriginal population has been supplemented by immigration from overseas. In addition, in the Northern Territory, as a result of interstate migration of non-Aborigines, the Aborigines fell from over 60 per cent of the population in 1947 to less than 30 per cent in 1971.

Since most migrants from overseas have gone to the capital cities, the result has been that, although the metropolitan Aboriginal populations have had the most rapid (apparent) growth, Aborigines have not increased markedly as a proportion of the total metropolitan populations; in no State does the proportion in metropolitan areas that is of Aboriginal or Islander descent equal the proportion they are of the State as a whole. On the other hand, although the rural Aboriginal populations have grown less, the Aborigines and Islanders have increased as a proportion of the total rural population because of the low growth rate of the non-Aboriginal rural population.

In non-metropolitan urban centres, except in the Northern Territory, the Aborigines have also been increasing as a proportion of the population. For Australia as a whole, the proportion in these centres in 1961 who were Aborigines was below the proportion that Aborigines were of the total population, but by 1971 it was above it. This crossover occurred in New South Wales, South Australia and Western Australia; Victoria's other urban centres already contained a higher than State average proportion in 1961, and this increased in 1966 and 1971. Queensland's proportion in other urban centres increased throughout the period, but it was still below the State average in 1971. In the Northern Territory,

FIGURE 9.1.1. STATES, TERRITORIES AND AUSTRALIA. RELATIVE DISTRIBUTION OF ABORIGINAL POPULATION BY SECTION OF STATE, 1961-1971.

TABLE 9.1.1. DISTRIBUTION OF ABORIGINAL POPULATION BY SECTION OF STATE, CENSUSES 1961-1971.

	ABORIGINES + ISLANDERS			PERCENTAGE DISTRIBUTION			AS PERCENT OF GENERAL POPULATION		
	1961	1966	1971	1961	1966	1971	1961	1966	1971
N.S.W.									
Urban-Metro/Major	1,398	3,335	6,522 ^a	9.50	16.17	27.32	0.06	0.14	0.21
Other	4,431	6,915	9,395	30.10	33.54	39.35	0.38	0.57	1.05
Total	5,829	10,250	15,917	39.60	49.71	66.67	0.17	0.28	0.39
Rural + Migratory	8,891	10,369	7,956	60.40	50.29	33.33	1.53	1.79	1.51
Total	14,720	20,619	23,873	100.00	100.00	100.00	0.38	0.49	0.52
VIC.									
Urban-Metro/Major	391	768	3,493 ^b	21.77	28.29	54.83	0.02	0.04	0.14
Other	482	1,059	1,926	26.84	39.01	30.23	0.08	0.16	0.34
Total	873	1,827	5,419	48.61	67.29	85.06	0.04	0.07	0.18
Rural + Migratory	923	888	952	51.39	32.71	14.94	0.21	0.19	0.22
Total	1,796	2,715	6,371	100.00	100.00	100.00	0.06	0.08	0.18
QLD.									
Urban-Metro/Major	1,088	1,840	2,901	4.37	6.50	9.09	0.17	0.26	0.35
Other	5,451	7,423	10,238	21.89	26.21	32.07	1.01	1.33	1.62
Total	6,539	9,263	13,139	26.26	32.71	41.16	0.56	0.72	0.91
Rural + Migratory	18,364	19,054	18,783	73.74	67.29	58.84	4.99	4.82	4.98
Total	24,903	28,317	31,922	100.00	100.00	100.00	1.63	1.69	1.75
S.A.									
Urban-Metro/Major	512	1,237	1,827	10.48	18.79	25.03	0.09	0.17	0.23
Other	675	907	1,537	13.82	13.78	21.06	0.38	0.52	0.84
Total	1,187	2,144	3,364	24.30	32.56	46.09	0.16	0.24	0.34
Rural + Migratory	3,698 ^c	4,440	3,935	75.70	67.44	53.91	1.80	2.30	2.17
Total	4,885 ^c	6,584	7,299	100.00	100.00	100.00	0.50	0.60	0.62
W.A.									
Urban-Metro/Major	773	1,179	2,302	4.23	5.55	10.38	0.18	0.24	0.36
Other	1,794	4,598	6,596	9.82	21.65	29.74	1.42	3.24	3.33
Total	2,567	5,777	8,898	14.05	27.20	40.12	0.47	0.90	1.06
Rural + Migratory	15,709 ^d	15,462	13,283	85.95	72.80	59.88	7.84	7.52	6.92
Total	18,276 ^a	21,239	22,181	100.00	100.00	100.00	2.45	2.50	2.15
TAS.									
Urban-Metro/Major	-	23	196	18.42	16.25	29.51	0.01	0.01	0.15
Other	13	21	290	34.21	26.25	43.22	0.01	0.01	0.18
Total	20	34	488	52.63	42.50	72.73	0.01	0.01	0.17
Rural + Migratory	18	46	183	47.37	57.50	27.27	0.02	0.04	0.18
Total	38	80	671	100.00	100.00	100.00	0.01	0.02	0.17
N.T.									
Urban-Metro/Major	-	-	-	-	-	-	-	-	-
Other	1,871	3,719	4,094	9.49	16.67	17.51	10.64	12.33	7.44
Total	1,871	3,719	4,094	9.49	16.67	17.51	10.64	12.33	7.44
Rural + Migratory	17,836 ^d	18,593	19,287	90.51	83.33	82.49	66.33	70.59	64.29
Total	19,707 ^d	22,312	23,381	100.00	100.00	100.00	44.30	39.49	27.06
ACT.									
Urban-Metro/Major	3	24	89	2.07	14.20	34.90	0.01	0.03	0.06
Other	-	-	-	-	-	-	-	-	-
Total	3	24	89	2.07	14.20	34.90	0.01	0.03	0.06
Rural + Migratory	142	145	166	97.73	85.80	65.10	5.97	3.90	5.53
Total	145	169	255	100.00	100.00	100.00	0.25	0.18	0.18
AUST.									
Urban-Metro/Major	4,172	8,396	17,332	4.94	8.23	14.95	0.07	0.12	0.21
Other	14,717	24,642	34,076	17.42	24.15	29.39	0.54	0.85	1.27
Total	18,889	33,038	51,408	23.36	32.38	44.34	0.22	0.34	0.47
Rural + Migratory	65,581	68,997	64,545	77.64	67.62	55.66	3.39	3.49	3.51
Total	84,470	102,035 ^e	115,953	100.00	100.00	100.00	0.80	0.88	0.91

Notes: a - Includes Newcastle and Wollongong urban areas in 1971 (only).

b - Includes Geelong urban area in 1971 (only).

c - Almost certainly an under-enumeration.

d - Using the official estimate of those not enumerated.

e - 57 persons whose main race was Torres Strait Islander but who were also returned as of less than half Aboriginal descent are counted twice in this total.

'other urban' is basically Darwin and Alice Springs, and the massive migration of non-Aborigines to those cities has resulted in Aborigines decreasing as a proportion even through a (slightly) higher proportion of the Aboriginal population was located there at each of the censuses in 1966 and 1971.

In 1971 over 55 per cent of the Aboriginal population was enumerated in rural areas, the proportion in the States and Territories varying from less than 15 per cent in Victoria to over 82 per cent in the Northern Territory. But, with the minor exception of Tasmania in 1966, the proportion in rural areas has decreased continuously, and indeed dramatically, at the last three censuses. However, only part of this change is attributable to actual migration; some at least is a result of people already in urban areas changing their racial identification (see section 9.3).

The rural areas have lost their share to both metropolitan and other urban centres, but it is the metropolitan areas that show the greatest relative gain, because their share in earlier years was so low. Even in 1971, however, the 'other urban' centres still contained almost twice the proportion that the metropolitan areas did, although in 1961 they had contained three and a half times as many. The total proportion of the population in urban areas has almost doubled since 1961, from 23 per cent then to 44 per cent in 1971. The Northern Territory has always had, and still has, the smallest proportion of its Aboriginal population in urban areas. Western Australia with only 14 per cent urban also had a highly rural population in 1961, but by 1971 it had reached about 40 per cent urban, roughly the same as Queensland. Both Queensland and Western Australia had very small proportions in the metropolitan areas throughout the period, but Queensland had in the past a much larger proportion in 'other urban' areas, so its total urban proportion has not increased as dramatically as has Western Australia's. But no other State, again excepting Tasmania, comes anywhere near Victoria. Its Aboriginal/Islander population is now 85 per cent urban and 55 per cent major urban; this is not greatly different from the distribution of the State's total population. New South Wales is the next most urbanized, but although the proportion has increased markedly in the 1961-71 period, only about two-thirds of the Aboriginal population was classified as urban in 1971, and only about 27 per cent was in major urban areas, far below the proportion which applies in the general population.

Only a limited amount of information is available which would throw light on the dynamics of the changing distribution of the Aboriginal population. Special studies of migration to Sydney and Adelaide have however demonstrated the attractive power of the metropolitan areas. Gale (1972) #1 found that of the approximately 1,700 Aborigines she contacted in Adelaide in 1966, about 80 per cent were actually born elsewhere and had moved to Adelaide at some stage during their life, many following a pattern of chain migration not unlike settlers from overseas. Gale also found that although the most common overall reason for migrating was to join relatives (about 30 per cent), over 40 per cent were 'involuntary' migrants who had come either for health reasons, as children to be fostered into white homes, or for trial or imprisonment. Employment was cited explicitly by only 11 per cent as their reason for moving. Adelaide is probably unique in the proportion of Aboriginal migrants it draws from outside the State. In many ways it is still the capital of the Northern Territory, and there is a substantial inflow to it from there.

The special study of Aborigines in Sydney undertaken for the New South Wales Minister for Youth and Community Services, (Scott 1973a) found that again about 80 per cent of the 9,000-odd Aborigines located in Sydney were born elsewhere - 66 per cent of them in New South Wales country areas. This study estimated that

#1

F. Gale (1972). Urban Aborigines.

TABLE 9.1.2. ABORIGINAL (ONLY) INTERSTATE MOVEMENT 1966-1971.									
LOCATION IN 1966	LOCATION IN 1971								
	NSW	VIC	QLD	S.A.	W.A.	TAS	NT	ACT	AUST.
NSW	15,491	180	277	41	43	2	39	26	16,099
VIC	119	3,558	60	39	29	13	14	3	3,835
QLD	252	53	16,046	26	23	6	107	5	16,518
S.A.	50	25	24	4,516	65	1	64	3	4,748
W.A.	18	26	26	44	14,287	3	285	0	14,689
TAS	8	16	6	0	21	389	6	1	447
N.T.	29	24	65	139	64	0	15,780	0	16,101
ACT	9	2	0	0	1	0	2	152	166
AUST	15,976	3,884	16,504	4,805	14,533	414	16,297	190	72,603
O/SEAS	91	57	40	13	44	7	21	3	276
TOTAL	16,067	3,941	16,544	4,818	14,577	421	16,318	193	72,879
NOT STATED	701	273	1,040	288	1,195	17	852	3	4,369
TOTAL CODED	16,768	4,214	17,584	5,106	15,772	438	17,170	196	77,248
NOT CODED	2,094		2,446	837	2,328	47	2,054	12	10,219
TOTAL 5 AND OVER IN 1971	18,862	4,655	20,030	5,943	18,100	485	19,224	208	18,507
UNDER 5	4,239	1,001	4,384	1,197	3,803	90	4,029	40	18,783
TOTAL	23,101	5,656	24,414	7,140	21,903	575	23,253	248	106,290

TABLE 9.1.3. NET INTERSTATE MOVEMENT 1966-1971 (THOSE STATED AND CODED ONLY.									
LOCATION IN 1966	LOCATION IN 1971								
	NSW	VIC	QLD	S.A.	W.A.	TAS	NT	ACT	AUST.
NSW	-	61	25	-9	25	-6	10	17	123
VIC	-61	-	7	14	3	-3	-10	24	-26
QLD	-25	-7	-	2	-3	1	42	5	14
S.A.	9	-14	-2	-	21	1	-75	3	-57
W.A.	-25	-3	3	-21	-	-18	221	-1	156
TAS	6	3	0	-1	18	-	6	1	33
NT	-10	10	-42	75	-221	-6	-	-2	-196
ACT	-17	-24	-5	-3	1	-1	2	-	-47
AUST.	-123	26	-14	57	-156	-33	196	147	-

**TABLE 9.1.4. URBAN MIGRATION OF THE ABORIGINAL
AND TORRES STRAIT ISLAND POPULATIONS, 1966-1971**

CAPITAL CITY \ URBAN MIGRATION	Proportion of respondents who had migrated to the city from within the State since 1966.	Estimated equivalent rate of natural increase in city population.
	(1)	(2)
Melbourne	7.8%	1.7%
Sydney	17.9%	4.4%
Brisbane	26.7%	7.3%
Greater Darwin	28.5%	8.0%
Adelaide	22.5%	5.8%
Perth	41.3%	14.0%
Hobart	21.0%	5.3%

(1) W.D.S. analysis of COMSTAT data adjusted for non-respondents.

