

An Ethnic Map of Australia Author(s): D. Sutherland Davidson Source: Proceedings of the American Philosophical Society, Vol. 79, No. 4 (Nov. 15, 1938), pp. 649-679 Published by: American Philosophical Society Stable URL: <u>http://www.jstor.org/stable/984944</u> Accessed: 23/03/2011 04:59

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at http://www.jstor.org/page/info/about/policies/terms.jsp. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at http://www.jstor.org/action/showPublisher?publisherCode=amps.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



American Philosophical Society is collaborating with JSTOR to digitize, preserve and extend access to Proceedings of the American Philosophical Society.

AN ETHNIC MAP OF AUSTRALIA

D. SUTHERLAND DAVIDSON

Assistant Professor of Anthropology, University of Pennsylvania

(Communicated by Horace H. F. Javne)

(Read A pril 23, 1938)

Abstract

The political structure of the Australian aborigines is characterized by extreme simplicity. The largest political unit is the horde, a group of about 35 closely related individuals who occupy a well defined territory of varying extent over which they exercise complete autonomy. Since the pre-European population of Australia is estimated to have been between 250,000 and 300,000 there must have been between 7,000 and 8,600 independent political entities on the continent, an astonishing condition when compared with the aboriginal situation in other parts of the world. However, although the hordes lack political cohesion larger groupings are recognized and named by the natives on the bases of dialectic and cultural similarities and geographical contiguity. These larger units, which furnish a more practical basis for ethnological considerations, can be spoken of as tribes in spite of the fact that there is no semblance of centralized political authority nor any sense of political confederation. Altogether there were several hundreds of tribes, each consisting of a number of hordes which varied from a very few to several dozens, but the total number will never be accurately determined because of the lack of satisfactory information for many regions where the aborigines are now extinct.

To date very little attention has been given the question of arranging the vast quantity of material on tribes and hordes. The last attempt to compile an ethnic map for the continent at large was 50 years ago, when relatively little information was available.

This paper represents a preliminary attempt to give the evidence some semblance of organization with the hope that the numerous errors can be rectified. and the many gaps in information filled, by those who possess the requisite unpublished knowledge.

The ethnic map herewith presented is intended to provide as complete and up-to-date a tribal map of Australia as is possible on the basis of available published sources up to The need for a map of this character has long been 1938.recognized for heretofore there has been none of continental proportions except that issued by Curr in 1887 when relatively little information was at hand.¹ Since by far the greatest

¹ Thorpe in 1913 compiled a list of 656 ethnic names but utilized only a very few sources. Although he equated a few cognates he made no attempt to treat his material in critical fashion or to distinguish tribes from hordes. His list PROCEEDINGS OF THE AMERICAN PHILOSOPHICAL SOCIETY, VOL. 79, NO. 4, NOVEMBER, 1938 649

part of our knowledge concerning the aborigines has been collected during the past half century it is time that some effort be made to organize the vast quantity of data now available and to ascertain the gaps in existing information in order that inquiries to fill them can be made wherever possible.¹

In order to understand the problems associated with the compilation and interpretation of the evidence on which the map is based it is necessary to discuss briefly the political structure of the Australians, an aspect of their ethnology which never has received more than passing attention in field studies.

Hordes

The political units in Australia are hordes, each possessing a name and consisting on the average of about 35 closely related individuals (7 to 10 families) who occupy a more or less well defined territory over which they have complete autonomy with prohibition against trespass by nonmembers. The hordes are patrilocal and, as the result of the prevailing cross-cousin basis of marriage whereby the proper mates automatically are not members of the same horde, also exogamous in a derivative sense. Political leadership of the horde is vested in a headman whose power is quite nominal for there are no political agencies whereby his commands, if he should make them, can be enforced. Although there seems to be a tendency for the position to be hereditary, unless a son obviously lacks the requisite qualifications, there are no indications of a development of any caste or class differences between the family of the headman and the other members of the horde.

Assisting the headman, and perhaps more important than he in several respects, is the council of elders which consists was not accompanied by a map. In 1925 Roheim published a map with numbers representing 389 ethnic groups. The sole purpose of this map was to facilitate the plotting of the various culture traits in which he was interested.

¹ Several regional maps are available, such as those by Mathews and Howitt and more recently by Radcliffe-Brown, Elkin, Sharp, Stanner, McConnell, Tindale, Thompson, Warner, and others. However, in most instances these writers have not attempted to correlate older data which should not be ignored.

650

of the few middle aged and old men of the horde. In so far as their political prerogatives are concerned these elders seem to have little actual power and apparently influence the members of the horde mostly on the basis of their wisdom and ability to control public opinion. We are greatly in need of studies of the mechanisms of control and influence among the Australians, not only through the more formal aspects of political structure but also through the effects of dynamic personalities within the general political pattern. The indications are that the Australian system offers no marked opportunities of a political nature for ambitious individuals to gain power and prestige. Such outlets seem to have been restricted to social institutions, ceremonial life and ritual, and magic.

The number of hordes in Australia can be computed only roughly at the present time. It seems to be well established that these political units do not vary greatly in population, occasionally numbering less than 25 individuals, seldom more Such a stability in numbers is in itself an interesting than $50.^{1}$ phenomenon which should be carefully investigated for, as the result of the greatly different ecological conditions in the various parts of the continent, the extent of territory required by a horde varies from as little as 20 square miles to as much as possibly 6,000 square miles. Thus the sizes of the territories seem to be adjusted to meet the requirements of a more or less standard and but slightly fluctuating population group regardless of the type of country inhabited. The boundaries of these territories seem to have been fixed for generations so that any change in ecological conditions is now compensated by adjusting the population to meet it, generally by infanti-It therefore would be important to determine the faccide. tors which tend to make a population of about 35 individuals so consistently desirable in all parts of the continent.

