

LARDIL PROPERTIES OF PLACE

An Ethnological Study in Man-Environment Relations

A thesis submitted for the degree of Doctor of Philosophy in the University of Queensland.

bу

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ABSTRACT OF THESIS

This study commences with a discussion on the nature of 'place' making reference to the limited scientific literature on the subject (Chapter 1). An initial model of place is established, being the association of a piece of environment with human behaviour, concepts and artifacts, as well as involving such properties as boundary definitions, rules controlling access and time of use, systems of naming and classification, and psychological complexes of memories and emotional attachments. This model is used throughout the thesis to identify and analyse the place constructs of the Lardil people, a tribe of Australian Aborigines inhabiting Mornington Island and some other islands of the North Wellesley group in the southern Gulf of Carpentaria.

After examining the methods of data collection used in the research (Chapter 2), the physical environment of Mornington Island is briefly described - climate, geomorphology, soils and plants (Chapter 3). A land systems model is constructed to which is correlated patterns of the people-environment relations of the traditional hunter-gatherer life (at c.1910). Ethnic models of environmental knowledge that have been elicited from Aboriginal informants include geography, social organisation and land tenure, seasonal movement and resource exploitation, construction of shelters, and use of places such as camps, graves, sacred sites, resource places, dancing and initiation grounds (Chapter 4).

The Lardil cosmology and cosmogony is outlined in Chapter 5. Here, certain properties of place are shown to form part of a set of mental constructs that were the basis of a sacred philosophy concerning Aboriginal man and his relation to the world. The Lardil call this philosophy 'the law'. Amongst other things, the law provides an explanation of the origin of Aboriginal man and his landscape. It also explains how the natural environment is inhabited by invisible animate beings whose actions are causally interrelated with those of humans. It demonstrates the necessity for the Lardil people to observe certain behavioural rules whilst using their environment in order to maintain an overall harmony between themselves and its invisible inhabitants.

The next Chapter contains an historical dissertation on the culture contact between the Aborigines and people of Asian and European It traces the contact period from prior to the arrival of the first missionaries (1914) up until 1975 (Chapter 6). A model of cultural change is constructed to assist in understanding the changing uses of place during this period. This model is then used in Chapter 7 to explain the origin of the places that were used by the Mornington Island people in 1975. This chapter deals largely with the mission settlement in which the majority of people today live as a concentrated population with access to Western housing and community services. The continuity of traditional man-environment systems over 60 years is examined, as well as the introduction of new systems by the missionaries, e.g. new social institutions, physical structures, economic resources, behaviour controls, local travel patterns. An account of contemporary travel to settlements, towns and cities on the mainland brings the ethnography to a close.

The conclusion (Chapter 8) deals with the elaboration of the initial model of place based on the ethnographic evidence of the previous chapters. The model is examined with the focus on cross-cultural differences. Aboriginality at place is distinguished from acculturated Western attributes. The role of place in the maintenance of cultural identity is discussed and finally, Lardil places are shown to be capable of being described using a structuralist type analysis.

N.B. The spelling of the tribal name Lardil is that commonly used in the anthropological literature. Its pronunciation, according to contemporary members of this group, is *letil* (to use the practical orthography devised by Klokeid (1974).)

TABLE OF CONTENTS

		Page
CHAPTER 1	THE NATURE OF PLACE	
,	Introduction The social origins of place Further dynamic aspects of place Places and cultural processes Place and time Place experience and emotion Territories and boundaries Behaviour settings Place classification A summary of place properties	1 2 7 9 11 12 15 17 19 20
CHAPTER 2	DATA COLLECTION METHODS	
	Selecting and combining methods Choice of study population Previous ethnological works The framework of participant observation Early fieldwork Interviewing Country studies Methods of working with informants Language 4 Further fieldwork and the communal role of the investigator	22 23 24 25 26 31 34 36 41 42
CHAPTER 3	THE PHYSICAL ENVIRONMENT OF MORNINGTON ISLAND	
	Introduction The climate of Mornington Island The origin of the physical environment of Mornington Island The origin of the coastal geography of Mornington Island The origin of the sand-based coastal units Interior and coastal land systems	45 46 52 55 60 63
CHAPTER 4	TRADITIONAL PROPERTIES OF PLACE OF THE LARDIL	
-	Introduction The Lardil as a 'tribe' Social structures Moieties, semi-moieties and subsections of the Lardil Countries and patriclans The patriclan countries and the semi-moieties Country boundaries Further Lardil social divisions: the Larumpenta,	66 67 68 68 70 75 76 78
	the <i>Tjirrkarampenta</i> , the <i>Lilumpenta</i> , the	

	Page
· Shifting group affiliation	82
· Lardil geography at a local scale - 'named places'	84
·Large scale geographic units	87
 Knowledge of places outside of Lardil lands 	88
· Special classes of places	90
Resource places Water sources	90 05
Roads and tracks	95 96
'Square-up' places and fighting places	90 97
Graves	103
Dancing grounds and dance preparation grounds	106
Initiation grounds	117
Story places	123
→ Campsites	126
The influence of social factors on the settlement pattern of camps	127
→ The artifactual environment of camps	131
Early literature on Lardil architecture	135
The influence of climate on camp and shelter 📈	
/ structure	
Cold weather camp	138
√ Wet weather camp	140
\ Mosquito camp	142
h Shade structures	143
Other shelter forms used in camps The role of shelters as artifacts	144
, Campfires	145 147
→ Behaviour at camps	147
Daily hunter-gatherer activity	(155 - ?
Leaving a camp	148
Artifactual remains of camps	156
Lardil travel	157
The use of message sticks	159
Special camps	162
Dugong and turtle camps	163
'Handcraft' camps	164
Interior camps	165
Tulnul camps	167
Seasonal movements between camps in F.J.'s and K.B.'s countries	167
The sociogeographic units of the Lardil	167
re-examined	172
Local movement between places as the basis	172
for remembering geographic knowledge	175
The spatial dialectic of 'inside' and 'outside' in Lardil thought	170
Conclusion	178 180
0011011011	100
CHAPTER 5 THE VISIBLE AND THE INVISIBLE - LARDIL COSMOLOGY	
AND COSMOGONY	
 Introduction to sacred Aboriginal beliefs 	188
Lardil Totemism	191
Dreams and the unseen people	193
Personal attitudes to knowledge and the	
Methodological difficulties therein	199

	Page
Some elements of Lardil history and a methodological note The pre-human era The coming of the first Lardil people:	201 203
Manhpil, Tuiwal tuiwal and Tjin tjin The travels of the dingoes The kalthat fish and the subincision ceremony The cutting of the channels The activities of Thuwathu, the Rainbow Serpent Malkri sickness and story-places re-examined The night sky, shooting stars and the moon Rainbows, shadows and footprints Conclusion	205 209 211 212 213 216 226 231 233
CHAPTER 6 CULTURE CHANGE ON MORNINGTON ISLAND	
Methodological approach Macassan contact European contacts Hall's time, 1914-1917 Wilson's time - the establishment of mission	237 238 241 248 253
policies The physical development of the mission The mission dormitory system The mission camp in Wilson's time First travel experiences New social authorities - the councillors The war period, 1942-1944 McCarthy's time, 1944-1948 The arrival of the Kaiadilt Further travel experiences Cultural change in McCarthy's time Belcher's time - the 1950's and 1960's Houses and shelters Socio-spatial groups in the settlement domiciliary zone	257 261 267 272 274 275 276 281 283 286 288 289 294
New modes of subsistence Further changes in the settlement environment Retention, adaption, and loss of aspects of traditional culture	297 299 302
The professionalization of traditional culture Cultural change on Mornington Island as measured by Cawte and his associates	307 311
The contemporary period (1970-1975) - new political influences	315
Economic development, settlement expansion, and Aboriginal subsistence	318
The issue of land rights The expression of Lardil culture in foreign places	321 323
Education, travel, and cultural exchange The role of traditional dance and initiation Drinking and fighting Mission-directed change on Mornington Island	325 327 330

×

		Page
CHAPTER 7	THE PEOPLE-ENVIRONMENT RELATIONS OF MORNINGTON ISLANDERS IN 1975	
	Places in the contemporary Mornington Island settlement	336
	Some physical, spatial and social units of the	339
	domiciliary zone Behaviour in domiciliary spaces in the village	346
	The artifactual environment of the domiciliary zone	351
•	Domiciliary behaviour compared in the village and the ridge	359
	The impact of fixed-feature houses and permanent domiciliary sites on behaviour	360
	Conflict and residential neighbourhood	363
	·Residential density and sleeping behaviour	366
	Privacy, crowding and information flow	370
	Domestic roles	378
	Changes in the acquisition and consumption of food Servicing, maintenance and monetary costs of	380 383
	occupying houses	007
	The problem of a death in a house	387
	Traditional attributes of domiciliary places	389
	A methodological note	391
	Non-domiciliary behaviour in the domiciliary zone Circulation in the domiciliary zone	392 393
	Gambling	393 394
	A square-up event	395
	Contemporary dance on Mornington Island	396
	Contemporary fighting behaviour	400
	Large-group fighting	403
	Duel fighting	405
	Women's fights	407
	Drunken fights	408
	Events at 'the strip' - the plane meeting place	410
	Store-oriented behaviour	413
	A Mornington Island wedding	419
	Behaviour at the 'pictures'	419
	Public meetings	421
	Behaviour and place in the non-domiciliary part	422
	of the settlement - a preliminary summary	
	The contemporary use of tribal lands and marine systems	424
	Emotional attachments to land	429
	New ways of learning old geography	430
	Travel to the mainland	431
	The geography of travel	434
	Mornington Islanders at the 'Isa'	435
	Some Aboriginal institutions in Mt. Isa - the 'Snakepit' and the 'Late Night Spot'	441
	The contemporary repertoire of place belonging to the Lardil	444 、
CHAPTER 8	PROPERTIES OF LARDIL PLACES	
•	The role of physical structures and artifacts in Lardil places	456 -
•	Lardil places Lardil places and behaviour	459

			Page
		ntrol of places on Mornington Island rdil place knowledge - names, ideas and concepts in Lardil places	465 469
	• The	e idea of spatial codes - the inside and outside of Lardil places	47 1
,	· So	cial and spatial structure, geography and settlement	47 4
	. Mo	e concept of territoriality in Lardil places vement and place ace, space, and time	477 479 481
		ace and change	485
	✓ P1P1	ltural identity and place ace as a form of man-environment interaction ace as a structure nclusion	487 493 496 499
Append ix	1	New Roth Article	503
Appendix	2	Biographical Data on Informants	510
Appendix	3	Data Samples	514
Appendix	4	Miscellaneous Data on the Physical Environment of Mornington Island	523
Append ix	5	Photographs and Illustrations of Aboriginal Huts and Shelters by W.E. Roth.	545
Bibliogra	aphy		

(viii)

LIST OF FIGURES

Figur No.	e Title	Page No. which figure faces
CHAPT	ER 3	
1.	Mornington Island, aerial view	45
2.	Map of the Wellesley Islands	46
3.	The interior land systems of Mornington Island	53
4.	Marine Influence on Mornington Island Coastal Land Forms	55
5.	Some Coastal Land Systems on Mornington Island	56
6.	Sand Based Land Systems of Mornington Island	62
CHAPT	ER 4	
7.	The Geography of a Lardil Patriclan Country Belonging to Fred Jaurth, Lindsay, Dick and Tim Roughsey and Alick Hills, and part of another country that belonged to Big Barney (deceased)	71 /
8.	The Geography of a Lardil Patriclan country belonging to Kelly Bunbújee, Charly Marme, Popgun and Watt (deceased)	72
9.	A map of Lardil Patriclan Countries and Littorals by Professor Cawte	77
10.	Lardil Patriclan Countries, Reconstruction c.1914.	78
11.	Lardil Patriclan Countries, 1975.	79
12.	A Division of Lardil Lands by Direction Based on Climatic and Geographic Criteria	80
13.	A Division of Lardil Lands into Three Contemporary Sociogeographic Divisions.	82
14.	A Division of Lardil Lands into Contemporary Sociogeographic Divisions by Informant P.J.	83
15.	Examples of Local Geography in Lardil Lands	85
16.	Lardil Resources of the Sand-Based Land Systems	93
17.	Lardil Resource Places	94
18.	Body Decoration for Dance, Mornington Island	109
19.	Some Lardil Dancing Artifacts	113
20.	Some Mornington Island Dance Events	114

Figur No.	e Title	Page No. which figure faces
21.	Spatial Structure at Lardil Dance Grounds	115
22.	Some Lardil Story Places	124
23.	Lardil Camps	126
24.	Some Traditional Skills of the Mornington Island People	132
25.	Lardil Camps : Nocturnal Layouts	139
26.	Lardil Shelters	140
27.	Construction of a Lardil Wet Weather Shelter	141
28.	Lardil Shelters	142
29.	Lardil Message Sticks and Map Sticks	160
29A.	Seasonal Camps and Resources, Fred Jaurth's country	169
29B.	Seasonal Camps and Resources, Kelly Bunbujee's country	y 171
30.	A Spatial Taxonomy of Traditional Secular Lardil Places	185
CHAPT	ER 5	
31A.	Sacred Places in Kelly Bunbujee's Country on Mornington Island.	195
31B.	Some Bark Paintings of Lardil Legends	204
32.	The Redbill Story Place, Mornington Island	212
33.	Lardil Paintings of the Rainbow Serpent	216
34.	Malkri places in Fred Jaurth's Country and Kelly Bunbujee's Country.	218
35.	The Properties of Inside and Outside Country on Mornington Island.	234
CHAPT	ER 6	
36.	The Establishment of the Mission Station on Mornington Island	249
37.	Mornington Island Aboriginal Mission Settlement, Site Plan Reconstruction for 1914.	250
38.	The Mornington Island Mission House	253
39.	Mornington Island Aboriginal Mission Settlement, Site Plan Reconstruction for 1936.	257
40.	The Mornington Island Mission Station, 1936.	259
41.	Dormitory Life at Mornington Island in 1936.	262

Figure No.	Title	Page No. which figure faces
42.	Mornington Island Aboriginal Mission Settlement, Site Plan Reconstruction for 1949.	277
43.	The Mornington Island Mission Settlement, 1949.	278
44.	Some uses of Bark Sheets, Mornington Island.	279
45.	Self Constructed Shelters, Mornington Island, 1975.	281
46.	The Arrival of the Kaiadilt on Mornington Island in 1947 and 1948	283
47.	Designed Cottages and Houses, Built on Mornington Island, 1957-73.	290
48.	Mornington Island Aboriginal Mission Settlement, Site Plan Reconstruction for 1966.	294
СНАРТ	ER 7	
49.	Mornington Island Aboriginal Settlement, Aerial view.	336
50.	Mornington Island Aboriginal Mission Settlement Site Plan - Major Spatial Zones	337
51.	A Typical Domiciliary Space on Mornington Island (Domiciliary Head - Fred Jaurth)	340
52.	Mornington Island Aboriginal Mission Settlement Site Plan - Buildings and Activity Areas	341
53.	Mornington Island Aboriginal Mission Settlement - Social Spacing in the Domiciliary Zone, November 197	343 5.
54.	Mornington Island Aboriginal Mission Settlement - Geographic Origin of Multiple Family Units and Some Common Names of Domiciliary Groups	345
55.	The Village at Mornington Island, c.1975.	348
56.	Contemporary Use of Traditional Shelter Forms on Mornington Island, 1975.	349
57.	The Shelters of Lardil Man, Kelly Bunbujee and Family, 1974-1976.	350
58.	Physical Change in a Domiciliary Space on Mornington Island.	351
59.	A Typical Domiciliary Space on Mornington Island (Domiciliary Head - Henry Peters)	352
60.	The 'Ridge Houses' Mornington Island (plates)	359
61.	The 'Ridge Houses', Mornington Island, 1975 (Architectural Drawings)	360

Figur No.	re Title	Page No. which figure faces
62.	Destruction of Houses, Mornington Island, 1975	388
63.	Non-Domiciliary Behaviour in the Domiciliary Zone at Mornington Island, 1975	395
64.	Preparing for Dance, Mornington Island, 1975	397
65.	Learning to Dance on Mornington Island, 1975-1976	398
66.	The Plane Meeting Place at Mornington Island, 1975	410
67.	Weekly Commercial Air Flights in the Southern Gulf of Carpentaria	411
68.	The Mornington Island Mission, 1975	413
69.	Store Oriented Behaviour, Mornington Island	414
70.	Miscellaneous Behaviour Units in the Mission Precinct at Mornington Island	419
71.	Camping Out on Mornington Island	427
72	Acculturation in the Technology of Dugong Hunting on Mornington Island	428
7 3.	The Wellesley Islands: A Decentralization Plan.	429

LIST OF TABLES

Tabl	e Title	Page No. which table faces
CHAF	TER 3	
1.	Mornington Island Climatic Data	47
2.	Land systems of the North wellesley Islands	64
CHAP	TER 4	
3.	A list of Aboriginal Artifacts Commonly used by the Lardil People of Mornington Island, c.1900.	131
4.	Properties of Camps in (A) Fred Jaurth's Country and in Part of Big Barney's Country, and in (B) Kelly Bunbujee's Country	167
5.	The Seasonal Factor in Traditional Lardil Life	168
СНАР	TER 6	
6.	Sea Exploration of the Wellesley Islands	242
7.	A list of Aboriginal Artifacts Obtained or Acculturated from Mainland Tribes by the Lardil over Recent Times, c.1900-1977.	272
8.	Record of Types of Designed Cottages and Houses Erected on Mornington Island, 1950-1975.	291
СНАР	TER 7	
9.	Contrasting Physical Properties of the 'Village' and 'Ridge' Domiciliary Zones	338
10.	List of Domiciliary Occupants, Mornington Island, November, 1975.	342
11.	Socio-spatial Units in the Domiciliary Zone, Mornington Island, November 1975.	344
12.	Regularly Occurring Adult Behaviour in Domiciliary Spaces in the Village.	346
13.	Artifacts and Objects that Consistently and Regularly Occur in Aboriginal Domiciliary Spaces on Mornington Island	347
14.	List of Some Artifacts that Occur Regularly in Mornington Island Missionaries' Houses but not in the Aboriginal Domiciliary Zone	353
15.	Artifacts Observed in the Living Room of J.J.'s D.A.I.A. Ridge House at Mornington Island, July 20, 1975.	353

Tabl No.	e Title	Page No. which table faces
16.	Artifacts Valued by Mornington Island Aborigines and sometimes used as Gifts by the Investigator	355
17.	Kesidential Density in the Mornington Island Settlement, November 1975.	366
18.	Non-domiciliary Behaviour Units in the Mornington Island Settlement, 1975.	. 392

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STATEMENT ON SOURCES

No part of this thesis has been submitted to this or any other University for any other degree conferred on me. The thesis is original in the overall treatment of the topic chosen for study.

In each chapter sources of information, whether from published or unpublished works have been acknowledged and listed in full in the bibliography. The literature search took place mainly in the libraries of the University of Queensland, the Australian Institute of Aboriginal Studies library, the Fisher library, the Mitchell library, and the Oxley library. Most photographs were taken by myself. Those that were not, have been acknowledged throughout the text, and the sources are set out in full in the bibliography. All original data are stored in the Aboriginal Data Archive of the Department of Architecture, University of Queensland, and includes still photographs, 8 mm movie film, cassette tapes of interviews and songs, tape transcripts, field maps, data cards, plant data, rock and soil samples.

The original contribution of this thesis lies in the following series of scientific operations:-

- 1. Original ethnographic research amongst and about a living group of people whose culture is undergoing rapid change. Such change implies that much of the data collected is non-recurring and thus unique.
- 2. The description of many features of the contemporary life of these people.
- 3. The collection of their memory knowledge on aspects of their past and unrecorded lifestyles, and the reconstruction of many historical events and belief systems.
- 4. The assembly of a diversified literature on their contact history and its construction into a model of cultural change to explain their contemporary social processes.
- 5. The collection of physical data from the natural environment of Mornington Island, and with the help of other scientific literature, the induction of a model of land systems for Mornington Island, with an associated geomorphological summary.
- 6. The analysis of the ethnographic data collected, as well as literature on man-environment theory, in order to develop a model of people-place relations for the Lardil.

There have been numerous writings published on the Lardil, on Mornington Island, and on the properties of places. However there is no published work, to my knowledge, that, in the manner presented here, assembles and correlates empirical data on the physical, social and behavioural environments of a huntergatherer group in a longitudinal study of people-environment relations.

Paul C. Memmott

1st August, 1979.

LIST OF ABBREVIATIONS

A.B.M.	Australian Bureau of Meteorology
A.D.A.	Aboriginal Data Archive, Department of Architecture, University of Queensland. The prefixes F and P before a numeral refer respectively to cassette tapes and photographs held in the Archive.
A.I.A.S.	Australian Institute of Aboriginal Studies, Canberra.
A.N.Z.A.A.S.	Australian and New Zealand Association for the Advancement of Science.
A.P.B.M.	Australian Presbyterian Board of Missions.
A.R.	Annual Reports of Queensland Northern Protector of Aborigines (1899-1903), Chief Protector of Aborigines (1904-1938), Director of Native Affairs (1939-1965), and Director of Aboriginal and Island Affairs (1966-1976).
B.O.E.M.A.R.	Board of Ecumenical Missions and Relations of the Presbyterian Church of Australia.
B.P.A.	Bush Pilot Airways.
C.S.I.R.O.	Commonwealth Scientific and Industrial Research Organization.
D.A.A.	Department of Aboriginal Affairs (Federal).
D.A.I.A.	Department of Aboriginal and Islander Affairs (State).
D.N.A.	Department of Native Affairs (State).
N.S.	New series (in the case of journals and manuscripts).
0.P.A.L.	Une People of Australia League
p.c.	personal communication
R.A.I.A.	Royal Australian Institute of Architects
R.I.B.A.	Royal Institute of British Architects
The Act	refers to 'Queensland, The Aborigines Act, 1971'.
C.A.E.	College of Advanced Education.

CHAPTER 1 THE NATURE OF PLACE

Introduction

This research is generally concerned with how people relate to their environment. They do this in a variety of ways: they perceive it and remember experiences of it; they think of it and speak of it; they remove various parts of it for food, energy and material resources; they continually erect and alter structures in it; they have whole systems of belief, attitudes and values about it; they move and behave in it. The relation of people to their environment is essentially an active one. They act upon it - they breathe the air; they can physically alter it; attach symbolic properties to it; and focus their senses upon certain parts of it. Likewise, the environment acts upon people. It provides a regular continuum of changing sensory stimuli; it restricts and directs human movement and activity through its physical barriers and open spaces; it affects human comfort and energy. There is then, mutual interaction between New juxtapositions and combinations of the man and his environment. two occur continually - both in the space of the world and the internal space of man's mind (mental space). Man's actions on the environment may produce new physical combinations of forms and spaces and symbols and artifacts; simultaneously, these experiences may result in his forming new, changed or reinforced mental constructs about his environment. Such everyday interactions comprise new syntheses of man and his environment.

This concept of man-environment interaction is only recent - it is preceded by a long history of scholarly debate upon whether man controls his surroundings or vice versa. The history of this dilemma has been outlined by Hillier and Leaman (1973), and they provide a detailed argument for its transcendance based on the idea of mutual interaction described above.

Regular patterns of man-environment interaction across large groups of people can be observed in all cultures and in all sizes of groups. A distinctive and regular character of environment, a

The words 'man-environment' do not connote the exclusion of women and children from this study, but rather, follow the contemporary use of this term in the literature, one that includes all humans. A more accurate term would be 'people-environment'.

constancy of architectural or building style and scale in space, are all seen to exist within the buildings of each specific cultural group.

Further, people use many parts of the environment in the same ways, e.g. they walk in the same directions along streets; they sit orderly together at the theatre; they synchronise much of their behaviour in time - sleep at night, eat on rising, etc. They also share much common knowledge about their environment which they apply in a meaningful way when they communicate. Thus a person in a particular culture can usually tell another person from that same culture where an event occurred, or how to travel to a certain place. They know where various components of their environments are - libraries, parks, roadways, corner shops, railway stations, etc.

This indicates that members of cultural groups have a shared intelligibility that they use to interact with their environment. It is essentially a social intelligibility that people collectively use to change and construct their physical surroundings in a physically and socially harmonised way. In addition it is used to carry out social and private operations within those surroundings in a meaningful, ordered, and socially-agreed-upon way. The subject of this thesis deals with a part of this shared intelligibility that pertains to the social use of place.

The social origins of place

Part of man's quest to organise his universe in a meaningful way seems to involve making parts of it into 'places'. What can be said of this phenomenon of 'places'? The shorter Oxford Dictionary tells us that a place is "a particular part of space of definite A place is simply not any part of space. Parts of the environment are differentiated by a number of people as having some special properties that at times make them more worthy of attention than their surroundings. Places often have names and boundaries. People may be observed to behave in characteristic ways at particular types of places at particular times, e.g. in parks at lunch time, or at railway stations when trains are due. Some places are accessible to the public whilst others are controlled or owned by an individual or group. There are rules that allow people access to places and rules that keep people out of places. What is the nature of such special properties and from where do they come? How do

social properties get into the environment to make places?

McBride and Clancy (1975) have suggested that places are created in a process of social interaction. They argue that certain pieces of the environment are more suitable to accommodate particular social interactions or activities, and become distinguished as places by being spatially associated with a particular activity. The place's suitability to accommodate the activity is attributed to its natural properties - perhaps shade, availability of fresh water, enjoyable vista, etc. It becomes a reinforcer for that activity due to its high degree of suitability to house the activity. The piece of environment becomes defined as a place, and its qualities of place are reinforced with each successive occurrence of the particular social interaction (McBride and Clancy 1975:5-6). This process is an example of a mutual man-environment interaction. Man behaves characteristically at a place, and the place physically supports or reinforces a characteristic behaviour. "The whole event begins to emerge as a single unit of function and of context." (McBride and Clancy 1975:6).

However, this explanation does not seem entirely complete. There exist places at which no behaviour regularly occurs, e.g. on the moon, or perhaps at a natural feature that is well known geographically through maps but which may never have been seen. Many places originate socially through a process of one person showing another a place and telling of its properties. Such a property may consist of just a name, not necessarily an aspect of human behaviour, or it could be a description of an event that occurred there once. Thus many places arise through the association of a piece of environment with a special piece of knowledge rather than with a characteristic sequence of human behaviour. Places can act as signs, symbols of class, power, identity - numerous mental associations are possible.