(2) W.D.S. estimate from (1).

Perth has experienced the highest rate of in-migration on this basis, but this may be due to an increasing trend for Aboriginal students to go to Perth for secondary and/or tertiary education.

Source: Scott (1973b):3.13

migration was occurring at the annual rate of about 5 per cent of the current population; it was found that about 40 per cent of the current population had lived in Sydney for less than 5 years, 60 per cent less than ten. Employment was cited by over 40 per cent of newcomers as the main reason for moving to Sydney, with 'better opportunity' and better housing being given by 31 and 11 per cent respectively. 'Involuntary' migration was not discerned in this study, apart from some 7 per cent who gave health reasons for moving.

At the 1971 Census a new question was introduced to obtain information on internal migration. A full analysis is not yet available, but it is clear from table 9.1.2 that interstate movement is quite restricted among Aborigines (details are not available for Islanders), both in terms of their own probability of moving, and in comparison between these probabilities and those of the general population. Of those whose response to the question was coded, Victorian and Tasmanian Aborigines were somewhat more likely to move from their State than were the general population, while those in the Northern Territory were less likely to move. New South Wales and Western Australia lost population to most other States, but except for a large shift of population from Western Australia to the Northern Territory, and smaller gains by South Australia at the expense of the Northern Territory, and Victoria at the expense of New South Wales, none of the net changes involved exceeded 50 persons. Moves within States were much more significant, but contrary to what might have been expected, urban-urban moves outnumbered rural-urban moves within States by over two to one. The difficulty here is that it is not yet possible to distinguish trivial local moves with urban areas from between non-major urban areas or between non-major and major urban areas. In another Scott study, however (1973b), an analysis of unpublished data from the census indicated that movement into the metropolitan areas from elsewhere in the same State has been extensive between 1966 and 1971. (table 9.1.4). Data which would show gains from outside the State is not currently available. Note however that there is a relatively poor correspondence between this information, which implies greatest relative growth in Brisbane, Perth and Darwin, and the data presented in table 9.1.1. It would appear that changing identification has produced problems here as well, and the 1971 Census internal migration question actually sheds some important new light on the subject. As is shown in section 9.3, it was mainly in the urban areas that new identifiers appeared in 1971. While Aborigines are undoubtedly migrating to the cities in substantial numbers, the volume of the inflow may not be as great as is generally believed, and changing identification may well have been just as significant as actual migrations in producing the larger proportions in urban areas which are discernible at the recent censuses.

9.2 The current vital profile

9.2.1. Stable population methods

If it is applicable, the most straightforward method for estimating the demographic parameters of a population for which census data is available, but not vital registrations, is by the technique of stable population analysis. A closed population subject to constant schedules of fertility and mortality will eventually assume a constant relative age distribution and rate of growth, both of which are uniquely determined by the vital rates, and, conversely, given the age distribution and rate of growth of such a stable population, it is possible to infer the level of fertility and the mortality pattern that have produced it. But for stable population analysis to be applicable, the population must be closed to in- or out-migration (or the extent of such movements must be known so they can be allowed for) and it must in fact be either stable (subject to reasonably constant fertility and mortality during the lifetime of all living members of the population) or at least quasi-stable (fertility constant, and mortality declining). None of these requirements are met in the case of the Aboriginal population. We have seen that Birdsell (1958), Strehlow (1965) and others have argued that the Aboriginal population grew rapidly to an optimum level soon after

TABLE 9.2.1. CRUDE BIRTH AND DEATH RATES, AND EXPECTATIONS OF LIFE AT BIRTH, IMPLIED BY BEST-FIT MODEL WEST STABLE POPULATIONS AT DIFFERENT CUMULATIVE AGES, 1971 CENSUS. (Males only; $r = .0249$)^a

CUMULATIVE AGE AT WHICH BEST FIT OBTAINED	INTERPOLATED MORTALITY LEVEL	CRUDE BIRTH RATE	CRUDE DEATH RATE	EXPECTATION OF LIFE AT BIRTH	RANK ORDER
5	10.77	.0467	.0218	41.57	2 ^b
10	8.97	.0510	.0261	37.22	3
15	7.97	.0540	.0291	34.83	1
20	8.94	.0511	.0262	37.15	2
25	9.55	.0496	.0247	38.63	4
30	10.78	.0467	.0218	41.58	6
35	12.28	.0437	.0188	45.33	7
40	13.18	.0420	.0171	47.54	8
45	13.83	.0410	.0161	49.07	9
RANGE	to 7.97 to 13.83	to .0410 to .0540	to .0161 to .0291	to 34.83 to 49.07	

Notes: a - This is the 1966-71 rate of growth of the male Aboriginal + Islander population.

b - The median. This is normally used to establish the overall best-fit stable population.

the continent was settled, and that it was maintained at that level by a complex of conservative social institutions developed in response to the extreme variability of the climate and hence of food resources. From this supposed stationary state the Aboriginal population has in the last two hundred years gone through a period of drastic decline followed after at most a generation by rapid increase. Both birth rates and death rates have undergone great changes within the lifetimes of living Aborigines. In addition, the compulsory or voluntary exclusion of 'part-Aborigines' from the Aboriginal population since the 1880s, and their gradual re-entry into the population since the 1930s, is a form of migration which has apparently affected both the growth rates and the sex and age composition of the enumerated populations, and its extent is not known.

The inapplicability of stable population analysis may be readily demonstrated by simply attempting to use it. Table 9.2.1 and figure 9.2.1 show the result of fitting stable populations to the age distribution of Aborigines and Islanders at the 1971 Census, using the 1966-71 rate of growth.^{#2} The best-fit birth rates, death rates, and expectations of life implied by the proportions under each age vary greatly - not fluctuating, as would be expected if age mis-statement alone were responsible, but systematically with age, reflecting the changes in the vital experience and/or extraneous losses or gains to the population that have occurred in particular cohorts at particular times. The best-fit overall stable population would imply a birth rate of 47 per thousand, a death rate of 22 per thousand, and an expectation of life of about 42 years, but that result is simply not meaningful given the systematic deviations of the age distribution from a fixed stable pattern. So in order to arrive at more valid estimates of Aboriginal fertility and mortality, it is necessary to shift to somewhat less direct methods.

9.2.2. Model life table methods

In a closed population with no errors in reported ages, the level of mortality can be derived simply by calculating the extent to which each cohort is reduced between one census and the next. The level of fertility can then be calculated as the sum of the intercensal rate of growth and the estimated crude death rate. However, the usefulness of this method will be reduced by age misstatement, and almost negated if the population is not closed, and people are moving in or out between the censuses. Although it is possible, by fitting a model life table to the actual survival ratios between successive censuses, to minimize or eliminate the effect of age-specific aberrations such as age misstatement and highly age-specific in or out movements, such movements spread over the whole age range cannot be allowed for. If there is a net gain between the censuses, the mortality level indicated by the best-fit model life table will be too low. If there is a net loss, the indicated mortality will be too high.

Figures 9.2.2 and 9.2.3, and table 9.2.2, summarize the actual and best-fit five-year survival ratios for males and females in the Aboriginal plus Torres Strait Islander population between 1961 and 1966, and 1966 and 1971.^{#3} The most striking feature is the highly age-specific movement into the population in 1966, and out of it in 1971, at ages under 20 years, and also the effect of age

#2

The method is outlined in H.S. Shryock and J.S. Siegel (1971) The methods and materials of demography; or in United Nations Department of Economic and Social Affairs (1967) Manual IV, Methods of estimating basic demographic measures from incomplete data. (Manuals on methods of estimating populations.)

#3

The method of obtaining the best fit life table is also outlined in Shryock & Siegel (1971) and in U.N. Manual IV. The model life tables are those of A.J. Coale and P. Demeny (1966) Regional model life tables and stable populations.

TABLE 9.2.2. ABORIGINES PLUS ISLANDERS. ACTUAL AND BEST-FIT 5-YEAR SURVIVAL RATIOS, 1961-66 AND 1966-71.

AGES	1961 - 1966				1966 - 1971			
	ACTUAL		BEST FIT		ACTUAL		BEST FIT	
	Males	Females	Males	Females	Males	Females	Males	Females
BIRTHS ^a			.85664	.88330			.88610	.85695
0-4	1.10790	1.11376	.95313	.95850	.92348	.94140	.96506	.94545
5-9	1.03341	1.04048	.98443	.98516	.93815	.94237	.98782	.98105
10-14	.95299	.96798	.98369	.98435	.88337	.90191	.98691	.98048
15-19	1.01377	.99258	.97637	.97884	1.05877	1.03204	.98086	.97435
20-24	.96220	1.00915	.97098	.97439	1.02690	1.02990	.97665	.96933
25-29	.97881	1.00832	.96757	.97092	.97742	.97732	.97407	.96525
30-34	.99345	1.01698	.96203	.96711	.97531	.95876	.96951	.96085
35-39	.97745	.90965	.95351	.96273	.97985	.94725	.96205	.95616
40-44	.93553	.90567	.94165	.95661	.97377	.95393	.95096	.95006
45-49	.89032	.86075	.92385	.94475	.92021	.94821	.93403	.93762
50-54	.79310	.85069	.89790	.92552	.85376	.86080	.90903	.91706
55-59	.85394	1.20988	.85937	.89423	.84030	1.02277	.87187	.88357
60-64	.95500	.75630	.80391	.84626	.99895	.74694	.81830	.83333
65-69	.66361	.70544	.72756	.77500	.64039	.71111	.74339	.76047
70-74	.48321 ^b	.57975 ^b	.62288	.67286	.50410 ^b	.58935 ^b	.64000	.65681
75+			.38581 ^c	.42010 ^c			.40043 ^c	.40568 ^c
LEVEL (WEST)			14.05	14.63			15.91	13.02
$\frac{1}{2} \text{ }_0$			49.67	54.08			53.93	50.05

Notes: a - $\frac{1}{2} L_0 / 51$
b - Actually, T_{75} / T_{70}
c - T_{80} / T_{75}

TABLE 9.2.3. BIRTH RATES, DEATH RATES, LIFE EXPECTANCIES, AND SEX RATIO AT BIRTH, OBTAINED BY APPLICATION OF BEST FIT MODEL LIFE TABLES, 1961-66 AND 1966-71.

		1961-66				1966-71			
		Crude birth rate	Crude death rate	Rate of increase	$\frac{1}{2} \text{ }_0$	Crude birth rate	Crude death rate	Rate of increase	$\frac{1}{2} \text{ }_0$
USING POPULATIONS AS ENUMERATED AT CENSUSES	Males	.0531	.0167	.0363	49.67	.0385	.0135	.0250	53.93
	Females	.0521	.0130	.0391	54.08	.0420	.0156	.0264	50.05
	Persons	.0526	.0149	.0377	51.81	.0402	.0145	.0257	51.94
		$B_m/B_f = 1.0592$				$B_m/B_f = .9450$			
EARLIER POPULATIONS RECONSTRUCTED BY REVERSE SURVIVAL	Males	.0468	.0173	.0295	49.67	.0421	.0137	.0284	53.93
	Females	.0486	.0170	.0316	54.08	.0435	.0159	.0275	50.05
	Persons	.0477	.0172	.0306	51.87	.0428	.0148	.0280	51.98
		$B_m/B_f = 1.0000$				$B_m/B_f = .9922$			

TABLE 9.2.4. SUMMARY OF OVERALL ESTIMATES OF CURRENT BIRTH RATES, DEATH RATES, LIFE EXPECTANCIES, AND SEX RATIOS AT BIRTH, DERIVED FROM MODEL LIFE TABLE ANALYSIS.