As the result of the quite constant character of the hordes in so far as population is concerned it is possible to indicate an approximate number of hordes for the continent on the basis

¹ See Wheeler, Malinowski, Davidson, 1926.

of the estimated aboriginal population as of 1788, the time of the arrival of European colonists. The most satisfactory figures as determined by available evidence are those computed by Radcliffe-Brown which suggest that the aborigines numbered not less than 250,000 and probably as many as 300,000 or even more. The difficulties in arriving at any figure seem obvious. At no time has there been a complete census for any specific region and even for the better known tribes our knowledge of their vital statistics is almost nil. The estimates of the early explorers are most unreliable. Some in passing through well watered country happened to encounter few natives and therefore concluded that population was sparse, whereas others in relatively poor country, coming upon great numbers of aborigines assembled for ceremonies, grossly overestimated the normal number of inhabitants of the district. When due consideration is given the fact that the Australians are pure hunters and wild food collectors who, by necessity in some areas and by choice in others, live in small groups of closely related individuals in well defined territories off which they seldom wander except to attend ceremonies, it seems clear that reliable estimates of total population cannot be made by observation of assemblies but only on the basis of ecological conditions in each area.

The difficulties of making a satisfactory estimate for aboriginal times are further increased by the epidemic of smallpox which swept across much of Australia soon after the whites arrived on the coast. Long before most tribes had heard of Europeans, let alone seeing them, their numbers were severely decimated by this scourge. Thus when the first explorers penetrated inland they encountered populations already greatly reduced in numbers. Assuming 35 individuals to a horde on the average it would thus appear that there were between 7,000 and 8,600 hordes or completely autonomous units, an amazing political situation not found elsewhere in the world, at least in historic times, and seldom approached proportionately in even small regions of the other continents. On the following chart rough computations are given to show the estimated population, the number of hordes and the density of population in the several regions of the continent where distinctive ecological conditions are apparent. These figures, extremely speculative as they may be in many instances, are nevertheless of value in that they serve to distinguish in a general way the areas of relatively dense populaion from those in which the natives were, or still are, comparatively few in numbers.

As can be seen in Figs. 1 and 2, which illustrate the chart computations, the regions most favorable to the aboriginal system of economy include in the apparent order of their importance (1) the tropical northern coasts and hinterlands of Queensland. North Australia and, to a somewhat lesser extent, of the Kimberley district, Western Australia, all of which are areas of little importance to the whiteman: (2)regions now appropriated by the whites such as Victoria.² eastern New South Wales, southeastern South Australia, the eastern littoral of Queensland and the extreme southwestern corner of Western Australia, in all of which the aborigines are now virtually extinct; (3) areas now utilized principally for cattle and sheep, such as the northwestern portion of Western Australia and the inland central parts of North Australia, Queensland and New South Wales; (4) the desert country of the remainder of the continent, that is, most of Western Australia, western South Australia, all of Central Australia, southernmost North Australia and western New South Wales and Queensland.

A comparison of the density of aboriginal population in these various regions with the present density of white popula-

¹Since it is undoubtedly true that population would generally tend to be somewhat denser in coastal areas than in the adjacent hinterland the liberty has been taken to indicate the likely difference between the coastal areas and the inland districts for this part of the continent. By comparing the map (Fig. 2) with the chart it will be seen that this procedure is purely arbitrary and not based upon facts for the divisions created. However, we should recognize some difference in density of population between the coastal and inland areas.

 2 For eastern Victoria the density is shown as one person to between 10 and 20 square miles but since the territory involved contains much sparsely inhabited mountain country the mean population per square mile for the entire region undoubtedly is much less than in the coastal districts where population was concentrated.

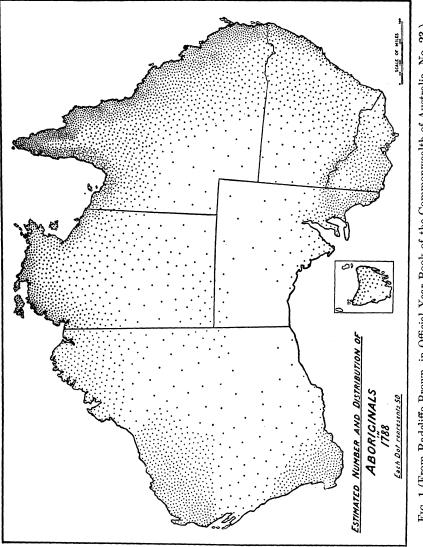
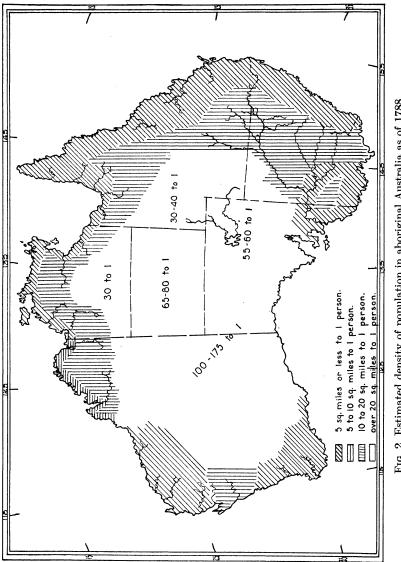


FIG. 1 (From Radeliffe-Brown, in Official Year Book of the Commonwealth of Australia, No. 23.)