In many cases a place may only exist in the mind without any physical correlate in the outside world. Examples of such place constructs are to be found in fiction, fantasy, dream and mystic knowledge of unobtainable realms. Alternatively, the physical correlate may exist, but may not be accessible to the senses. Places have a variable scale (May 1970:214, Norberg Schulz 1971: Ch.2, Relph 1976:20). Cupboards and attics, houses and towns are all called places. The largest places extend outside one's visual field.

^{1.} Visual field is defined as the 'instantaneous pictorial view of the eves' (after Gibson 1950:42 43)

They can only be experienced in part, e.g. islands and countries, planets and galaxies. The extent of many such large places could only be imagined with the aid of maps, until the use of aerial and satellite photography.

Above there is to be seen a contrast in ways of experiencing places. One is a physical experience of being at such-and-such a place; the other is through thought and memory. This dichotomy is described by Schulz (1962-1973:XXXVI-XXXVII, XLII). He distinguishes (a) interactions in physical sensory space - or how individuals are interacting with their immediate surroundings at a given time from (b) interactions in mental space involving environmental concepts, memory knowledge of environmental experiences, emotions, and intimacies connected with such experiences. Examples of the latter class of interactions may well have derived from the previous class. Past experiences of places can be recalled and referred to during thought and conversation. Their properties may be used to help describe ideas about other places, real or imaginary.

Some places may exist due to the presence of some natural feature that the members of a local group or a passer-by find interesting, significant or aesthetic in some way. In this manner, a traveller's eye may be arrested in some fleeting glance by a scene so visually dramatic, that it is vividly impressed on his memory as a place of great beauty or of visual excitement (Tuan 1977:161). Outstanding visual properties may also be accompanied by textures, smells and sounds, giving a unique 'sense of place' to use Tuan's phrase (1975:235). For example breweries and biscuit factories, stables and butchers' shops are commonly recognized by their smells.

Places with outstanding sensory properties may be of interest to many cultures and groups, and may even be of world fame, e.g. Mt. Vesuvius, Ayærs Rock, Niagara Falls, Mt. Everest. Of these Tuan (1977:164) says "Enduring places, of which there are very few in the world, speak of humanity".

On the other hand many places that one cultural group selects to regard as significant in the landscape may differ in quality from those valued by the next group. For example John von Sturmer,

^{1.} It is his model of the 'I' world and the 'me' world.

an anthropologist who studies Aboriginal societies in Cape York has experienced Aborigines showing him places in the natural landscape that they see as outstanding and detached from the environs, yet he himself reports seeing no special variation between such places and the surrounding landscape (p.c., February 1976). There are cultural groups who believe in seldom-seen or unseen entities that are to be found at particular places (e.g. fairies, leprechauns, energy fields in pyramids). Thus Tuan (1975: 234) refers to the 'spirit' of a place when referring to the abodes of gods, good and evil energies, invisible creatures, etc. The cross cultural differences in the nature and properties of place is a theme that will be amplified as this dissertation proceeds.

It can be seen from the above that places do not need man-built structures to exist. Rapoport (1972:3-3-11) has argued that the Australian Aborigines were able to establish a sense of place and extensive local geographies without necessarily using permanent buildings or settlements. It will be argued herein that the evidence on the Lardil supports this claim.

This introduces a third way of making place - by changing the physical properties of a piece of the environment to distinguish it from its surroundings. This may be done by rearranging the physical elements that are already there, e.g. by digging a hole; alternatively by adding new physical elements or markers, e.g. erecting a structure of some kind.

Major changes in the physical environment of the Western world usually involve architectural and planning agencies. Relph (1976) makes strong criticisms of contemporary architects and planners who he says are perpetuating a careless, superficial, insensitive attitude to place by creating environments that lack diversity, character and authenticity, and that originate from social stereotypes, mass values and intellectual fashions. Such a state, Relph calls 'placelessness'. In contrast he discusses (1976:68) indigenous cultures who have built structures to create a strong sense of place - one of authenticity without theoretical or aesthetic pretension.

At this point in the discussion it is possible to distinguish at least three ways of imposing properties on the environment to differentiate places:

(1) through the enactment of characteristic sequences of behaviour in a particular piece of the environment;

- (2) by mentally associating certain concepts or ideas with a particular piece of environment; and
- (3) by physically altering a piece of environment.

There are constructs in the literature on place that would suggest that the above three methods could be developed into a model of place properties. Relph (1976:47) has listed the elements making up the identities of places as "the static physical setting, the activities, and the meanings...." Elsewhere Relph says (1976:67) that places have structure of form, behaviour and meaning. Canter (1977:158) too has concluded that "a place is the result of relationships between actions, conceptions and physical attributes". As this argument proceeds, the process of making places will be elaborated, and a more complex repertoire of properties generated.

In fact the ways of making places often occur in combination, e.g. by people erecting a building to house an agreed-upon activity and then giving the new place a special name. Places then may consist of physical space and elements together with associations of people, things, concepts, behaviour, times, past events, legends or stories....a physical-psychological complex of properties.

To establish social places, such knowledge must be shared about the nature of a place between individuals. This establishes the social meaning or sense of a place. Places then always carry the implications of persons. They have been described as the exteriorization or expression of man in the environment (Wagner 1972). "Place is the image of man in space" (Van Eyck in Thakurdesai 1972: 334).

In general places continue to exist and have social meaning whilst people use them or relate to them in consistent ways, and teach others of their properties. This provides a heritage of properties that are passed from person to person for each generation's tenancy. Those places that have ongoing cultural values (such as houses, squares, farms, streets, cities, etc.) provide a certain stability of environmental meaning for a society (after Norberg-Schulz 1969:228).

The investigator would like to know where Goethe said: "Field, wood and garden were to me only a space, Until you, my beloved, transformed them to a place"

^{2.} Relph (1976:33) cites Van Eyck (1969) who refers to this property as "a collectively conditioned place consciousness".

The properties of place so far discussed can be seen to be dependent for their character upon interactions of people with the environment, and of people with people. It appears that place is definitely a dynamic process of people-environment change, and so it becomes important to pursue the nature of this change.

Further dynamic aspects of place

Places may have short lives or last for millenia. Places may begin to die when people die without teaching others of their properties, although the sites of many places remain marked with the artifactual remains of their past being, e.g. Shelley's "Ozymandius":

"Two vast and trunkless legs of stone stand in the desert..."
How do places become non-places, or 'placelessness' as Relph
terms it? One way occurs when places transform so as to be of no
relevance to users. Places can thus be destroyed physically as in
war, or by natural disaster. Relph also mentions (1976:60)
mechanisms of a behavioural and conceptual nature:-

"....changing environmental conditions can render it inadequate for the purposes of social interaction and individual behaviour...."

"....changes in attitude, fashion, or other aspects of belief systems, can render an image [of place] implausible...."

Thus old place properties are removed and new ones added. Some old properties may remain, as in the example of the city hotel being demolished and a new hotel being erected on the same site and given the name of the old hotel.

Places may not disappear altogether, but undergo a transformation of properties. Relph refers to the chimneys of industry that were once a symbol of technological process but which are now a sign of environmental pollution. Places take on new meanings and lose their old ones as people's relationships with them alter in response to new world views and cultural change.

Tuan claims (1975:240) that places which are created as public symbols are often unable to "survive the decay of their particular cultural matrix". However some may survive if a new culture transforms the nature of the place symbols to suit their own needs. Buildings that were designed and built for a single purpose may years later be re-assimilated into cultural life by being declared a national monument, a curio or artwork, or by being converted to a museum, or

given some other status or function of social significance.

Even within a cultural group a single place may have a number of different meanings, each of which becomes relevant under different only used at certain times and circumstances. Some places are are out of focus at other times (e.g. the seasonal tourist resort). At many places multiple functions often occur, e.g. a town square may be a place for political assemblies for some, whilst simultaneously being a place where others sit and eat their lunches. Different individuals or groups are likely to relate to a place in different ways. An often cited example is the factory that becomes an exciting playground for trespassing children on the weekends when workers are absent and machinery is still. Buildings and architectural spaces are not always used for the purposes for which they were designed. Canter (1977:178) has also argued that different social groups have unique perceptions of place which not only may differ but can lead to conflict. It seems reasonable then to acknowledge a polysemy of place as an important dynamic quality that is demonstrated when different cultural groups or individuals use a place in different ways.

One dynamic quality of place is that of transposing properties from some places, and imposing them in others. The London Bridge was taken to the U.S.A. - a cultural transplant of place. Explorers, migrants and settlers take familiar place names from their own country and use them to name parts of a wilderness or a newly settled land. In this way a certain security of place is restored in the new and at first, alien homeland.

A further dynamic aspect of place is that of the place itself being physically mobile. If an individual journeys for a long enough period in a wagon, caravan, ship or train, space becomes personalized and the transport system becomes a mobile place.

A further implication of mobile living (or nomadism) is the setting up of camps as instant but temporary domiciliary spaces. If travel direction and path is irregular and aimless such temporary camps are likely to be used but once as temporary places. Relph (1976:83) describes the reduced significance of home as place when people continually relocate their residence; for example:- "...it has been estimated that in North America the rate of mobility is equivalent to each household moving once every three years...."

Amongst many nomads however, camps, although used for short periods of time, are not temporary places. If travel conforms to

regular geographical patterns or seasonal cycles, a campsite may be used intermittently and be regarded by the users as a permanent place. Its frequency of use may vary, and it may only be distinguishable in the landscape when transportable domiciles are erected for the short period of occupancy.

Camps are examples of places at which some properties remain constant whilst others transform in a regular pattern. (Lardil camps will be examined in Chapter 4).

Some may consider the natural landscape to be a more consistent factor amongst all the dynamic properties of place (Relph 1976:30,31). However it undergoes transformation as well, not only from the impact of man, but by the hand of nature itself when considered at the geological time scale. History and archaeology provide records of places that have been buried, submerged, or washed away in times of natural catastrophe (e.g. Atlantis, Pompeii). A more regular type of change in the natural properties of place is that caused by the seasons, lunar and tidal cycles, day and night, climatic influences, etc.

This discussion on dynamic properties of place introduces two more premises for this thesis study. The first is that a study of place, to be fully complete, must encompass properties of the natural environment such as weather, soils, rocks, plants, animals, geomorphology and then focus on types of natural change. Such a study begins in this thesis in Chapter 3.

The second premise is that any detailed study of a social phenomenon (including place) must take as its framework the cultural process to determine what types of links and interactions the social phenomenon of place has with other cultural elements and processes.

Places and cultural processes

The creation and/or destruction of places, are largely complex cultural processes that require detailed study. Turner has noted the same (1973:229,230) in his study of pilgrimages and shrines:-

"....But new pilgrimage shrines are constantly coming into existence as rumours of miracle workers and saints and their therapeutic deeds spread among the masses. These shrines may be situated in new locations. It remains a problem for intensive investigation to study the new conditions under which

such folk devotions survive until they become established pilgrimages legitimated by the authorities of the religious system in whose field of beliefs they have sprung up.....

I am at present inclined to favor the view that a pilgrimage's best chance of survival is when it imparts to religious orthodoxy a renewed vitality, rather than when it asserts against an established system a set of heterodox opinions and unprecedented styles of religious and symbolic action. In this latter situation one finds sects, heresies, and millenarian movements, but not pilgrimage centres...."

The dynamic relation of place to other cultural dimensions introduces a class of cultural models that could be termed 'the This term is borrowed from Goldschmidt cultural ecology paradigm'. who stated (1971:5) that a "theory of cultural ecology postulates that....when and as new techniques for effectively exploiting the environment are discovered or invented, the ecological relationships of the community and its environment are altered, making possible and perhaps necessary the development of new institutional forms. and requiring alteration of proprietary in individual behaviour, attitudes and values." It is not necessary to discuss here whether this postulate is correct or not. It is sufficient to recognize the importance of providing a cultural framework in which to study the properties of places. Proshansky (1972:455) has also pointed this out: "If the environmental psychologist is to predict at all, then he must deal with relational hypotheses which specify meaningful properties of physical settings as related to characteristic activities and behaviour patterns and the psychological and sociological processes underlying them."

Spivak (1973:46) has considered the consequences of terminating or destroying key community places which are "necessary for support of the healthy life of a human family and the larger community."

Such places he terms 'archetypal places'. He suggests (1973:46) that if "an archetype is lost to a community, we should see consequent changes in the structure and location of behaviour in its population, echoing the pattern of those behaviours whose accommodations have been lost, disturbed or distorted. We cannot be sure if the behaviour will be displaced to another setting, mutate into a new kind of behaviour in the same mode or seem to disappear altogether, only to

turn up transmuted into emotional pathology, higher divorce rates, or crime."

A particular aspect of the relation between place and cultural change has been examined by Rapoport (1978), viz. the change in the role of settlement and place that occurs when a group undergoes a change from nomadism to sedentarization. The case study herein is expected to throw some light on this type of change.

It is clear that the social significance of place, its role, and the forces it exerts and receives, can only be fully determined by consideration of the cultural elements and processes to which it is linked. In this thesis an attempt is made to study the interaction of place with such diverse subjects as social beliefs and values, social organization, economy, community decision-making, politics and leadership, social roles, art and music, religion and ceremony, education, communications, material culture, behavioural events and settings, movement and transport systems.

Place and time

As different cultural groups express themselves in the environment in different ways (see e.g. Rapoport, 1969), it can be expected that the nature of places may vary cross-culturally. It has been stressed that man-environment interaction is essentially dynamic. transformation of relations that occur in a context of time and space. One reason for cross-cultural variation in the nature of place may be that different cultures operate within different concepts of space and time (Elkin 1969). The spatial and temporal properties of places must be examined from the world view of the culture that defines such places. It can be hypothesized that a contrast will become evident between the Lardil use of place in response to natural units of time (seasons, lunar cycles) during hunter-gatherer life, and use of place with cycles of Western time units (hours, days, 'the working week') as in the contemporary settlement situation at Mornington Island.

With respect to the temporal properties of place, Tuan (1977:179) provides three categories of time-place relationships:-(i) time as motion or 'flow', and place as a pause in temporal 'current'; (ii) attachment to place as a function of time, captured in the phrase, 'it takes time to know a place'; and (iii) place as a memorial to times past. In the last case meaningfulness of place is determined by people recalling some significant past event associated with a

particular place (e.g. a past battle at a 'battlefield'). Often there is a physical marker to symbolize the event, such as a monument.

The second type of place that Tuan mentions above is that which one experiences regularly in daily life and with which one associates the same repeated meaning, behaviour and appearance. One can observe that individuals and groups demonstrate regular sequences or cycles of behaviour at a fixed number of places, and in a fixed order, e.g. the milkman who delivers milk at the same sequence of houses, at approximately the same time every night.

Tuan (1975:242) also has pointed out that repeated experience is one way in which affective bonds reach beyond human beings to place. This is often in contrast to the first type of place-time relationship, which may consist of experiencing a place for a brief time in a journey and then forgetting it soon after. Of course the reverse may be true as previously mentioned - the properties of a place may make such an impact on a person that a short exposure may be all that is required for an intense and everlasting memory.

There is thus no simple quantitative relation between length of time experienced at a place and intensity of feeling for, or meaning of that place. Places can be created instantly by an individual or group, but in general, places tend to mature and display some degree of permenancy over time, as behavioural properties are reinforced by users, and as they accrue new properties to add to the complexity of their nature.

Bachelard (1964) has convincingly demonstrated how attachments to home place grow through ongoing daily use, accumulation of experience, committment to maintenance, and the association of memories and daydreams of things past and imaginary.

A place may evoke in a person "yearnings for times past, for vanished ways of life, or for romanticized history", feelings that are described as 'nostalgia' (Newcomb 1972:441). Thus people obtain emotional relationships with places (Lowenthal 1975).

Place experience and emotion

Places that evoke affection in people Tuan (1975:236,241) calls 'fields of care'. They provide some sort of comfort or material support that is likely to generate an affective bond between persons

and place. There need not be anything visually outstanding about such places and they may not be discernible to an uninformed visitor or passer-by. Tuan gives as an example of a field of care, the urban neighbourhood (1977:243). Although boundaries may be invisible to the visitor, groups of inhabitants often establish conscious spatial limits, focal points for social interaction and a close identity with their everyday living environment. When such neighbourhoods become threatened by large-scale redevelopment plans, protests from residents often result. Strong emotional expression of attachment to place may be evoked. People will physically defend their places. In addition, unified group action against redevelopment reinforces the identity of people with their neighbourhood and their community. They demonstrate care for their 'field of care'.

Bachelard (1964) and Relph (1976:38-40) have stressed the intensity of affective bonds that people have with their homes. Such bonds include heriditary and cultural components, as well as memories and childhood experiences. "To have roots in a place is to have a secure point from which to look out on the world, a firm grasp of one's own position in the order of things, and a significant spiritual and psychological attachment to somewhere in particular". (Relph 1976:38).

Tuan (1977:33) has contrasted the child's attitude to place with that of adults, who tend to have many more nostalgic experiences derived from ongoing experience:-

"Place can acquire deep meaning for the adult through the steady accretion of sentiment over the years. Every piece of hairloom furniture, or even a stain on the wall, tells a story. child not only has a short past, but his eyes more than the adult's are on the present and the immediate future. His vitality for doing things and exploring space is not suited to the reflective pause and backward glance that " make places seem saturated with significance. The child's imagination is of a special kind. It is tied to activity. A child will ride a stick as though it were a real horse, and defend an upturned chair as though it were a real castle. In reading a book or looking at its pictures, he quickly enters a fantasy world of adventure. But a broken mirror or an abandoned tricycle has no message of sadness. And children are baffled when they are asked to interpret the mood of a

landscape or landscape painting. People have moods; how can a scene or place look happy or sad? Yet adults, particularly educated adults, have no difficulty associating inanimate objects with moods. Young children, so imaginative in their own spheres of action, may look matter-of-factly on places that to adults are haunted by memories."

Tuan (1977:32) has noted that all human beings appear to have personal belongings and asks if they all require a personal attachment with a place. "....people, young and old, feel a need to anchor their personality in objects and places." Of all the human-place relations, one of the most intense is that of identifying with a place so strongly that one feels part of it and one believes it is a part of oneself. There is a merging of place identity and self identity.

Tuan (1977:242) describes such a form of emotional attachment to place - that of a religious one. "The religious tie is one of kinship, reaching back in time from proximate ancestors to distant semi-divine heroes, to the gods of the family hearth and of the city shrines..." A similar system of human identity with place pervades throughout much of Aboriginal Australia (Rapoport 1972, Berndt 1974, Strehlow 1970). Groups of Aborigines have emotional ties with many places in their lands that were created by ancestral heroes. Many such places contain magico-religious properties that link place energies with particular people who share part of those unique place energies. This subject will be pursued later with respect to the Lardil.

A contrasting aspect of emotion and place is that of dislike for some places, e.g. the prisoner may not enjoy his cell, and the schoolboy may not be happy at his desk. People are sometimes caught in the dilemma of wishing they were somewhere else (nostalgia) but at the same time being committed to staying in a place that they do not like (melancholia) (after Relph 1976:42).

Relph (1976:51-61) makes a detailed examination of ways of experiencing and of not experiencing places, in terms of various mental attitudes or 'frames of mind'. He uses such concepts as empathy, self consciousness, unselfconsciousness, detachment, dispassion, alienation, unreflective involvement. He attempts to delineate modes of identification, part identification or non-identification of people with place. As a way of classifying places

he says (1976:143) these categories can be used to differentiate qualitatively distinct places by providing a model that both reflects and guides experiences. This is an important paradigm in that it is one of the few in the place literature. However its exact usefulness is unclear. Relph says (1976:62) his categories of place experience are not discrete nor mutually exclusive. He goes so far as to put forward a polarity of attitude to place. He contrasts self-consciousness of one's surrounding places with unselfconsciousness of surroundings. He associates (1976:68) with these two states of mind, contemporary Western man and 'primitive' people respectively.

It is difficult to take this latter idea seriously. Individuals change their level of consciousness about things continually. It may be argued that some people are more often aware of surrounding places than other people are. For example amongst the Lardil Aborigines there are some individuals who display continual awareness about place whilst moving through the landscape. They are always informative, knowledg@abl@, and concerned about each new place encountered.

Relph does however, elsewhere recognize the complexity of emotional and attentive relationships with places:-

"As a form of existence authenticity consists of a complex awareness and acceptance of responsibility for your own existence. But in terms of the experience and creation of places, authenticity rarely appears in such a pure form - instead it is discontinuous and occurs with different levels of intensity." (Relph 1976:78).

Territories and boundaries

The mention of people defending their neighbourhood introduces a paradigm of place that has so far not been mentioned, that of 'territoriality'. The concept of human territoriality is one which has recently been developed by ethologists and anthropologists alike. Human territories can be regarded as a special class of places displaying a special set of place properties. Peterson (1976B) has reviewed the literature on the subject and concludes that man is territorial in a number of senses. "He has a personal space halo, notions of property in land, a willingness to defend areas of ground

and limits to the range of his daily, yearly and lifetime wanderings."(Peterson 1976A:13.14).

Because territories may exist for individuals, small groups, large groups and other aggregates of population, one can distinguish a scale of territory types and sizes. Lyman & Scott (1967:236-243) discuss the differences between (a) body territory or personal space, (b) the territory occupied by a small group of people whilst interacting, (c) public territories accessible to all members of a community. At a larger scale can be considered national territories.

Anthropology is concerned with communal and tribal territories. The literature on territoriality in Aboriginal Australia (e.g. see Peterson 1976A) contains functional models explaining the complex interrelation of factors such as spacing mechanisms, ecology, local group organisation, local travel, resources, division of labour.

Petersen (1976B:13,14) discusses the origin and maintenance of community territories and states that man "has evolved in societies so that anything that is intrinsic to society survival is of fundamental biological importance. Ideologies, most commonly unilinear ideologies, that associate groups of people with tracts of land appear to have been basic to society survival in huntergatherer and many horticultural societies, helping to ensure their continued survival by forcing small groups to meet the population problem locally."

If this hypothesis is applicable to the Lardil in pre-contact times, an interesting discovery herein may be the way in which social and religious places act as spacing mechanisms to maintain the focus of particular groups in the environment, and thus tend to keep such groups localized. In addition it might be interesting to see how such an ancient pattern of evolution could possibly be swiftly disrupted.

Boundaries are an important feature of territorial places. Although size and location of place may vary considerably, boundaries of place are often fixed by individuals and groups, and can provide important definition to place (Tuan 1977:11). The common nature of boundaries is that they distinguish the spatial discontinuity of something. Nevertheless their properties vary greatly. Boundaries often have associated with them, rules and other devices to control their permeability; such things as (a) admission procedures,

(b) inclusion and exclusion rules, (c) fences, walls and architectural symbols, and (d) authorized social roles (e.g. guards, ticket collectors, customs officers, boundary beaters, custodians, security officers). These all combine in different ways to control how people and things cross or do not cross into or out of a place. People commonly defend their places with aggressive displays at or near their boundaries, e.g. the farmer chasing trespassers, or neighbouring countries fighting over their border definition.

There are still further ways of maintaining boundaries:- (a) with the help of guard dogs; (b) by the use of ceremonies (e.g. warding off evil spirits); (c) by a group emphasizing some property of their habitat, that is different to their neighbour's - perhaps a local resource, a custom, an architectural style, or more pleasant weather, things that are said to stop at their boundary. Place then may play a role in the self-identity of the group occupying it.

Although boundaries are usually relatively fixed, they may at times exhibit dynamic qualities. They can shift to expand or reduce the size of a place. Boundary re-definition may be achieved by adjusting physical markers or by imposing new behavioural rules in an area. If boundaries consist simply of the association of a particular environmental feature, such as a stream or a street, with the edge of a prescribed space, a boundary might be adjusted without any physical disturbance of the landscape - the operation may be performed on a map or by way of verbal agreement amongst the local people. The British legal system involves many mechanisms for redefining places, e.g. land use zoning appeals, title transference, sub-division of land, the conveyance of land ownership.

Behaviour settings

Mention has been made of such place attributes as behaviour-environment interaction, boundaries, ecological structure, time properties. These things can be observed to combine in a complex way to form a special class of places known as 'behaviour settings'. This unit was devised by Barker and Wright (1955) in mid-west towns of the U.S.A., and elaborated upon by Barker (1968). The 'behaviour setting' "is a standing behaviour pattern together with the context of this behaviour, including the part of the milieu to which the behaviour is attached and with which it has synomorphic relationship". (1955:9), i.e. it is an ecological unit consisting of an interaction

between behaving persons and things, time and the immediate environment. The physical things and time (or 'milieu') are supportive of the behaviour and surround it. There is an interdependent relation between the two, and hence the term 'synomorphic'.

'Standing behaviour pattern' implies that the behaviour is persistently extra-individual, i.e. there may be a turn-over of individuals in a setting, but even though they come and go, they display repetitive characteristic patterns of behaviour in the setting. Thus the structural qualities of the setting are maintained independent of personality, except in the case of social deviancy. Such settings involve forces which coerce individual behaviour to conform to recognized setting models of what is the correct behaviour to carry out in the circumstances (Barker and Wright 1955:7-9).

A school room is a good example of a behaviour setting. The milieu consists of the building, its furniture and equipment (desks, teacher's table, blackboard, chalk, maps, etc), and the system of time used to structure the day's teaching activities (periods and bells). The standing behaviour pattern involves students sitting in rows at their desks attending at times to their school books, and at times to the teacher and the blackboard, as they systematically carry out their lessons. Control of the setting is in the hands of the teacher, perhaps with support from the headmaster and his cane. Setting deviancy such as speaking out of turn, throwing missiles, excessive noise, failing to achieve set goals is dealt with by warnings, intimidation and punishments.

Other examples of behaviour settings include church confessional, theatre performances, shops, factory assembly lines, boxing rings, offices, etc. The behaviour setting puts people in the situation of contributing their personal behaviour to setting maintenance. At the same time their individual lifestyles and life spaces are shaped by the setting. This is what comprises the synomorphy. The boundary of a behaviour setting is generated by the behaviour, and is circumjacent to the behaviour. It may or may not involve physical components (walls, fences, floors, roofs).

Behaviour settings can be thus seen to comprise a special class of places of a complex nature. However the literature has not clearly demonstrated to what extent this model is applicable to other cultural groups; and if it is, what cultural variables might be involved. It is hoped that this study will contribute to these problems.

Place classification

Peterson suggests (1976B:6) that boundedness "has an aesthetic and analytic appeal, because by creating a finite universe it allows for the total exhaustion of a topic in the course of analysis and makes for ease of comparison. It is this intellectual appeal that transforms what are often really gradients, clines, areas of intergradation or zonation into discontinuities or bounded units."