		Crude birth rate	Crude death rate	Rate of increase	$\frac{1}{2} \text{ }_0$
AVERAGE OF ESTIMATES BASED ON RECONSTRUCTED POPULATIONS	Males	.0443	.0154	.0289	51.80
	Females	.0459	.0164	.0294	52.06
	Persons	.0451	.0159	.0292	51.93
		$B_m/B_f = .9960$			
FINAL ESTIMATES (SLIGHTLY DISCOUNTED TO ALLOW FOR CHANGING IDENTIFICATION)	Males	.0434	.0167	.0267	49.56
	Females	.0435	.0160	.0275	50.00
	Persons	.0434	.0164	.0271	49.78
		$B_m/B_f = 1.0200$			

TABLE 9.2.5. COMPARISON OF POPULATIONS FOR WHICH VITAL RECORDS ARE AVAILABLE, AND CENSUS POPULATIONS IN 1961, 1966 AND 1971.

	<u>N.S.W.</u>	<u>VIC.</u>	<u>QLD.</u>	<u>S.A.</u>	<u>W.A.</u>	<u>TAS.</u>	<u>N.T.</u>	<u>A.C.T.</u>	<u>AUST.</u>
1961 Vital records available	2,853	0	10,875	0	0	0	18,327	0	32,055
Census	14,720	1,796	24,903	4,885	16,276	38	17,763	145	80,526
1966 Vital records available	2,330	0	11,043	0	0	0	19,786	0	33,158
Census	20,618	2,715	28,262	6,584	21,238	80	22,312	169	101,978
1971 Vital records available	0	0	11,136	0	0	0	21,614	0	32,750
Census	23,873	6,371	31,922	7,299	22,181	671	23,381	255	115,953

TABLE 9.2.6. CALCULATION OF VITAL RATES OF POPULATION FOR WHICH VITAL RECORDS ARE NOT AVAILABLE, 1966.

<u>Population on which rates based</u>	<u>Average population</u>	<u>Average annual births</u>	<u>Average annual deaths</u>	<u>Average natural increase</u>	<u>Crude birth rate</u>	<u>Crude death rate</u>	<u>Rate of natural increase</u>
Census	101,558	4,579	1,616	2,963	.0451	.0159	.0292
Vital records available	27,397	1,022	452	570	.0373	.0165	.0208
No vital records available	74,161	3,557	1,164	2,393	.0479	.0157	.0323

misstatement that occurs as a result of people skipping the age groups just below pension age, as well as age 15-19. Note that the actual and model survival ratios correspond fairly well in the middle age range, and that the fit is better for the 1966-71 curves than for 1961-66, particularly for females.

The crude death rates implied by the best-fit model life tables, and the crude birth rates derived from the calculated death rates and the observed rates of growth, are summarized in table 9.2.3. It can be seen that the results from the 1961-66 comparison differ quite markedly from those from 1966-71. In addition to the lower rate of increase in 1966-71, mortality is estimated to be slightly lower, so the crude birth rate in 1966-71 is much lower than in 1961-66. The sex ratio at birth in 1966-71 seems too low, while that for 1961-66 seems too high. Males have a higher expectation of life in 1966-71, while levels for females are higher in 1961-66.

It is certain that the intercensal growth rates do not reflect only natural increase, but also net ethnic in or out migration (changing racial identification), and part at least of the discrepancies between males and females and between the two intercensal comparisons may result from differential gains or losses of males or females within or between the two intervals. It is possible to partly correct for this by reverse surviving the later population to the earlier date on the basis of the best-fit model life table. This has two effects: it forces age misstatements at the earlier census into the correct age group, or at least into the same cohorts in which they occur at the later one; and it can largely eliminate the effects of highly age-specific in or out movements. If only age misstatements occur, or if leakage in or out is not concentrated in particular ages, reverse survival can change the proportions in the various age groups, but will not affect the size of the total population. However, in the Aboriginal/Islander population, losses and gains have been concentrated in the earlier age groups, and reverse survival has a very interesting effect. As will be seen in table 9.2.3 it brings the 1961-1966 and 1966-71 tables much closer together, by reducing the reconstructed 1966 population and increasing the reconstructed 1961 population, although it increases the difference between the estimated death rates.

This procedure removes the effect of highly age-specific leakage, (and in the process gives us a minimum estimate of its extent). But it remains almost certain that the overall level of mortality obtained is still distorted by the overall level of changing identification at all ages. It will be recalled that the birth and death rates obtained by combining all available vital records indicated that for the groups concerned the current growth rate was only just over 2 per cent, with a birth rate of about 37 per thousand and a death rate of about 16 per thousand. The population from whom those rates were calculated was substantial - about 33,000, or about twenty to thirty per cent of the total Aboriginal/Islander population, but of course it is not a representative sample. Yet it hardly seems possible that the total population could have higher levels of fertility or mortality than this institutionalized segment. Nevertheless, the analysis based on the intercensal changes indicates that the census-identified population had substantially higher birth and growth rates between 1966 and 1971 than the groups for whom vital records are available, and that the difference was even greater between 1961 and 1966. Moreover, although the rates based on the reverse-survived earlier population are brought closer to the vital event-based rates for 1961-66, the reconstruction increases the difference for 1966-71.

The reduction in both the birth rates and growth rates, which occurs between the 1961-66 and the 1966-71 periods, looks quite reasonable when based on the reconstructed earlier populations; but the changes in the male and female life expectancies over the period almost certainly reflect differential changing identification occurring in a wide range of ages, and this is not eliminated by

reverse-surviving. However, by averaging the populations and events from the two intercensal periods, it is possible to obtain a set of estimates which look very plausible indeed. These are shown in the top half of table 9.2.4; note that the discrepancy between the male and female rates has almost disappeared, with birth rates about 45 per thousand, death rates about 16 per thousand, growth rates of 2.9%, and life expectancies of just over 50 years, with the female fractionally higher. These values would apply in the middle of the entire period, i.e. mid-1966.

While these various adjustments certainly make the results of the census analysis far more credible, they do not significantly affect the differences between the birth rates and growth rates based on the censuses, and those based on recorded vital events; nor is it really possible to further adjust the results of the intercensal analysis to either remove or reduce these discrepancies. The birth rate is obtained as a residual after the growth rates and mortality level have been calculated separately, so the birth rate can only be reduced by reducing the death rate or the intercensal growth rate. But these are themselves interdependent: lowering either one will only increase the difference between the other and the comparable rate based on the vital events. Age-specific errors have supposedly been eliminated by reverse survival, so any remaining attenuation due to changing identification must affect the whole age range, and if part of the intercensal increase was due to the in-movement of new identifiers, adjustment for this would involve either eliminating these new recruits from the later census, or adding them in to the earlier one. But either operation will reduce the survival ratios, and hence increase the indicated death rate, leading to the equally unlikely proposition that the mortality of the Aboriginal population as a whole is greater than that of the group for whom vital statistics are available. And above and beyond all these considerations is the fact that adjusting the birth rate down produces results incompatible with the present age structure of the population.

So while the census-based rates may still be slightly affected by changing identification, it appears that we must look to the vital record-based rates for an explanation of the discrepancy between the two. There are two broad possibilities: the vital rates may be in error somehow, and not even reflect the true demographic parameters of the population they are supposed to be based on; or else the rates may be correct, but the population they describe may differ substantially from the census population. The only way in which I can conceive of the vital records being in error, is through the population figures for the controlled groups being inflated; it seems highly unlikely, under current circumstances, that their births or deaths could be under-reported to any significant extent. It is possible, for instance, that the populations given have tended in recent years to reflect a de jure definition (people who 'belong' to a community), rather than a de facto one. If a substantial number of the people who belong to communities are actually elsewhere when they have children or die, the rates derived from community records would be too low. This could also explain the observed reduction in the vital rates since 1951: this effect could be a result of the relaxation of restrictions on the movement of Aborigines in recent years, so that more and more of the de jure populations of reserves are not in fact resident there at any given time, and hence not at risk of having their births or deaths included in the vital statistics, even though they are still counted in the population.

There are two difficulties with this suggestion, however. The first is that there is absolutely no evidence to support it; I have looked very carefully at all the recent records for both Queensland and the Northern Territory, and both systems are self-checking. The Northern Territory records actually form a complete register, while the Queensland returns are balanced quarterly against the actual population. The second difficulty is that the birth and death rates do not differ

to the same extent. As table 8.5.1 and figure 8.5.1 show, the birth rate based on vital records in 1951 was about equal to the value indicated by the censuses in 1966; the decline since 1951 might therefore be a result of births occurring elsewhere. But the death rate based on vital records has been at the 1966 census-based level since 1956, implying that only births were omitted, or that the death rate has actually risen since then, and that the current census-based rate is too low. Overall, as was suggested in section 7.2, it is likely that there is some differential omission of births, but I cannot see this accounting for more than a fraction of the discrepancy between the two sets of rates.

This leaves the possibility that the vital records reflect reasonably accurately the vital profile of the population they refer to, but that there is a substantial difference between that population and the census. It should be recalled that not all States are even represented in the vital records. Table 9.2.5 compares the average populations for which vital records are available in 1961, 1966 and 1971, with the census populations: Victoria, South Australia, Western Australia, Tasmania and the A.C.T. are completely excluded from the vital records, and New South Wales does not appear in 1971, while only in the Northern Territory do the records cover anything like the census populations. The vital rates have not altered significantly since 1961, so we may confine the comparison to the average of the two census-based sets of rates, and the 1966 vital rates. As table 9.2.6 shows, if both are accepted as correct, it follows that the population not included in the 1966 vital records must have had a birth rate of about 48 per thousand, a death rate of about 16.8 and a rate of natural increase of about 3.2% a year. That is not impossible, but it would be a little surprising if the entire excluded group did in fact have a fertility level above that of any group for which vital rates are available. Indeed, if the crude birth rate of about 46 per thousand calculated for Western Australia in 1971 applied in 1966 as well, the Aboriginal populations in New South Wales, Victoria, Queensland, South Australia, Tasmania and the A.C.T. not covered by vital records would have to have a crude birth rate of almost 50 per thousand.

My own assessment is that a slight discounting of the census-based birth rates, growth rates, and life expectancies is called for, to allow both for the remaining effect of changing identification, and for some slight reduction in fertility, and possibly also in mortality, since 1966. The values arrived at are summarized in the lower half of table 9.2.4. I have reduced the rate of growth to about 2.7 per cent a year, with male and female expectation of life at birth about 50 years, a birth rate of about 43 per thousand and a death rate of about 16 per thousand and an infant mortality rate of about 120 per thousand. However, variations of two or three per thousand in the birth, death and increase rates, of 5 years either way in expectation of life, and of 20 per thousand either way in the infant mortality rate, are all quite possible. Nevertheless, it is still certain that Jones' (1970b) estimates were distorted by his lack of recognition of the effect of movements into the population between 1961 and 1966, resulting in his estimates of both the level of fertility and expectation of life being much too high.

9.2.3 The fertility pattern

Once the overall level of fertility of the population has been established, it is possible to estimate the age-specific fertility pattern on the basis of what is known of the relative distribution of child bearing through the female reproductive years. There are four sources of information on the pattern of Aboriginal fertility based on reasonably large populations, three of which have been mentioned already: the two studies by Jones of the fertility of 'full-blood' people in the Northern Territory in 1961 and 1967 (Jones 1963, 1971) summarized in table 7.7.6, and the results of the hospital reporting system in Western Australia summarized in table 7.5.7. The fourth source is a question at the 1966 Census on number of children born to existing marriages: data is available for Australia as

a whole, but for the 'official' (half or more) Aboriginal population only. I have used it to estimate age-specific 'birth' rates by taking the increment in average issue between each pair of successive single ages as an estimate of the marital fertility rates for that year of age, and assuming that marital fertility accounted for all fertility (or rather, that women with any issue responded to the question regardless of whether they were married or not). The results are summarized in table 9.2.7. This method has the potential for producing a biased estimate under conditions of changing fertility and differential (reported) non-marital fertility by age, and it can be seen from table 9.2.7 and figure 9.2.4 that over age 35 the 'rates' become rather meaningless, because from then on average issue actually decreases with age. In addition, the other biases may have operated differentially at older ages, and the proportion of total births reported may have been lower, as a result of memory lapse, or a more literal response to the instruction to report only births within the current marriage.