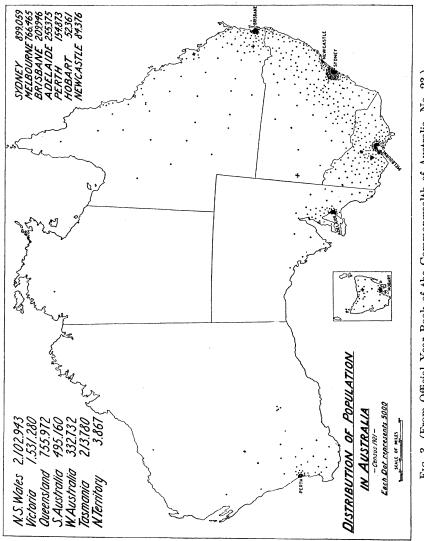




	Area	Estimated Population	Approximate Number of Hordes: Average 35 Persons	Approximate Density of Population per Square Mile
Central Australia New South Wales	236,400	3,000- 3,500	85- 100	1 to 67 - 80
Eastern Central-Western	100,000 210,372*	25,000- 30,000 15,000- 18,000	700-850 420-500	1 to 3.3- 4.0 1 to 11.7- 14.0
11 11 A	310,372*	40,000- 48,000	1,120-1,350	(1 to 6.5- 7.8)
North Australia Northern Southern	$187,220 \\ 100,000$	29,000- 35,000 3,000- 3,500	$\begin{array}{r} 830-1,000 \\ 85-100 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
0 1 1	287,220	32,000- 38,500	915-1,100	(1 to 7.5- 9.0)
Queensland Southwest—Clarence River, N. S. W., to Broad Sound —to height of land Burdekin—Cape Rivers drainage—Mackay to	50,000	15,000- 18,000	420- 510	1 to 2.8- 3.3
Cairns. Fitzroy tributaries, Daw-	65,000	16,500- 20,000	465- 560	1 to 3.2- 4.0
son, Comet, Mackenzie Rivers drainage Cape York Peninsula to	45,000	10,000- 12,000	280- 340	1 to 3.7- 4.5
Gilbert River drainage Central Queensland Western Queensland	$100,000 \\ 180,500 \\ 230,000$	40,000- 48,000 10,500- 12,500 8,000- 9,500	$\begin{array}{r} 1,140-1,360\\ 300-360\\ 225-270\end{array}$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
South Australia Lower Murray Valley and	670,500	100,000-120,000	2,830-3,400	(1 to 5.6- 6.7)
adjacent areas Remainder of eastern South	30,000	6,000- 7,200	170- 205	1 to 4 – 5
Australia	$150,070 \\ 200,000$	2,500-2,800 1,500-2,000	$70-79 \\ 40-56$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
Victoria	380,070	10,000- 12,000	280- 340	(1 to 32 - 38)
Gippsland Murray River, east of Goul-	15,000	1,000- 1,300	28- 36	1 to 11 - 15
burn River Western Port District Portland Bay District Northern Wimmera Southern and Central Wim-	$15,000 \\ 20,000 \\ 10,000 \\ 10,000$	$\begin{array}{rrrrr} 1,500-&2,000\\ 3,000-&4,000\\ 3,000-&4,000\\ 2,000-&2,500 \end{array}$	$\begin{array}{rrrr} 42-&57\\85-&115\\85-&115\\57-&70\end{array}$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
mera	17,884	1,000- 1,500	28- 42	1 to 12 - 18
Western Australia Northwest District, north	87,884	11,500- 15,300	325-435	(1 to 5.7- 7.6)
of Gascoyne River Southwest District Murchison District Kimberley Central desert area	$\begin{array}{c} 120,000\\ 50,000\\ 100,000\\ 100,000\\ 605,920\end{array}$	$\begin{array}{r} 24,000-\ 29,000\\ 12,500-\ 15,000\\ 5,000-\ 5,500\\ 10,000\\ 3,500-\ 4,000 \end{array}$	$\begin{array}{rrrr} 685-&830\\ 360-&420\\ 140-&155\\ 280\\ 100-&115 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Tasmania	975,920 26,215	55,000- 63,000 2,000- 2,500	1,565-1,800 57-70	(1 to 14.8- 17.7) 1 to 10.5- 13.0
Grand total	2,974,581	253,500-302,800	7,177-8,595	(1 to 9.8- 11.7)

* Inclusive of Federal Capital Territory.

tion (Fig. 3) reveals some interesting facts. Since it is generally assumed that the European system of economy fosters a much greater population than is permitted under strictly aboriginal conditions, especially when such a crude culture



as that of the hunting and wild food collecting Australians is concerned, it is important to note that this is true only for certain parts of the continent. Although the total European population of over 6,500,000 is more than twenty times the total native population of pre-colonial times, it should be noted that the former is concentrated in areas where native population did not reach its greatest density. The advantages of the European system in this instance are quite evident. However, in respect to the northern coasts and the interior deserts, the areas of greatest and least population density respectively under aboriginal conditions, the advantages are reversed. For example in North Australia and Central Australia combined, the aboriginal population apparently totaled between 35,000 and 42,000, but the white inhabitants in 1921 after about a half-century of penetration and settlement numbered only 3,867. Of these individuals most live in a few towns and the remainder are scattered over the cattle country. It thus seems clear that the European system of economy, in spite of great sources of food supply made available by domesticated animals, local or imported agricultural products, and various methods of preserving perishable commodities, is not always superior in terms of population supported in a given region. This situation is food for thought for those who favor a policy of forced acculturation of aborigines, whether through the activities of missionaries or governmental or other agencies, in those regions which have little or no economic importance to the whiteman and where the natives if left alone can exploit the natural resources of value to them in a relatively efficient manner.

FAMILY HUNTING TERRITORIES

Although the horde is the largest land owning unit it is by no means the smallest. In many parts of the continent the horde property is divided into several territories each owned by a family or an individual.¹ The boundaries are accurately delimited and generally are determined by natural

¹ For a more detailed discussion, see Davidson, 1928; Harrasser.

features of the terrain. Artificial markings are not unknown, but apparently are not common.

Trespassing upon family property in theory is strictly prohibited to all, but it has been reported that in practice this regulation often is not enforced in respect to near relatives or neighbors.¹ However, since all the males in a horde are closely related such statements may mean that all members of a horde come and go almost at will over all the family territories within the horde boundaries. We also have reports for some areas that although family territories are recognized they seldom are occupied exclusively by their owners who prefer to live with the other families of the horde and to roam in unison over the entire property of the group.

Ownership of these family or individual properties, in keeping with patrilocal tendencies, generally seems to pass directly from father to son. There also is evidence to show that in some instances a father partitions off a tract for a son during his lifetime or informs his family of the division to be made after his death. There also are several reports of aborigines giving or bequeathing land to friends.² Presumably the donors had no sons or made other provision for them. We have no detailed studies of the specific rules of inheritance in this respect but it would seem that there must be some regulations to prohibit the disinheritance of sons, for the latter could not appropriate lands elsewhere nor as a rule could they, as the result of the prevailing custom of patrilocal residence. take residence on the lands of their fathers-in-law. Similarly the rule of patrilocal residence seems to be responsible for the lack of inheritance of territorial rights by daughters, although some exceptions have been reported.