Analysis of place using comparative means implies a form of place classification. Another method is by contrast. Many places have different properties and features, but one can find similarities between some places. Such similarities and differences allow cultures to classify places according to various criteria and within different systems of knowledge, e.g. geographic, economic, demographic, architectural, etc. (Lynch(1960) uses the categories of paths, nodes and districts).

Nevertheless the complex diversity of place properties and types prevents the creation of a single set of simple finite or mutually exclusive categories into which all places can be neatly sorted. There may be place units that are ambiguous by displaying some of the attributes of one class and at the same time some of another class. Effective classification has to focus on some particular key property (e.g. size, vegetation, urban density) whilst ignoring others (perhaps group territories, climate, architectural style). Relph (1976:29) cites Donat who says that places "...never conform to tidy hierarchies of classification. They all overlap and interpenetrate one another and are wide open to a variety of interpretation."

The study of the classification of things by cultural groups is a recent field of study within the academic disciplines of cognitive anthropology and sociolinguistics. Attention has been on such subjects as ethnobotany (Berlin et al 1974), ethnogenealogy (Conklin 1964), hamburgers (Frake 1962), reptiles and fish (Bulmer et al 1975), but the investigator knows of no detailed study on the places of a cultural group and their classification of those places. There are some studies however, that deal with some of the properties of one particular class of places for several groups - e.g. Berndt's study (1970) of sacred sites in part of Western Arnhem Land, and that of the places visited and/or made by ancestral heroes in the land of the Walpiri and Kartangarurru - Kurintji

(Petersen et al 1978).

A summary of place properties

The above observations on the nature of place provide a preliminary list of perperties to investigate and consider in the case of the Lardil of Mornington Island. Perhaps other properties will be found, and cultural factors will be isolated. In summary, these properties are:-

- (1) Places have relative location in space, and variable size and scale.
- (2) Common methods of making places are as follows:-
 - (a) A place can be partly or wholly created by altering the physical characteristics of a piece of environment.

 Such physical features may be natural or man-made.
 - (b) A place can be partly or wholly created by enacting special types of behaviour at a particular piece of environment. Such behaviour becomes associated with that place.
 - (c) A place can be partly or wholly created by the association of concepts, ideas, legends, names, memories with a particular piece of environment, i.e. knowledge properties.
- (3) Places may be made using a combination of the above methods, resulting in physical-psychological complexes of multiple inter-related properties (physical structures are not necessarily a component).
- (4) Some places can originate in the mind, as distinct from places of the outside world.
- (5) People acquire emotional relations with place affection, nostalgia, dislike, etc. In some circumstances personal and place identities seem to merge.
- (6) Properties of place are transmitted socially and thus may stay constant through generations and cultural periods.
- (7) Differences and similarities between places result in various methods of classifying places.
- (8) Places display many dynamic properties. For example:They are created or destroyed. Destruction can be caused by man or nature. The social value and meaning of place can change.

 Properties can be taken from one place to make another one elsewhere, and there are such things as mobile places. There

- is a polysemy of place for different individuals, groups and contexts. In general the nature of place can be seen to be an ongoing process of people-environment interaction.
- (9) Places have time properties such as frequency and degree of use. Places have the ability to accumulate properties over time, and may have associated with them past events, experiences and memories.
- (10) People acquire territorial relations with place. They create boundaries around their places and may be prepared to defend them. Such behaviour may be linked to cultural mechanisms of survival.
- (11) A special class of place with complex and stable properties has been isolated by Barker and Wright (1955) in North American towns that of the 'behaviour setting'.
- (12) Some cross-cultural variables in the nature of place have been identified e.g. the role of cultural concepts of time and space in the definition of place, the cultural perception of places by the users, the role of cultural process in place changes, relative values of places.

Most of the remainder of this thesis consists of a detailed ethnography on the Lardil properties of place. Traditional places as used in the time of hunter-gatherer economy (pre 1914) will be discussed as well as the contemporary use of place (1975). The properties of these two diachronic ethnographies will be connected by an explanatory chapter on the history of cultural and environmental change. The concluding chapter returns to analysis and the problems of constructing a theory of place.

But first the methods of data collection will be discussed for the reader to establish the credibility of the ethnographic content of the thesis.

Selecting and combining methods

In the last ten years there has emerged a scientific discipline concerned with the nature of man-environment relations. It has been given a number of names, e.g. architectural psychology (Canter 1969), environmental psychology (Proshansky et al 1970), the social science of architecture (Hillier and Leaman 1974:Part 1). The data collection methods so far used in this discipline have been varied and mostly drawn from the social sciences. They have been listed, described and discussed by a number of investigators: Reichardt (1970), Proshansky et al (1970:Part 6), Proshansky (1972), Lozar (1974A:169-70), Ittelson et al (1974:208-242), Heimstra and McFarling (1974:9-24), Canter and Lee (1974:63-64). From these reviews it can be seen that a number of dangers exist in the adoption of data collection methods for use. One investigator issues a sound warning: that there is "no single, all embracing behavioural science methodology ready for the taking by whatever new discipline needs it." (Proshansky 1972:453). The choosing and design of data collection methods must be based on careful consideration of the nature of the phenomenon under study. Initial observations and assumptions must be explicitly stated. Care must be taken not to inbuild assumptions into the data collection programme that contain inferences about the meaning of the behavioural events as opposed to their actual properties. Data units must be chosen that will represent the true nature of the phenomenon under study. Such representation must be at a level that will be effective for use in analysis and will lead to the construction of theoretical models that have explanatory and/or predictive capacities (after Lakatos 1968). Proshansky points out (1972:455) that a general methodological approach within environmental psychology must rely heavily on exploratory and descriptive investigations, as opposed to causal-hypothesis approaches, due to the properties of the subject and the present level of theoretical development in the discipline.

Man-environment studies require the relating of a patterned environment to a sequenced pattern of human behaviour. Data must be collected that describe (a) the physical environment; (b) forms of human behaviour in it; and (c) interactions between (a) and (b). This requires a method of describing changing phenomena in time. Such description also involves entities with dissimilar properties, and so it is expected that a number of data collection techniques

must be used in combination 1 as a coherent programme of data collection. 2

The present study takes all the above points into consideration. Some basic assumptions about the nature of the phenomena have been declared in the introduction and others are formulated in this chapter in association with the methods they serve. These assumptions represent initial premises from which the data collection methods have been logically selected and combined. The methods and techniques have been drawn from a number of disciplines, including ethnography, -that branch of ethnology dealing with the description of cultures. Methods were explored by testing them individually and in combination in the field to see what quantities and quality of data they could generate and what technical problems they presented. Preliminary findings from the data collected by each method influenced successive collection operations in an attempt to ensure that bodies of data would be complete and reliable.

The literature cited above contains no reference to participant observation, a method used largely by anthropologists. Here it is used, not only as a data collection technique, but as a framework in which all investigation operations and methods are placed.

It is suggested that the final programme of data collection as outlined in this chapter and in other parts of the thesis, represents a significant methodological contribution to the study of man-environment relations.

Choice of study population

The Lardil people of Mornington Island were chosen as the subjects for this study from some ten communities or settlement populations of Aborigines in north-west Queensland. 3

These other groups have not managed to retain their traditional culture to the same extent as the Lardil. Their traditional systems of cultural beliefs and activities today receive little overt social expression. ⁴ Thus it was decided that the Lardil people had the most potential for a study concerned with environmental knowledge. Their traditional environmental knowledge is still actively exercised, yet they have created a whole spectrum of new environmental relationships

In some ways this is comparable to a psychological test battery.
 Following a three month exploratory field trip through north-west Queensland.

^{1.} One problem associated with the combined use of dissimilar methods is the possibility of generating compound errors in the data. This has been noted by Lozar (1974B:188).

^{4.} This has been substantiated by regular visits to all of these north-west Queensland communities in 1974,1975,1976,1978 and 1979. However, some cultural revival (dance and initiation activity) has recently occurred at Doomadgee.

through living in Western settlements and travelling to cities, towns, ports, cattle stations, and, in some cases, overseas.

Another reason for selecting the Lardil to work with in this study, was their externally oriented lifestyle. Observation of contemporary daily use of the environment was comparatively easier than in other settlements (the Dajarra fringe settlement was an exception).

Previous ethnological works

Unfortunately little ethnological material is available on the Lardil. Although the ethnographer Roth visited Mornington Island perhaps several times in the first part of the century. I his publications (1901A, 1908A, 1908B, 1910A, 1910B) contain only brief references to its inhabitants, Sharp (1936, 1939) produced two outstanding works on the Lardil social classes and their relation to totems. The field studies of Tindale in the early 1960's, McKnight in the late 1960's, and Huffer in 1970, have so far not yielded any major publications. The very brief field trip of Cawte and associates generated numerous publications (1968A, 1969, 1972, 1973, 1975), but it is difficult to assess the validity of many of his social findings, especially since discrepancies and errors have been observed in some of his base data, such as in his maps (1972:28 and 1974: 109). Z Cawte (1973:106-119) has proposed a variety of explanations for the malkri syndrome, a form of illness that occurred traditionally amongst the Lardil, and which they explained through behavioural and environmental factors. It is hoped that this study will contribute to a better understanding of this phenomenon which does not seem to have been completely explained by Western science. Hale has collected a large amount of language data but his publications (1966, 1967, 1970, 1973) have so far been of a technical linguistic nature. Fortunately, there are two invaluable manuscripts written by Lardil individuals, one by Dick Roughsey (1971A, B), and one by his wife Elsie Roughsey (1972). These contain a wealth of written information on the changing Lardil world as experienced by two of its members. A content analysis has been carried out on these two works and they are used extensively in this thesis.

Some excellent photographic data have been uncovered. Social change can readily be observed and analysed from the photographs

^{1.} An account of Roth's first visit to Mornington Island has been uncovered by the investigator and is enclosed in Appendix 1.

^{2.} Some of these errors will be pointed out in later sections of the thesis.

contained in The Annual Reports of the Chief Protector of Aboriginals (1913, 1914, 1916), MacIntyre (1921), Nelson (1936), McCarthy (1948), Gloe and Weller (1949). Also the Australian Institute of Aboriginal Studies houses a variety of film footage from Mornington Island including material on dance, and on circumcision ceremonies held in 1958 and 1972,

As well as the above, there is an extensive number of other scientific writings of various sorts, travellers' accounts and observations, technical reports, newspaper and magazine articles, mission publications, technical pamphlets, correspondence, etc., which make references to Mornington Island, the Lardil people, and the mission history. This material has been compiled into a bibliography on the Wellesley Islands, and it is drawn upon in this study to supplement field data, or to provide frameworks (hypotheses) for collecting field data.

The framework of participant observation

The various data collection techniques used in this work are only meaningful when placed in the context of the field method of participant observation. The use and nature of participant observation as carried out in this study, is in general accordance with the lengthy description of the method of Koepping (1973). His work will be drawn upon to provide a brief explanation of the method:-

Participant observation is "a unique research method of anthropology with a qualitative orientation" and "as a method it is different from purely empiricistic data-collection" (1973:54). It aims to understand the unique qualities of the life-ways of a cultural group in their own terms. The investigator must participate in the everyday activities of the study group and attempt to experience these activities as the group does. Hence he must undergo an internalization of the values of the group both on the thought and action levels. Although "he will never be able to substitute the new cultural patterns for his own ones completely, he has to internalize to such an extent the intentionalities of the observed group that he can acquire as much as possible - full knowledge of the elements of the approached culture" (1973:48). This implies that the investigator must gradually undergo a personal transformation and in so doing acquires a qualitatively different form of life style and understanding.

However, there must also occur a parallel mind existence as a Western scientific ethnographer and theoretician. The activity of theorizing occurs before, during and after field work with the study culture. Participant observation "includes not only the perception of the "other" human being as a quality, it also requires a priori and posteriori knowledge for the interpretation of the data gleaned from the experience itself, knowledge which takes the qualitative aspects of the data into consideration and tries to theorize without manhandling the "flavour" (1973:43).... "by asking the right questions in advance, relying on many thought formations before their time, by putting then something substantial into the field, by perceiving also the experience itself as a qualitative act", the investigator is able "to put these qualitative aspects of that experience into a theory, projecting thought and experience at one" (1973:43). This dual activity of theorizing and experience, of switching the planes of thought and existence continuously, comprises an endless dialectical process of different conscious entities influencing one another; a dialectical relationship between the method and the result achieved (1973:33, 43, 48, 49),

Within this context of participant observation of the study group, can now be put all the other investigation activities:problem formulation and re-formulation; hypothesizing and testing of hypotheses; and a series of field trips to collect data, with intervals between during which the investigator was occupied with theoretical adjustments and data analysis programmes.

Early field work

Two preliminary field trips were made, ¹ each of seven days, to examine the Mornington Island mission settlement, to familiarize with the study population, and to develop an ongoing rapport with them.

The third field trip was preceded by a two month pilot study in the fringe settlement at Dajarra in central western Queensland. By fringe settlement is meant the following: a cluster of shelters and domiciles that are positioned, orientated and constructed by the occupants at low cost or no cost: being located near or within a town, yet physically separated from the town; contravening local building regulations; and built on land not owned by the occupants. The fringe settlement at Dajarra contained about 80 people at that time, most being from the Andakerebina tribe, together with attached kin. This self constructed settlement contained a complex set of social properties

^{1.} During December 1973 and April 1974.

imposed on space, and its occupants were externally orientated in their living activities.

These settlement conditions were observed to be at least superficially similar to the Mornington Island situation. The pilot study at Dajarra was used to briefly test out the methods of participant observation and naturalistic observation with a smaller population than that of the main study group on Mornington Island (approx. 320 Lardil adults).

The third field trip to Mornington Island was of three months duration and the following activities were carried out:-

- (a) The methods of participant and naturalistic observation were adjusted and further developed.
- (b) A working map of the contemporary settlement was prepared (scale 1:2500) identifying buildings, people's residences, landscape features etc. Working maps of parts of Mornington Island were made showing detailed geographic features. Other maps of the settlement and its nearby environs were made showing dance grounds, important story places, ceremonial places, old graves, place names and other features of local importance.
- (c) Demographic data were collected for the entire community. For each individual: name, age (often only approximate), genealogy tribal identity and origin, and migration information.
- Some twenty persons with a sound and active knowledge of bush living were identified as potential informants. For the purposes of this study, the period of bush life is taken as prior to 1945. An acculturated change began to occur in the Lardil society in 1914 upon the arrival of the first missionary (Hall). However, the first missionaries focused their attention on the children and adolescents, and it was not until the late 1940's that bush life was permanently discontinued by the adults, ² Some of the oldest living people today thus have a good recollection of bush life.
- (e) Structured interviews were carried out with a range of adults to establish their effectiveness as informants. The interviews were further useful in that data were collected from individuals on (i) life travel experiences, (ii) types of domiciliary experiences, i.e, types of shelters and houses lived in during one's life, (iii) a 'cognitive map' was drawn of the mission settlement by each individual showing places he or she knows or likes the best

During September - December 1974.
 Some temporary revivals did occur during the war when the missionaries evacuated, and after the war when there occurred periods of acute water shortage in the mission.

or that are considered important. (This projective technique is derived from Lynch (1960)).

These first interviews were by no means easy. The investigator found the Aborigines to be tense and difficult to communicate with. This was because of the strangeness of the idea of interviews to the Aboriginal people, their lack of understanding of why the investigator was performing this activity, and the investigator's inexperience in using this method. Such communication problems with Aborigines have been noted by others (e.g. Cawte 1972:146). They were only overcome as the process of participant observation provided a mutual understanding between the investigator and the Lardil adults, - an understanding of each other's cultural identity and social, economic and intellectual motives.

(f) A method was devised to discover systematically the common range of behavioural events, that constituted the everyday fabric of social life for the Aboriginal people in the contemporary settlement situation. Working units of man-environment interaction were identified for more detailed study.

This last method was based on the following assumption of Proshansky et al (1970:29):- "Human behaviour in relation to a physical setting is enduring and consistent over time and situation; therefore, the characteristic patterns of behaviour for that setting can be identified," If human behaviour can occur systematically in time and space, then the range of such behavioural patterns should be observable, and this was found to be clearly the case for much of the everyday behaviour in the community. A set of visual fields was selected in which all the exterior spaces of the settlement could be satisfactorily observed. Each field contained observation point/s from which systematic and unobtrusive observation of behaviour was made. The scale of behaviour observed was that of 'episodes of molar behaviour'. By 'molar behaviour' is meant the self directed behaviour of an individual as a co-ordinated and integrated whole for any given instant of time (Barker and Wright 1955:178-181). Such units of behaviour occur for an individual in an ongoing 'stream' or 'episode', the physical setting of which may change (Barker and Wright 1955:4-10). As the focus of this study is on the use of shared environmental knowledge by the study population, the scale of behaviour observed had to be at the extra-individual level. Thus, episodes of behaviour were studied that were to some degree consistent over time and situation for the members of the study group,

Preliminary observation was directed at the outside of domiciliary units. There appeared to be a domiciliary territory about each domicile, in some cases about a cluster of domiciles. The extent of these territories was identified by observing (i) physical markers of the territory's edge, e.g. fences, lines of rocks, shrubs, changes in landscape, etc.: (ii) behavioural responses by outsiders coming to visit, and by inhabitants responding to visitors, trespassers, and others, e.g. location of greeting behaviour and aggressive behaviour during territorial encroachments, changes of walking, gesture orientation, etc.: (iii) the consistent use of space for particular domiciliary activities by inhabitants, e.g. cooking, eating, washing, defecating, sleeping, craftwork, gossiping, etc.

Following the location of domiciliary spaces, attention was directed to other spaces and their use. Observation was carried out in these non-domiciliary spaces for periods of several hours systematically for all daylight hours and days of the week, in all of the defined visual fields. Night time data were less systematic relying more on participant observation and partly on auditory data.

After several months of observation these observed units of behavioural episodes were separated into four classes using criteria concerned with their relation to the spaces and artifacts at and near which they occurred. These four structural classes were:-

- (i) Behaviour episodes that occurred regularly at a space and at a time, e.g. dancing practice, the selling of handcrafts, meeting the plane, etc.
- (ii) Behaviour episodes that occurred regularly in a particular space but not at any regular time, e.g. walking along pathways.
- (iii) Behaviour episodes that occurred at a regular time but not in a particular space, i.e. those that occurred at many different places at regular times, e.g. going hunting.
- (iv) Behavioural events that did not occur consistently in space or time, and so were of apparently random occurrence. These were identifiable by the nature of the units of molar behaviour and sometimes by their characteristic sequence, e.g. fighting behaviour.

Changes within some specific examples of structures were also observed.

During the fourth field trip of almost eight months duration, a programme of photographic recording was carried out in the settlement of both observed behavioural units and physical structures (buildings and their services, earthworks, roads, landscaping, natural features, etc.) In addition, a detailed study commenced of two examples chosen from the 24 behaviour episodes that had been observed to occur systematically in time and space. These episodes were termed 'man-environment interaction' units. The two chosen for study were dance and obtaining shelter. They have both been common activities amongst the Lardil since traditional times. The reasoning behind the selection for study of these particular two units is reproduced below from a previous description of the investigator's fieldwork written in May 1975:

The two examples can be contrasted in a number of ways that suggest phenomenological distinctions of perhaps important scientific significance. A significant number of descriptions of persons 'obtaining shelter' have been collected and most (although certainly not all) concern the efforts of a single individual in this task. The shelter may ultimately house a number of people, and there may be numerous social influences in the process of its acquisition. Nevertheless, it often largely concerns just a single individual interacting with his physical environment. Furthermore, the interaction results in a major, and often permanent transformation in the physical environment; the addition of a sizeable artifact that may remain there for up to 20 years. In contrast, the dance phenomenon consists of a sizeable number of individuals (at times up to 80) in a very social setting, who, although performing numerous transformations of the arrangement and dispositions of human bodies in space, do not permanently affect the environment, save for some alteration to the surface of the ground.

Also the creation of shelter is a 'design act' or an environmental modifier act, i.e. a redistribution and synthesis of physical resources. The dance is an environmental user action - people using an environmental venue that exists for that specific use. This illustrates the contrast of active change on the environment, with active support of the existing environmental facilities.

^{1.} May - December, 1975

The two phenomena also occur in different time scales. Obtaining shelter may be an event that occurs due to (a) changing environmental needs, e.g. necessity to hunt food in more productive settings in different season, (b) travel to far away places, (c) physical obsolescence of the previous dwelling, or (d) due to social necessity, e.g. getting married, shifting from a disliked neighbour. Dance occurs in a more 'everyday'sense. Dances for pure social enjoyment may occur every evening in pleasant weather. Over' the last 75 years, there have occurred numerous festivals or displays of dancing that necessitate daily practice for up to 6 weeks in advance.

The nature of these two differing examples also holds important methodological implications. In the case of dance, a group of people participate in a social event. It is therefore possible to collect data on that particular event from informants who collectively participated. However, data on how a man obtains his shelter may be most directly collected from him alone (either by observation of him as the event occurs, or from his retrospection of the event during conversation after it has occurred). Now each Lardil shelter can be said to be similar in visual appearance to neighbours' shelters in the nearby environment there exist similarities in general design, scale, materials and construction amongst groups of the Lardil people concerning the derivation of forms and spaces in their built environment. In the case of traditional dance, it can be seen that a cultural intelligibility amongst the participants must also exist which allows them to co-ordinate singing, music, and dance on different dance grounds with differing participants, and yet produce similar artistic events, e.g. the dance of Thuwathu the Rainbow Serpent, or the dance of Tumenta the Hollow Tree Man.

<u>Interviewing</u>

Information on the two man-environment interaction units was to be elicited in structured and semi-structured interviews. A data collection programme was devised which aimed to collect from informants, memory knowledge describing specific incidences of these two events. These verbal descriptions would comprise ethno-psychological accounts, i.e. the data would be ethnographic, and consist of consciously constructed psychological models of the man-environment interactions as described by individuals who participated in those events. It was intended to collect samples of descriptions of the events distributed

at various times over the last 60 years. Then a structuralist type analysis was to examine the changes in social knowledge pertaining to these events which had occurred during that time period, 1

However, this strategy proved methodologically impossible, simply because it was difficult to get most informants to remember specific events from the past in a systematic and unconfused way. Although reference was frequently made to specific experiences, knowledge could not be easily elicited unless the framework of discussion was orientated upon the cultural theory of the Lardil, i.e. upon the proper way things should be done in the society, upon the proper way to behave in various circumstances, and upon the correct forms and content of social knowledge. Once this framework of orientation to cultural theory was established as the format for interviews, informants could readily discuss any aspect nominated within this format, and illustrate such aspects with personal experiences of specific events. Although informants frequently used anecdotes from experience to illustrate their knowledge, details of past events were usually limited or confused.

It was possible to place these descriptions in a time context using the concept of a 'mission period'. This is derived from the Aborigines' concept of time used relative to mission history. The units of time used, refer to the period of residence of the head missionary, e.g. "It happened during Mr. Wilson's time", or "He was a boy in Mr. Hall's time". Thus"-

- (1) "before Mr. Hall's time" pre-mission period (pre 1914)
- (2) Mr. Hall's time (1914 1917)
- (3) Mr. Wilson's time (1918 c1941)
- (4) Mr. McCarthy's time (c. 1944 1948)
- (5) Mr. Belcher's time (c.1950 1969)
- (6) the contemporary situation "only lately" (1970 1975)

In this study the terms 'traditional life' or 'traditional culture' will refer specifically to a period from c.1880 to c.1920. This period is partly remembered by the oldest living informants. The parents of these informants lived their adult lives in this period, transmitting their lifestyle and cultural knowledge to their children. In Chapter 5, it will be shown that some acculturation of Western traits occurred in this period, but it will be argued that no great impact was made on the culture till the missionary Wilson began to exert his mission policies (c.1920). Children (including most informants) were then subjected to dormitory life. Nevertheless, contact with

Manther of the second and the second

^{1.} This analysis proposal was described in the May 1975 research description by the investigator.

parents was maintained and returns to bush life were made, Traditional culture continued to be transmitted, but in diminishing degrees. The collective knowledge of their parent's bush life will be taken as the contemporary knowledge of the traditional life.

It was noted from observations on the nature of contemporary examples of dance and obtaining shelter that these events did not always proceed in the way that they were supposed to, according to the theoretical knowledge of the informants. Social knowledge about events was not always a close model of reality. Perhaps the explanation of this is as Levi-Strauss proposes (1963: 281): "conscious models, which are usually known as 'norms' are by definition very poor ones, since they are not intended to explain the phenomena but to perpetuate them". When informants were asked to explain this state of affairs the answers were typically "they don't follow the law properly", or "those young boys got no law" or "they been lose that law". Two explanations seem likely here. The first could be that social change after European contact has brought about the destruction of these various social structures. The second would be along the lines of Levi-Strauss: that there has always been a rift between behavioural codes and behavioural practices. This problem will be discussed later, but it is important here to note the methodological danger of trying to interpret descriptions of events as close models of those events.

Interviewing thus continued with an aim to structure discussion subjects through questioning but within a framework of Lardil knowledge. It became obvious that knowledge could not easily be confined to the two categories of dance and obtaining shelter. As the investigator's awareness of cultural knowledge and theory increased, it was realised that dance played an important role as the media for the expression and transmission of Lardil cosmological knowledge. It became more difficult to separate logically, knowledge about dance from questions such as: "Why is knowledge encoded in the form of songs?", "Where do these songs come from and how are they passed on?", "What implications do these songs have for everyday behaviour, as well as birth, death, and the origin and nature of the landscape?". The answer to these questions led to an inquiry into Lardil cosmology or as the Lardil call it, 'the law'.

The knowledge collected concerning 'obtaining shelter' was by no means as quantitative as that on dance, and informants tended to be less interested in this secular activity. Knowledge concerning the names of traditional shelters their forms and construction methods

was elicited as a comparatively brief corpus of data. The topics of (a) how to choose the best form of shelter to build, (b) where to site it, and (c) how it is used, soon expanded into a broader area of theoretical knowledge - that concerning traditional life style activity, and the traditional use of the environment for obtaining food and material resources, and for carrying out social and ceremonial activities. The traditional use of the environment also involved an ethnogeography. This related to cosmology in a number of ways, e.g. the presence of invisible beingsat particular places in the environment and their control over the environment. Elicitation of knowledge concerning the obtaining of shelter played a small (but nevertheless significant) role within this broader framework of knowledge. The subject of obtaining Western-type shelters in the mission settlement over the last 25 years did not yield a very extensive corpus of data either. Information was mainly preoccupied with simple construction processes and the difficulties of obtaining building materials.