However, this distortion at older ages cannot obscure the basic similarity between the census-based curve, and the other distributions shown in figure 9.2.4. All display roughly the same pattern, very highly peaked at age 20-24 years, and dropping of somewhat more sharply than might be expected thereafter, especially in the Northern Territory series. This may reflect a high incidence of secondary sterility among Aboriginal women, a situation that would be expected, given the poor general health status of the population, but which to my knowledge has not been documented directly.

Of all the age-specific fertility schedules presented, that from the Western Australian hospital reporting system is probably the most well founded, and the correspondence between its shape and that derived for Australia as a whole from the 1966 Census would seem to indicate that it is reasonably representative of the whole population. I have applied the pattern of fertility it contains to the 1971 Census Aboriginal/Islander age distribution to produce the crude birth rate of 43 per thousand settled on previously for Australia as a whole. The results are shown in table 9.2.8. They indicate a total fertility of about 5.97, a gross reproduction rate of about 2.96 (assuming a sex ratio at birth of 1.02), a net reproduction rate of about 2.18 (on the basis of Coale and Demeny (1966) West life table with life expectancy of 50 years), a current average age at childbirth of just over 25 years, and an ultimate stable generation length of about 26.68 years. The intrinsic rate of increase would therefore be a little over 2.9% a year.

The fact that it is possible to arrive at these tentative estimates on the basis of census data alone should not be allowed to obscure the urgent need for a proper system of registration and analysis of Aboriginal births and deaths, however. While I am reasonably confident that my census-based estimates are closer to the truth than those based on vital records of particular groups, and than those derived by F.L. Jones (1970b), there is no way of assessing the size of any remaining errors of estimation, or of knowing whether the true rates are constant, increasing or decreasing. Without proper vital statistics, we are still basically dependent on inspired guesswork.

9.3 Changing identification

Throughout this study I have used the concept of ethnic migration to explain some of the discrepancies in past statistics of State and census Aboriginal populations. It was an examination of the 1966 figures which first convinced me that it was necessary to include some such concept in any complete account of the Aboriginal population; the historical data later confirmed this and gave the notion a more definite characterization. But how much do we really know about the process of changing identification, and the groups of people involved? This section attempts to draw together all the direct evidence available.

TABLE 9.2.7. AGE-SPECIFIC FERTILITY ESTIMATED BY AVERAGE ANNUAL INCREMENT IN ISSUE OF CURRENT MARRIAGE. 1966 CENSUS. 'OFFICIAL' POPULATION (PERSONS OF HALF OR MORE ABORIGINAL DESCENT) ONLY.

Age of woman	Average issue (current marriages)	Currently married women	Total women	Estimated total average issue	Increment in average issue from this age to next	5-year average	5-year age group
15	.68	43	825	.04	.04		
16	.73	86	794	.08	.12		
17	.94	151	695	.20	.13	.15	15-19
18	1.20	186	676	.33	.23		
19	1.37	269	660	.56	.27		
20	1.56	347	653	.83	.19		
21	1.89	309	573	1.02	.29		
22	1.95	367	548	1.31	.41	.26	20-24
23	2.53	343	504	1.72	.07		
24	2.61	342	498	1.79	.43		
25	2.94	453	599	2.22	-.06		
26	2.99	406	561	2.16	.82		
27	3.77	333	421	2.98	-.44	.19	25-29
28	3.39	388	518	2.54	.58		
29	4.05	355	461	3.12	-.37		
30	3.50	580	739	2.75	.82		
31	4.54	307	390	3.57	-.19		
32	4.33	360	461	3.38	.64	.14	30-34
33	5.02	321	401	4.02	-.30		
34	4.66	342	428	3.72	-.16		
35	4.65	403	527	3.56	.21		
36	4.67	355	440	3.77	.63		
37	5.58	258	327	4.40	-.44	-.003	35-39
38	5.07	335	429	3.96	-.01		
39	5.52	239	334	3.95	-.65		
40	4.13	467	585	3.30	.71		
41	5.11	227	289	4.01	-.12		
42	5.06	229	298	3.89	.11	-.08	40-44
43	5.47	182	249	4.00	-.41		
44	4.77	186	247	3.59	-.70		
45	4.05	288	404	2.89	.52		
46	4.62	237	321	3.41	.57		
47	5.42	122	166	3.98	-.39	-.06	45-49
48	5.03	179	251	3.59	-.23		
49	4.72	144	202	3.36	-.88		
50+	3.48	289	405	2.48

TABLE 9.2.8. ESTIMATING AGE-SPECIFIC FERTILITY, AND GROSS AND NET REPRODUCTION RATES. AUSTRALIA 1966-71.

<u>Age group</u>	<u>FEMALE POPULATION</u>			<u>1971 W.A. rates</u>	<u>Implied births</u>	<u>Desired births for b=.0434</u>	<u>W.A. rates prorated</u>	<u>L_x level 13</u>	<u>Expected births per woman</u>
	<u>1966 (reconst)^a</u>	<u>1971</u>	<u>Mid</u>						
15-19	5,124	5,958	5,541.0	.2590	1,435	1,267	.2287	3.8940	.8906
20-24	3,838	4,992	4,415.0	.3662	1,617	1,428	.3234	3.7940	1.2270
25-29	3,349	3,720	3,534.5	.3084	1,090	963	.2724	3.6774	1.0017
30-34	3,025	3,232	3,128.5	.2147	672	594	.1896	3.5493	.6730
35-39	2,611	2,906	2,758.5	.1397	385	340	.1234	3.4101	.4208
40-44	2,093	2,496	2,294.5	.0550	126	111	.0486	3.2603	.1585
45-49	1,777	1,988	1,882.5	.0088	17	15	.0078	3.0972	.0242
Total	21,871	25,292	23,554.5		5,342	4,718	5.9695		4.3956
B _m /B _f	.	.	.	.	.	.	1.02	.	1.02
G.R.R.	.	.	.	.	.	.	2.9552	.	
N.R.R.	.	.	.	.	.	.	.	.	2.1761
Total population	101,239	115,953	108,596						
Crude birth rate	.	.	.	.	.0492	.0434 ^b			

Note: a - Reconstructed by reverse-surviving from the 1971 population using level 13 West for females (and level 14 West for males)

b - This crude birth rate is implied by the 1971 age structure and the life table used.

Changing identification is not a one-way process. Although there has apparently been a net gain to the census population over the last few censuses, this has been a result of a balance between those changing from Aboriginal to something else, and those changing from something else to Aboriginal. The interpretation that I have been putting forward does not depend on some new mechanism, but merely involves the assertion that, for a very long time, the balance has been tipped in the opposite direction to that generally believed. I do not think there can be any doubt that, in New South Wales and Victoria at least, re-identifying as an Aborigine had become widespread even before the second world war, and that within the population, the trend was for people to shift from identifying as 'half-castes' to identifying as 'Aborigines'. (Pool (1964) calls this 'centripetal' category-jumping, i.e. moving towards the categories of greater nominal Aboriginal descent). Yet the absorptionist ideology was so firmly embedded in Australian conventional wisdom, that even when people became aware that changing identification was occurring, they completely misunderstood the direction in which it was taking place. F.L. Jones, for instance, correctly detected the fact that the losses to the 'half-caste' population between 1954 and 1961 were too great to be attributable to mortality alone (Jones 1970a). But he then went on to conclude that the missing 'half-castes' had changed their identification to 'European' ('centrifugal' category-jumping), whereas it is clear even from the changes in the total sizes of the Aboriginal sub-populations, that the net movement was in the very opposite direction. Similarly the Census Bureau, when it detected the changes in the responses of matched individuals between 1961 and 1966, emphasized the numerically less significant 'centrifugal' changes, and treated the 'centripetal' changes as a surprising anomaly.

If 'full-bloods' had been fully enumerated, and if Aboriginal birth and death statistics had been available, the true significance of these changes would presumably have become clear much earlier. It is probably just as well that they did not, however, since the result would probably have been that even stronger absorptionist pressures would have been brought to bear on 'part-Aboriginal' people who were determined to assert their Aboriginality.

On the other hand I do not want to convey the impression that 'centrifugal' category-jumping is no longer occurring. For one thing, mixed marriages, although apparently of limited extent, seem generally to result in a net loss to the population, through 'part-Aboriginies' ceasing to identify when they marry out of the Aboriginal sub-culture (Gale 1969, Jones 1970a, Barwick 1971). Also, as was noted in section 8.2 and 8.6, it appears that although there has been a net gain to the census populations in the south-eastern States, there may well still be a net loss occurring in Queensland, Western Australia and the Northern Territory. Additional evidence that this may be the case is obtainable from the 1971 Census internal migration question, although as noted full results are not yet available.

Since this question asked all persons where they were at the time of the 1966 Census, it is possible to reconstruct where the people who in 1971 called themselves Aborigines (only) were in 1966. By comparing the reconstructed population with the population from the 1966 Census, it is then possible to estimate the extent of changing identification between 1966 and 1971, and what groups of people were involved.

Answers were sought to this question in 1971 from all persons then aged 5 years and over; however, only people who in 1971 were at their usual residence were coded. In addition, there was a non-response rate of over 5 per cent, so only about 83 percent of persons 5 years of age and over in 1971 are actually available for this analysis. But even the estimates obtained by reconstructing this reduced group substantially exceed the populations identified as of any Aboriginal descent at the 1966 Census in Victoria, Tasmania and the A.C.T. as a whole, and in the urban areas of New South Wales, (table 9.3.1). Predictably, a similar comparison shows

that the 'official' 1966 Aboriginal population is substantially exceeded by the reconstructed population in all States and Territories except South Australia, Western Australia and the Northern Territory, and in the urban areas of all States and Territories except the Northern Territory; again, it seems clear that changing identification is occurring to different extents in different places.

We will know more about this process of changing identification when a similar analysis is available for Torres Strait Islanders, and when cross-tabulations of 1966 residence by individual characteristics are produced. It is possible to pro-rate the reconstructed populations in table 9.3.1 to obtain estimates relating to the entire 1971 Census population, including Torres Strait Islanders, and those persons who did not state their 1966 residence, as well as those who were not at their usual address in 1971, although the assumption involved, that the groups excluded did not differ significantly from those included, would be difficult to defend (the substantial number not coded were excluded for the very reason that they more mobile than the rest). The results of doing so are shown in table 9.3.2, which also shows the overall survival ratios for each State and Territory implied by these estimates. For comparison, the survival ratios calculated directly from the populations actually enumerated in each State and Territory in 1966 and 1971 are also included; the two sets do not differ greatly, because interstate migration has been fairly limited.

The survival ratios for the States and Territories can be seen to vary widely, from a low of .8574 in the Northern Territory, to a high of over 7.0 in Tasmania, reflecting apparent differences in the direction in which the net balances of changing identification lie. But note that the overall Australian survival ratio of .9354, which is only slightly lower than that implied by the best-fit model life tables, would indicate very much smaller net changing identification for Australia as a whole. If, therefore, the State and Territory ratios do reflect true differences, the gains and losses must have almost cancelled each other out, at least in total, and that fact itself would require some explanation simply because it would be such a coincidence.