¹ For instance Nind, pp. 27, 28, 44, who wrote in 1831 and thus had excellent opportunity to observe the natives of southwestern Australia at a time when aboriginal culture was still intact, reports that members of the horde were accorded the privileges of breaking down grass-balls, digging roots and killing certain animals on the private property of individuals but were not allowed to fire the bush unless the owner were present.

² Collins, p. 599, was deeply impressed by Ben-nil-long "who both before he went to England, and since his return, often assured me, that the island Me-mel (called by us Goat Island) close by Sydney Cove was his own property; that it was his father's, and that he should give it to By-gone, his particular friend and companion." The division of horde property among the constituent families has been described in brief for certain parts of Victoria, New South Wales, Queensland, North Australia, South Australia and southwestern Western Australia. Elsewhere it has not been reported. Although it probably is lacking in many areas it would not be surprising to learn of its presence in various other regions.

The first information on family hunting territories in the desert interior recently was collected by Mr. Norman B. Tindale of the South Australian Museum who kindly forwarded his data. His findings among the Pitjantara of the desolate Mann Range in northwestern South Australia show that each family owns a definite separate tract over which it has sole rights for the securing of dingo puppies, considered a great delicacy, during the months from July to October. These properties were said by the aborigines to have been the same for at least a generation.

There are several reasons why we should not expect typical family territories to be prominent in the desert regions. Not only is water confined to a few waterholes, often great distances apart, but in many of them the supply is not permanent. Hence the members of the horde must be free to move freely and extensively as necessity demands. In addition the exigencies of life in this barren area seem best met by the families living together, pooling their resources and sharing their food, for whereas one hunter may be successful one day he may search in vain for many succeeding days during which time he must depend for the sustenance of himself and family upon the good fortune of his fellows who in turn had partaken of the results of his own success. In the well-watered regions families living alone would never be very far from their neighbors but in the desert areas where between 100 and 200 square miles are required to support one person the segregation of families would cause virtual isolation.

Survivors of the Tangane (Tanganalun), now domiciled at Point McLeay, South Australia, reported that in aboriginal times family hunting territories were customary.¹ A family

¹ Information kindly furnished by Mr. Tindale.

tract was called karawi and its boundary (kinara) in some cases was marked by a stick on which had been cut marks to identify the owner. When an old man established a separate territory for a son by partitioning his property he marked off the kinara and the son thus became known as kalyanan kinara. It also was said that when a family became extinct its territory passed to the nearest family in the same moiety as the deceased owner. In the case of an owner who lacked sons, partitionment sometimes was made before his death by giving land to young men of the same moiety. These references to moieties should not be construed as meaning that the moiety, itself, had any control over these territories. Since a man's closest male relatives, his brothers and parallel cousins, automatically belong to his moiety, the disposal of land apparently was made to certain relatives who only incidentally were members of the same moiety as the owner.

Among the nearby Yaralde each family is said to have had two territories, one inland, one at the seashore. Names were applied to the individual tracts as well as to their boundaries.

Because of our scant knowledge concerning family hunting territories it is impossible to determine the criteria for their prevalence in some regions and their lack, or apparent lack, in certain other areas. On the basis of available information they seem to have been most common in the regions suited to European economy and now appropriated by the whites. This may be partially a coincidence but a detailed study of the ecology of the continent must be made before more detailed conclusions can be attempted.

Although a political map of Australia strictly speaking should portray the distribution of hordes, since they are the political units, it seems obvious that such would be impractical regardless of how desirable it might be. Even though we possessed the requisite information, which we do not, a map of extrordinary size would be required to permit the inclusion of several thousands of names. This difficulty is well demonstrated in Figs. 4 and 5 which show the distribution of hordes among the Karadjeri and Kurnai at opposite ends of the continent. However, we have relatively little detailed information of this character, for very few investigators have sought information of a purely political nature. The reasons for this condition are not difficult to ascertain. Most

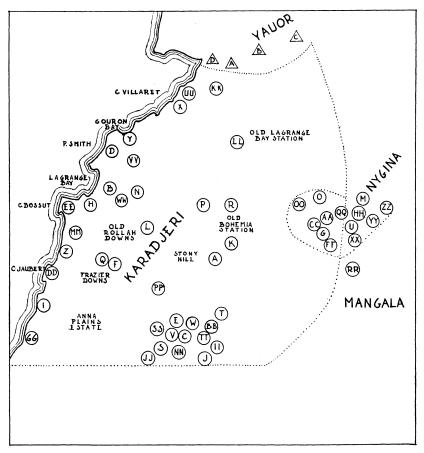


FIG. 4. Distribution of Karadjeri hordes including some of neighboring tribes (After Elkin).

Australianists have found the social structure of the aborigines so intricate that it has absorbed all their attention or interest. Furthermore the purely political aspects of the Australian culture pattern are relatively unimpressive and of local character when contrasted with social institutions

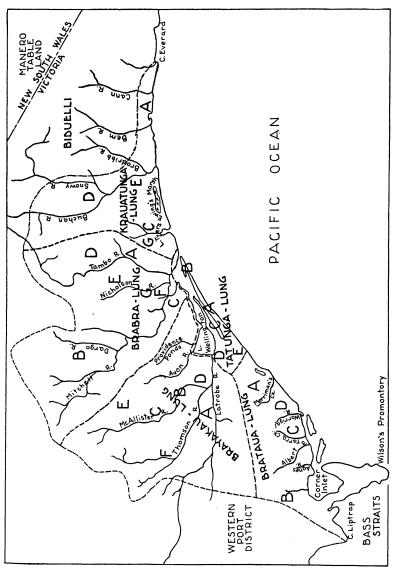


FIG. 5. Distribution of Kurnai tribes and hordes.

which constitute the dominent role in Australian life and individually are often of sectional or regional significance. Thus scores of hordes may be characterized by the same or similar social characteristics, such as kinship systems, moieties, sections, sub-sections, totemic rites, initiation ceremonies, and the like, and investigators who limit their studies to these aspects of ethnology can ignore the details of local political structure without serious difficulties.