It can be seen that during interviews informants presented their knowledge in such a way that they expanded beyond the subject nominated by the investigator in a manner that they considered necessary and appropriate to the nature of the subject matters under discussion. It is felt that this open ended approach resulted in data that the subjects considered to comprise natural and important classes of Lardil knowledge. Since this study is concerned with ethnic systems of environmental knowledge, these classes were acceptable as the final form of the knowledge data for analysis in this study. Country studies

When the old men learnt that I was interested in their traditional places, they decided to take me to their countries. Here was an important unit of their geography, 'patriclan countries'. These are described in full detail in Chapter 4. Two of these countries became sites for intense data collection on traditional places and their properties. One country was located on the south east side of Mornington Island and included a smaller island (Sydney Island). The second country was located at the eastern end of Mornington Island and includes Cape van Diemen. Their location can be seen later on the map in figure 2.

The men who acted as guides and informants, were the 'owners' or'bosses' of these two countries, Fred Jaurth, Lindsay Roughsey, Kelly Bunbujee, Charly Marme. For simplicity of naming, these two 1. For biographical information on these men, refer Appendix 2.

countries are referred to throughout the thesis as 'F.J.'s country' and 'K.B.'s country' after two of these contemporary custodians.

Base maps were prepared from tracings of Commonwealth Air Survey photographs. ¹ The two countries were traversed several times on foot, and all the places that the men knew were mapped and photographed in a series of three and four day excursions. The two maps are shown in figures 7 and 8. Examples of field data recording properties of place are contained in Appendix 3.

The informants were interviewed in order to obtain further information concerning the nature of these two countries and to corroborate field findings. Additional data were gained on the traditional use of the environment, the movement patterns of groups, hunting and gathering methods, Lardil botany, classification of landscape features, seasonal use of landscape, as well as geography. The trips to the homelands of these old men stimulated many sentimental and nostalgic responses. They recalled many anecdotes concerning traditional living in their countries. This provided a basis for ongoing interviewing.

To enable this environmental data to be examined and discussed in a Western scientific framework, a 'land systems' study was carried out in the two study 'countries'. ² 'Land systems' consist of soils, topography, flora and fauna combined and interacting together in recurring characteristic ways. The "land system is a scientific unit for the description and mapping of types of country, classified according to their origin." (Stewart et al 1954:113). Data collection aimed at adequate contribution to the main thesis study, without becoming an exhaustive land system survey in itself. Plant, soil and rock specimens ³ were collected as well as numerous observations of the same. Much of these data is tabulated in Appendix 4. Some meteorological data were also collected.

Seven transects were laid out in F.J.'s country along environmental gradients in an attempt to understand variations of properties within the land systems. The location of the transects was in accordance with the following criteria:-

2. No land system survey has been carried out before in the Wellesley Islands to the knowledge of the investigator.

^{1.} Runs 2 and 3, CAB/4064.

^{3.} These data were collected on a short field trip in July 1976, with assistance from P. Bycroft (environmental psychologist from University of Queensland), M. Maher (geographer from Griffith University), and J. Covacevich (Curator of Reptiles, Queensland Museum). The data is currently housed in the Aboriginal Data Archive (University of Queensland).

- (a) Across transition zones between land units:
- (b) Across littoral land units that have a varying saline factor;
- (c) At right angles to dune and sand ridge formations which are arranged in parallel lines. (In general, there is a gradation from the oldest sandridges which are the most densely vegetated and the furtherest inland, to the most recent beach dunes which are sparsely vegetated and often closest to the coastline);
- (d) Across land units undergoing encroaching erosion of soil by streams;
- (e) Across land units of varying topography. (Examples and descriptions of data obtained on these transects are contained in Appendix 4.)

All of this data was combined with theory drawn from the natural sciences literature to provide a model of land systems in the North Wellesley Islands. This is described in Chapter 3. It provides a Western construct of the natural environment to which can be related Aboriginal concepts of geography and various natural and supernatural phenomena in the world of the Lardil.

Methods of working with informants

From a study of the history of social change on Mornington Island (refer Chapter 5), it is obvious that the people who now live there do not comprise a simple universe of homogeneous members. Each Lardil has a background of different experiences and perceptions of these social changes. It is important for the investigator to know which classes of individuals might possess certain areas of memory knowledge relevant to this study, or alternatively, who to question to learn reliably of a particular event. It is common for many of the people to boast of knowledge they possess, that they may have only acquired second or third hand, or perhaps from a non-authorative source. Unless the investigator can place the origin of an informant's knowledge in the context of an historical model of social change, it will be difficult to verify the accuracy and expertise of that knowledge. Access to such a model begins to allow the investigator to selectively choose or sample informants for their unique perception of an event or social construct. Each individual presents his knowledge from a particular experiential basis and social perspective.

Demographic information on Aboriginal individuals is available from the kinship data, $^{\rm l}$ and biographical outlines of the key informants have been provided (see Appendix 2). Informants' data used in

^{1.} An example of the kinship data collected by the investigator is contained in Appendix 3.

this study qualified with that informant's initials and thus can be related to biographical information concerning that individual. The initials of key informants are as follows:-

- F.J. Fred Jaurth (or Jarral)
- K.B. Kelly Bunbujee
- G.P. Gully Peters
- C.M. Charly Marme
- J.J. Jackson Jacob
- L.R. Lindsay Roughsey
- E.R. Elsie Roughsey
- P.J. Phil Jack
- D.R. Don Robertson

Mornington Islanders also use biographical information to draw attention to the social perspective of another individual and the quality of his knowledge. They do this in conversation by eliciting personal attributes of the person under discussion, attributes which are associated with the knowledge status of that person and his social qualifications. The most important of these are as follows:-

- (a) Age expressed using a reference system of 'mission periods' and personal traits such as 'still a single man', 'young boy, only this high', 'grey hair now', etc.
- (b) Blood and Tribal Origin. Blood variation is associated with differences of tribal background. On Mornington Island there are people from the Wellesley Island tribes, viz. the Lardil, Kaiadilt, and Yangkal, as well as representatives from nearby mainland tribes including the Wanyi, Kalkadoon, Janyula, Mara, Mikwalun and Yukulda. To have parents from different tribes means to be of mixed blood and to have multiple tribal identity. In addition, a minority of individuals are part European or Chinese.
- (c) Origin of individual by reference to Lardil socio-geographic units, viz. whether a person is windward or leeward; whether they belong to the <code>larumpenta</code>, <code>lilumpenta</code>, <code>palumpenta</code> or the <code>tjirrkarampenta</code> division and from which patriclan country/s their families come from. These sociogrographic units are explained in Chapter 4.
- (d) Extent of knowledge of a man, usually expressed using attributes of age and level of initiation. The term 'old man' is often used to imply a man of much knowledge. Levels of initiation imply the same. There are two initiation ceremonies for men:

^{1.} The common literature spellings of these tribes are used throughout this work.

the 'first degree' or *luruka* involves circumcision; the 'second degree' or *warama* man is both circumcised and subincised.

Terms such as 'big man', 'clever man', 'song man' can all denote high status due to possession of substantial quantities of traditional knowledge.

(e) Employment positions or community roles in the contemporary society can also carry status, e.g. chairman of the community council, leading hand on the stock team, canteen manager, etc...

A feature of contemporary Lardil society is that old men know the most about matters of traditional knowledge. It is unusual to find a young man (below the age of about 40) who will argue over the correctness of a piece of knowledge with a man of grey hair and age (over about 55). If a young man could not answer a question for the investigator, it was common for that man to advise the investigator to seek the answer from an old man. Old men are socially recognized as possessing specialized knowledge of traditional beliefs and customs. A large portion of this dissertation involves these subject matters, and so the majority of informants are old men.

The above is only the beginning of the process of qualifying informants' knowledge in order to understand the location of bias, error, and ignorance. It was asserted earlier that there exists a social intelligibility of knowledge for the members of a cultural group that allows for meaningful communication between them concerning their mutual interests. However, this does not imply that social knowledge is of a fixed nature. Recent research in sociolinguistics tells us that the nature of any given speech event may vary when conducted in different social settings and by different participants. For example two Aborigines do not greet each other in the city in the same way they do at a dancing ground, and they do not greet Europeans in the same way they greet each other. Message form and content will be influenced by the social environment and by the social positions of the speakers and listeners, and so generate variations upon the given event.

Van der Leeden (1975) has demonstrated the effect of the social position of speakers on the way they tell myths amongst the Nunggubuyu of Arnhem Land. Here narrators will "refer purposefully to their own and/or their opponent's social positions", and "become quite conscious

^{1.} e.g. see Blom and Gumperz for the influence of social organisation on speech in Norway (in Gumperz and Hymes 1972:418-421. Also see other contributions to this volume.)

of the possibilities of mythological symbolism for defending or improving individually or collectively maintained positions" (1975: 46), ".... mere naturalistic observation of speech behaviour is not enough. In order to interpret what he hears, the investigator must have some background knowledge of the local culture and of the processes which generate social meaning." (Blom and Gumperz 1972:434). Before analysis, data must be qualified with their properties that arise from the social context in which they have been obtained. The investigator must continually use his data in conversation in various social contexts, both those structured by him and by the society. This constant usage will tend to reveal those properties of the data which allow them to be satisfactorily and acceptably used in specific contexts. This in turn, may reveal properties concerning the context within which the data were received - that of interviewing an informant by the investigator.

It has been often found in this study that some informants have inbuilt bias and error into the knowledge they present in interviews. Examples of this include (i) the courtesy bias - a person tells the investigator what he thinks the investigator wants to hear; (ii) ignorance bias - a wish not to show one's ignorance, or else a wish to maintain one's status as an informant by not confessing one's ignorance, resulting in the fabrication of answers to questions that are socially fixed; (iii) ethnocentric bias of the type described by Van der Leeden - bias arising from one's social position (which can be sketched using the personal attributes listed previously); (iv) bias arising from attitude to sacred knowledge one can distinguish between those who have a conservative attitude to sacred knowledge, resisting speculation about the cosmological nature of things, and those who take a creative attitude, hypothesising explanatory theories about the cosmological nature of things. This phenomenon will be explained in more detail later in Chapter 5. In addition, much sacred knowledge is withheld or disguised in form.

When it is discovered that an informant's information has properties that are inconsistent across situations of its social usage, the investigator must try to learn if the inconsistencies are due to informant's error, or to ignorance, or to the nature of the social context of use. Some strategies to do this are as follows:-

(i) The investigator observes how a piece of information is used in a range of places at different times and with different groups of people. He observes who might consistently use a piece of information and how that individual may alter the nature of the

information in different places with different social company. Patterns of consistent usage in particular settings are identified. The investigator can then socially experiment with these properties of a piece of information. He can participate in conversations and predict the appropriate setting in which to use key information. He can then himself use the information in a particular conversation and verify that it is the correct social usage by the response of the other social members present. This technique is very useful when learning about restricted forms of knowledge and how to adapt the nature of such knowledge to be used in a public setting.

- (ii) The investigator asks his informant questions that he has already asked some time in the past (even several years or more). One can test which answers to particular questions are predictable and which are inconsistent through time. If inconsistencies arise, the informant is then asked to corroborate his information with that which he previously presented and to explain the differences. Here it is sometimes found that recent events may affect the nature of knowledge.
- (iii)A standard interview is carried out separately with a number of key informants. The investigator then asks each informant to corroborate his information with that obtained from the other informants. He is asked to explain the reasons for differences and in some cases, similarities. This often leads to an informant discussing his perception of the biases of other informants.

Using these strategies with a number of key informants over a substantial period of time tends to result in working relationships that generate knowledge of a reliable and well-qualified nature. They understand that they should admit to not knowing something; that they must be honest with their information; that they should qualify it when they are unsure, or when just giving an opinion, or withholding knowledge for a particular reason. If such informants are not confident about their own knowledge, or if they feel that they are not socially eligible to answer particular questions, they will refer the investigator to another informant who is more qualified to answer those questions. If there is a subject of disagreement, or something is forgotten, they will seek opinions and information from others. Without being asked, they will produce information and artifacts that they know are of interest to the investigator.

Although they have no precise understanding of the investigator's

Western scientific problem they know what his interest areas are and they describe his activities as "studying the culture". As relations with informants develop, they present more and more knowledge of importance and of a sacred nature which at first was withheld. (It should be noted that traditionally the strength of an Aboriginal society lay partly in the extent and nature of its knowledge and it was not something that could readily be given to outsiders.) The key informants take on a pride and status in their role as select working companions to the investigator. Their social status is generally reinforced, because a European shows indepth interest and respect for their traditional cultural knowledge at a time when many of the contemporary Aboriginal youths are disrespectful towards it or are not interested in it.

All informants were paid for their time at a minimum rate not less than what they would receive in normal mission employment (\$2.00 per hour). This rate doubled and tripled in the case of key informants as work intensified and the quality of the data increased. Also gifts were used as a special token of gratitude. By 1978 payments were often in the form of Aboriginal artifacts from Central Australia.

L anguage

The common language used today in the mission settlement is a form of non-standard English and this is the language of the speech data collected for this study. Sommer (1974:42, 43) has described this language as "a continuum of dialects..... At one end of the continuum is something approaching the norm of Australian English. At the other is a very 'broad' creole, maximally influenced by the vernacular languages. Each speaker controls a span of this continuum using forms towards the 'upper' limit of his control when addressing those in authority, and forms towards the 'broader' end of the span when scolding his children..... A tentative analysis suggests that it draws most of its vocabulary from English, and its morphology and phonological processes from Aboriginal sources". Flint (1960:66) also describes this language as a context-dependent continuum but does not analyse it in the same structural manner as Sommer:-"It occurs in conversations with fellow Aboriginals of similar age, on topics and in situations relating to home and recreational environment. This form of speech is predominantly English in vocabulary and recognizably similar in grammatical structure, but it is so different in its phonemes and rhythm patterns as to be largely unintelligible to non-Aboriginal listeners..... Such

conversations represent however, the extreme end of a stylistic continuum. Other conversations of the same informants on formal school topics, or with senior or unfamiliar persons are more easily intelligible and linguistically closer to educated Queensland English (Flint 1968:15).

Whatever the structural nature of non-standard Aboriginal English used on Mornington Island, the investigator has become adept in its usage. It was the medium for all of the interviews carried out in the study.

Where the investigator cites words in the Lardil language in this thesis, they are italicized, $^{\rm l}$ and spelt using a practical orthography devised by the linguist T. Klokeid (1974). No claims are made for exact accuracy of phonetic transcription.

Further fieldwork, and the communal role of the investigator

As field work continued the investigator was committed to a series of tasks and roles by members of the community, indicating that ongoing participant observation was methodologically sound. This community involvement was partly generated by some particular attributes of the investigator's self-presentation viz:-

- (i) The investigator was not affiliated with either of the institutions that largely direct the lives of the people: the Presbyterian Board of Missions and the Queensland Department of Aboriginal and Island Affairs. In this sense the investigator was politically independent of the rest of the white community at the mission.
- (ii) The investigator lived in, or adjacent to the Aboriginal sector of the settlement, in the lifestyle of a camper, e.g. cooking on a fire, living at times in a tent, no special ablution facilities, etc. This was in physical and behavioural contrast to the remainder of the white community who mostly live in a separate part of the mission in the most comfortable and best furnished houses. It reinforced the investigator's independent
- identity with an interest in Aboriginal matters rather than those

 1. The scientific names of plant and animal genus and species are also italicized but are usually distinguishable by their Latin character. Another relevant point here is that the names of contemporary Aboriginal adults are not italicized, even if they are of Lardil origin. On the other hand, Aboriginal names of deceased adults used in the context of discussion on traditional hunter-gatherer life are italicized. Where citations are made of other authors' works, any italics used by those authors are preserved in the quotation. Square brackets used in such citations represent an insertion by the investigator.

of white mission staff.

(iii) The investigator could use his skills as an architect.

As the Aboriginal community became aware of these features of the investigator's personality, a series of requests were received, either from individuals or the community council, to assist with various problems. These problems were concerned with either cultural exchanges or with architectural and environmental matters. Some examples of these problems are as follows:-

- (a) The preparation of a design proposal for a cultural centre, and a landscape design for the new canteen.
- (b) The preparation of a discussion paper on Wellesley Island land rights.
- (c) The preparation of a map of sacred sites and graves in the vicinity of the settlement to help ensure their safety from future settlement works.
- (d) The investigator was asked by the community council to accompany a dancing team to an Aboriginal dance festival at Aurukun (August, 1975) in the role of 'manager/protector'.
- (e) Tribal elders requested the investigator to act as a neutral witness and arbitrator between tribal representatives during discussions on a proposed inter-tribal initiation.

Other requests came from external institutions to act as an agent for the people, e.g.:-

- (a) The investigator had to negotiate the manufacture and purchase of a set of traditional material culture items for display in the Queensland University Anthropology museum. This was followed by the collection of catalogue information from Aborigines and the sending of Aboriginal personnel to Brisbane to participate in the display.
- (b) The Australian Institute of Aboriginal Studies asked the investigator to collect information from Wanyi people on Mornington Island for a land rights submission concerning the Upper Nicholsen River.
- (c) The investigator became involved in the Cyclone Reconstruction Programme following the destructive cyclone of December 1976.

 This involved assisting in the design of some 84 new houses and a new hospital, and the contract administration of these works.

 All of the above activities helped to generate a socially valid role and identity for the investigator within the Aboriginal community. This demonstrates that not only was the investigator internalizing

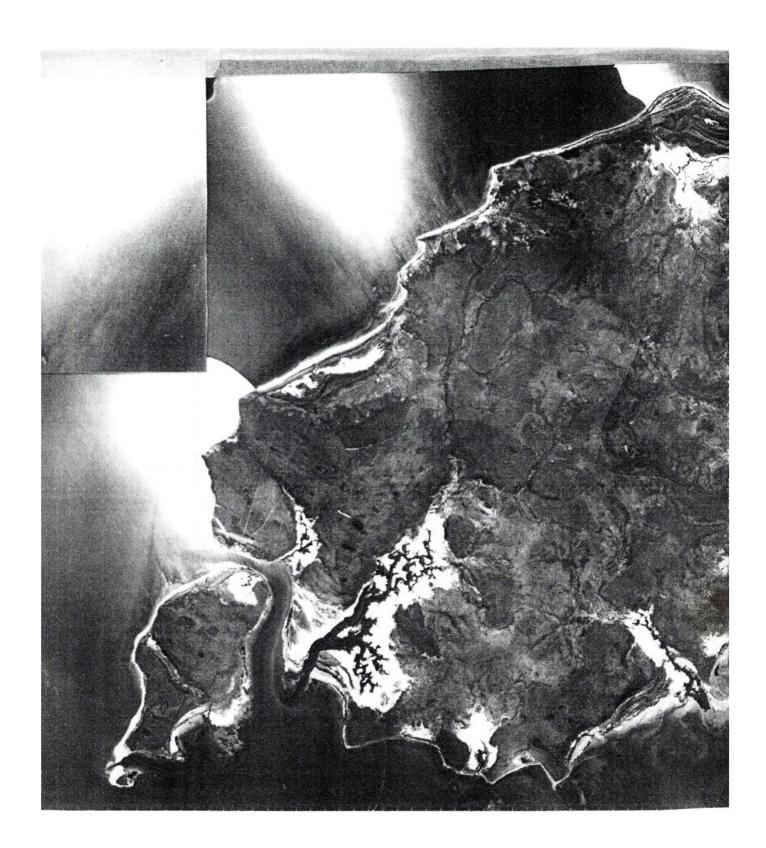
values of the Aboriginal people, but they themselves were recognizing this and taking advantage of the resulting social situation. This status permitted easier access to important Aboriginal knowledge and a guarantee of its reliability. The process was a consequence of the application of participant observation as the methodological framework for the study.

The collection of data using maps, photographs, behavioural observations, interviews, etc. continued on all field trips, and data records were updated. Participant and naturalistic observation allowed identification of properties of everyday Lardil behaviour. Descriptions of observed units of behaviour were introduced into interviews for discussion, to obtain informants' perceptions of their society's behaviour. In this way behavioural episodes could be given titles and other properties of meaning intelligible to, and commonly used, by the Lardil themselves.

After significant portions of the thesis manuscript were drafted, the investigator made several short field trips back to Mornington Island in May 1978 and February 1979. These visits were used to compare the theoretical models constructed on contemporary behaviour with that reality itself. Such comparison proved to be favourable. The land systems model which was based largely on data collected from the two patriclan countries, was also checked at some other places' on Mornington Island. This model seemed reliable for the purposes for which it was intended. It is described in the following chapter.

All of the data collected for this study are currently stored in a data archive in the Department of Architecture, University of Queensland. It is titled 'Aboriginal Data Archive - Aborigines and their Ethno-environment'. Where this data archive is quoted in this thesis, its title is abbreviated to 'A.D.A.' Data units that are cited are accompanied wherever possible by reference indices that indicate their locations in this archive.

^{1.} Of particular significance was the occurrence of the cyclone at Mornington Island during December, 1976. This destroyed much of the physical structure of the settlement and a portion of the data describing the physical environment was converted to the status of 'non-recurring',



Introduction

Mornington Island is one of the Wellesley group of islands in the southern Gulf of Carpentaria in Australia, located between longitude 139°20' and 139°15' and between latitude 16°25' and 16°45'. It is the largest island of the group being approximately 65 kms long and 7 to 26 kms wide, approximately 99,000 hectares and oriented in a northeast/south-west direction. Figure 1 is an aerial photograph of the island. There is a number of smaller islands nearby, some of which string across to the mainland, viz. Denham, Andrew, Forsyth, Pains and Bayley Islands. Collectively they are the North Wellesleys, being separated from another cluster of islands to the south-east, the South Wellesleys, which are just out of sight from Mornington Island. The largest of the latter group is Bentinck Island. These islands are shown on the map in figure 2.

There are close similarities in rocks, soils, flora, fauna, and climate amongst all of these islands. However micro-variations occur, particularly on Mornington Island, it being larger, higher and further from the mainland than most.

This chapter consists of three parts. First a description of the climate on Mornington Island is made. Attention is paid to properties that play an important role in influencing the nature of man-environment relations.

The second part is a sketch of the geomorphology. Rather than deal with flora separately in another section, the dominant floristic species associated with each particular geomorphological unit are discussed in conjunction with the description of that unit. Structural forms of vegetation such as life form, density and height follow the terminology of Specht's system of units in C.S.I.R.O. (1970). The Lardil names of plant specimens (italicized) together with some common names are given in brackets following the scientific names which were supplied by the Queensland Herbarium after identification of the field specimens. A list of all of the plant species is in Appendix 4. The two study countries (referred to as K.B's and F.J's countries) are used throughout to provide examples of particular features which will be correlated with cultural properties in later chapters.

Photo montage by the Department of Surveying, University of Queensland from Wellesley Island Air Photographs, Runs 2 and 3, CAB/4064.

Known as 'Namie Island' to the contemporary mission Aborigines, after an important tribal elder who resided there.
 N.B. In general there is a lack of data available concerning the

^{3.} N.B. In general there is a lack of data available concerning the physical environment. There exists no soils map nor any vegetation

MAP OF THE WELLESLEY ISLANDS

Map prepared from Australia 1:250 000 topographic maps Mornington, Cape Van Diemen, Vestmoreland, Burketown, by the Division of Australian Mapping.



Maps of these two countries are in figures 7 and 8 in Chapter 4. An important data source used in this section is the geological map in Grimes (1974). This map of Mornington Island geological units is not reproduced here since the scale is too small for examining the two study countries in detail, but cross reference is made to the units. Davies' definitive geographical work (1972) has aided immensely in the reconstruction of the origin of the interesting variety of coastal land and marine forms around Mornington Island.

The geomorphological units naturally provide a set of land systems units which are listed in the third and last part of this chapter for further reference in the remainder of the thesis.

The climate of Mornington Island

Gloe and Weller (1949:3) noted that data on the climate of Mornington Island ware scarce. The situation is somewhat improved today. Regional characteristics have been described by Gentilli (1972), who divides the seasonal cycle of the monsoonal wet/dry north of Australia into units that pertain well to Mornington Island. However, the moderating effect of the sea must be taken into account. "The year may be divided into a short wet season and a long dry season, with two subsidiary transitional periods between them. On the basis of temperature and physical comfort, the long dry season can be further divided into two parts, the cool dry season and the warm dusty season. This gives three main seasons and two transitional ones." (Gentilli 1972:75). Each of these seasonal divisions will be described in turn.

1. The cool dry season (May to August)

The beginning of the dry season is characterized by the onset of steady south-east trade winds. These winds build up in intensity, blowing strongest in June and July (Gentilli:71). The strength of wind appears to vary in cyclic patterns - both daily cycles and monthly ones. The latter have been reported by the local Aborigines who claim that the winds build up to their peak intensity at the period of no moon, and of all the dry season months blow strongest in June and July, i.e.at the middle of the dry season. It is difficult to substantiate a correlation between lunar and wind cycles until detailed studies are completed. However, regular daily cycles have been observed by the investigator.

N.B. Early meteorological observations did not include wind direction and strength, nor humidity.

^{2.} A similar division is made by Slatyer and Christain (1954:17).

TABLE 1. MORNINGTON ISLAND CLIMATIC DATA

<u>Rainfall</u>

1914-1937 Source: A.B.M. (1940:45)

- average yearly number of days of rain: 64

1916-1942 Source: Gloe and Weller (1949:4)

- annual and monthly averages.