I have used the survival ratio for Australia as a whole in order to calculate very roughly the expected survivors in each State and Territory if they were all subject to the total 'mortality'. This assumes that the age compositions do not differ significantly. The results are shown in the last three columns of table 9.3.2. We may ignore New South Wales, Queensland and South Australia, where the (E - O)/E figures are less than .03, and where the net gains and losses almost balance out anyway. For the rest of Australia, however, this analysis indicates that the changes between 1966 and 1971 involved substantial two-way shifts in identification, with a net loss to the Aboriginal population of about 3,150 persons in Western Australia and the Northern Territory being offset by a similar net gain in Victoria, Tasmania and the A.C.T. Note also that if the same procedure were applied separately to the urban and rural sections of each State and Territory, large two-way streams would also be implied within them. Of course, if there was substantial misreporting of 1966 location by those Aborigines coded, or if there were substantial differences between the mobility of those coded and the rest, or between the mortality or age structures of the States and Territories, this long chain of inference might need to be modified; however I doubt whether the general conclusion would be greatly altered.

If the assumptions do hold, this analysis yields a rough estimate of net gains and losses in each State and Territory; but by definition, these must all sum to zero for Australia as a whole. To obtain an estimate of the net loss or gain (if any) for Australia, we must return to the model life tables

TABLE 9.3.1. COMPARISON OF POPULATIONS ENUMERATED AT 1966 CENSUS WITH 1966 POPULATIONS RECONSTRUCTED FROM 1971 CENSUS INTERNAL MIGRATION QUESTION.

	Reconstructed 1966 population	Enumerated 1966 Population		1966 Reconstructed as % of 1966 Enumerated	
		'Official' - half or more	Total - all identified	'Official' 1966 Population	Total 1966 Population
N.S.W. - Urban	10,307	6,447	10,232	159.78	100.67
Rural	5,792	7,722	10,369	75.01	55.86
Total	16,099	14,219	20,601	113.18	78.12
VIC. - Urban	3,250	1,167	1,819	278.58	178.72
Rural	585	623	888	94.06	65.99
Total	3,835	1,790	2,707	214.36	141.74
QLD. - Urban	6,362	5,395	7,462	117.87	85.22
Rural	10,156	13,608	15,578	74.63	65.19
Total	16,518	19,003	23,040	86.91	71.68
S.A. - Urban	1,895	1,607	2,144	117.73	88.25
Rural	2,853	3,898	4,440	73.19	64.26
Total	4,748	5,505	6,584	86.19	72.07
W.A. - Urban	5,306	4,470	5,751	118.70	92.26
Rural	9,383	13,969	15,395	67.17	60.95
Total	14,689	18,439	21,146	79.66	69.46
TAS. - Urban	292	19	33	1,636.84	942.42
Rural	155	17	46	947.06	350.00
Total	447	36	79	1,311.11	597.47
N.T. - Urban	2,081	2,788	3,714	74.64	56.03
Rural	14,020	18,331	18,592	76.48	75.41
Total	16,101	21,119	22,306	76.24	72.18
A.C.T. - Urban	42	3	19	1,966.67	310.53
Rural	124	93	150	133.33	82.67
Total	166	96	169	190.63	108.28
AUST. - Urban	29,535	21,896	31,174	135.00	94.82
Rural	43,068	58,311	65,458	73.87	65.81
Total	72,603	80,207	96,632	90.56	75.17
OVERSEAS	276				
TOTAL STATED	72,879				
NOT STATED	4,369				
TOTAL AT USUAL ADDRESS IN 1971	77,248				
NOT AT USUAL ADDRESS	10,259				
TOTAL OVER 5 YEARS IN 1971	87,507				
TOTAL UNDER 5 YEARS IN 1971	18,783				
(TOTAL IN 1971)	106,290 ^a				

Note: a - Aborigines only. Figures for Torres Strait Islanders are not available.

TABLE 9.3.2. ESTIMATES OF THE OVERALL SURVIVAL RATIOS OF THE ABORIGINAL/ISLANDER POPULATIONS OF THE STATES, TERRITORIES AND AUSTRALIA, BASED ON THE 1971 CENSUS INTERNAL MIGRATION QUESTION.

<u>STATE OR TERRITORY</u>	<u>ENUMERATED IN 1966</u>	<u>RECONSTRUCTED SURVIVORS IN 1971</u>		<u>STATE POPULATION 5+ IN 1971</u>		<u>'EXPECTED' SURVIVORS BY AUST. RATIO</u>	<u>RECONSTRUCTED LESS 'EXPECTED'</u>	
			<u>SURVIVAL RATIO</u>		<u>SURVIVAL RATIO</u>		<u>N</u>	<u>As % of expected</u>
N.S.W.	20,618	19,695	.9552	19,535	.9475	19,286	409	2.12
VIC.	2,715	5,132	1.8902	5,280	1.9448	2,540	2,592	102.05
QLD.	28,262	26,181	.9264	26,400	.9341	26,437	-256	-0.97
S.A.	6,584	5,987	.9093	6,077	.9230	6,159	-172	-2.79
W.A.	21,238	18,472	.8698	18,342	.8636	19,866	-1,394	-7.02
TAS.	80	590	7.3750	563	7.0375	75	515	686.67!
N.T.	22,312	19,130	.8574	19,341	.8668	20,871	-1,741	-8.34
A.C.T.	169	205	1.2130	215	1.2722	158	47	29.75
AUST.	101,978	95,392	.9354	95,753	.9390	95,392	0	

It will be recalled that the best-fit life tables for 1966-71 implied a 1966 population slightly smaller than the enumerated one. assuming that the model tables correctly describe the level of mortality (and that age misstatement does not significantly affect total apparent survival), the 'true' total survival ratio from 1966 to 1971, based on the reverse-survived 1966 population, would be about .9500, and the net loss to population would be about 1,220 persons, 876 males and 344 females (see table 9.3.3). Adding these the 3,150 persons obtained from the examination of the States and territories would then give us a minimum of 3,150 persons moving into the population between 1966 and 1971, and a minimum of 4,370 (3,150 + 1,220) leaving it. Remember that there were two-way changes in each State and Territory which are completely excluded from these figures.

The distribution of the total Australian net loss among the States and Territories would require another exercise in prorating which cannot really be justified, given the tenuous basis of the entire argument. There is a need here for an entirely separate study of this particular aspect of the problem; given a little more data, it would be possible to adjust each State and Territory population for internal migration by sex and age, calculate the best-fit life tables, work out the net gain or loss, balance these to the total for Australia by adjusting the life tables, adjust for obvious age misstatements, and then repeat the whole process until the results ceased to change. All that I can do in the present context, however, is comment on the picture for Australia as a whole, and even then I am not sure that I fully understand what has been happening; in particular, I cannot really account for the fact that the model life tables fit so well for Australia as a whole, despite the apparently substantial movements into and out of the population in the interval.

I have suggested in several places that the main changes in identification that took place between 1961 and 1971 involved young children, a number of whom were included for the first time in 1966, then excluded again in 1971. To a certain extent the conclusions about the 1966-71 changes, which were discussed above, are dependent on the validity of the model life table used; but this is not true of the 1961-66 changes, which are so marked that they would be relatively little affected by either variation in the mortality level assumed or any conceivable age misstatement. (The possibility of outright non-enumeration being involved cannot however be so readily excluded.) In fact, the first indications I had of the characteristics of the new identifiers came from an examination of F.L. Jones' suggested life tables for the States and Territories. Although these all assumed expectations of life that were too high, they revealed quite clearly, when used to reverse-survive 1966 to 1961, a pattern of age-specific deficiencies in the enumerated 1961 population that could only be accounted for by changing identification or non-enumeration. And the fact that most of the new recruits were children in the south-eastern States indicated that changing identification was the most likely explanation.

Figure 9.3.1 clearly shows why the existence of these new recruits is beyond doubt. It presents the changes in the female census age distribution in the form of an isometric figure, in which changes in the size of cohorts are indicated by the dotted lines. This figure shows that the cohorts aged 0-4 and 5-9 in 1961 increase substantially in size in 1966 in a way that cannot possibly be attributed to age misstatement. There is also an apparent deficit of females 20-24 in 1966, and the usual excess at ages 60-64, although this is much less marked in 1966 than in 1961 or 1971. The drop in 1971 of those aged 0-4, 5-9 and 10-14 is also very steep (it is even more so for males), but the interpretation of this as involving a net loss to those age groups is clearly less well-founded than the suggested gains in the earlier interval. As a general point, the 1966 distribution has an overall ridge-like appearance, while there is a valley effect in 1961.

FIGURE 2.3.1. AUSTRALIA. TOTAL FEMALE ABORIGINAL POPULATION.
POPULATION AGE SURFACE, 1911-1971.

Since any further consideration of the characteristics of the ethnic migrants must depend on sex-age specific estimates of mortality, and since, in the absence of Aboriginal death statistics, that means on the model life tables, it is essential to consider at this point the extent to which we can rely on these to adequately summarize the true mortality that prevails in the population. It is also necessary to find some way of separating out the effects of age misstatement, which involves anomalous transfers of population across cohort boundaries only from losses or gains which occur across the boundary of the population itself. The prevalence of age misstatement in the Aboriginal/Islander population, and the distortion this produces in individual cohorts, was indicated by the actual survival ratios shown in table 9.2.2 and figures 9.2.2 and 9.2.3.

One method of dealing with the problem of age misstatement, much favoured by Demeny, the developer of the method of fitting model life tables I have used, and, I understand, the author of the relevant section in Shryock and Siegel (1971), as well as of U.N. Manual IV, is to work with cumulative ages or cumulative differences, so that, except to the extent that there are asymmetrical net transfers between cohorts subjected to levels of mortality different to their 'true' level, gains or losses due to age misstatement should sum to zero. Normally, ages and other variables are cumulated from 0, but for several reasons it is appropriate in the present context to cumulate from the top down, giving numbers aged 0 and over, 5 and over...75 and over. Two general reasons are that the model life tables are fitted on the basis of the survival of those aged 0 and over to age $0 + n$ and over, those 5 and over to age $5 + n$ and over, etc.; and that when considering populations survived from one census to the next, we cannot accumulate from 0 because our survivors begin at age n . And the particular reason in this instance is that the gains and losses to the population are all concentrated at young ages, so that differences accumulated from 0 do not fluctuate about zero at all, but about the net gain or loss reached by about age 20; when cumulated from the top, however, they fluctuate about zero all the way down to age 29.

Figures 9.3.2 and 9.3.3 show the changes in the population aged x or over at the 1961, 1966 and 1971 Censuses. In charts of this kind the population at any given time is represented as a rank-ordered array; the cohort surfaces, which mark off intervals according to stated ages, may be thought of as being moved flexibly up or down as individuals die, or move into or out of the nominal cohort they bound, between one census and the next. The various broken lines in the two figures indicate where the cohort boundaries would be expected to lie if no age misstatement occurred, and if mortality were at the exact level indicated by the particular model life table used.

The first chart, figure 9.3.2, compares the actual changes with those expected on the basis of the best-fit model life tables, which indicated life expectancies for males of 49.67 in 1961-66 and 53.93 in 1966-71, and for females of 54.08 in 1961-66 and 50.05 in 1966-71. It is the decrease in the female expectancy after 1966 that is responsible for the ridge effect noted in 1966 in figure 9.3.1, and which is also discernible here. The goodness of the fit of the model tables to those cohorts aged 10 and over in both 1961 and 1966 is apparent, although considerable age misstatement is again seen at the boundaries of the cohorts aged 20-24 in 1971. By contrast the fit below age 10 at all three censuses is very poor, except in the case of females in 1966-71. Note that if these life tables are correct, there was an apparent gain of both male and female children between 1961 and 1966, but that it was mainly males who were lost between 1966 and 1971.

There are however substantial reasons for doubting that the life tables are all correct. In particular the changes in the expectation of life at birth between 1961-66 and 1966-71, and the resulting differences between males and females in 1966-71, are completely anomalous. The higher female expectancy in 1961-66, and

FIGURE 9.3.2. COHORT SURFACE CHART OF THE ABORIGINAL POPULATION AT CENSUSES 1961, 1966 AND 1971, AND FORWARD AND BACKWARD PROJECTIONS BASED ON THE BEST-FIT MODEL LIFE TABLES.