In addition it should be pointed out that there has been no necessity to determine the names and boundaries of the political units of the continent from the point of view of government authorities. Although the horde is the fighting and land owning unit its limited population and primitive weapons prohibited it from offering any effective resistance to European colonization. There have been no wars between the whites and the aborigines, in the sense of the word understood in the Americas and Africa, but at the most only local skirmishes with police. Although Australia can well be ashamed of its methods of annihilation of the aborigines in certain areas it should be recognized that European diseases and the insidious forces of acculturation have taken perhaps a greater toll of native lives than have firearms. At any rate it has seldom been necessary for the government to deal with political units for the purpose of defining boundaries or of purchasing native lands, hence the lack of government interest in recording information about aboriginal political organization.

Tribes

Although there are no political units greater than the hordes it is possible and desirable to apply the term tribe in a non-political sense to groups of hordes which are recognized by the natives, themselves, as cultural, dialectic and geographical units, each with a name. The Australian tribe thus differs from tribes in other parts of the world principally in that it lacks a centralized government. It is not a confederation for there is no political cohesion between its constituent hordes. There is no tribal chief nor even a tribal council with the result

that each horde retains complete political autonomy. Nor are there any defensive or offensive alliances between the individual hordes. Were the Australians politically minded it would seem that this situation would offer unlimited opportunities for the ambitious individual interested in military conquest and land aggrandizement. However, Australian culture does not offer a setting in which the politically minded could prosper for the entire philosophy of life of the aborigines is contrary to such possibilities. For religious reasons each individual, at least in much of the continent, feels an attachment to the land of his birth whence at a certain sacred spot his spirit emanated and to which it will return at the time of his death. To natives imbued with this philosophy land in other localities, where there would be a normal complement of human beings with souls associated with the local sacred spirit abodes, would be entirely useless to those who lacked spiritual connections therein. In this respect it is important to note that there seldom has been any mass exodus by aborigines from lands appropriated by the whites. The survivors of the initial period of contact, peaceful or otherwise. usually have remained until they became extinct or so decultured that they offered no serious objection to eviction and settlement on some reserve. Another example of the Australian's attachment to the land of his birth is found in the reports that aborigines may refuse to act as guides beyond certain points, at least partially on the ground that they do not belong to the territory beyond.

The presence of so many small political units in Australia has necessitated the development of some recognition of the rights of neighboring hordes in order that there may be mutual advantages. Thus we already find in Australia what might be called the beginning of international law. In addition to the recognition of territorial soverignity we find the sacredness of messengers and envoys, rights of asylum, domicilement and hospitality, and the exchange of economic goods over wide areas, in some instances on the basis of individual contract whereby one individual orders the manufacture of certain articles from a business associate in a nearby or distant horde.

Whether the Australians in certain regions were in process of developing larger political units is a most question. In some areas, such as for example the Lower Murray River Valley, it might seem at first glance that there is or was the beginning of some extended political authority. Such appearances, however, must not be confused with the great assemblies for social ceremonies reported by early writers which often were attended by hundreds of natives who temporarily were well organized for the purposes then at hand under capable religious and ceremonial but non-political leaders. It would seem that only by a complete shift in emphasis in the Australian culture pattern would it have been possible in the areas of relatively congested population to have welded the hordes into larger political units. There seems to have been no general tendency in this direction.

The number of tribes in Australia has not vet been satisfactorily determined. Some exceptional tribes are known to include a few dozens of hordes whereas others embrace only six or eight. Our information at present is insufficient to indicate what on the average the number of hordes to a tribe may be. Undoubtedly the number varies considerably in the different parts of the continent and in terms of density of population. If we could assume that in the congested areas a tribe would include at least ten hordes it would follow that there are between 700 and 860 tribes for the continent at large. The latter figure coincides approximately with the number of names on the accompanying tribal map but this cannot be accepted in itself as proof that the map is approximately accurate either in respect to the names themselves or in the distribution as given. Undoubtedly there are many more names to be added. On the other hand, it seems quite certain that many of the names included may not represent tribes but may be those of hordes, localities, geographical features or dialects. Much of the information available in the great number of published sources from which the tribal map was compiled contains ambiguities and conflicting evidence.¹

¹ See Davidson, 1938.

Hence of the several thousands of names recorded it often is impossible to come to any definite conclusion as to just what they represent. However, the percentage of names concerning which there is uncertainty is relatively small for, aside from cognates, of which there are many, most of the names are specifically stated to represent tribes or hordes. It is of value to note that the distribution of names on the large map tends to coincide in general with the maps of population density (Figs. 1 and 2).

The specific problem of accurately locating on the map the various tribes is a most difficult one. In only a few instances have boundaries been described and, as a rule, only approximate limits have been given. In the few cases in which they have been placed on maps the boundaries usually are shown by straight lines rather than by lines which follow the local topographical features. The extent of most tribal territories, however, is not even approximately defined in the reports but the locations are given roughly in terms of prominent landmarks such as mountains, rivers, bays or other recognizable features, or in terms of orientation from them. Thus a tribe may be said to inhabit the Mount A district, the region northwest of Mount B, the shores of Bay C, or inland therefrom, or the central portion of River D. Distances usually are not included although occasionally we are told that a tribal area is small, considerable or large, whatever these terms may mean. Obviously a "small" tribal territory in the desert may be many times as extensive as a "large" area in some of the better regions.