	Yrs.Records	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	0ct	Nov	Dec	Total
	1916-1942													
Average	27	1363	1156	992	192	41	43	3	5	4	22	213	613	4677
Max. Yr.	1939	2937	2821	911	396	6	321	3	0	0	27	244	863	8329
Min. Yr.	1923	388	291	774	121	4	68	0	. 0	0	0	67	627	2340

1965-1974 Source: A.B.M. Monthly Climate Data-Surface

- monthly rainfall averages and average number of days of rain per month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	0c t	Nov	Dec
Average rainfall (points)	1224	1493	1634	356	73	23	4	1	25	55	218	554
Average number of days of rain	15	14.5	16.3	4.375	1.9	.675	.22	.11	.44	. 14	5	9.8

- average annual total rainfall: 5051 points (calculated on data for 6 years only)
- average number of days of rain per year: 62 days (calculated on data for 7 years only)

Temperature =

1965-1974 Source: A.B.M. Monthly Climate Data-Surface

- average monthly temperatures (Celsius)

 Jan
 Feb
 Mar
 Apr
 May
 Jun
 Jul
 Aug
 Sep
 Oct
 Nov
 Dec

 mean 9 a.m.
 29.39 28.17 27.94 27.94 27.94 24.78 22.5 21.67 23
 25.83 28.67 30.28 30.22

 mean 3 p.m.
 31.67 30.22 30.55 30.44 27.72 25.44 25.67 27.78 29.61 30.94 32.5 31.89

During the evening between 7 and 8 p.m., the winds usually drop to a light breeze or dead calm. As midnight approaches, winds build up from varying directions. In the early hours of the morning winds resume blowing first from the west and gradually work around to the south-east. They then blow through to the following afternoon reaching their peak just after mid-morning - often over 20 kmh. 1

A similar daily cycle was described in August 1857 by Lt. Chimmo (1859:433): "During the last few days, the winds seem to have daily gone round the compass. Commencing at S.E. as the sun rises, they gain strength with the sun, drawing round to the east and N.E. as the sun declines then to the northward; at midnight a calm of short duration, followed by very light airs from N.W., west and S.W. until daylight, when it again assumes its S.E. direction as the sun appears on the horizon. These appear to be the characteristics of the winds in the depth of the gulf when the S.E. trade or monsoon is not fresh". When the winds blow at their strongest, conditions are uncomfortably cold and dry. However, when the wind intensities drop, the climate is delightfully warm and invigorating.² Skies are usually cloudless. On some winter nights, there is the possibility of dewfall (Slatyer and Christian 1954:24). Fogs come in from the sea in June and July. 3 However, in the early winter months (May, June) there may be a light shower of rain, and in June or July a storm may occasionally occur from year to year (Gentilli 1972:75). Such precipitation is insignificant compared to that of the wet season proper. Climatic data for monthly rainfall averages, and average number of days of rain per month are shown in table 1.

2. The warm dusty season (September - October)
"The dry season warms up towards the end of August and this equally dry transitional period continues with rising temperatures" until late October (Gentilli 1972:76). The south-east winds subside in intensity and are interrupted by intermittent north and north-westerly breezes. Most remaining surface water on the island disappears during this period except for a limited number of deep shaded pools, mostly on the headwaters of the Dugong and Gabanyari Rivers. 4

^{1.} From data collected by the investigator in July 1977. Dick Roughsey similarly describes these cycles (1971C:43, 48).

^{2.} In 1921, McIntyre wrote of "the most glorious climate that bountiful nature has ever given as a gift to humanity. Who will deny this winter months truth of the Gulf of Carpentaria?" (1921:61).

^{3.} Personal observation. Tindale (1962A:229) has noted the possibility of persons carrying out traditional night fishing to lose orientation in sea fogs, risking severe exposure.

^{4.} Gloe and Weller's map of Mornington Island indicates locations of permanent waterholes. The investigator's field work reveals that many of these locations which were probably recorded using air reconnaissance are erroneous, at least in contemporary circumstances.

Many trees have lost foliage and much groundcover dies. Bare parched areas of soil readily blow away. Duststorms and whirlwinds are common and uncomfortable.

3. The hot dry-wet transition period (November - December) Winds during this period are variable and often calms occur. Conditions gradually become exhaustingly humid and temperatures reach a maximum in November. At this time most of the Aboriginal people sleep during the middle of the day. As the humidity builds up, diurnal heating results in convection currents, and a blanket of cumulus clouds develops daily over the island, accompanied by lightening. Occasional thunderstorms eventuate occurring in mid and late afternoon with increasing frequency until they are a daily happening. The cumulo-nimbus clouds climb into tall narrow columns, and sometimes several storms may be observed charging over the island. They bring a short heavy deluge which temporarily alleviates the heat. More than an inch of rain may fall in less than half an hour (Gentilli 1972:80, Slatyer and Christian 1954:21). Gale force squalls may accompany these thunderstorms (Slatyer and Christian 1954:20). With the oncoming of these storms, the country is transformed. Trees show fresh leaves. Plants, that appeared withered and dead, begin to shoot. Green grass appears everywhere and rock holes are filled once more. Many insects begin breeding including mosquitoes. The Aboriginal people refer to this period as "the first rain time". The amount of rainfall and other conditions may vary annually in this period due to the differences in the intensity of the monsoonal influence from year to year (Gentilli 1972:72).

An unexplained meteorological phenomenon occurs in the south-east corner of the Gulf, between the west of Cape York and the Sir Edward Pellew Islands, predominantly from September to November. "Known as the Morning Glory [cloud] because of its magnificent appearance at sunrise, it is a long horizontal roll of low cloud which appears on the eastern skyline, usually upon calm and otherwise cloudless conditions, and advances rapidly like a rolling sea-wave bring a sudden windsquall...", a pressure jump, erratic temperature behaviour, and drop in relative humidity, but rarely any precipitation (A.B.M. 1977:1, 5). It moves from east to west beginning its roll in the early morning and passing over Mornington Island between 7 a.m. and 9 a.m. approximately, at speeds of 10-25 m/s. It assumes the form of an arch or bow in perspective as it stretches across the sky from one horizon to the other, but its lateral dimensions are generally uniform along its entire length.

Some hypotheses as to its origin have been put forward by A.B.M. (1977) but are by no means conclusive.

The cloud is only 100 to 200 metres thick and is very low (50-500 metres high). One has been observed by an aircraft greater than 120 kms long. Double rolls are common and up to seven successive rolls have been observed (A.B.M. 1977:1-7).

- 4. The wet season (late December March) Gentilli (1972:71) lists five causes of rainfall in order of their average contribution to annual rainfall:
 - a. tropical depressions
 - b. instability thunderstorms
 - c. the monsoon
 - d. tropical cyclones
 - e. the continental cool front

In reality, some of these phenomena are closely associated, e.g., depressions may intensify to become cyclones. Slatyer and Christian (1954:20) observe that the rain is mostly received between the spring and autumn equinoxes. In the upper air, the prevailing winds of the wet season are north-westerly, and hence the term 'north-west monsoon'. (Gentilli 1972:84). By January, the wet season is usually established and the rainfall is distributed in a series of short wet periods of a few days' duration and mostly falling at night. There are intermittent breaks of hot calm weather, rather than a sequence of more or less continuous weather. Maximum temperatures, although remaining high, are a little less than those of the transitional period because of more frequent cloud coverage. (Slatyer and Christian 1954:21. See table of climatic data, monthly temperature averages.) Humidity is at its maximum in January and February (ibid, 1954:23). The streams, which during the dry season consist of scattered pools only, commence their annual flow, lasting for several months only. Active erosion on soil slopes occurs producing mixed deposits of alluvium. Freshwater springs emerge all along the beaches at the water table level. Insect life is most prolific.

Coleman has presented data-for the A.B.M. on the "Frequencies, Tracks and Intensities of Tropical Cyclones in the Australian Region, Nov. 1909 to June 1969" (A.B.M. 1971)2. An examination of cyclones that passed through the southern Gulf in this period, i.e., within 40 km of Mornington Island, yields the following information.

described by A.B.M. (1940), Gentilli (1972:72) and others.

Mornington Island was included in a list of heavy rains recorded in Queensland by the Aust. Bureau of Meteorology. On the 18th Jan., 1919, 371.25 mm fell in less than 24 hours (A.B.M. 1940:14)
2. Many of the characteristics of cyclones in Australia have been

Coleman notes the intensity of each cyclone by the lowest recorded central pressure that occurs in the cyclone eye. No cyclone has passed close to Mornington Island, according to these data, whose eye pressure has been less than 980 mb. Four cyclones originated in the vicinity of Mornington Island. The records span 60 potential seasons. Cyclones have actually occurred in the southern Gulf during 29 of these seasons. In only six seasons have two or three cyclones occurred in the one season (never more). The frequency of occurrence then is about once every two years. (This explains why their contribution to rainfall on the average is not as high as other more regular factors.) Examination of the data reveals three dominant track patterns:

Track type A^2 :- cyclone forms in Arafura Sea; moves south and south-east through Arnhem Land, south-east across the southern Gulf of Carpentaria, usually close to the coastline; then either east across Cape York, or dissipates inland to the south. This type is most common in December, i.e., early in the season. It occurs less frequently than the other two types.

Track type B:- cyclone forms within the Gulf of Carpentaria; travels in a southerly direction across the southern Gulf, and inland. This type occurs most commonly in January.

Track type C3:- cyclone originates in Coral Sea; travels west across Cape York; across Gulf of Carpentaria, dissipating into the Barkly Tableland. It is most common in February and March, i.e., late in the season. The available data on cyclones that occur within any one season show that the temporal sequence of the path behaviours of such cyclones is always in accordance with the above order, i.e., track type A usually precedes type B which usually precedes type C, even if the cyclones do not occur in the months stated as being normal for their track type.

The underwater profile of the Gulf of Carpentaria is very flat and shallow, which is ideal for the transmission of storm surges. 4

^{1. 31.1.34, 11.1.48, 9.1.51, 17.1.56.}

^{2.} Also noted by Slatyer and Christian (1954:20)

^{3.} Also noted by Slatyer and Christian (1954:20)

^{4.} This point has been noted by the Cyclone Surge Evacuation Committee (1925:29). A storm surge can be defined as the difference in level between the normal predicted tide level and the temporary change in sea level caused by the cyclone (called the 'storm tide'). The storm surge is transmitted by a wave having a period measured in hours. Usually only one cycle is present and seldom do more than two or three occur. The wave-length may be several kilometres, and this represents the distance that the wave can penetrate inland over areas that lie below the storm tide level. (Definition prepared from Harris (1958) and Wang (1959)).

Storm surges may accompany the larger cyclones on Mornington Island. In living memory these have not been severe enough to pass over the sand based land systems that surround much of the island. Occasionally, they do penetrate up into swales, creek and stream beds and associated flood plains behind and between sand dunes and ridges, creating semisaline areas in the environment. Associated with cyclones is general destruction to flora and fauna on land and in the sea. The high energy wave environments cause significant change to coastal land forms.

On the morning of December 20, 1976, a cyclone, code named cyclone 'Ted' by the Brisbane Tropical Cyclone Warning Centre, passed over Mornington Island, moving in a south - south-easterly direction, track type B. It then passed over Burketown at 10 p.m. that night. Cyclone 'Ted' caused extensive structural damage to the majority of domiciles on Mornington Island, and was the worst in living memory. The accompanying tidal surge penetrated into parts of the sand-based domiciliary zone (the "village"), again for the first time in living memory. According to the Bureau of Meteorology in Brisbane, the intensity when nearest Mornington Island was about 950 mb and the maximum winds near the centre exceeded 200 kmh.

Waterspouts have been reported to occur around Mornington Island and are the subject of a number of the traditional Lardil dances. They are known to form in various kinds of weather, but do occur in association with cyclones at times. Lane (1966:58-62) has described the general properties of waterspouts: As they form, a characteristic whirling motion begins. The rotating air in the vortex cools by expansion, and the consequent condensation of the water vapour forms the funnel shaped cloud. Where the spout touches the water a large amount of spray is drawn up into the vortex. The average duration is 15 minutes. Waterspouts assume a variety of shapes and sizes and may vary widely in behaviour. They frequently occur in families, three or four appearing in the same general area at once. Waterspouts which leave the water for the land become tornadoes and vice versa.

5. The hot-wet dry transition period (April)
"The 'monsoon' usually wanes in late March or April and hot period of
calms and variable winds commences and continues for about a month."
(Gentilli 1972:78). Temperature and humidity decrease and instability
thunderstorms occur in mid and late afternoon with decreasing frequency
(Slatyer and Christian 1954:20).

^{1.} e.g. in February 1948 (Gloe & Weller 1949:6) and in December 1976 (cyclone 'Ted').

The origin of the physical environment of Mornington Island

In Late Jurassic and Lower Cretaceous time, gradual sinking of the land produced a great marine invasion as far south as latitude 18° and probably further. The area now known as the Gulf of Carpentaria was submerged. The last major sediment laid by the sea in this period is now known as the Normanton Foundation and is several hundred metres thick. Some of this rock is surface exposed on Mornington Island today in isolated places (shown in Grimes (1974) as map unit Kin. 1)

With the retreat of the Lower Cretaceous sea, the record of marine sedimentation ends. The history of the Cainozoic Era is one of erosion and the accumulation of terrestial deposits. Lateritization occurred over much of the region. A nodular ferricrete zone of standard laterite profile developed (shown in Grimes 1974 as map unit Tf.). Where this profile remains undisturbed today as level plains, the surface is composed of yellow grey loams and clays² with dark-coloured nodular laterite occurring at shallow depths, and supports mostly low eucalypt woodland and grassland.³

Contemporary seacliffs on Mornington Island "show the best exposures of the standard laterite profile ... It consists of a hard nodular ferricrete, about a metre thick, overlying a softer thin ferruginous zone, which grades down into a mottled zone up to 10 m thick. A pallid zone is also present in some places, but generally appears to be below the present sea level." (Grimes 1974:32). The age of this surface will be regarded as Miocene (Grimes 1974: Fig. 24, Gloe and Weller 1949:5, C.S.I.R.O. 1954:44). Where this surface has not persisted, erosion, deposition, or movements of the earth's crust have produced younger land surfaces.

The Recent cycle of erosion was initiated by differential earth movements involving the downwarping of the Gulf of Carpentaria.

^{1.} On the map in Grimes (1974), a section of this K1n unit (labile sandstone, siltstone, mudstone) is indicated on the southern side of Sydney Island at walpakuntiyan in Big Barney's country. This rock is deeply weathered and appears to be mottled laterite (samples in A.D.A.:R10, 11). This is only one of several apparent discrepancies the investigator has noted between the survey map and ground observations. The author of the map, K. Grimes, has acknowledged that its accuracy is not high at scales of those of the order used in the maps of F.J.'s and K.B.'s countries (personal communication, Mines Department, Brisbane, 1976).

Described in C.S.I.R.O. (1968:50) as soil landscape unit Mb 17.
 Tindale (1962A:283) describes the plateau on Bentinck Island as being similar.

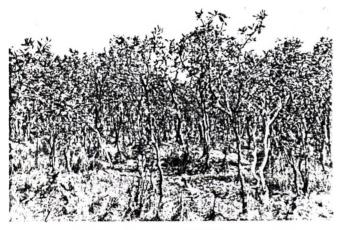
THE INTERIOR LAND SYSTEMS OF MORNINGTON ISLAND



The undulating character of the Mornington Plateau is revealed by this road passing through low woodland. The short stature trees are typical of much of the plateau's flora.



An area of open woodland with a dense groundcover of grass and Acacias.



An open to low scrub of Melaleucas and Acacias is to be found in low lying areas that are waterlogged in the wet season.



Open grasslands on the flood plains of the Gabanyari River in Big Barney's country. Lardil men Fred Jaurth and Cecil Moon are standing on a disused initiation ground.



Spinifex longifolius, Triodia sp. and low Melaleucas are found on the windswept edges of the plateau that have little Suil Cover.



A mid-dense community of Acacia with little understory, standing on a scarp between the Tf and Czs geological units of the Mornington Plateau.



The headwaters of the larger intermittent streams contain some perennial waterholes containing freshwater fish and turtles. This example is on a tributary of the Dugong River. A woodland of Eucalgrius 201 learn and others, surrounds.

Minor differential uplifts which were complementary to the downwarping may have caused the Wellesley Islands to rise to form the 'Mornington Plateau' in the Pliocene, Late Tertiary period (Grimes 1974:6, Fig. 24). Rejuvenation of streams led to considerable dissection of the warped slope of the Miocene land surface. This surface has been partly removed, but the laterite remnants still remain as the higher flat-topped ridges (Grimes 1974, map unit Tf). Dissection continues to encroach upon the remaining positions of the Miocene land surface. These dissected areas are undulating to gently undulating with occasional low lateritic scarps, small level plains and broad shallow valleys. They contain unconsolidated deposits described as "a wide-spread sandy unit which forms a thin cover of sheetwash and colluvial material" (Grimes 1974:37, shown as map unit Czs). This plateau surface is between five and 20 metres above the present sea level.

Dissection on Mornington Island is now controlled by two major drainage systems: Those streams and creeks which run to the north-west side of the island and those that run to the south-east side. The drainage system on the south-east is considerably larger than on the other side (refer to aerial photograph), indicating a slope on the plateau to the south-east which however is not pronounced. A thin spine of higher ground runs north-east and south-west between these drainage basins. It is believed that this spatial asymmetry of the two drainage systems was caused by a tilt in the laterite surface (Grimes 1974:7). (Alternatively the tilt may have occurred before the surface was lateritized.)

These streams flow only intermittently during and following the wet season. In the dry time of the year (late April to early December) the larger ones, e.g. the Dugong and Gabanyari Rivers, consist of a chain of waterholes² inhabited by freshwater fish and turtle.

The undulating surface of the Mornington Plateau and the different soil types on its surface give rise to variable communities and densities of vegetation ranging from grassy low open-forests and woodlands, and closed scrub, to low open woodland, open scrub and grasslands. The older flat-topped laterite ridges provide a well-drained habitat ensuring short stature trees (5-12 metres), in sparse to mid-dense distributions. The bloodwood, Eucalyptus polycarpa (pilthurr) dominates in these areas but Melaleuca and Acacia species are the most prominent in the more poorly drained areas.

1. A photograph of such an undulation is in figure 3.

^{2.} An example of one is shown in figure 3. Gloe and Weller (1949:17) estimated one of these waterholes (the "Air Force" hole) to hold from 40,000 to 50,000 gallons.

The latter species formsopen to closed scrub on the lowest lying areas that become waterlogged in the wet season, e.g. in the interior of Sydney Island in F.J's country is a community of Acacia leptocarpa (manharran), Acacia aulocarpa (wanhan), Melaleuca leucodendron (taral) with tilmir grass, Vetiveria elongata.

A variety of associations occur throughout the plateau including such species as Eucalyptus pruinosa (boxwood, parratar), Eucalyptus papuana (white gum, palarru), Grevillea dryandri (silky oak, nukun), Petalostigma banksii (punurr), Coelospermum veticulatum (kunga), Suriana maritima (maranpun), Terminalia bursarina (turmatjal), Melaleuca viridiflora (paarr), M. acacioides (manal), M. stenostachya (minhan), Acacia hammondii (karrwakarr), and Pandanus species (tangal).

The understorey consists of open to mid-dense tussock grassland mixed with small Melaleuca and Acacia shrubs. Open grassland (containing Chrysopogon and Eriachne species amongst others) may prevail in some areas; particularly on the flood plains of the lower reaches of the larger non-perennial streams where Themeda australis may grow densely up to two metres high if seasonal burning does not occur. Spinifex type grasses often predominate on the driest parts of the plateau near the edge of saltpans and on the wind-exposed edges of laterite cliffs with little soil cover. Species include Spinifex longifolius and hummocks of Triodia sp., sometimes mixed in with low Melaleucas (less than a metre). An example is in figure 3 at kupare in F.J.'s country.

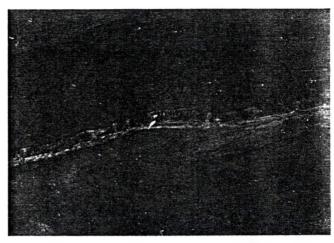
On scarps between the Tf and Czs geological units may be found tall stands of Acacia shrubs (6-10 m) e.g. in F.J's country a line of Acacia alleniana (kurrpara) occurs, several kilometres long and several hundred metres wide on a gentle scarp called kathawaka. An example of an Acacia growing on a steeper scarp in mid-dense to dense communities with sparse to no understorey, is shown in figure 3. The very hard timber of many Acacia species (particularly A. alleniana, A. aulacarpa, A. goniocarpa) is an important Lardil resource, used for manufacturing traditional tools and weapons. Acacia may form low closed to open scrubs (2-8 m high) on dry parts of the plateau with skeletal soils (e.g. near tulmanthapa and munatjan in F.J's country).

Pandanus spp. are to be found on damp spots; and where depressions occur in association with finer clay formations, swamps may result (Lardil, penka). These are dry for much of the year, but during and after the wet season provide the habitat for Nymphae species, an important traditional food source of the Aborigines. The swamps contain close stands of Melaleuca shrubs and are surrounded largely with Imperata cylindrica (swamp grass, kentha). Examples are at lelaka and behind tingkilmi in F.J's country.

MARINE INFLUENCE ON MORNINGTON ISLAND COASTAL LAND FORMS



Storm surges associated with cyclones and spring tides may cause severe coastal erosion. This example shows a lithified sand cliff in front of the mission settlement after cyclone Ted in December, 1976.



A length of sea cliff on the north-west side of Mornington Island. The interior land systems extend right to its edge. Note the wave-cut rock platform in the littoral zone.



Tasman's Cape van Diemen at the eastern end of Mornington Island - a laterite cliff undergoing quarrying and removal of boulder material. A stand of *Casuarina (wunhan)* brave the windswept edge of the Mornington Plateau.

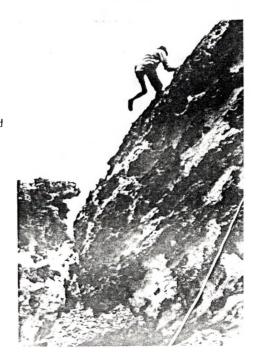


Mottled laterite cliffs some ten metres high in Kelly Bunkujee's country. Rock crevices and holes are a favourite habitat of mud crabs.



An isolated unit of mottled laterite exhibiting severe undercutting by the sea, stands not far from the cliff face proper.

Keily Bunhujee climbs part of a cliff face to examine a high rock pool used as a water source after the first storms in December bring the dry season to a close.



The origin of the coastal geography of Mornington Island

The sea encroached once again into the study area during post-glacial Pleistocene time drowning the Gulf of Carpentaria and causing deposition of material on the lower portions of the Miocene land surface. Present day sea levels were passed some 6,500 years ago, the highest level reached being about three to four metres above the present sea level (Smart 1976:217, Simmons et al 1962:315). The Wellesley Islands were at first peninsular extensions of the mainland, but were finally cut off by the sea. It is from this point in time that Lardil history begins, and their interpretation of these geological events is later examined. The sea has fallen to its contemporary level in a series of damped oscillations through Holocene times (Fairbridge 1960:76). The eustatic emergence caused some entrenchment of streams, incision of stream channels in the lowlands, and the exposure of areas of coastal alluvia, raised beach ridges, and high-level beach rock and rock platforms ¹ (Grimes 1974:43).

Today the Gulf of Carpentaria is shallow in depth about 65 metres deep in its central and northern parts (Heatwole 1975:145). Since the Wellesley Islands are located at the south of the Gulf, they are removed from the influence of the world ocean current system and from oceanic swells. This naturally protected sea environment is one of low energy for most of the year. The south-east trade winds blow at their strongest in winter for about 20 days per year, and at these times a moderate wave energy results. Rain-bearing monsoonal winds also produce moderate wave energy in January - March from the north-west. Very high wave energies are associated with tropical cyclones which occur about once every two years. The most extreme situation is when a storm surge generated by a cyclone coincides with a spring tide. Water is piled up along the coasts and severe erosion may result (see figure 4).

Tidal movement is a source of some local marine energy. The geography of the Gulf causes disturbance to 'normal' tide rhythms. For most days the tides are diurnal, but for one to three days in every 11 or 12 days, the tide changes to semi-diurnal. During the 'doubles', relatively little water movement occurs. At springs the tidal range is from approximately 2.6 to 3.7 metres, according to Karumba tide data (Qld. Department of Harbours and Marine 1973-75)².

^{1.} Upwarping may also have been a significant factor involved in the formation of some of these features (Grimes 1974:5, 7, 43).

^{2.} Pennefather (1880:3) and Stokes (1846:268) observed similar tidal characteristics during their voyages around the Wellesley Islands.

SOME COASTAL LAND SYSTEMS ON MORNINGTON ISLAND



1. A meandering tributary of the Dugong River. The tidal estuary is separated from the surrounding tidal flat by low closed mangrove forest



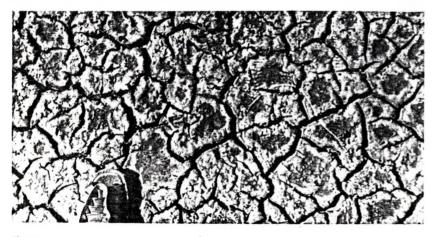
2. Penetrating low mangrove forest is a difficult task unless one finds a path worn by wild cattle.



3. A high tidal flat inside a mangrove area in Kelly Bunbujee's country contains a crescent-shaped midden of mud shells over a metre high - an ancient feasting place.



4. A gap in the mangroves provides a chin-deep crossing over a tidal estuary. Aboriginal guides dry off as they proceed to cross a tidal flat.



5. An area of moist, chocolate brown sand and mud in a tidal flat, displays a well defined structure after the wet season.



6. Part of large tidal flat in Fred Jaurth's country covered with reddish-brown laterite pebbles.

However because of local disturbances which include freshwater run-off from the Gulf streams, predicted tides and times are not highly accurate. Tide-induced currents occur around the island with highest velocities at mid-tide. (Preliminary mapping of these currents has been carried out by the C.S.I.R.O. (1963-65)). They induce currents in the tidal estuaries of the streams, and ebb tide flow is further accentuated by freshwater run-off in the wet season.

Despite a Jow-energy sea environment for much of the seasonal year, the above factors are responsible for a great deal of variation in the coastal geography of the Wellesley Islands. 1

The streams which flow only in the wet season, bring sand and mud to the coast to be deposited at their mouths as tidal flats (Grimes 1974, map unit Qcp). The mixture of sand and mud is about equal according to Davies' data sources (1972:113), and consists of mottled grey and yellow, grey and brown clays (C.S.I.R.O. 1968:29, soil landscape unit 101). For most of the year the surface of the tidal flats is hard, and in places the clays crack displaying a well-defined structure (illustrated in figure 5). Unusually high spring tides in association with storm surges sometimes cover these flats in the wet season, ensuring a thin spread of sait and consequently a lack of vegetation. Their boggy nature during and following the wet season make them difficult to traverse for man and animals alike at this time. The 'saltpans' as they are called locally (kapa in Lardil), have a barely discernible undulation, and on the higher parts there often occurs a wide spread of laterite pebbles. Laterite rocks project through the surfaces in places (e.g. at the 'redbill story place' and at ketmintjila in F.J's country). Chemical and physical processes have caused the formation of some deposits of pure white, pink, and yellow² clays under the surface of the saltpan. These clays are of economic importance to the Lardil as will be seen in the next chapter. 3 The largest tidal flats on Mornington Island extend for some 13 kilometres with widths of up to two kilometres. Examples are shown in figure 5.

^{1.} Much of the following interpretation of coastal, littoral and sublittoral land forms is based on the geographical theory in Davies (1972

^{2.} Yellow clay is caused by oxidation, the oxygen being trapped inside the columns of clay in an environment of fluctuating water table.