- — • = Census populations (adjusted for unstated ages and underenumeration)
- - - - • = 1961 Census population projected forward to 1966
- - - • - - - = 1966 Census population projected backward to 1961 and forward to 1971
- - - • - - - = 1971 Census population projected backward to 1966

FIGURE 9.3.3. COHORT SURFACE CHART OF THE ABORIGINAL POPULATION AT CENSUSES 1961, 1966 AND 1971, AND FORWARD AND BACKWARD PROJECTIONS BASED ON THE DISCOUNTED MODEL LIFE TABLES.

- = Census populations (adjusted for unstated ages and underenumeration)
- = 1961 Census population projected forward to 1966 and 1971.
- - -●- - = 1971 Census population projected backward to 1966 and 1961.

FIGURE 9.3.4. ESTIMATES OF PERSONS INCLUDED IN ABORIGINAL POPULATIONS AT 1966 AND 1971 CENSUSES WHO WERE NOT INCLUDED AT EARLIER CENSUS.

TABLE 2.3.3. ESTIMATES OF PERSONS NEWLY IDENTIFIED IN 1966 AND 1971.

Age in 1966	MALES							FEMALES							
	Enumerated in 1966 (=0)	1961 population survived to 1966						Enumerated in 1966 (=0)	1961 population survived to 1966						
		By best-fit life table			By discounted life table				By best-fit life table			By discounted life table			
		E ^a	O-E ^b	Cum ^c	E ^a	O-E ^b	Cum ^c		E ^a	O-E ^b	Cum ^c	E ^a	O-E ^b	Cum ^c	
0-4	9,684							9,267							
5-9	8,214	7,067	1,147	1,417	7,064	1,150	1,426	7,999	6,884	1,115	1,464	6,789	1,210	1,769	
10-14	6,619	6,305	314	270	6,304	315	276	6,606	6,255	351	349	6,228	378	559	
15-19	4,764	4,917	-153	-44	4,917	-153	-39	4,837	4,919	-82	-2	4,899	-62	181	
20-24	3,829	3,688	141	109	3,687	142	114	3,612	3,562	50	80	3,545	67	243	
25-29	3,233	3,262	-29	-32	3,262	-29	-28	3,307	3,193	114	30	3,176	131	176	
30-34	2,957	2,923	34	-3	2,922	35	1	3,031	2,919	112	-84	2,901	130	45	
35-39	2,580	2,498	82	-37	2,498	82	-34	2,635	2,506	129	-196	2,489	146	-85	
40-44	2,211	2,157	54	-119	2,156	55	-116	2,084	2,206	-122	-325	2,190	-106	-231	
45-49	1,930	1,943	-13	-173	1,942	-12	-171	1,757	1,856	-99	-203	1,843	-86	-125	
50-54	1,518	1,575	-57	-160	1,575	-57	-159	1,329	1,459	-130	-104	1,448	-119	-39	
55-59	1,196	1,354	-158	-103	1,354	-158	-102	1,054	1,147	-93	26	1,136	-82	80	
60-64	953	959	-6	55	959	-6	56	980	724	256	119	716	264	162	
65-69	1,040	875	165	61	875	165	62	810	906	-96	-137	892	-82	-102	
70-74	651	714	-63	-104	713	-62	-103	467	513	-46	-41	503	-36	-20	
75+	446	487	-41	-41	487	-41	-41	378	373	5	5	362	16	16	
5+	42,141	40,724	1,417		40,715	1,426		40,886	39,422	1,464		39,117	1,769		
Total	51,825							50,153							

Age in 1971	Enumerated in 1971 (=0)	1966 population survived to 1971						Enumerated in 1971 (=0)	1966 population survived to 1971						
		By best-fit life table			By discounted life table				By best-fit life table			By discounted life table			
		E ^a	O-E ^b	Cum ^c	E ^a	O-E ^b	Cum ^c		E ^a	O-E ^b	Cum ^c	E ^a	O-E ^b	Cum ^c	
		E ^a	O-E ^b	Cum ^c	E ^a	O-E ^b	Cum ^c		E ^a	O-E ^b	Cum ^c	E ^a	O-E ^b	Cum ^c	
0-4	10,229						9,971								
5-9	8,943	9,346	-403	-876	9,227	-284	-469	8,724	8,761	-37	-344	8,760	-36	-343	
10-14	7,766	8,114	-348	-473	8,085	-319	-185	7,538	7,847	-309	-307	7,847	-309	-307	
15-19	5,847	6,532	-685	-125	6,510	-633	134	5,958	6,477	-519	2	6,477	-519	2	
20-24	5,044	4,673	371	560	4,651	393	797	4,992	4,713	279	521	4,713	279	521	
25-29	3,932	3,740	192	189	3,717	214	404	3,720	3,501	219	242	3,501	219	242	
30-34	3,160	3,149	11	-3	3,128	32	189	3,232	3,192	40	23	3,192	40	23	
35-39	2,884	2,867	17	-14	2,844	40	157	2,906	2,912	-6	-17	2,912	-6	-17	
40-44	2,528	2,482	46	-31	2,459	69	117	2,496	2,519	-23	-11	2,519	-23	-11	
45-49	2,153	2,103	50	-77	2,081	72	24	1,988	1,980	8	12	1,980	8	12	
50-54	1,776	1,803	-27	-127	1,783	-7	-24	1,666	1,647	19	4	1,647	19	4	
55-59	1,296	1,380	-84	-100	1,363	-67	-17	1,144	1,219	-75	-15	1,219	-75	-15	
60-64	1,005	1,043	-38	-16	1,027	-22	50	1,078	931	147	60	931	147	60	
65-69	952	780	172	22	766	186	72	732	817	-85	-87	817	-85	-87	
70-74	666	773	-107	-150	756	-90	-114	576	616	-40	-2	616	-40	-2	
75+	553	596	-43	-43	577	-24	-24	498	460	38	38	460	38	38	
5+	48,505	49,381	-876		48,974	-469		47,248	47,592	-344		47,591	-343		
Total	58,734							57,219							

Age in 1971	Enumerated in 1971 (=0)	1961 population survived to 1971						Enumerated in 1971 (=0)	1961 population survived to 1971						
		By best-fit life tables			By discounted life table				By best-fit life tables			By discounted life table			
		E ^a	O-E ^b	Cum ^c	E ^a	O-E ^b	Cum ^c		E ^a	O-E ^b	Cum ^c	E ^a	O-E ^b	Cum ^c	
		E ^a	O-E ^b	Cum ^c	E ^a	O-E ^b	Cum ^c		E ^a	O-E ^b	Cum ^c	E ^a	O-E ^b	Cum ^c	
0-4	10,229						9,971								
5-9	8,943						8,724								
10-14	7,766	6,981	785	954	6,953	813	1,242	7,538	6,754	784	1,141	6,660	878	1,425	
15-19	5,847	6,222	-375	169	6,201	-354	429	5,958	6,133	-175	357	6,106	-148	547	
20-24	5,044	4,823	221	544	4,800	244	783	4,992	4,793	199	532	4,773	219	695	
25-29	3,932	3,602	330	323	3,579	353	539	3,720	3,453	267	333	3,436	284	476	
30-34	3,160	3,177	-17	-7	3,156	4	186	3,232	3,082	150	66	3,065	167	192	
35-39	2,884	2,834	50	10	2,810	74	182	2,906	2,805	101	-84	2,787	119	25	
40-44	2,528	2,403	125	-40	2,381	147	108	2,496	2,396	100	-185	2,380	116	-94	
45-49	2,153	2,051	102	-165	2,030	123	-39	1,988	2,096	-108	-285	2,080	-92	-210	
50-54	1,776	1,815	-39	-267	1,794	-18	-162	1,666	1,740	-74	-177	1,728	-62	-118	
55-59	1,296	1,432	-136	-228	1,414	-118	-144	1,144	1,338	-194	-103	1,328	-184	-56	
60-64	1,005	1,181	-176	-92	1,163	-158	-26	1,078	1,013	65	91	1,004	74	128	
65-69	952	785	167	84	771	181	132	732	603	129	26	597	135	54	
70-74	666	650	16	-83	636	30	-49	576	689	-113	-103	678	-102	-81	
75+	553	652	-99	-99	632	-79	-79	498	488	10	10	477	21	21	
10+	39,562	38,608	954		38,320	1,242		38,524	37,383	1,141		37,099	1,425		
Total	58,734							57,219							

Notes: a - Survivors expected if the life tables used are correct.
b - Observed less expected: persons apparently appearing in this cohort for the first time.
c - O - E accumulated from old ages down.

Notes: a - Survivors expected if the life tables used are correct.

b - Observed less expected: persons apparently appearing in this cohort for the first time.

c - O - E accumulated from old ages down.

the increase in the male expectancy in the interval, might have been possible, although an increase of four years in expectation of life over a period of only five years would be something of a world record. But the movement of the female table in the very opposite direction at the same time seems to me to be quite impossible. It will be recalled that these discrepancies were eliminated in section 9.2.2 by the simple expedient of averaging the life expectancies for the two periods, and then discounting the averages by about two years. This yielded a final estimate of expectation of life for both males and females of about 50 years.

The choice of those particular discounted mortality levels was not as arbitrary as it may seem. It was seen in table 9.2.2 and figure 9.2.3 that of all the best-fit model life tables, the 1966-71 female table, with expectation of life of 50.05 years, seemed to give by far the best approximation to the actual census survival ratios. The outstanding goodness of fit of this life table is further demonstrated in figure 9.3.4 and table 9.3.3, which show the differences between the actual numbers in each age group in 1966 and 1971 and the numbers expected on the basis of the various model life tables. There are minor problems with misstated ages between 55 and 70 in 1971, and major ones between ages 10 and 30, where there is also an apparent loss of about 350 persons; but as will be seen from the fourth graph in figure 9.3.4, the discrepancies in each age group are smaller than in any of the other graphs, the cumulated differences deviate much less above or below zero, and the total cumulated deficit is smaller. In relative terms, it is only about 0.6 of a percent of the total female population. I think it may be safely asserted that female mortality between 1966 and 1971 is correctly represented by the west life table with expectation of life of 50 years (level 13).

This provides a reasonably fixed reference point against which it is possible to assess the validity of the other best-fit life tables, all of which, as figure 9.3.4 and table 9.3.3 show, imply populations that differ substantially from those enumerated. If it is accepted that the apparent decrease in female life expectancy cannot be correct, then, given that it was 50 years in 1966-71, the 1961-66 value would have to be 50 or less. I have made the minimum assumption and reduced it from 54 to 50, and that is the basis of the 'discounted' level used earlier. It may of course have been lower, although that would increase the discrepancy between the actual and reverse-survived population in 1961. Even the reduction to 50 increases the total cumulated excess in 1966 from 1,464 to 1,769; this is justified only by the fact that without this minimum adjustment the changes in expectation of life are completely unbelievable.

The validity of the male model life tables is somewhat more difficult to assess. As figure 9.3.4 and table 9.3.3 show, neither is a particularly good fit through the age range, and the difference between the actual and expected populations is substantial in both cases. From figure 9.3.2, it can be seen that the correspondence between the actual and expected populations is substantial in both cases. From figure 9.3.2, it can be seen that the correspondence between the actual and expected cohort boundaries between 1966 and 1971 is only marginally worse for males than for females down to about age 10 in 1966, but that the size of the male cohorts aged 0-10 in 1966, and hence the size of the total male population in 1966, was much larger than would be implied by reverse survival from 1971. By contrast, the female life table gives a good fit to both the cohort boundaries and to the total sizes of the populations; as noted it indicated a loss between 1966 and 1971 of less than 350 females, aged between 5 and 14 (most of them aged 10-14), while over 900 males are lost according to the male table, again between ages 5 and 14 in 1971, but over half of them aged 5-9. These are the children, mostly boys,

who, I have suggested in a number of places, could have been identified out of the population, between 1966 and 1971 presumably by their parents.

I suspect, however, that at most a part of the differential apparent losses of boys and girls is due to genuine differences between the two in the extent of changing identification, and that they may be primarily an artefact of the method used to establish the best-fit life tables.