Unfortunately, too, the authorities do not always agree. Some tribes are reported by different authors in various locations within a given region. When these locations do not conflict with other tribal lands an extensive domain for that particular tribe possibly may be indicated. In many instances, however, parts of this region may be assigned by other writers to different "tribes," although in reality the latter may be constituent hordes. In instances of this kind information usually is not sufficiently detailed to warrant an assumption as to just what the situation may be. Since many of the earlier writers received their information by correspondence from distant settlers, who in turn may never have visited many of the tribes they reported on, but knew of them only through hearsay from local blackfellows, most of these conflicting reports of a tribe's location may be erroneous. Here again, however, it is impossible to make certain which accounts are reliable. Nevertheless the placing of these names on the accompanying map required the exercise of arbitrary judgment on the part of the author with the probability that he has accepted as authentic many claims which are faulty and has underestimated other evidence which deserves greater weight.

In attempting to secure the most accurate results the author has followed as consistently as possible the policy of accepting as the most reliable the reports of professionally trained fieldworkers or of others known to have visited the tribes in question. The least weight has been given to the statements of those early writers who derived their information from distant correspondents. Such a policy obviously involves inaccuracies and injustices for many of the correspondents of Curr, Howitt and others undoubtedly were careful observers in respect to such matters as tribal locations and, on the other hand, professional fieldworkers often do not visit all the tribes presented on their maps but rely upon native informants for data concerning them. Physiographical maps for many parts of Australia furthermore do not include detailed landmarks of importance to the natives and may give only English terms which confuse them. Hence many aborigines can not indicate on the white man's map the location of geographical features well placed in their own minds which they would have no difficulty in finding.

Another difficulty familiar to every cartographer is the confining of long names to small spaces. The names of many Australian tribes and hordes contain several syllables and, as has been indicated, in some regions the territories occupied may be relatively small. In the few cases where this is known to be so the names have been run off the map when possible or indicated on the smaller sectional maps (Figs. 6 and 7).

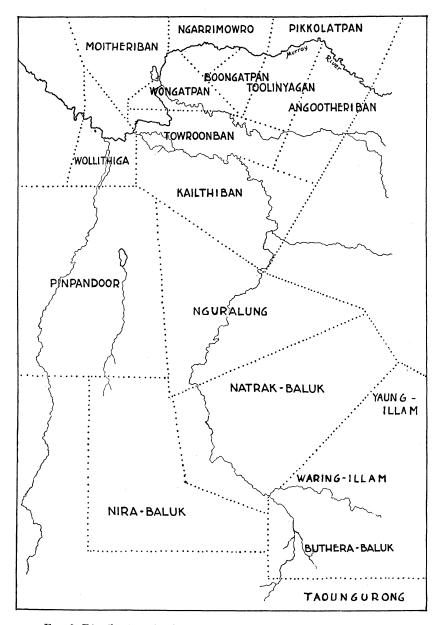


FIG. 6. Distribution of tribes in northern central Victoria and adjacent New South Wales (After Curr).

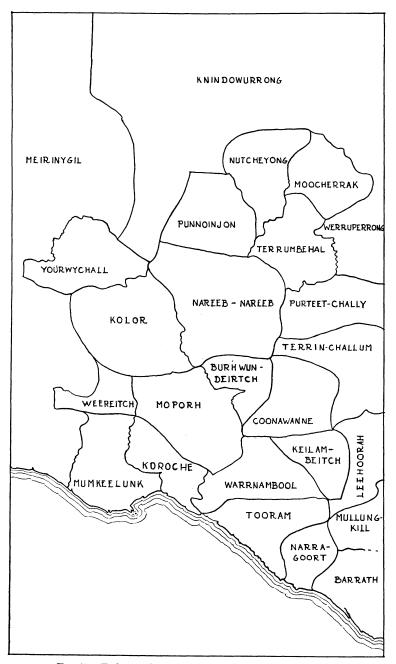


FIG. 7. Tribes of Southwestern Victoria (After Smyth).

However, there are numerous instances in which the extent of territory occupied by a tribe is not given in the source material, hence it is impossible to determine whether the space alloted the printed name extends over and beyond the actual boundaries of that tribe. In addition it has been necessary many times in respect to the congested tribal areas to fit the printed names into the spaces available. Thus the lettering may be horizontal, vertical or diagonal and may give the impression that some tribal territories are long narrow strips extending a great distance in one direction but not in another whereas such expanses cannot be affirmed and should be regarded as possibly if not probably extremely distorted.

STABILITY OF TRIBAL TERRITORIES

The tribal distribution as shown apparently represents the status quo for an undeterminable but considerable period. There seem to have been no major movements of population in late prehistoric times nor are there any obvious indications that such have taken place at any time in the past. Australian traditions not only do not emphasize migration legends for political or ethnic groups but for the most part are quite deficient in them. On the other hand, tales which relate the movements of *mythical* ancestors are guite common in certain areas where each totem group has its own legends of the wanderings of the *mythical* beings responsible for its beginning. Particularly in Central Australia have these tales been abundantly recorded, but these *mythical* wanderings are concerned with the establishment of religious totemic centers and are not intended as, nor can they be interpreted as, tales of tribal migrations.

It is possible that intensive inquiry in the field might elicit information of ethnic movements. Off hand, however, we have no reason to believe that there have been any major migrations within recent centuries. Occasionally one meets with traditions of minor shifting of peoples such as the Dieri claim that their forefathers, whatever generation this term may imply, formerly occupied the territory in which the Wonkanguru now dwell. The latter, it is said, drove out the Dieri, because they had been expelled from their own country by the Wonkamala.¹ How much truth there may be in the details of these claims we have no way of knowing. We have no reason to doubt that some shifting may have taken place for, if we may judge from local climatic conditions in historic times, the region concerned is subject to such severe changes in the course of a few generations that the density of population must have varied greatly over a long period of time. Ecological conditions, therefore, may have encouraged some movements of local character as the climate fluctuated but such adjustments may have been very gradual. Thus we should not accept Howitt's intimation that the Dieri and other tribes were forcefully ejected from previously occupied lands without better evidence that such was the case. Our reasons for suspecting that warfare may not have been necessarily the cause for such a change are to be found in the Australians' complete lack of interest in land aggrandizement and in our knowledge of what has happened in adjacent regions to the west in the last few decades.