^{3.} An important source of white clay in F.J's country was at mantawa where a small creek has cut through the sand platform and down into an old clay pan below, exposing a face of white clay. Quantities of this clay are taken to kunpalkan on the south-east side of Sydney Island for the flood-making ceremony.

A narrow mid-dense band of *Melaleuca* and other low shrubs and very sparse grass cover grow on the inland edge of the tidal flats where they meet the Mornington plateau. Examples of species in this minor fringing community include *Melaleuca acacioides* (tunhkurr), Clerodendrum inerme (purrul), Sporobolus virginicus (melpe grass), and Vetiveria elongata (tilmir grass).

In some older protected parts of saltpans, meadows are reclaiming the otherwise hostile environment, but do not constitute sizeable units in the two study countries. (An example is at ngalpre in F.J's country). Tindale (1962A:282) has observed marsh meadows on Bentinck Island: "At favourable points where the clay is depressed possibly by compression under former weight of sand, there are marshes, some of freshwater plants, others of salt meadow type.... [An] accumulation of wind blown dust and silt [is] caught by vegetation in the marshy ground.... [forming] some grassland, and a mixed marshy meadow.... growing on the veneer of soil over the clay." Grimes has verbally confirmed that this is his geological unit Qac (see Grimes 1974:11).

The undulating tidal flats provide a broad path for freshwater runoff or 'sheet flow'. The effluent arrives at tidal estuaries and creeks
which penetrate into the flats. There are no large marine barriers at
the mouths of these streams (i.e. deltas or sand ridges), the inlets
being relatively deep. On their intertidal slopes salinity is lower
than on the higher flats, and these slopes provide the habitat for
several species of mangroves; both periscope-root species (e.g. Avicennia
marina) and stilt-root types (e.g. Rhizophora stylosa), their roots
receiving daily immersion in salt water. Other members of this community
include Avicennia eucalyptophylla (maran), Ceriops tagal (pilirr),
Lumnitzera racemosa (mantatharr), Rhizophora mucronata (puthar),
Aegialitis annulata (meri), and a Bruguiera sp. (mur).

Most mangroves form a low closed forest, two to three metres high, e.g. at pilirural and putalkikapa in F.J's country, but on some estuaries high forests up to six metres occur. Mangrove communities (Lardil munhta) provide a floristic wall between the tidal flats and the sea. They are also to be found where sediments are washed downdrift of estuary mouths by tidal flow, to quiet sections of coast sheltered from the higher energy waves.

Along the coastline there are many sections of laterite cliffs especially where the land juts furthest seaward. (Examples are in figure 4). These may be as high as 15 metres on the north-west side of the island. Intertidal rock shore platforms frequently occur, sometimes in association with cliffs and sometimes independently.

The deeply weathered laterite profile provides an easy quarrying environment for the sea and other erosion agents (Davies 1972:78-84, 93, 97), and notching is common in the cliffs up to three metres high. Wave quarrying varies from rapid to slow depending on the time of the year, and causes beaches in front of, or downdrift of cliffs to be covered with boulder material. Pebble beaches may form in re-entrant traps (Davies 1972:107, 112). Freshwater springs are found in holes in the rock shore platforms at some places, e.g. at Spring Point, and at walpakuntiyan in F.J's country. These features of coastal erosion and deposition are illustrated in figure 4.

The lower parts of the eroded plateau surface are buried by sand beaches, coastal dunes, dune ridges and sand platforms. The material is mostly derived from the sediments of streams brought onshore by the local transport system. However marine sediments may play an important role on the north-west coast of Mornington Island where there are few streams.

In the latter case, sand material may have originally derived from the rivers of the western and south-western Gulf of Carpentaria. The dominant agent for building dunes on the north-west coast is the north-west wind. This blows intermittently from November to April bringing monsoonal rain from January to March. Despite the high rainfall there are sufficient periods of very hot sunny weather which, being associated with diurnal tides, allow the back of the beach to dry out. This results in the sand movement necessary for dune formation.

There is extensive impedance of marine material around most of the island caused by cliffs, protruding rocks and offshore rock platforms that jut seawards. Such obstacles are more pronounced on the south-east coast where re-entrant sand traps occur frequently to make broad, sand beaches (Lardil, kela). The winter wave energies, and the varying directions of the irregular coastline on the south-eastern side of the island, are two factors ensuring the formation of well developed swashaligned and drift-aligned beaches as well as sand spits.

The north-west coastline is much more regular and consequently conditions of free transport of sediments are probably higher. On this side of the island sections of high hard rock headland occur at intervals (e.g. at Gold Cliff and White Cliff). The dominant north-westerly approach of the summer waves brings marine sediment on-shore to form parts of coast¹ that could be classified as 'zeta form bays' or 'offset coasts' (after Davies 1972:136).

^{1.} Long-shore drift may also play a role in this process.

The seas surrounding the Wellesley Islands supply the coast with a high proportion of calcareous material. 'Warm tropical seas, highly supersaturated with lime, are characterised by particularly high rates of production and low rates of dissolution. A great range of animals and plants of very varied phylogeny produce sheaths, spicules, segments, branches, chambers, crusts and massive particles of calcite and aragonite.' (Davies 1972:113, 114). Waves bring these marine-produced deposits to the beach in concentration, particularly in the dry season. During the wet season this material is diluted by non-calcareous sediments brought to the coast by freshwater streams. At kuraliya in F.J's country one sand ridge consists entirely of such calcareous components, wave sorted and washed free of sand. Such a shell beach is termed melmir tulka in Lardil.

The high calcium carbonate content of the beaches and near-coast dunes results in the formation of lithified beach rocks, platforms and dune cliffs. In the wet season surface water seeps through the sand dissolving calcareous material, and springs out along the beaches at the raised water table level. The calcite precipitates out, cementing together shells, shell fragments, laterite pebbles and rocks in different proportions to form beach rocks. There is a resultant distribution of sand rock, shell rock, and a variety of conglomerates. These lithified formations "are exposed, normally by beach retreat, in the intertidal zone; usually projecting from the unconsolidated beach² sometimes forming reefs, and sometimes being refashioned by the sea into what may clearly be called shore platforms." (Davies 1972:116). In several of the lithified rock platforms³ Lardil men point to impressions in the surface which they claim are the footprints or marks of ancient human ancestors. 4

Freshwater springs out along the top of the beach in the wet season, above the normal high tide level. These springs were an important source of water for the Lardil. Along this shoreline grow Casuarina equisetifolisingly, or in clumps, and in parts as a long high wall of coastal flora up to several kilometres long (e.g. at Birri in G.P's country.) This habitat is a favoured camping place of the Lardil. These oak communities susceptible to destructive erosion by high energy waves during storm surges associated with severe cyclones.

Tindale (1962A:284) reports similar wave-sorted shell beaches on Bentinck Island.

e.g. at nhathatjampeli in F.J's country.

^{3.} An example is at panta in F.J's country - see figure 22.

^{4.} Tindale (1962A:281) has reported the same phenomenon amongst the Kaiadilt.

The origin of the sand-based coastal units

Given that the energies of the wind and sea varied throughout late Quaternary time, conditions of formation of sand-based coastal units are not easily reconstructed, and the following classification must be regarded as preliminary only, merely aimed at providing a discussion basis for the remainder of the thesis. Two important variables are easily identified from field observation, viz. morphology and vegetation density. Structural form varies, largely as a result of different constructive and destructive agents. Three prominent methods of origin appear to be (i) parallel sand-ridge formation by successive emergences of submarine sandbars; (ii) high dune formation by wind action on the beach; (iii) levelling and platform formation by the eroding action of wind and rain on the above two primary forms. Vegetation density varies but a general rule is that the most recently formed sand systems are inhabited by grass and groundcover with very few (if any) trees or shrubs, whilst the oldest sand systems are well vegetated as woodlands and forest.

The seaward ridges "are generally composite, sharply defined, and composed of white shelly sand. The shell content decreases inland, and the ridges become less well defined." (Grimes 1974:11). The oldest sand systems are freed from calcareous content and salt by continual solution during the wet season, 1 and by the interaction of plants on the surface. They contain a large proportion of loam derived from vegetable matter, giving soil colours of dark, mid, and pale brown. A distinction can be made between the newer formations of calcareous sand and the older formations composed of siliceous sands. These soil units correspond to the C.S.I.R.O. (1968:7) soil landscape units A20 and B35 respectively and to the geological units Qm and Qd in Grimes (1974).

Colonization at dune and ridge fronts is effected by long creeping rhizomes, vines and grasses such as Spinifex longifolius (kutjiku), Vetiveria elongata (spear grass, tilmir), Euphorbia atoto (munir munir), Vitex trifolia (wultha wultha), Vigna marina (warapu), Themeda australis (lulmurr).

Grimes (1974:11) puts forward this explanation, but says an alternative cause may be variation in the original deposits.

Grimes (1974:12) compares carbon 14 age determinations for sand ridges at Edward River. The data indicates a progressive aging of the ridges from the coast to the inland. The oldest ridge is dated at 5630 B.P., whilst the oldest shelly sand ridge is 3935 B.P.

SAND BASED LAND SYSTEMS OF MORNINGTON ISLAND



Aboriginal assistants gather up plant specimens on the top of a high consolidated dune ridge on the windswept south-east side of Sydney Island. The trees whose tops are visible, grow at the base of the dune front which has been lithified into a stable rock base at the water table line.



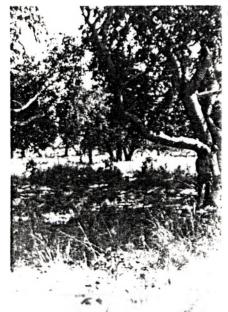
A shallow tidal estuary breaks through a sandbased system on the north-west side of Mornington Island. Oak trees (Casuarina equisetifolia) growing on the beach merge into mangroves. A tidal flat lies behind. Such estuaries were favoured places by the Lardil to net and spear fish.



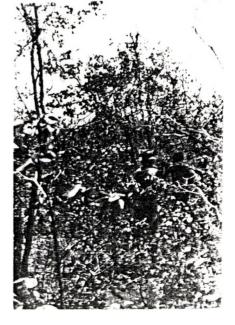
The rear of a stabilized sand ridge, with a gentle slope back to meet the interior Mornington plateau.



An older sand platform near Birri, freed of calcareous content and supporting a wellestablished Eucalyptus woodland.



A campsite amongst bloodwoods at Metjingi in Fred Jaurth's country. This ancient sand platform is isolated from the sea by a tidal flat and estuary. 👝



Low open forest grading into scrub on an old sand-based system in Kelly Bunbujee's country. ____

These bind the sand, eventually allowing a more extensive grass cover to form with a generally sparse distribution of shrubs and trees such as Casuarina equisetifolia (wunhan), Pandanus sp. (tangal), Planchona careya (wiwal), Excoecaria agallocha (kurtan), Canarium australianum (pilkurr).

The older sand-based systems that are most distant from the coast support a variety of communities, including (i) woodlands dominated by tall Eucalyptus papuana (whitegum, palarru); (ii) low woodland (up to ten metres high) with Eucalyptus polycarpa (bloodwood, pilthurr) dominating amongst a variety of broadleafed species (e.g. at metjingi and tinkilimi in F.J's country); and (iii) low open forest grading into closed deciduous scrub with little ground cover (e.g. at tjinkan in K.B.'s country). This last unit is commonly called 'low monsoon forest'. It is really a form of rain forest, as it has an almost closed canopy containing numerous lianes, an absence of annual herbs on the floor, and a leafy carpet (after Webb 1968). Using rain forest terminology then, the correct title for this unit is 'deciduous vine thicket' (Webb 1968:298). Illustrations of these communities are in figure 6.

Other trees and shrubs that are typical of the older sand systems are listed as follows. Many produce edible fruits and berries:-Terminalia carpentariae (wild plum, murrpen), Terminalia subacroptera (crow fruit, tangakurr), Ficus opposita (wild fig, kirrir), Diospyros ferrea (tjital), Hakea arborescen (pintan), Canarium australianum ··· (pilkurr), Brachychiton paradoxum (thalar), Carissa lanceolata (kurnmil karnma), Hibiscus tiliaceus (matat), Hibiscus geranioides (pelparr), Securinega virosa (wulan), Antidesma ghaesembilla (kukunakan), Dodonaea platyptera (kuriwirawir), Planchonia careya (wild mango, wiwal), Eucalyptus setosa (yulalu), Santalum lanceolatum (sandalwood, yilipintapan), Petalostigma pubescens (punu punu), Opilia amentacea (pampularr), Macrozamia sp. (watat), Pandanus sp. (tangal), Acacia torolusa and A. hammondii (karrwakarr). A mid dense grassland occurs below the woodlands containing communities with Digitaria papposa (kelngka), Setaria surgens (tutakanta), Sporobolus virginicus (melpe), Heteropogon contortus (karawakanta), Triodia sp. (tjaran), Aristida sp. (kawuruwa).

If these sand-based units are taken to be the oldest and hence of siliceous material, then a correlation between age of sand, chemical make-up of soil and vegetation character might be made for such systems, but is beyond the scope of this study. Some dunes with well established Eucalyptus woodlands are perched high on laterite cliffs suggesting that they grew before the cliffs were cut.

The first method of sand ridge formation mentioned above is the result of submarine sand bars driven shoreward and emerging from the sea as swash-aligned beach dunes not exceeding four metres in height. These eventually form a series of roughly parallel sand ridges and swales.

The swales are open in some places but many contain a closed community of shrubs growing in semi-saline conditions that include Avicennia eucalyptophylla (marin), Rhizophora sp. (puthur), Bruguiera sp. (mur), Exocarpus latifolius (nyulangka), Premina corymbosa (piyal), Guettarda speciosa (parrar). Some swales near the coast contain saltwater lagoons if barrier construction conditions have been suitable.

Up to ten parallel sandridges and swales are not uncommon, the largest complex occurring in the vicinity of the Sandalwood River. These formations are easily observable on the aerial photograph in figure 1. Other examples are at ngalingaliwuran in F.J's country and at parartkiya in K.B's country. The ridges between the swales are mostly open with a tussock grass cover. On the landward ones are to be found individual or small stands of shrubs such as Hakea arborescens, Ficus opposita, Planchonia careya and Pandanus spp.

The second type of dune ridge formation (Lardil tulka) consists of one or several large dunes up to 20 metres in height, some higher; much more so than the parallel sand ridges described above. An example is illustrated in figure 6. The front of most of these dunes slope gently. There is often only a single ridge but there may be a second or third large dune ridge behind with intervening swales. Alternatively the front of the dune may consist of a series of small steps or ridges escalating up to peak at the rear, as at piriwaka in F.J's country. Formation of these dunes appears to have been by the action of the south-east winds during dry seasons of low humidity. They are most frequent on swash aligned beaches where there is an abundant supply of sand exposed to the wind for lengthy periods of time by the diurnal tides. They thus predominate on the south-east side of Mornington Island, but the highest are on the north of Wallaby Island and the south of Sydney Island. Where the Mornington plateau slopes gently down towards the coast to meet the rear of the dunes, fresh water swamps may form in cavities providing a habitat for Melaleuca spp. and water lilies, e.g. at karra karra in F.J's country.

Along the south-east side of Sydney Island is an example of a high continuous sand-dune ridge that has been well stabilized over time by vegetation and by lithification of the forefront which now stands as a cliff in many places. The top is well grassed with a very sparse distribution of wind-swept and sandblasted low shrubs and groundcover such as Diospyros ferrea (tjital) Pavetta brownii (pilpil), Euphorbia sp. (munix munix). The partly lithified dune front provides a stable rock base at the wet season water table line on which trees are well established as a wall of vegetation along the length of the dune and as high as it (See figure 6).

This community consists of Casuarina equisetifolia (beach oak, wunhan), Ficus opposita, Guettarda speciosa (parrar), Scaevola taccada (purrnganga), Hibiscus tiliaceus (matat). The rear of the dune is vegetated with tall shrubland and low woodland, the species being characteristic of the older vegetation communities listed before.

The oldest vegetated sand-based units are low undulating platforms e.q. at parartkiya in K.B's country. They are derived from the progressive erosion and vegetation of the primary ridges and dunes. The action of rainwater is probably also partly responsible for the breaking down of the sand ridge profiles into secondary dune platforms. These platforms can be classified as secondary dune systems. Examples are to be found physically separated from the coast by tidal flats and mangrove systems testifying to their age (e.g. at metjingi in F.J's country). Some depressions which appear to be segments of old swales contain swamps with a humus and clay foundation as at palantere in K.B's country. They contain broad-trunked Melaleuca spp. and Nymphae spp. (see figure 16). The latter plant was a popular seasonal food resource of the Lardil whilst the former yields large sheets of paperbark, an important traditional shelter building material. In very shallow swampy areas an almost pure plant community is sometimes found dominated by Elaeocharis dulcis (kurka). The corms (pentja) of this plant are a favoured seasonal food of the Lardil. Examples are at larrlkriya in F.J's country and tjinkan in K.B's country. It is on these old sand platforms that low open forest up to six metres may be found 1 without any under storey (see figure 6).

Small wet weather streams and creeks have broken through coastal dune formations at places where berms or ridges are low. Deflected inlets may occur on drift-aligned beaches. Here barriers are formed by estuary discharge swept downdrift by the waves induced by south-east winds (Davies 1972:129). An example is at theeyi in K.B's country.

The Lardil people have an extensive series of permanent wells in the sand-based coastal units. They are located over raised areas of ground-water which are transmitted from underground sources via fissures in the laterite and through sandy and shelly bands in the blue clays and sand clays underlying the dunes (Gloe and Weller 1949:7).

Interior and coastal land systems

The foregoing description of the landscape of Mornington Island and other proximate islands provides the basis for delineating a set of 'land systems' units for use in the remainder of the thesis.

^{1.} Probably a similar community as Martensz's 'monsoon forest' in the Sir Edward Pellew <u>Islands</u> (1969:18)

TABLE 2. LAND SYSTEMS OF THE NORTH WELLESLEY ISLANDS

Term of Reference	Geology	· Soil	Flora	Other Characteristics
TERIOR LAND SYSTEMS Exposed Normanton Foundation	Exposed rock of the Normanton Foundation Geological unit Kln.	l	I	This unit occurs infrequently according to Grimes (1974)
	Deeply weathered sediments (kaolinized silicified and ferruginized)			
The interior land systems of the Mornington Plateau	Laterified Normanton Foundation. Geological unit If.	yellow grey loams and clays with nodular laterite. C.S.I.R.O. soil landscape unit Mbl7	Contains a variety of low open forest, low open wood-land, low woodland, open scrub, closed scrub, tussock and hummock grasslands	These two units combine to form an undulating surface, predominated by low Eucalypt woodland and grassland. There occur some
	Land system 2 dissected and with a surface of colluvium and alluvium. Geological unit Czs.	quartzose sand, gravel, laterite pebbles	: :	lateritic scarps between the two units with Acacia woodland, often lacking an understory
Intermittent streams	Alluvium. Geological unit Qra.	Stream bed sediment. Quartzose sand, silt and clay.	Surrounded by a fringegrowing community of woodland, low woodland and shrubland	A small unit occurring most- ly in land system 3. The unit consists of a string of waterholes in the dry season.
Intermittent swamps .	Fine alluvium	Silt and clay	Low spialenca shrubland, usually with Spragae spp.	A small unit occurring mostly in Land System 2.
ASTAL LAND SYSTEMS Tidal flats. Also referred to as saltpan & claypan	Salt and tidal flats Geological unit QCp.	Sand, mud, salt. Mottled grey and yellow, grey and brown clays. C.S.I.R.O. soil landscape unit Fol	None, except for transition zone of low shrubland at the edge	May cover over during the wet season, with sheet flow from the interior land systems, and with salt water from tidal estuaries.
Meadows	Geological unit Qad	Probably silt over Land System 6	Tussock grassland	A small and infrequent unit compared to the others.

8	Beaches	Laterite boulders, pebbles,	The geological components	At the top of some heaches	Both swash-aligned and
		calcareous sand and shells	occur in variable distribution Most beaches are a mixture of sand and shell. Some wave sorted shell deposits occur washed free of sand. Boulder beaches occur in conjunction with Land System 16 & 17	At the top of some beaches lines and clumps of trees (woodland) form a transition unit. Casuarina equisetifolia often occurs as a pure community in a continuous line	Both drift to be
	Sand ridges	Geological unit um	Calcareous sand. C.S.I.R.O. soil unit A20	The ridges are covered with tussock grass, the older ones having some open woodland. The swales may be either open, or contain shrubland in parallel bands	Parallel sand ridges and swales '
	Sand dunes	Geological unit Qd	Calcareous sand grading to siliceous sand on the older dunes	Dunes are covered with middense grassland, open, or with low open shrubland or woodland. Where dune fronts are steep, possibly forming lithified cliffs, a line of woodland may occur at their base.	Several dunes may recede as undulating ridges from the shore
	Sand platforms	r	Dark, mid-tone or pale brown silicious sand	Tall shrubland or low wood- land, with mid-dense grass- land. In some places there may be low open forest grading to open scrub with little undercover	Derived from Land Systems 9 & 10
	Pentja swamps	Usually located in Land System Unit ll	Grey clay	Almost pure community of Elacocharis dulcis	Intermittent swamp
	Freshwater swamps	Usually located in swales free of tidal influence in Land System 9 or at the rear of dunes (Land System 10)		Surrounded by a woodland transition zone and containing Nymphae 8p.	Both intermittent and pere
	Saltwater lagoons	Located in swales between sand ridges close to the coast	Sand based		Perennial. Normally cut o from the sea by sand barriers
	Mangroves		Sand, mud, salt	Low closed forest. Some mid-height closed forest.	Distinctive green flora in littoral locations. Often
	Laterite cliffs	Often notched. Mathinal remised by the sea to contilbute to Land System 3	i	ı	association with tidal estuaries.

TABLE 2 continued

Wave cut. Sometimes in association with 16.	Sand rock, shell rock and conglomerate. Shells, shell fragment, sand,
Laterite shore platforms	Lithified shore platforms and beach rocks
11	18

Sand rock, shell rock and conglomerate. Shells, shell fragment, sand, laterite pebbles and rocks are cemented together in different proportions depending on which of these components occur at the top of the beach.

'Land systems' consist of soils, topography, flora, and fauna combined and interacting together in recurring characteristic ways. "These inherent land characteristics are dependent on the nature of the underlying rocks (i.e. the geology), the erosional and depositional forces that have produced the present topography (i.e. geomorphology), and the climate under which these processes have operated. That is, the land system is a scientific unit for the description and mapping of types of country, classified according to their origin." (Stewart et al 1954:113).

No scientific description of the land systems of Mornington Island has been carried out by the C.S.I.R.O. or any other body known to the investigator. This description represents a pilot study for future testing and elaboration. The land systems units used in this study are set out on table 2. They all hold significance of different sorts for the Lardil people, conferring particular natural properties on different Aboriginal places. The units are coded on to the maps of the two study countries (figures 7 and 8 in Chapter 4). Neither individual sand-based units nor interior units are clearly defined on the maps due to lack of clear boundaries between members of each of these two categories, and due to their properties varying along gradients rather than by sharp contrast. Several of the geological units noted in Grimes (1974) have too small a distribution on Mornington Island to occur in either of the two study countries, and hence do not appear on the maps herein. 1

Littoral and sub-littoral land and marine units yield important food resources for the Lardil and some are included in the table of land systems. Others (not included) consist of tidal estuaries, channels, sandbars, sand spits, berms, sand and mud flats, laterite reefs, lithified and coral reefs.²

These units are: (a) Qa: flood plain alluvium:sand, silt, clay.
 (b) Qac: coastal alluvium:quartzose sand, silt, minor clay.

^{2.} Heatwole (1975:145) reports that there is a small amount of coral in the southern Gulf distributed in local patches around islands. Grimes (1974:7) reports some exposed coral reefs on the north-west side of Mornington Island.

In the table a division has been made between the interior land systems located on the Mornington plateau of Cretaceous and Tertiary origin, and the coastal land systems produced in the more recent Quaternary period. The Lardil refer to the interior as witawampal or 'inside country', and to the coast as kela, beach side or 'outside country'. It will be seen in the following two chapters that this division was of fundamental importance to both Lardil economy and religion.

^{3.} This word also means 'sand beach' in Lardil.

Introduction

Rapoport (1972:1) has suggested that the range of ways of defining place amongst Australian Aborigines is of scientific significance due to their reliance more on mental associations rather than physical structures to create a sense of place. This appears to be in contrast with the Western world. He claims (1972:2) that "with regard to the symbolic representations of place it does seem possible to generalize" for the whole Australian continent. However in-depth studies of the Aboriginal concept of place are few, and deal only with some of the relevant aspects. For example, the make-up of land-owning units has been reviewed in Hiatt (1962) and Stanner (1965); Tindale (1962A) has mapped the geography of the Kaiadilt, the shelters of some groups have been recorded by Roth (1897, 1910A), Thomson (1939, 1949), Hamilton (1972) and Biernoff (1973) amongst others; patterns of seasonal use of the landscape are known for the Wik Monkan (Thomson 1939) and the Nunggubuyu (Biernoff 1973, Thomson 1949). sensory and behavioural properties of traditional camps have been described for the Tjankuntjara (Hamilton 1972) and the Nunggubuyu (Biernoff 1973). Throughout this thesis reference is made to these and other writings to enable some comparisons to be made between Lardil properties of place and those of other Aboriginal groups.

In this chapter a study is made of the traditional manenvironment relations of the Lardil. It contains a description of
the different types of places in Lardil lands. Geographic examples
are regularly drawn from the two study countries of informants F.J.
and K.B. The data contain a large amount of detail on campsites
which is interconnected with patterns of population movement. Architectural structures are examined. Attention is directed throughout to
types of behaviour, artifacts, and knowledge and other properties
associated with particular places. Finally some cognitive evidence is
used to support various arguments about the nature of places in the
traditional Lardil world.

The data were used to reconstruct the situation just prior to the arrival of the first missionary in 1914. The historical evidence in Chapter 6 demonstrates that no acculturation had occurred from Western sources at this time, save for a few items of material culture. However a significant portion of the data used, is carefully drawn from later periods, up to 1946, during which older individuals intermittently continued to practice traditional bush living.²

Later in this chapter the author devises a taxonomy of Lardil places.
 If the reader wishes to consult the taxonomy whilst studying this chapter, it is to be found facing p.185.