Strictly speaking, they are not best-fit tables at all. The method, outlined in U.N. Manual IV and in Shryock and Siegel (1971), involves calculating the level of mortality which will produce the later populations aged n and over, $5 + n$ and over, etc., from the earlier populations aged 0 and over, 5 and over, etc., and then taking the median of these calculated levels up to about age 45 and over as an estimate of the overall level of mortality that applied to the population during the n years under consideration. Thus there is no requirement that the differences between the actual and expected cohort sizes sum to zero, and in fact the sum of the residuals may be quite substantial when, as in the present case, the younger age groups are very large and have actual survival ratios significantly above or below the median. That is why the populations obtained by reverse survival in section 9.2.2 were not the same size as the actual ones.

This method was specifically developed to minimize the effect of age misstatement, but nevertheless it seems to me that if that is the aim, the best-fit life table produced should be the one that, when used to survive between two dates, produces a population of the same absolute size as the observed population at the date of survival, even though it may have a different age composition. The demonstrable advantage of using the median in situations such as applied in the case of the female population between 1966 and 1971 is really beside the point: in that case, the value of the method was that it was relatively unaffected by the age-specific errors of closure; but that is an entirely different matter.

In a situation where there are both substantial age misstatements and major errors of closure, it is a matter of very fine judgment to determine the goodness of fit. In the case of the male Aboriginal population between 1966 and 1971, a number of considerations would seem to indicate that more weight needs to be given to a reduction in the sum of differences, notwithstanding that this is the opposite of the view I took of the female life table for 1966-71. By reducing the 1966-71 life expectancy to about 50 (actually 49.56, level 14), the expectations of life for both males and females becomes roughly the same in both 1961-66 and 1966-71, the differences between boys and girls in apparent changes in identification almost disappear, and the life table fits well with the changes in the very large group aged 0-10 in 1966. In addition, it is implied that the total sizes of the 1966 and 1971 populations, and the 1966-71 rates of growth, are substantially correct. The cost of making this adjustment is a reduction in the closeness of correspondence between the actual and expected cohort boundaries in the adult ages, but as figure 9.3.3 shows, this effect is quite minimal.

Figure 9.3.3 compares the changes in the census distributions of persons aged x or over with those expected on the basis of the discounted life tables. The effects mentioned above are clearly seen; the male and female patterns are now almost the same, and changes in identification (or enumeration) are almost entirely confined to the 1961-66 interval. It may be mentioned that I have also looked at the effect of assuming that mortality for males and females is at the lower levels (life expectancy about 54 years) in both 1961-66 and 1966-71; this would imply somewhat fewer new recruits in 1961-66, but substantial losses in 1966-71. On the other hand, it would also be possible, by reducing expectation of life to about 45, to reproduce the total populations, and also the cohorts aged 0-4 and 5-9 in 1966, almost without error, but again at the cost of increasing the fuzziness of the cohort boundaries at older ages.

What more can we say about changing identification as a result of this digression? The most important point to note is that there still remains the unresolved paradox that it is now even easier to treat the population as closed between 1966 and 1971, despite the fact that the growth rates in some of the States, as well as the results of the 1971 Census internal migration question, indicate that this cannot possibly be the case. As figure 9.3.4 and table 9.3.3 indicate, there is also a balancing out of undue gains and losses in the age distribution which is very difficult to account for, with gains between 1961 and 1971 to the groups aged under about 45 in 1971 being offset by similar losses to those over 45. The fact that this balance only emerges over the 10-year period, being spread over both intercensals for males but confined to 1961-66 for females, indicates that it cannot reflect a pattern of mortality different from the model. I can only suppose that the losses at certain ages in some States are being offset by gains at other ages elsewhere, but that in fact increases the coincidence involved.

Whatever the explanation here, whichever level of mortality is taken, and whenever the changes occurred, there are a number of features of the pattern of net new identification or enumeration for Australia as a whole during the ten years from 1961 to 1971 which can be readily discerned in the 5th and 6th graphs in figure 9.3.4. The most important would seem to be that the age distribution implies that it was whole families with young children who were involved. Once the effect of age misstatement at age 15-19 is removed, the group has an extremely hollow-sided distribution which effectively ends at age 30; above that only age errors seem to be discernible. The number involved was between 2,000 and 3,000, and there were roughly the same number of males and females. Remember that these are minimum net estimates for Australia as a whole. If mortality is higher than the levels used, the numbers would have to be increased; if the troughs in the cumulative difference curves in graphs 5 and 6, which are strikingly similar for both males and females, actually indicate the crossover of two curves, one young one representing those moving in and one old one representing those moving out, then the minimum inflow on this basis alone would be increased by 500 or more.

It is possible that a part of the influx was in fact due to non-enumeration at earlier censuses. I have already suggested that some 800 persons were missed in South Australia in 1961, and that it is possible, though unlikely, that some were omitted in Queensland. But all other indications are that the majority of the new Aborigines have appeared in the urban areas in the south-east, and that would seem to imply changes in identification rather than in the adequacy of enumeration.

So while it is certain that substantial numbers of people have changed the way in which they described their race at recent censuses, it is not easy to establish just what groups of people were involved. They were probably mainly parents with growing families in most parts of the south-eastern States, and urban areas of the other States. The indications are that there are still 30 to 40,000 potential new identifiers, although we cannot assume they have the same characteristics as the new identifiers of the past. But it seems certain they will continue to contribute to the overall growth of the Aboriginal population for a long time to come.

9.4 Projecting the population.

Population forecasting is a hazardous undertaking at any time. But when, as in the case of the Aboriginal population, there is uncertainty about the current size of the population, the current growth rate, the levels of fertility and mortality, and the extent of changing distribution and changing identification, it is simply out of the question. All that I intend to attempt in this section is to set limits to the possible trajectories that the population may follow between now and the end of the century. In his 1970b study F.L. Jones projected the States and Territories separately by weighting the fertility and mortality schedules according to the proportion of 'full-bloods' and 'half-castes' in each State or Territory, using the results of his 1963 study for the 'full-blood' schedules and

Maori rates for the 'half-castes', together with some arbitrary adjustments. Enough has been said already of the inadequacies of these projections, and of the impossibility of obtaining reasonable schedules for the States and Territories from any analysis of census material, as well as the logical error involved in the use of 'half-caste' fertility rates. For all these reasons, I have restricted the component projections to Australia as a whole, exploring the possible growth in the State and Territory populations by other methods. The fertility and mortality estimates I have used for the component projections are those derived from the censuses in section 9.2.2, and I have used the 1971 Census as the base population; the implications of using the total of the State and Territory estimates are examined later.

On the evidence available, it seems unlikely that for the Aboriginal and Islander population of Australia as a whole, future levels of either fertility or mortality will be higher than they are at present; the projections are therefore restricted to either constant or declining rates. For the purposes of this exercise, it has been assumed that fertility and mortality either remain at the levels indicated by the 1961-66-71 model life table analysis, or else decline linearly by 2001 to replacement level, with expectation of life equal to that now applying to the general Australian population. The pattern of fertility is also assumed to shift to that currently prevailing in the general population.

Tables 9.4.1 and 9.4.2 show the survival ratios and fertility rates used in these projections, while table 9.4.3 indicates the approximate values of the gross and net reproduction rates and expectations of life implied in 1996-2001 by these four alternatives. However, the possibility of either fertility or mortality remaining indefinitely at the current level while the other declines to that of the general population (alternatives 2 and 3 in table 9.4.3) is so remote that it may be discounted altogether. This leaves two bracketing projections: fertility and mortality both remaining at their apparent current levels, or both declining to replacement level with expectation of life the same as that of the general population. The results of these two projections are shown in table 9.4.4.

These projections are models which serve to outline the range of possibilities if certain relatively extreme conditions apply. Nothing here is meant to imply that any one of them is likely to occur, or that changes that do occur will occur within the time scale used here.

Note the enormous momentum of growth contained in the very young age structure; even if a net reproduction rate of 1.0 were attained by 2001, growth would continue well into the next century, and the population will double by 2001 even if fertility and mortality both decline; in fact, the level reached under these conditions is only some 50,000 below that implied by constant fertility and mortality. The real slowdown would occur in the first 30 years of the twenty-first century, as the reduced cohorts resulting from declining fertility moved into and through the child-bearing years.

With constant fertility and mortality, the birth rates and death rates fluctuate about 45 and 15.75 per thousand respectively, with the rate of growth about 3 per cent a year. With declining fertility and mortality, the birth rate is halved, reaching 21 per thousand by 2001, while the death rate falls to less than 5 per thousand as a result of the transitional age structure. The rate of growth drops to 1.6 per cent a year.

The real contrast between the two projections is to be found in the changing compositions of the populations. While the proportion under 15 years of age stays at about 45-46 per cent under constant vital rates, it drops to almost 30 per cent under declining levels, while the proportion over 65 years rises slightly. The ratio of the dependent to the active ages falls from .97 in 1971 to only .56 by 2001. Even on the most conservative projection, it is certain the population of

TABLE 9.4.1. 5-YEAR SURVIVAL RATIOS USED IN THE PROJECTION OF THE ABORIGINAL POPULATION 1971-2001.

AGE	CONSTANT MORTALITY (also 1971-76 ratios for declining mortality)		DECLINING MORTALITY (values reached by 1996-2001)	
	Males	Females	Males	Females
	.8558	.8566	.9672	.9840
0-4	.9528	.9453	.9943	.9979
5-9	.9843	.9810	.9969	.9988
10-14	.9836	.9804	.9960	.9986
15-19	.9763	.9743	.9938	.9979
20-24	.9708	.9693	.9927	.9971
25-29	.9674	.9652	.9922	.9963
30-34	.9618	.9608	.9905	.9950
35-39	.9533	.9561	.9868	.9927
40-44	.9414	.9500	.9794	.9883
45-49	.9236	.9375	.9670	.9813
50-54	.8976	.9170	.9470	.9707
55-59	.8590	.8834	.9166	.9531
60-64	.8035	.9332	.8715	.9211
65-69	.7271	.7603	.8038	.8652
70-74	.6224	.6566	.7070	.7759
75+	.3854	.4055	.4636	.5197
Level (west)	14	13	22	23
‰	49.56	50.00	68.56	75.00

TABLE 9.4.2. AGE-SPECIFIC FERTILITY RATES USED IN THE PROJECTION OF THE ABORIGINAL POPULATION 1971-2001.

AGES	RATES PER WOMAN PER YEAR	
	CONSTANT FERTILITY (also 1971-76 for declining)	DECLINING FERTILITY (reached by 1996-2001)
15-19	.2287	.0490
20-24	.3234	.1553
25-29	.2724	.1669
30-34	.1896	.0842
35-39	.1234	.0336
40-44	.0486	.0084
45-49	.0078	.0006
Total fertility	5.9695	2.4906

TABLE 9.4.3. APPROXIMATE VALUES OF VARIOUS PARAMETERS OF THE ABORIGINAL POPULATION IN 1996-2001 UNDER FOUR ALTERNATIVE PROJECTIONS.

ALTERNATIVE	FERTILITY	MORTALITY	‰	G.R.R.	N.R.R.	R.S.R. ^a
1.	Constant	Constant	50	2.96	2.18	.74
2.	Constant	Declining	70	2.96	2.88	.97
3.	Declining	Constant	50	1.17	0.86	.74
4.	Declining	Declining	70	1.17	1.14	.97

Note: a - Reproduction-survival ratio.

TABLE 9.4.4. AUSTRALIA. PROJECTED CHANGES IN THE ABORIGINAL POPULATION 1971 - 2001.