An interesting shifting of population has taken place in recent years in western South Australia and adjacent Central Australia and Western Australia, a tremendous arid area which apparently constitutes the most inhospitable part of the continent. It is indeed impossible for Europeans, or for that matter for aborigines from other parts of Australia, to comprehend the rigors of existence in this region. The waterholes on which depend all living creatures are few and separated by vast expanses of desert, rough limestone outcroppings, desolate mulga country or barren mountain ranges. Animal life, as might be expected, is most meager and edible wild plants, so important as supplements to a preponderantly meat diet, occur only sporadically and never in great abun-More important still, the region is subject to such dance. severe droughts that even the normal paucity of sources of food cannot be depended upon with any degree of security. Here then is an area which requires of its inhabitants a most

¹ Howitt, p. 45.

intimate knowledge of natural history and geography, a constant vigil for game, an infinite patience, the keenest exercise of ingenuity, and the physical stamina to meet the vicissitudes of life. The aborigines have succeeded in living here only because they have adopted the sanest methods within their knowledge of adjustment to a stern and exacting environment.

It must not be supposed that the aborigines of this region regarded their struggle for existence as other than normal. The neighbors of each horde live under approximately the same conditions so that the relative ease of existence in other parts of the continent is unknown. In their experience life is easy in good seasons and difficult in years of drought. Hence under aboriginal conditions there were no incentives to leave these homelands and migrate into surrounding regions already supporting a full complement of human beings. But even if the thought of migration had occurred it would have been physically disastrous to attempt to wrest from other hordes of equal strength the lands they would die in defending.

The main factor in the struggle for life is the maintenance of population at or below the saturation point and this course has been successfully followed by the practice of infanticide, a widespread custom in Australia. In good years babies could be permitted to live providing the mother was not overburdened by older infants still dependent upon her, but in drought years the babies perforce had to be killed. Thus in aboriginal times the population must have fluctuated within certain extremes in accordance with economic conditions and to have remained quite stationary geographically. Confined to its traditional territory by cultural and physical forces each horde has tended to maintain the status quo and to solve its problems of subsistance by altering its numbers to suit the supply of food available.

The arrival of Europeans in Australia in no way changed the conditions of life in western South Australia, which never was colonized, but their coming into adjacent regions has provided the natives of the western portion with new solutions to their problems. About a century ago the whites commenced their penetration of South Australia and gradually worked north from Adelaide until cattle stations were established in all of the suitable pasturage country northwest and west of Lake Eyre. Indeed the rapid growth of the colony and the general enthusiasm of the times induced many individuals to settle even marginal areas where the grass supply was satisfactory only during good years. Drought conditions were not serious during these early years, although they may have appeared so at the time, and a most happy future was confidently anticipated. The colonists prospered, their wealth accumulated and apparently to their satisfaction the aborigines in the settled regions dwindled so in numbers that they ceased to be a factor of danger.

The colonists hardly had arrived in much of the occupied territory, however, when climatic conditions began to change gradually for the worse. Droughts not only increased in frequency but also in duration. It is said in South Australia that the early settlers used to complain if they had three poor years in ten but that at the present time the inhabitants inland are overjoyed if they have three good years in a decade.

As a direct result of these droughts the cattle area has been considerably reduced in extent. Cattle have been shot by the thousands in order that the limited water supply might be sufficient for the living. Many homesteads and thousands of square miles of territory have been abandoned. However, although this land is regarded as worthless under the European system of economy it nevertheless is very desirable country from the point of view of the natives of the nearby desert area and, since the aborigines of the abandoned region have become decimated to the extent that they no longer can occupy it fully, or are so accultured to European institutions that they do not care to return to a purely hunting existance, a large area capable of supporting hundreds of blackfellows has again become available. This vacuum has made a strong appeal to the nearby desert-dwellers who faced with apparently unprecedented hardships as the result of the severe

drought conditions in recent years have gradually moved eastward as the whites have withdrawn.

The threat of extermination under which these aborigines have lived during the past few decades is well illustrated by the great reduction in their population in the last century from an estimated 2,000 to an estimated 900 (Elkin) or one person to 175 square miles in 1931. Although this decrease cannot be attributed entirely to drought conditions the latter certainly have contributed in large part to this reduction. For instance in 1930 in a group of 60 natives met by Colson in the distant Petermann Range (Central Australia) no children under four years of age were seen.¹ Presumably all babies during the previous four years had been killed and, since the Australians are a practical people, also eaten. T_0 the sentimental European such a procedure is unthinkable but the Australian knows from centuries of experience that the perpetuation of the group depends primarily upon the knowledge possessed by the older folks who have lived through various drought periods and that this must be depended upon if the group is to be protected from complete extinction. Anv attempt to save the infants, the most dependent class and the only one easy to replace, might result in the destruction of all.

The movement into the abandoned cattle country apparently has not taken place by wholesale migration but rather by the slow but constant infiltration of small groups of natives, perhaps a family or two at a time. However, it appears that over a course of several years whole tribes have gradually shifted their center of population, the land which they have abandoned thus becoming available for their neighbors. For instance I have been informed by Mr. Tindale that the Pitjantara of the Mann Range have extended their area into the western Musgrave Range formerly inhabited by Jankundjadjara who have moved eastward into the old station country.

A similar movement also has taken place westward toward Laverton and Mount Margaret in Western Australia where

¹ Elkin, p. 64.

the original tribes for various reasons are virtually extinct. Dr. Elkin in 1930 and subsequently Mr. Tindale found Mandjindja from the Warburton Ranges, near the South Australian border, as well as natives from the surroundings desert country, working their way westward toward the area of white settlements.