^{2.} Note that reconstruction of hunter-gatherer life at this time involves (a) drawing upon old people's memory knowledge, and (b) making observations in the field as old people recollect specific incidents of bush life, and simulate some of its activities. Such data collection methods do not readily yield quantitative data concerning economic variables, e.g. energy expenditure and exact time budgeting. Ecological models involving such quantitative factors are thus not

The Lardil as a 'tribe'

The Lardil people traditionally associated with one another and shared a common culture. They could rightly be called a tribe according to a recent set of criteria formulated by Turner (1976: 180-181). They shared the following characteristics:-

- (i) They spoke a common language which was called *letil* differing from that of their neighbours on Denham and Forsyth Islands.
- (ii) They occupied a common territory with a well defined boundary, exploiting it for their economic needs. The physical nature of islands allows such a precise geographical unit to be defined. The Appel Channel forms the boundary between the Lardil territory and neighbouring tribal group, the Yangkal. All of Wellesley Islands to the north-west of this channel are claimed by the Lardil, with the exception of the Bountiful Islands. (Refer to figure 2 in Chapter 3, which is a map of tribal lands in the Wellesley Islands).
- (iii) They referred to themselves using two common names which were also used by their neighbours to refer to them, viz. letil
 and kununamenta. Kununa is the name of Mornington Island,
 and kununamenta literally means 'people of Mornington Island'.
- (iv) They shared a common culture. It differed from their neighbours in at least two significant ways:
 - (a) the Lardil exploited only island resources whilst the Yangkal had access to mainland resources also.
 - (b) they had only one contiguous tribe with whom they could interact and trade. The Yangkal had several tribes to whom they had access, whereas mainland tribes had from three tribal neighbours up to nine or more, (e.g. the Walpiri had ten according to Tindale's tribal map (1974)).
- (v) Their members interacted and co-operated on a more or less regular basis. Sub-tribal groups may have had disputes from time to time, but usually meetings of people from such groups occurred regularly for feasting, dancing and ceremony.
- (vi) They exhibited a measure of political autonomy, The older males comprised a governing body controlling allocation of important economic resources, maintenance of behavioural codes, trade and feud with neighbours, initiation ceremonies, expression of religious and cosmological knowledge to manipulate the behaviour of people and activity in the natural environment.
 The above attributes will be discussed throughout this study, especially

the characteristic of 'occupying common land'.

The size of the Lardil tribe in traditional times is in doubt, since early reports conflict. Howard (1910) reported 400 people on Mornington Island in groups of 40 or 50 (i.e. from 8-10 groups). It will be demonstrated later that the size of local groups was variable dependant upon seasonal and social factors. It is also likely that Howard's presence around the island made an abnormal impact on population distribution since many individuals would have travelled to observe his party and vessel. In 1914, Hall surveyed the island on horseback and estimated population size at 200 (Hall 1915). One can employ a rule of Roth's (1910A), which he used to calculate the size of the Kaiadilt population, to give a third estimate somewhere between the first two - approximately 250. It seems then that the population at the time of first contact was between 200 and 400. An accurate estimate requires in-depth genealogical study which is not in the scope of this thesis.

Social structures

At a subtribal level the Lardil classify themselves into categories of people in a number of institutionalized ways that constitute a complex social structure of population units and relations between individuals in such units. Although the central aim of this thesis is not concerned with social structure directly, it is necessary to briefly describe Lardil social structure to provide a context in which to discuss cultural phenonema relevant to this study. It is shown that some social categories have a spatial definition and that such spatial units can reasonably be called places. The association of a group with a space is referred to as a socio-spatial or socio-geographic unit. People often identify as belonging to such units. They carry out specific patterns of behaviour in some of them which further emphasizes uniqueness of place.

Three dimensions of social structure require examination:

- (a) moieties, semi-moieties and subsections
- (b) patriclans
- (c) socio-geographic units named by direction Emphasis will be on the relation of these structures to behaviour and place.

Moieties, semi-moieties, and subsections of the Lardil

In 1935, Sharp carried out research at Mornington Island mission on the 'social structure' of the Lardil. He reported (1935, 1939) that among the Lardil there are eight segments or subsections which combine to form larger categories, viz. four unnamed semi-moieties and two unnamed moieties (1935:158, 162, 163). The members of each

semi-moiety constitute one patrilineal descent line of the kinship system. The Lardil people often call each of the eight segments 'skins' in Aboriginal English. In contemporary Lardil the names of the subsections are puralangi, kangala, yekamari, kamarangi in one moiety, and ngaripilangi, pulanyi, pangaranyi, and palyarinyi in the other. The phonetics differ a little from Sharp's. One obtains one's skin affiliation at birth by virtue of descent. In a situation where two parents are correctly married by skin, the skin of the child is not that of one's father, but rather that of the other subsection of one's father's semi-moiety. For example, if ego belongs to subsection A and his father to subsection B, then his children will belong to B, but the children of his sons will belong to A, as did his father's father. The members of subsections A and B make up one semi-moiety.

Although the semi-moieties and moieties are unnamed, this social structure corresponds closely with the Mara and Aranda semi-moiety systems (Sharp 1935:160). The investigator has travelled with Lardil men amongst Walpiri, Warramunga and Wanyi tribesmen who upon meeting, are all quick to discuss and work out their social positions within the eight subsection system.

Sharp reported (1935:164) that the members of each semi-moiety commonly possessed a number of totems. The members of a moiety (i.e. two semi-moieties) also share some totems, although no totems are shared between members from opposite moieties. Totems are discussed in more detail in the following chapter.

The Lardil had a variety of behavioural norms based on this social structure. These directed the nature of many everyday interactions between people. The individual was obliged to regularly note the subsection or skin of spatially proximate persons in relation to his own skin and choose socially prescribed patterns of behaviour accordingly. These norms can be referred to as 'descent-phrased rules' in line with the terminology of Scheffler and Fortes (Holy 1976:119). The Lardil have terms used to distinguish one's kin such as father, mother, brother, father's mother, father's father, mother's mother, mother's sister, etc.

^{1.} Although the names of these eight subsections may vary from tribe to tribe, the names used by adjacent tribes often bear phonetic resemblance. Using the subsection nomenclature provided by Sharp (1935), Spencer and Gillen (1904), Reay (1962), it is possible to discern such phonetic similarities in adjacent tribes from the Lardil through the Wanyi, Karawa, Janula, and through all tribes down to the Aranda and Walpiri.

These terms are each applied to a complete class of persons who are members of one subsection and of a specific generation level. Thus everybody in the tribe (and in neighbouring tribes with the same social structure) is a classificatory relative of one sort or another. The most important descent-phrased rule concerns marriage. Under normal circumstances a man of a particular subsection may choose his wife from within only one other prescribed subsection; specifically, a man and his sister marry the daughter and son of a mother's brother's daughter. The Lardil also had some alternative marriage rules which Sharp has outlined (e.g. 1935:162).

Elsie Roughsey (1972) refers to some of the behavioural rules observed by the Lardil:-

- (i) classificatory sisters-in-law cannot talk to each other, except through a third person; similarly brothers-in-law (1972:91, N.S.135).
- (ii) a man cannot looknor talk to his parents-in-law (1972N.S.: 135).
- (iii) various classificatory relatives have obligations to intervene in fights between married couples of particular subsections (1972:92).
- (iv) only certain classificatory female relatives may attend a pregnant woman, and a newly born child. Some classificatory relatives are obliged to present gifts to the new born child (1972 N.S.:126).
- (v) classificatory uncle of child (father's brother) is entitled
 to punish the mother if she hurts the child (1972:92)
 and so on.

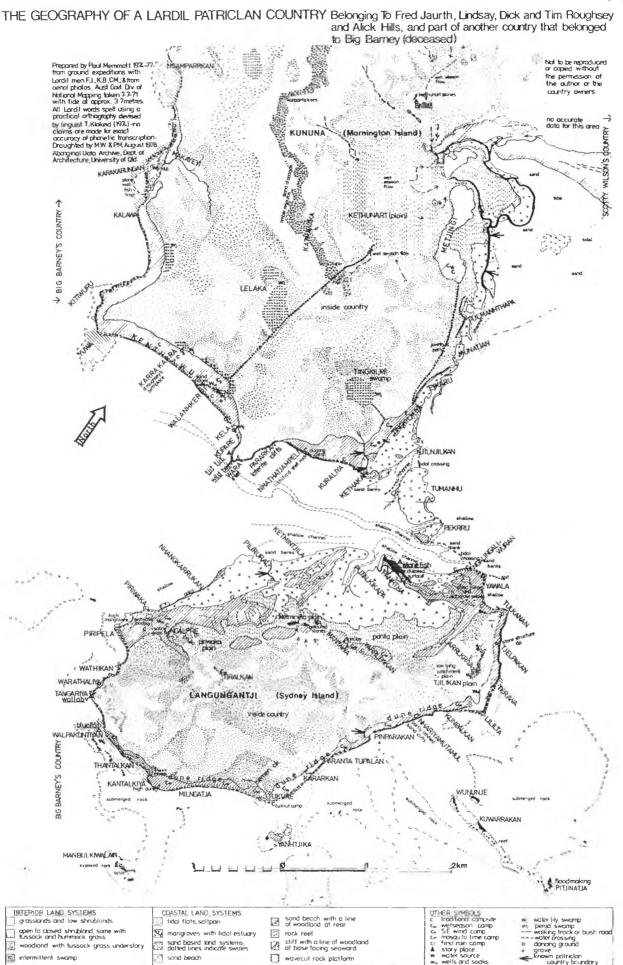
Rules such as these pervade all aspects of everyday behaviour; talking, sleeping, small group interaction, food sharing, fighting, dancing, etc. Sharp gives examples of how the unnamed moieties find expression through behaviour:-

- (a) members of one moiety circumcise and/or subincise boys of the opposite moiety (1939:456);
- (b) members of one moiety play a game using a string ball, against members of the opposite moiety during the initiation ceremony, (1935:167).

Further examples of such behaviour between individuals of different subsections and moieties are discussed herein when they are associated with a particular place.

Countries and patriclans

The eight subsection system described by Sharp does not alone



N.B. Interior land systems are mapped using textures that give an indication of the intergradation of units. Sand-based systems are described independently in the text, but mapped collectively due to their complex inter-gradational character. Boundaries between units are only mapped if reasonably clear on aerial photographs at a scale of approximately 1:15.000.

wavecul rock platform

exposed rock masses other than cliffs marine and land lithfied platforms/beach rack

sand beach

cliff of laterite or lithified material

intermittent swamp

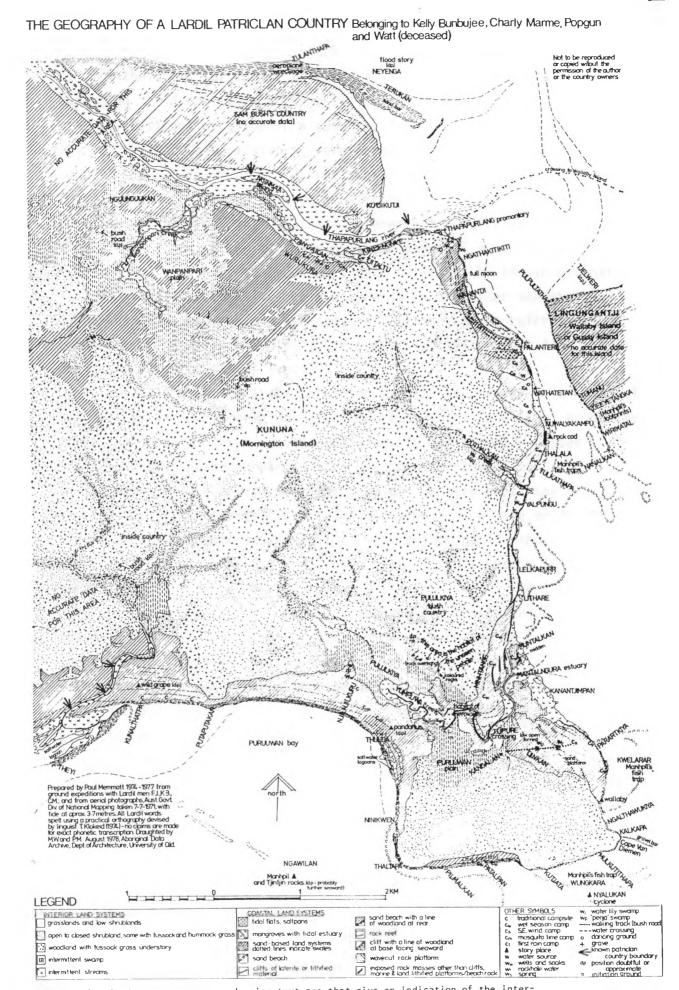
comprise the traditional Lardil social structure. Another set of social segments are landholding units. They were briefly described by Sharp as being small and unnamed, and consisting of a "few siblings or parallel cousins and their known descendents, the patrilineage or joint family. Its solidarity rests primarily on kinship bonds and a common interest in territory which consists of a number of usually contiguous named countries of varying size..." (1939:456-7). 'Country' is the term used today by the Lardil to refer to these land units. Two of them have been mapped - (see figures 7 and 8). "Common interest in territory" was focused on the joint huntinggathering activities of the group. The agnatically related occupants of each 'country' will be referred to as a 'patriclan'. Each patriclan contained males from three or four generations. The unit was exogamous women normally married into patriclans other than their own and came to identify with their husband's country. ² From Sharp's definition the patriclan might be seen to consist of a fixed number of families displaying patrilineal affiliation, and having common identity with a fixed area of land.

However, this is an oversimplification. The size of residential groups varied at different times of the year due to seasonal influences on hunting and gathering methods. Individuals travelled extensively outside of their patriclan countries for social as well as economic reasons. These factors concerning movement in the environment are examined in detail later. Although the majority of the occupants of a country were normally members of the patriclan, other individuals might be affiliated with the group for varying periods of time, through a variety of ties such as (a) patrilineal and patrifilial ties, (b) affinal and matrifilial ties, (c) friendship, (d) ties of trade, e.g. with Yangkal tribesmen, (e) ties of loyalty to a 'big man', (f) political ties arising from conflicts between patriclans and larger social groups, (g) ties through common participation in dances and ceremony. All of these factors carried relative structural importance in the composition of local residential and economic groups. The idea of territories being occupied by static patriclans is an error that is well recognised by contemporary theorists in social anthropology.

3. e.g. see Holy (1976), Hiatt (1962), Stanner (1965).

^{1.} Tindale describes a similar land-occupying unit among the Kaiadilt as an unnamed hordal territory claimed by descendents of a common ancestor in the male line (1962A:273).

^{2. ... &}quot;wives stay with their husband's people" (D.R. in A.D.A.: F22).



N.B. Interior land systems are mapped using textures that give an indication of the intergradation of units. Sand-based systems are described independently in the text, but mapped collectively due to their complex inter-gradational character. Boundaries between units are only mapped if reasonably clear on aerial photographs at a scale of Negariment Of The Complex Complex in the complex inter-gradational character. Boundaries between the complex inter-gradational character in the complex inter-gradation character in the complex inter-gradatio

LARDIL PROPERTIES OF PLACE
PAUL MEMMOTT
Department Of Architecture

Nuclear families and single men might reside in a number of countries during a year and would camp with members of the home patriclan in each of those countries. Such individuals would normally maintain an identity with their own (or father's) country, and express this relation by returning there from time to time to live with their affines.

The residential group in a country, i.e. members of the patriclan together with outside visitors, were normally presided over by a senior male of the patriclan or by several senior males (brothers, step-brothers, cousins). In the absence of strong male leaders, a woman occasionally obtained this status. Reference to countries in speech is usually make today using the name of this leader, 'e.g. "Gully's country" or "Fred's country". Geographic data collected by the investigator indicates that the countries were not named in any other manner, although popular geographic place-names are often used to refer to whole countries by loosely extending their proper spatial context to designate larger areas of land.

The title given to these patriclan leaders was tulmata. In general the tulmata was an elderly man with important social and legal authority. After the death of a tulmata, the tulmata-ship was normally passed down the patriline to an eldest son, grandson, brother's son, etc. In the absence of a mature male the role of 'country boss' may be carried out by other relatives of the deceased e.g. a wife or daughter. A tulmata may bequeath or will his country before his death to a specific individual who may not be the most eligible person in the patriclan or may not even be a member of the patriclan. Such situations were likely to cause serious disputes after the death of a tulmata.² Informant J.J. stated that the tulmata may have chosen to pass his country to a "law man with a strong tongue" (i.e. a man of authority), rather than to a son whose authority was weak. Thus Big Peter and Billy Waga gave J.J.'s father tulmata-ship over their countries. Evidence collected by anthropologist David McKnight ³ suggests that the occupancy of countries by specific patriclans changed from time to time. Population growth and internal conflict within a patriclan may have resulted in the division of a country into two. 4 Alternatively the decline of

^{1.} Similarly Tindale notes that the countries of the Kaiadilt were referred to by the contemporary or immediately past 'boss' (eldest member of the patriclan) (1962A:273).

^{2.} Tindale mentions disputes over territorial claims amongst the Kaiadilt (1962A:273).

^{3.} Personal communication, London, February 1975.
4. The idea of a hunting group growing in numbers until it becomes ecologically unstable and then splitting into two distinct bands has been examined by Bradfield (1973:454) in his discussion on baboons. The first symptoms of such a split might be when the males separate into two groups for daily hunting.

the numbers of a patriclan due to death and infertility may have resulted in the amalgamation of a country into a neighbouring country under its tulmata. Over a time scale of several generations occasional fusions and fissions of countries may have occurred 1 in association with demographic fluctuations. The role of the tulmata 2 was not one of absolute land ownership and control, but involved only limited economic duties. He was in charge of a number of favoured seasonal plant resources, viz. pentja corms, 3 waterlilies, pena or nailfruit, pandanus nuts - kuriyal, palm tree nuts - watat. These were consumed at organized feasts. The tulmata was responsible for preventing people from taking any of the natural harvest until it had properly ripened. He then sent invitations to favoured people from outside of his country who would come and participate in the feast with members of his own patriclan. The number of people invited was appropriate to the size of the harvest, and it was allocated by the tulmata to those families present. G.P. (in A.D.A.:F3) describes these procedures:- "Boss belong to waterlily looks to see first if bulbs big enough, try him, see if everybody can join...then go for pentja after waterlily....all together...all tjirrkarampenta...then down here, Horse's Flat, have to ask boss of that pentja place first, κ wita, he gotta try pentja first... ⁵

Although the tulmata was in charge of these plant resources any Lardil individual had free access across all Lardil lands to more widely dispersed resources such as fish, oysters, timber, freshwater, etc. One important rule which had to be observed whilst not in one's own country, was to allocate specific cuts of meat off any dugong or turtle which one might catch, to the tulmata of that country, or to his closest relative in the case of his absence. The tulmata was also in charge of 'story places' in his country. Simple behavioural procedures could be carried out at these places at any time to bring about the fertility of the creature or plant whose spirit resided at that place. Such places constituted an important level of environmental control which was largely the responsibility of the tulmata. They are described in more detail later in this chapter.

Available evidence does not suggest that the tulmata had any other

^{1.} In certain ways this process is ongoing today. Contemporary land claims are discussed later. Hiatt (1965:18) also reports of the amalgamation of land holding units amongst an Arnhem Land group, the Gidjingali.

^{2.} Evidence bearing on this subject is recorded in A.D.A.:F30, F31 with K.B. Also see Roughsey (1971A:98).

^{3.} Eleocharis dulcis.

^{4.} At least two species including Pandanus spiralis.

^{5.} A similar custom is observed by the Wik-Munkan (McConnell 1934:335).

^{6.} Dick Roughsey says the cuts were tail and head of dugong; flappers, chest and head of turtle. (1971C:50).

roles or privileges other than those above. When informants describe the nature of the <code>tulmata</code> in Aboriginal English they normally say "boss belong that country", or "boss belong that <code>pentja</code> place". The suggestion is that the <code>tulmata</code> does not so much own the country, but is charged with the obligation of respecting and protecting it, and ensuring the proper use of all resources, both material and magicoreligious. This is a different mode of land tenure to outright possession which must be born in mind when discussing Lardil attitude to land. Rapoport (1972:5) suggests that the reverse of a people-owning-land relationship is characteristic of Australian Aborigines, viz. that "tribal lands are not owned even though groups of people had rights over it...the people are "owned" by the country - it knew them and gave them sustenance and life".

An alternative means existed for an individual to obtain rights of use over resources. If a person was born near a resource then that individual had similar rights to those of the local tulmata and the country was known as his or her birth country. Elsie Roughsey (1972:9, 10) mentions this:- "...waterlilies were grown in large swamps, when the green leaf turn yellow, its time to be rooted up. The person who was born there owns that part of the place also owns the swamp too. So when the boss is there he gives order to his people, they can go down to lily swamp and dig them out...when they come in their camps, they give half of the big share to the person who owns or claims the waterlily swamp"; and again:- "even in the pandanus palm tree you cannot pluck any nuts of the tree or even from the ground when it full...when the harvest time is come, everybody is allowed to help themselves, orders were always given by the man who own the place, where he was born..."

A tulmata of a patriclan country is therefore obliged to share his environmental rights and controls with those who were born in his country. This right allows individuals to make additional land claims outside of their patriclan country. Thus K.B. maintains that Lardil man, Angus Roughsey is boss of nguira, his birth place, which is on the north-west side of Mornington Island. However, Angus's patriclan country is located on and near Sydney Island which is on the opposite side of Mornington Island. Another consequence of one's place of birth is that a person inherits the local place name as a personal name. For example, Dick Roughsey can be addressed as karrakarra after the place where he was born in Big Barney's country, as well as by his tribal name of Kupalathaltan. (Local place names are widespread in Lardil lands and they are discussed in a later section of this chapter).

The patriclan countries and the semi-moieties

At this point it is necessary to consider carefully the relationships between a number of the constructs under discussion. Sharp's evidence (1935) suggests that there are important structural links between:

- (a) a semi-moiety, i.e. a patriline
- (b) a patriclan or several patriclans occupying one or more countries
- (c) the totems of the semi-moiety (listed by Sharp 1935:172-174)
- (d) the totemic centres in the country/s occupied by the patriclan/s. Sharp claimed (1939:457) that "totems associated with countries of the 'dulmar' are normally those of one's own semi-moiety, totems associated with homeland countries constitute a small constellation within the semi-moiety totems and tend to become particularly related to patrilineage which thus assumes a certain totemic character". "Totems associated with countries" can most easily be interpreted as meaning Lardil 'story places'. These are special places in the landscape in which totemic spirits reside. Sharp is asserting that the totems which have their resident places in the country of a patriclan are the same as some of the totems of the semi-moiety to which the male members of the patriclan belong. It follows that the passing down of totems from father to child through the subsection system occurs within a spatial locale in which there are fixed places that contain the energies of those totems. Association between the fotems of one's semi-moiety and the totems residing in one's patriclan country is suggested by a second statement of Sharp's (1935:166):- "The patriclan country belonging to any member of these same subsections, Ego calls his 'dulmar'; a man has special hunting privileges in countrys he calls thus. All totems belonging to Ego's mother's mother's brothers patrilineal descent line... Ego speaks of as his 'kutarien'; and this same term is used to designate the country of any member of this semimoiety...". Similarly totems and countries of mother's fathers' and mother's brother's lineage are called 'baaltan'. Totems and countries of father's mother's brother's lineage are called 'babiren' and 'babimar' respectively. (Sharp 1935:166).

In the next chapter the nature of totems in the Lardil culture are examined. The available evidence suggests that for given individuals there is not a neat correlation between the totems of one's semimoiety and those that reside in one's patriclan country. There appear to be separate systems of totemic affiliations.

If the above argument were plausible, it should also be possible

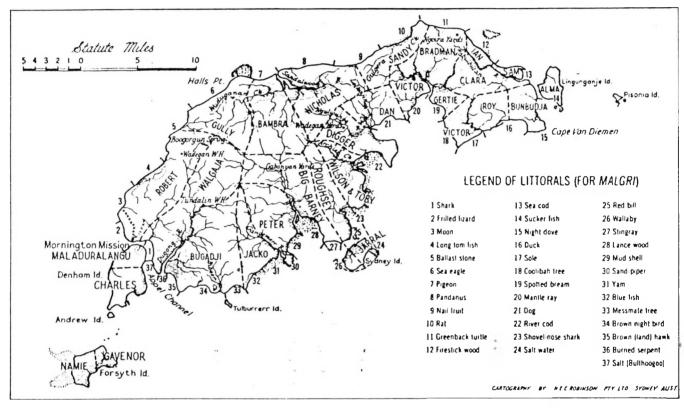
to divide the Lardil into their four semi-moieties and clearly associate the male members of each semi-moiety with a fixed tract of land consisting of several patriclan countries. However, this is not the case. A number of reasons can be put forward to explain why such arguments do not hold. It has been pointed out that if a tulmata died without an heir, his country would be amalgamated with a neighbouring country under a new tulmata who may belong to a different semi-moiety to that of the deceased tulmata. The Lardil also subscribe to additional and alternative marriage rules to that normally permitted under the Mara and Aranda type of semi-moiety systems (Sharp 1939:456). This permits a person to acquire a wife by placing himself in a semi-moiety not of his father's. This lack of uniformity in acquiring one's subsection does not make for easy comparative analysis of the skins of the occupants of countries. Still other factors complicate normal practices of land inheritance. A man may be permitted to take up permanent residence in a new country due to conflicts with relatives in his father's country, or because he simply prefers the social company of that group. If such a residential shift results in an ongoing identity with the new homeland the man's children may eventually rise to challenge the tulmataship. Such seems the case in the country in which Tiaurt was tulmata in c.1920. Today tulmataship is claimed between not only Tjaurt's two sons, but also the sons of Kiwalpitja - the Roughsey brothers. These claimants belong in opposite moieties and comprise two patrilines, not one.

Another method exists by which one can claim rights of tulmata-ship outside of one's father's country, that is, in one's birth country as described in the last section. This evidence shows that the distribution of males affiliated with the various 'patriclan countries' does not fall into any clear socio-spatial structure based on semimoieties.

Country boundaries

Patriclan countries are separated by clear boundaries that run approximately at right angles to the coast and the coastal land systems. (A boundary between two countries is coincident with the boundary between two locally named places - these will be described later). These boundaries are today referred to as 'cut-off lines' in Aboriginal English. Thus a "place cuts out the end of the country". This system of division clearly separates all of the coastal land systems into patriclan countries. The boundary lines extend out into the sea for an indefinite distance and thus marine resources are also allocated. Behind the coastal land systems the boundaries extend

A MAP OF LARDIL PATRICLAN COUNTRIES AND LITTORALS by Professor Cawte



This map is to be found in Cawte (1973:109), and is titled "The Lardit View of Mornington Island" N.B.

indefinitely into the interior land systems. Inland resource centres are usually found on watercourses which drain the higher interior zones. Isolated resource places such as a swamp or a stand of important trees can also occur in these interior land systems. All such resource places located in the interior land systems are claimed by the patriclan occupying the nearest coastal land systems. Evidence suggests that there are no clear boundaries defining the interior limits of countries. The interior zone, excluding resource places, is not considered to be in the charge of any tulmata. It is regarded as freely accessible environment for hunting wallaby, goanna and for obtaining 'sugarbag' and vegetable roots i.e. resources whose locations are not permanently fixed.