	CONSTANT FERTILITY AND MORTALITY							DECLINING FERTILITY AND MORTALITY						
	1971	1976	1981	1986	1991	1996	2001	1971	1976	1981	1986	1991	1996	2001
<u>Population</u> - Males	58,734	67,758	78,666	91,682	106,569	123,944	144,267	58,734	67,001	75,791	85,763	95,960	105,770	114,564
Females	57,219	66,176	76,987	89,716	104,369	121,336	141,148	57,219	65,788	75,096	85,261	95,774	106,086	115,579
Persons	115,953	133,934	155,653	181,398	210,938	245,280	285,415	115,953	132,789	150,887	171,024	191,734	211,856	230,143
<u>Masculinity Ratio</u>	103	102	102	102	102	102	102	103	102	101	101	100	100	99
<u>Percentage 0-14</u>	45.9	45.2	45.1	45.7	46.0	45.8	45.6	45.9	44.3	42.7	40.9	38.6	35.6	31.8
5+	3.4	3.1	2.8	2.7	2.6	2.6	2.5	3.4	3.3	3.1	3.2	3.4	3.8	4.2
<u>Dependency Ratio</u>	.9719	.9357	.9190	.9384	.9451	.9384	.9272	.9719	.9095	.8443	.7883	.7244	.6485	.5625
<u>Birth Rate</u>	.0448	.0461	.0464	.0459	.0457	.0458		.0405	.0379	.0346	.0305	.0259	.0212	
<u>Death Rate</u>	.0160	.0161	.0158	.0158	.0156	.0155		.0135	.0123	.0095	.0076	.0060	.0046	
<u>Rate of Natural Increase</u>	.0288	.0300	.0306	.0301	.0301	.0303		.0271	.0255	.0250	.0228	.0199	.0165	

TABLE 9.4.5. AUSTRALIA. SUMMARY OF VARIOUS PROJECTIONS OF THE ABORIGINAL POPULATION 1971-2001.

	MY PROJECTIONS				F.L. JONES		
	CENSUS		STATE AND TERRITORY		1970a	1970b	
	Declining	Constant	Declining	Constant		Low	High
1971		115,953		150,945	107,068	111,563	114,510
1976		132,789		172,862	125,309	130,240	136,463
1981		150,887		196,421	147,978	153,558	164,478
1986		171,024		222,635		181,697	195,452
1991		191,734		249,595		214,546	239,606
1996		211,856		275,789		252,851	289,515
2001		230,143		299,595		298,064	350,346

TABLE 9.4.6. PROJECTED ABORIGINAL POPULATIONS OF THE STATES AND TERRITORIES OBTAINED BY
 (a) **PROJECTING AUSTRALIA FROM THE 1971 CENSUS, AND ASSUMING THE 1971 CENSUS DISTRIBUTION CONTINUES.**
 (b) **PROJECTING AUSTRALIA FROM THE 1971 STATE AND TERRITORY ESTIMATES, AND ASSUMING THAT DISTRIBUTION CONTINUES.**

<u>Projection based on</u>		<u>Vital rates</u>	<u>N.S.W.</u>	<u>VIC.</u>	<u>QLD.</u>	<u>S.A.</u>	<u>W.A.</u>	<u>TAS.</u>	<u>N.T.</u>	<u>A.C.T.</u>	<u>AUST.</u>
1971	Census		25,873	6,371	31,922	7,299	22,181	671	23,381	255	115,953
	State and Territory		32,500	6,245 ^a	45,000 ^a	9,450	28,000	1,000	28,500	250	150,945
1976	Census	Declining	27,339	7,296	36,557	8,359	25,402	768	26,776	292	132,789
		Constant	27,575	7,359	36,972	8,431	25,621	775	27,007	295	133,934
	State and Territory	Declining	37,219	7,152	51,534	10,822	32,066	1,145	32,638	286	172,862
		Constant	37,540	7,213	51,978	10,915	32,342	1,155	32,919	289	174,352
1981	Census	Declining	31,065	8,290	41,539	9,498	28,864	873	30,425	332	150,887
		Constant	32,047	8,552	42,851	9,798	29,775	901	31,386	342	155,653
	State and Territory	Declining	42,291	8,126	58,557	12,297	36,436	1,301	37,086	325	196,421
		Constant	43,627	8,383	60,407	12,686	37,587	1,342	38,258	336	202,626
1986	Census	Declining	35,211	9,397	47,083	10,766	32,716	990	34,486	376	171,024
		Constant	37,347	9,967	49,939	11,419	34,700	1,050	36,577	399	181,398
	State and Territory	Declining	47,936	9,211	66,372	13,938	41,298	1,475	42,036	369	222,635
		Constant	50,843	9,770	70,398	14,784	43,803	1,564	44,586	391	236,140
1991	Census	Declining	39,475	10,535	52,785	12,069	36,677	1,110	38,662	422	191,734
		Constant	43,429	11,590	58,071	13,278	40,351	1,221	42,534	464	210,938
	State and Territory	Declining	53,740	10,326	74,410	15,626	46,299	1,654	47,126	413	249,595
		Constant	59,123	11,361	81,862	17,191	50,937	1,819	51,846	455	274,594
1996	Census	Declining	43,618	11,640	58,324	13,336	40,527	1,226	42,719	466	211,856
		Constant	50,449	13,477	67,526	15,440	46,920	1,419	49,459	539	245,280
	State and Territory	Declining	59,380	11,410	82,219	17,266	51,158	1,827	52,072	457	275,789
		Constant	68,749	13,210	95,190	19,990	59,230	2,115	60,287	529	319,300
2001	Census	Declining	47,383	12,645	63,359	14,487	44,025	1,332	46,406	506	230,143
		Constant	58,763	15,682	78,575	17,966	54,598	1,652	57,552	628	285,415
	State and Territory	Declining	64,506	12,395	89,316	18,756	55,574	1,985	56,567	496	299,595
		Constant	79,998	15,372	110,766	23,261	68,921	2,461	70,152	615	371,547
2001 indexed to 1971 ^b	Census	Declining	1.9848	1.9848	1.9849	1.9848	1.9848	1.9848	1.9848	1.9848	1.9848
		Constant	2.4615	2.4615	2.4615	2.4615	2.4615	2.4615	2.4615	2.4615	2.4615
	State and Territory	Declining	2.7020	1.9455	2.7979	2.5697	2.5055	2.9583	2.4194	1.9840	2.5838
		Constant	3.3510	2.4128	3.4699	3.1869	3.1072	3.6677	3.0004	2.4600	3.2043
Annual growth rate 1971-2001 ^c	Census	Declining	.0228	.0228	.0228	.0228	.0228	.0228	.0228	.0228	.0228
		Constant	.0300	.0300	.0300	.0300	.0300	.0300	.0300	.0300	.0300
	State and Territory	Declining	.0331	.0222	.0342	.0315	.0306	.0362	.0294	.0228	.0316
		Constant	.0403	.0294	.0415	.0386	.0378	.0433	.0366	.0300	.0388

Notes: a - 1972 figure.

b - 1971 Census = 1.0

c - Using 1971 Census as the base.

school age will increase by a half by the end of the century, and under the highest growth assumption it will more than double. The population in the economically active ages (15-64 years) is virtually the same in 2001 under both projections - just under 150,000 or three times as large as at present; the difference being that under constant fertility and mortality there is almost one person in the dependent ages for each of these 150,000 persons, while there is only a little over half that under the declining projection

If instead of the census, the State and Territory populations shown in table 8.1.3 were used as the base for the projection, and if they had the same sex and age structure and vital profile as used for the census, the projected populations by 2001 would be as shown in table 9.4.6. The table also summarizes the distribution by State and Territory each 5 years to 2001 which would be obtained if the relative distribution that applied at the 1971 Census continued, and compares that to the distributions that would be obtained if the State-and-Territory-based projected population was distributed in the same way as the State and Territory populations in 1971. Here again, I am simply trying to establish bracketing alternatives - the assumption is that the population in any State will not be lower than the declining census-based projection, nor higher than the constant State-and-Territory-based projection. Note however that no allowance is included for interstate or overseas migration. Such moves have been small in the past, but could become more significant in the future. In addition, no allowance has been made at any stage for a shift in the sex ratio at birth from the assumed level of 1.02. The effect of this, however, would not be great over the period being considered.

If the analysis presented here is correct, then, the Aboriginal/Islander population is certain to be at least 230,000 by the end of the century, almost twice its present size, and it could reach 285,000, almost two and a half times its present size, even if there is no further accretion due to changing identification. If the State and Territory figures are a reasonable estimate of the ceiling up to which changing identification may occur, then continuing ethnic in-migration could result in up to an extra 70,000 to 100,000 persons being identified at the census in 2001. This would mean a turn-of-century population of between 300,000 and 380,000, 2.6 to 3.2 times the size it was in 1971. There is wide variation between the States and Territories in the potential contribution of new identifiers to the census populations, however. In Victoria I have already suggested that the reservoir of invisible Aborigines may have been all but emptied already, so the constant State-based projection implies a population in 2001 almost the same as the census projection, less than 2.5 times the size of the 1971 Census, with a growth rate in the interval of less than 3%. In Queensland, by contrast, the State-based projection yields a population in 2001 over 21,000, or 24% larger than does the census, almost 3.5 times the size of the 1971 Census population, implying a growth rate of over 4%. The situation in Tasmania is not surprisingly even more extreme.

Even on my highest natural growth and in-movement assumptions, however, the projected population for Australia as a whole in 2001 is only 21,000 higher than F.L. Jones' (1970b) projection based on high natural growth alone; my high natural growth projection is almost 65,000 lower than his, and his 'low' natural growth projection yields a population in 2001 higher than my high natural growth one by more than 12,500, and about the same as my low natural growth and maximum in-movement projection. These comparisons are tabulated in table 9.4.5.

The rate of natural growth of the Aboriginal population is high and will remain so for the balance of the century even if fertility declines; and the natural growth will almost certainly be supplemented by new identifiers. With these included, the maximum rate of growth in the census-identified population would be just on 4% a year between now and the end of the century, but once the reservoir of

prospective new identifiers was emptied, 3% would seem to be the absolute maximum attainable.

APPENDIX

STATISTICAL DATA SOURCES IN AUSTRALIA, 1970-1971

Source of the Statistical Information

1. Statistical Information

2. Statistical Information

3. Statistical Information

Statistical Information

4. Statistical Information

5. Statistical Information

In the Australian Bureau of Statistics, statistical information is collected and processed in a variety of ways. In the past, the Bureau has been known for its statistical information. All are now known by the Bureau of Statistics. However, for ease and efficiency of citation, all are now listed in Part I of this bibliography.

Statistical Information

6. Statistical Information

7. Statistical Information

8. Statistical Information

9. Statistical Information

10. Statistical Information

Statistical Information

11. Statistical Information

12. Statistical Information

Statistical Information

13. Statistical Information

14. Statistical Information

15. Statistical Information

16. Statistical Information

17. Statistical Information

Statistical Information

18. Statistical Information

19. Statistical Information

growth assumption is also more than double. The population in the age-groups active ages (15-64 years) is virtually the same in 2001 under both projections - just under 150,000, or about as large as at present; the difference being that under constant fertility and mortality there is almost one person in the dependent ages for each of these 150,000 persons, while there is only a little over half that under the declining projection.

If instead of the census, the State and Territory populations shown in table 2.1.5 were used as the base for the projections, and if they had the same sex and age structure and vital profile as used for the census, the projected populations by 2001 would be as shown in table 7.4.4. The table also summarizes the distribution by State and Territory each 5 years to 2001 which would be obtained if the relative distributions that applied at the census were maintained, and compares that to the distributions that would be obtained if the State and Territory-based projected population was distributed in the same way as the State and Territory populations in 1971. Here again, I am simply trying to establish bracketing alternatives - the assumption is that the population in any State will not be lower than the declining census-based projection, nor higher than the constant State-and-Territory-based projection. Here however that an allowance is included for the projected increase in the Aboriginal population.

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Note: In the Australian States and Colonies, official statistical publications such as Census Reports, Yearbooks, Statistical Registers, etc., have in the past been issued by a wide variety of authorities. All are now issued by the Government Statistician, however, so for ease and rationality of citation, all such publications are listed in Part I of this bibliography under 'Statistician, etc.'

Even on my highest natural growth and in-movement assumptions, however, the projected population for Australia as a whole in 2001 is only 24,000 higher than F.L. Jones' (1970b) projection based on high natural growth alone; my low natural growth projection is almost 65,000 lower than his, and his 'low' natural growth projection yields a population in 2001 higher than my high natural growth one by more than 12,500, and about the same as my low natural growth and medium in-movement projection. These comparisons are tabulated in table 9.4.5.

The rate of natural growth of the Aboriginal population is high and will remain so for the balance of the century even if fertility declines; and the natural growth will almost certainly be supplemented by new identifiers. With these included, the maximum rate of growth in the census-identified population would be just as high a year between now and the end of the century, but once the reservoir of

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