Another factor attributable to the whites in the expansion of the desert dwellers is the establishment of missions and government reserves in Central Australia (Hermannsburg) and southern South Australia (Ooldea, Koonibba and various settlements along the Bight). As an initial result the local tribes in each area, attracted by free food, tended to congregate at these points during certain seasons and to return to their properties for hunting when this activity was profitable. In southern South Australia in particular, however, these visits gradually increased in duration until in some areas the natives have become entirely dependent upon the whites and virtually have ceased their efforts for livelihood by aboriginal means. Thus more lands have become available for the more distant tribes which during the recent severity of the drought have extended their hunting areas southward and northward as well as eastward and westward. In addition natives from distant regions have been prompted to make visits to the missions and reserves and many of them, attracted by the glamor of European institutions and by a constant although not a varied food supply, are now satisfied to remain close to the seat of benefaction. Even Pitjantara natives of the Mann Range have made their appearance at Hermannsburg, Central Australia, but return home to hunt when the rains have watered their country. At Ooldea, South Australia, natives are found from the distant Everard. Musgrave and even the Macdonnell Ranges, 235, 280 and 470 miles respectively to the north.¹

The recent shifting of population in western South Australia and adjacent areas thus seems to have been abetted by the withdrawal of Europeans. However, it is important

¹ Bolam, p. 71.

to note that the changes noted have been gradual. Extensive lands for re-occupation by aborigines did not suddenly become available, hence the population adjustment apparently has proceeded without any important disruption in native culture. It seems permissible to suspect that similar droughts may have prevailed in pre-European times and that the return of better conditions may have encouraged aborigines of neighboring regions where the population had not been so seriously curtailed to infiltrate areas where the number of occupants had been drastically reduced. Such a movement may have taken place in the form of a slow settlement of families on lands belonging to distant relatives, or possibly by marriage with matrilocal residence. It would be very important to learn the details of the recent adjustments reported for South Australia by securing case histories of families and individuals who have changed residence. Inquiry should be devoted to the collection of complete data in respect to the relationships between and the totemic affiliations of the present and former occupants of specific territories.

It seems to be significant that the few shifts in local populations of which we have record seem to be associated with the return of better conditions and not with the rise of drought conditions. Thus reduced food supply does not appear to be a cause of movement, at least not an important cause, for replacements in population for those who die each year can be checked through infanticide as the potential supply of food diminishes. We cannot doubt that many natives in South Australia and Central Australia would have starved to death during 1920–1930 if rations had not been made available at government reserves and mission stations. However, the serious threat to life over a period of many years seems to have not prompted any of the local hordes to become marauders on the lands of others or to have attempted to secure territorial expansion by appropriating or by attempting to seize the lands belonging to their neighbors.

Incidentally it is worth noting in passing that those aborigines who have partaken of the whiteman's charity in many instances have saved their bodies but have lost their souls. Those who for one reason or another have lingered near the centers of benefaction are now suffering all the maladjustments which usually accompany rapid cultural change. In partially adopting European culture in which full opportunities for economic and social assimilation are not granted, many have developed an inability or an unwillingness to return to their previous ways of life and unknowingly are destined to an existence of dependency on charity or professional mendicancy.

Aggregations

In much of the older literature on the Australians one finds mention of "nations." In some instances the authors have regarded hordes as tribes, hence the meaning of nation to them corresponds to our use of the term tribe. Other writers, however, employ the word nation to signify a larger body consisting of several tribes. In view of its modern and historical connotation, particularly in a political sense, the word nation obviously is unsatisfactory for such a use. Aggregation, therefore, seems much better suited for the purpose involved.

As the result of the varying and often questionable criteria used by several writers the aggregation is not readily definable. It may imply a linguistic unit consisting of several tribes whose dialects are quite similar, a geographical unit of several tribes who occupy a distinct region, or a cultural unit in which a number of tribes possess in common some prominent cultural pecularities. However, since there is no specific correlation between language, geography and culture, only one can serve as the basis for classification. Furthermore, particularly in respect to culture, the conditions are constantly changing. For practical purposes it would be convenient to group the several hundred tribes into a few dozen aggregations on the basis of cultural evidence and to classify the many dialects into a smaller number of linguistic units. But to accomplish these tasks much more information

is required than is available at the moment. In addition it should be realized that such classifications would be merely for purposes of our own convenience, not recognized by the aborigines who do not think politically in terms greater than the horde, linguistically in terms greater than the dialect, or culturally in terms greater than the provenience of the institutions of direct concern to the members of the horde as revealed by their own experiences. It should be emphasized, however, that aggregations, like tribes, are not political groupings in any sense whatsoever, but conceptualized units which facilitate our handling of Australian data.

BIBLIOGRAPHY

This bibliography contains only the few sources directly referred to in this paper. The material on which the map is based contains an additional 150 titles.

- BOLAM, A. G. 1927. The Trans-Australian Wonderland. 6th Ed. Melbourne.
- Collins, D. 1798. An Account of the Colony of New South Wales. . . . London.
- CURR, E. W. 1887. The Australian Race. Vol. 4 (Map). London and Melbourne.
- DAVIDSON, D. S. 1926. The Basis of Social Organization in Australia. American Anthropologist, 28.
- ----. 1928. The Family Hunting Territory in Australia. Ibid., 30.
- 1938. A Preliminary Register of Australian Tribes and Hordes. The American Philosophical Society. Philadelphia, Pa. (Mimeographed.)
- ELKIN, A. P. 1931. The Social Organization of South Australian Tribes. Oceania, 2.
- HARRASSER, A. 1936. Die Rechtsverletzung bei den australischen Eingeborenen. Beilageheft zur Zeitschrift für vergleichende Rechtswissenshaft, 50. Stuttgart.
- HOWITT, A. W. 1904. The Native Tribes of Southeast Australia. London.
- MALINOWSKI, B. 1903. The Family Among the Australian Aborigines. London.
- NIND, S. 1831. Description of the Natives of King George Sound. London.
- RADCLIFFE-BROWN, A. R. 1930. Former Numbers and Distribution of the Australian Aborigines. In Official Year Book of the Commonwealth of Australia. No. 23. Wickens, C. H., Ed.

ROHEIM, G. 1925. Australian Totemism. London.

- THORPE, W. W. 1913. Australian Tribal Names and their Synonyms. Records of the Australian Museum, Vol. 8, No. 4.
- WHEELER, G. C. 1910. The Tribe and Intertribal Relations in Australia. London.