Cawte has published a map showing the Lardil countries (1973:109) - (see figure 9). His map indicates the existence of interior boundaries. Cawte spent a rather short time at Mornington Island and it is unlikely that he spent adequate time exploring the interior of the island. He would of course had readily been able to circumnavigate the island in a boat. He obtained some degree of accuracy with his coastal boundaries of countries but it will be argued here that his internal boundaries are erroneous.

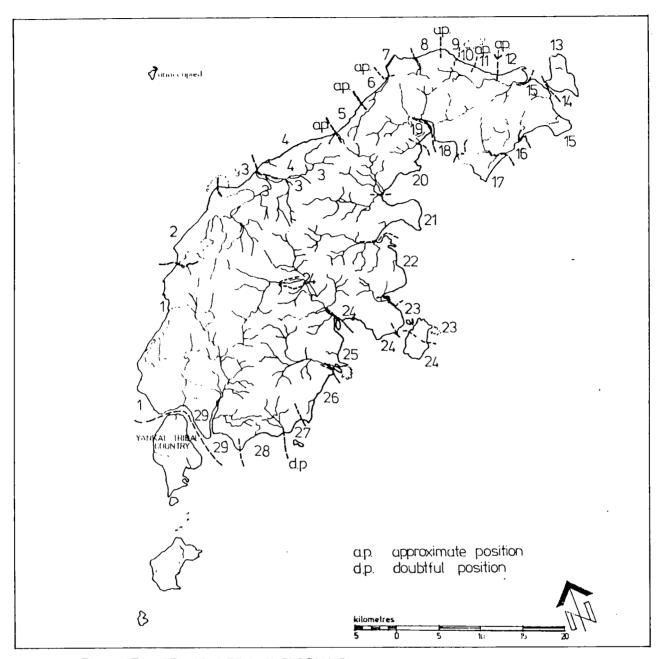
Attempts were made by the investigator to obtain information on Cawte's internal boundaries, both by interview ² and during field trips into specific countries. Coastal boundaries were found to be fixed and their positions mutually agreed upon by informants. No boundaries were located in the interior land systems; only resource centres were claimed as belonging to individual tulmata. Cawte's methodological approach is further cast into doubt by other anachronisms on his map, e.g.

- (1) Informants were unable to locate exact boundaries that divide the littoral zone into segments guarded by malkri totems, yet his map indicates such boundaries.
- (2) Cawte assigns a parcel of land to Clara Reid that consists of all interior land systems. All informants agree that Paddy Marme, her father, was the tulmata of coastal lands. The orientation of all of the patriclan countries to the sea is a point that will be returned to later.
- (3) Small errors have been made in the location of coastal boundaries (up to one km.), e.g. that dividing *Tjaurt's* land from Big Barney's

^{1.} During a University vacation (Cawte 1972:8).

^{2.} e.g. see K.B. in A.D.A.:F.7 (units 738-755).

LARDIL PATRICLAN COUNTRIES, RECONSTRUCTION c. 1914



LIST OF TULMATA OR COUNTRY CUSTODIANS

Kemin (preceded by Tarin).
Taltjirrurungalin and Malam
Parrapurr (tollowed by Paramparra).
Lunguri (tollowed by Wangalkelitjerr). Kulthukalkan (previously Munkaletja)... Tjekaritja (tall Peter) 18 19 Kanturélka 20 Malathurunku 21 22 Petangalin and Pentangalin (the two Terrys).
Tjaurt (Johny) Kamarangi Tjimpitharrunku Tjunkunirrkatja 23 Tjepalarr Pimineetja (fem Wangal Kelitja Pungkal Walankru 24 Thungalngilitia (female). 25 Kununkurr (preceded by Kungkalkatnalin) 26 Kulthawangalku (followed by Kalalatiyan). Kupúnku 13 Nithakanhmu und Pultapul 14 Quack, Doctor and Jock 15 Tipriti (followed by Panpatji). 16 Tjurpan (followed by Tenmiyaru). Tungunmu and Rekilrunkurr Terin and Kalthaparrkurunkru 28 29 Wakatja

- on Sydney Island.
- (4) The calling of one particular tulmata, pukatji, meaning the hawk, seems incorrect. The name of the tulmata was Terin (deceased) and his country contained the hawk story place.
- (5) Despite a detailed field study of Panpatji's country using his three sons (youngest approximately 68) as guides and informants, no night dove story place (i.e. malkri place) was found to exist.

The investigator has prepared two maps of patriclan countries with information on their tulmata, from field excursions and interviews. The first map is a reconstruction of the socio-geography, c.1914, at the time when the mission was founded and the traditional culture largely intact. The second map pertains to claims over countries in 1975. (See figures 10 and 11).

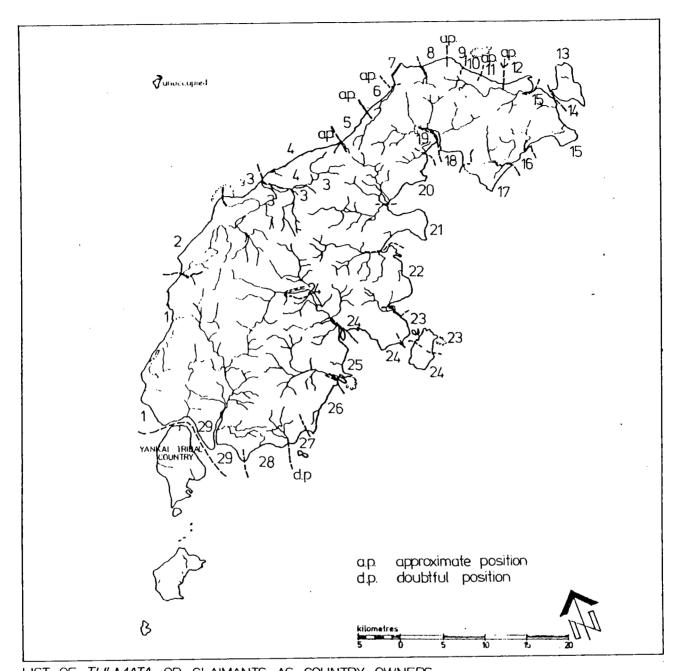
Further Lardil social divisions: the Larumpenta, the Tjirrkarampenta, the Lilumpenta, the Palumpenta, and the Windward and Leeward.

The Lardil people also subdivide and classify themselves into a small number of socio-geographic categories. According to Dick Roughsey (1971C:16) there are four: "My people own Mornington, Sydney and Wallaby Islands. We are divided into four groups by direction. The western group is called Balumbanda, the north Jirrgurumbanda, the east Lelumbanda, and south, my own group, Larumbanda." In the contemporary settlement various behavioural expressions of these units are often seen e.g. in dancing, pre-initiation ceremony, and fighting. These categories may rightly be called groups after the definitions of Scheffler, Keesing and other social anthropologists. They represent an important level of social structure. However their exact definition does not appear to be as clear as Dick Roughsey suggests.

When applying this fourfold classification, in conversation with informants, confusion and contradiction arises concerning the number of land segments by direction, their geographic extent, and the identity of various individuals within these groups. The problem is particularly confusing with respect to the identity of the palumpenta. Were these people a Lardil group living at the south-west end of Mornington Island; or were the palumpenta the Yangkal people of Denham and Namie Islands; or were they both these groups?

These apparent contradictions are partly explained through a semantic analysis which recognises that the terms larumpen, tjirrkarampen, lilumpen, palumpen, are each polysemic. 3 There are several discrete

^{1.} Klokeid's orthography is used again in the spelling of these Lardil words. It is more common in the Wellesley Island literature to see these terms spelt using a 'b' for a 'p', a 'd' for a 't', and a 'g' for a 'k', etc. Such alternative spelling may be used in some places in this thesis e.g. on maps and tables.2. See Holy (1976:126)3. After the definition of 'polysemy' by Scheffler and Lounsbury (1971:6).



LIST OF TULMATA OR CLAIMANTS AS COUNTRY OWNERS Abbreviations: M.P.D.— Members of patriline all deceased. M.C.— Claim through ma B.C.— Claim by being born in the country. C.I.D.— Claim in dispute. M.C.— Claim through matriline:

15 Popgun; Charly Marmies; Kelly Bunbujee. 1. Robert Burns 15 repgair, Charty Marmies; Keily Bunbuj 16 Victor Barney 17 M.P.D.; C.I.D. 18 M.P.D.; Gertie Scholies (M.C.) 19 M.P.D.; Maude and Pansy (M.C.) 20 Dan Bush and Phil Jack 21 Digwer Adam 2. Gully Peter 3. Bambra Goodman 4. Nicholas Dugong through adoption; M.P.D.; David and Leonard Charles (M.C.) 5. M.P.D. Alick Hills (M.C.); Ian James (M.C.) 6 M.P.D.; C.I.D. 7 Maurice Sandy 8 M.P.D.; C.I.D. 21 Digger Adam
22 Rusca Toby and Scotty Wilson.
23 Fred Jaurth; Claim also by Roughsey brothers.
24 M.P.D.; Vera Barney. Henry Adamson or 'Bradman' (resident at 25 Eric Peter (resident at Doomadgee). 26 Tom Jacob 27 M.P.D.; C.I.D. Doomadgee); Angus Roughsey (B.C.) 10 Ian James 11 Les Marmies 27 M. P. D.; C. I. D. 28 M. P. D.; C. I. D. 29 M. P. D.; Hugh Ben and Elizabeth 12 Clifford Bush 13 M.P.D. 14 M.P.D. Alma Williams (M.C.) Jack (M.C.)

meanings (or significata) of each term that are related through their sharing a distinctive property. This suggests that the derivation of each meaning is from this shared property. All informants confirm that the terms larumpen, tjirrkarampen, lilumpen, palumpen mean the directions of south-east, north-west, north-east, south-west, respectively. These four directions comprise the cardinal points of the Lardil 'cognitive compass'. Intermediate directions are larumpen-lilumpen (eastern), lilumpen-tjirrkarampen (northern), palumpen-tjirrkarampen (western), palumpen-larumpen(southern).

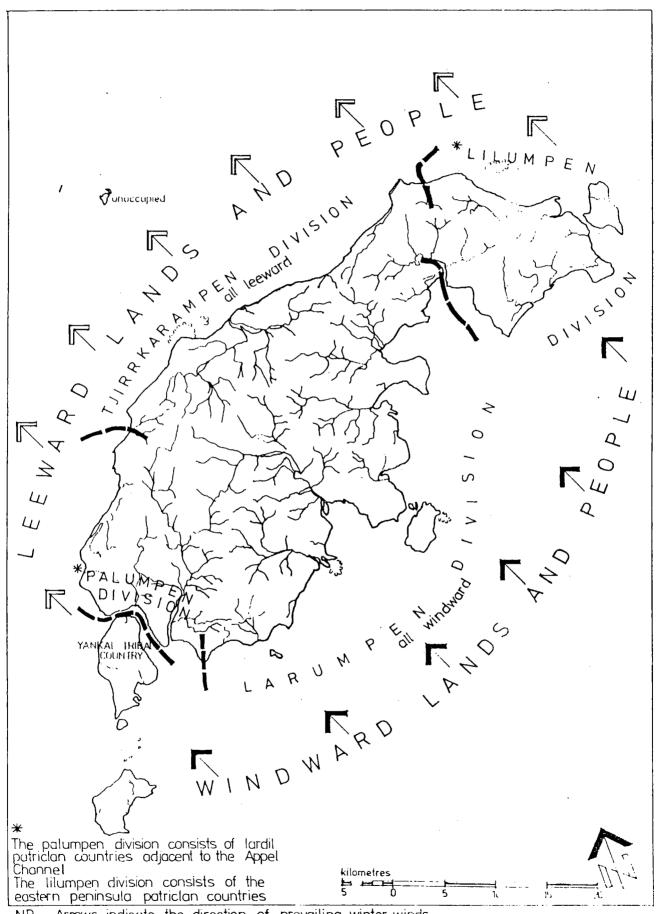
Some evidence exists to suggest why these four directions are the orientating directions of the Lardil, as distinct from some other set of directions (e.g. an east-west orientation based on where the sun rises and sets). In the previous chapter it was observed that there are two lengthy pieces of coastline on Mornington Island, roughly parallel, on opposite sides of the island, and differing in their physiography and microclimates. These coastlines are aligned at approximately right angles to the seasonal prevailing winds - the southeast trades and the north-west monsoons. The Lardil call the southeast coast the windward side of the island and the north-west coast the leeward side of the island. The nomenclature 'windward/leeward' refers to the strong south-east winds blowing from April to November. It will be seen in later parts of this chapter that the Lardil preferred to live on the coast for most of the time, depending upon marine food resources. Their coastal economy was severely interrupted by the cycles of strong south-east winds, which, when peaking in strength forced the people to temporarily seek food in the interior land systems of Mornington Island. The Lardil living on the south-east side of the island were identified as windward people, and those on the northwest side as leeward people. This classification continues today: "Why we call them tjirrkarampen [people] is because they're on the leeward side". (K.B. in A.D.A.:F7). The Lardil words meaning the people who live on these two pieces of coastline are larumpenta and tjirrkarampenta.

It appears that the original sense of these two terms may have been (a) <code>larumpenta</code> - people who live on Mornington Island on the coast exposed to the strong-blowing summer winds and (b) <code>tjirrkarampenta</code> - the people who live on the opposite coast, and partly sheltered from

^{1.} Dick Roughsey's directions of south, north, east, west appear to be a simplification for European readers of his book.

^{2.} Also note Elsie Roughsey's observation..."they lived as one individual race, although they had two tribes of people, Winded and Lewit". (1972:108).

A DIVISION OF LARDIL LANDS BY DIRECTION BASED ON CLIMATIC AND GEOGRAPHIC CRITERIA



NB. Arrows indicate the direction of prevailing winter winds.

those winds. The people who live in the directions in between these two principal directions were called separately by the names <code>lilumpenta</code> and <code>palumpenta</code>. Thus a division of Lardil land can be made on the basis of geographic and climatic criteria (as opposed to social criteria) in the following way:-

- larumpen land land occupying most of the south-east coast (windward side of the island)
- 2. tjirrkarampen land land occupying most of the north-west coast (leeward side of the island)
- 3. lilumpen land land located on the eastern peninsula of Mornington Island (includes Wallaby Island)
- 4. palumpen land land contiguous to the Appel Channel to the southwest.

This division is shown on figure 12. The boundaries between these units are shown to coincide with patriclan country boundaries. This enables members of each patriclan to be clearly classified into geographical categories. It can be hypothesized that the semantic structure under discussion was derived from associations of people with spatial directions based on the nature of prevailing winds and the geography of the coastline. In time, the terms may have undergone a widening of reference by being applied in a variety of spatial contexts, yet still conserving the spatial properties of direction. This hypothesis appears more than plausible particularly when supported by the fact that in certain social situations the Lardil people will identify as either windward or leeward people. These situations usually involve rivalry or antagonism between the two groups, e.g. during traditional dancing or fighting. Others have observed this social polarity within the Lardil people. Elsie Roughsey for instance has stated: "I never noticed my father and mother living together. I was more on my father's people side...leeward people...in those times,...it was very hard for them to get together..." (c.1943). A missionary observed that 2 "...there is constant tension between the North (leeward) and the South (windward) groups which makes for disharmony at times, though this is often transmitted into healthy competition..."

Ambiguity in the use of these Lardil socio-geographic terms by informants necessitated a simple semantic analysis of samples of speech data. Taking first the terms <code>larumpen</code> and <code>larumpenta</code> - in its primary

2. In The Australian Presbyterian Board of Missions (1967:7). Presumably Rev. D. Belcher.

^{1.} This citation was extracted from an interview transcription but the cassette has subsequently been broken.

sense (or significatum) larumpen can be said to mean "in the direction of, or pertaining to the direction of south-east, with respect to a given point of reference or locale in space". Larumpenta means people of the south-east. When used in various speech contexts the sense of larumpen can be narrowed by explicitly or implicitly selecting a specific reference point and/or spatial locale at which one chooses to apply the term. Likewise with the other directional terms. Thus if one is speaking of the people on Mornington Island, those who live on the south-east side are the larumpenta, on the north-west live the tjirrkarampenta, the palumpenta live on the south-west, and the lilumpenta on the north-east coast. By natural association, the larumpenta are the windward people, and the tjirrkarampenta are the leeward people.

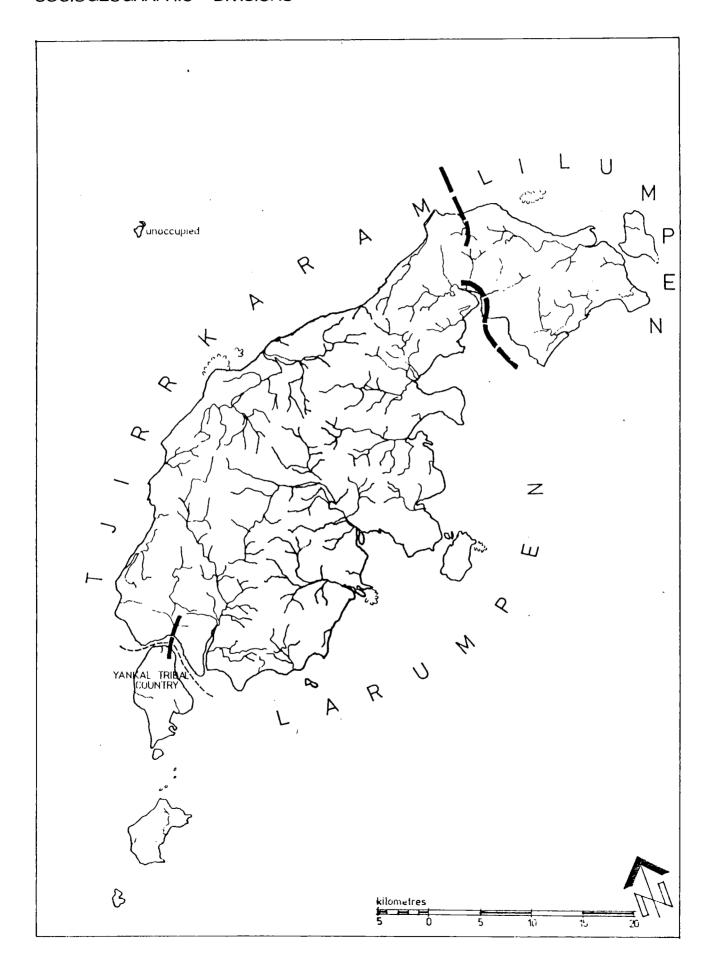
If however one is speaking of people who live on the south-east side of Denham Island, then within that locale they are also windward people, or <code>larumpenta</code>, although they are not Lardil. Similarly the people who live at the south-west end of Denham Island can be called <code>palumpenta</code>. The people who live on the mainland of the southern Gulf of Carpentaria are also <code>palumpenta</code> from the geographical viewpoint of those on Mornington Island. Dick Roughsey (1971A:39) employs this sense when referring to the first immigrants to the Wellesley Islands: "the Bolamandoo first came by raft from the West and made these islands." The people who camp on the south-west side of a camp are also referred to as being on the <code>palumpen</code> side of the camp. The four terms can be used correctly in any of the above modes. However there is a more restricted meaning of the term <code>palumpenta</code>. It can mean the people to the west of Mornington Island who identified as the Yangkal tribe, and who inhabited Denham, Forsyth and other islands. \frac{1}{2}

Two important Lardil men who lived at the south-west end of Mornington Island in the early mission period were Punch and Robert. Informants will agree that they are palumpenta. But some will say that Robert is tjirrkarampenta and that Punch was larumpenta. Punch and Robert are palumpenta in the sense that they live in the south-west part of Mornington Island - this is the simple directional sense. The second classification is based on a different level of meaning; a level that is not only geographic but social as well. In this context Punch is socially identified with the larumpenta, the south-east group of Lardil people, and Robert is socially identified with the tjirrkarampenta, the north-west group of Lardil people. This classification is

^{1.} Some information on these people can be found in interviews with F.J. and C.M. in A.D.A.: F5, F18.

^{2.} Refer to map of Lardil countries. Note that Punch is deceased.

A DIVISION OF LARDIL LANDS INTO THREE CONTEMPORARY SOCIOGEOGRAPHIC DIVISIONS



at a subtribal level of group identity. The main technique of eliciting data on such group affiliation was to get informants to systematically name the group identity of given Lardil persons. In general, data collected in this way supports the existence of only three major sociographic groups amongst the Lardil: the <code>larumpenta</code>, the <code>tjirrkarampenta</code> and the <code>lilumpenta</code>. The extent of land presided over by these three groups in current times is indicated on the map in figure 13.

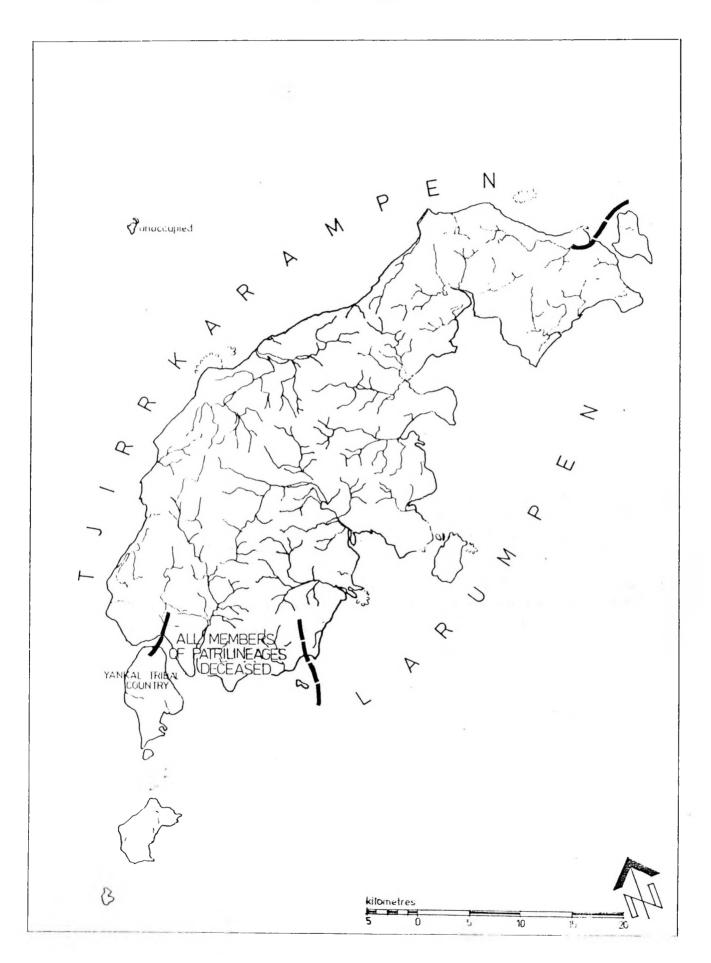
No modern evidence for a palumpen social group was elicited but this does not preclude the existence of such a group in early or premission times. The elder of one country contiguous to the Appel Channel (Punch) is deceased with no male heir. His palumpen neighbour, Robert, has a large part of his country's coastline located on the leeward side of the island and socially identifies with the leeward or tjirrkarampenta people in many circumstances. It is quite probable that the palumpen Lardil were once strong enough in numbers and leaders to be a recognizable and acknowledged social group. Some evidence does suggest this. Henry Peter (a tjirrkarampen man) told the investigator that a Lardil woman, Big Mary, was an important individual presiding over land from Gold Cliff to Timber Point, i.e. on both windward and leeward sides of the island. A church observer said in 1967 that "there used to be two further divisions (as well as windward and leeward), East and West, but these have merged into North and South respectively." (in "Encounter" 1967:7).

Shifting group affiliations

Another level of dynamics in socio-geographic group identity has been identified which complicates method and analysis further. This is a level of group dynamics which appears to be political in nature. Families who lived in proximity to one of the boundaries between the groups may have found it advantageous to identify with both groups at different times. Such political shifts may have been necessary to maintain friendly neighbourly relations, to obtain wives and to participate in joint hunting, feasting and ceremonial activity. Although at times Robert and Punch may have identified as tjirrkarampen and larumpen respectively, they would have to maintain a degree of co-operation and social identity with the Yangkal people on the opposite side of the Appel Channel. This channel is an important resource centre suitable for catching schools of fish and dugong by setting nets across the deepest parts. It was also a vital crossing point where Lardil people carried out trade activity for mainland

^{1.} Informant K.B. at times calls Robert tjirrkaram-palumpen (in A.D.A.:F6).

A DIVISION OF LARDIL LANDS INTO CONTEMPORARY SOCIOGEOGRAPHIC DIVISIONS BY INFORMANT P. J.



commodities.

A further example of shifting identities can be seen in the 111 umpen group of Lardil who preside over land, part of which is on the windward side of the island, and part on the leeward side, although it is all to the north-east and east of the Lardil tribal lands. A lilumpen family living on the leeward side of its group territory may have affiliated with the tjirrkarampen group if it was to their mutual advantage. In this way the tjirrkarampen could attempt to increase their membership during conflicts with the windward people. Such an identity shift or displacement could be justified by arguing that the family lived on the leeward side of the island and thus must be leeward people also. Similarly members of the lilumpen group living on the south-east coast of their territory might be said to be windward by the larumpenta. It is worthwhile noting that no speech datum was obtained in which a man of the lilumpen group, as defined geographically on the map in figure 13, identified himself as either larumpen or tjirrkarampen. For example K.B. identifies himself as lilumpen; G.P. identifies himself as tjirrkarampen, and identifies K.B. as larumpen, and the lilumpenta on the leeward part of lilumpen territory as tjirrkarampen. K.B. asserts (in A.D.A.:F30) that his people all belong to "one country, all lilumpenta." "We all share this country right up to Elizabeth Creek...around nguira." (K.B. in A.D.A.:F7).

Although the lilumpenta maintained their group identity, it often suited them to affiliate temporarily with the other groups and it is likely that they were involved in a history of such affiliations. Whether permanent transformation of group identity occurred can only be surmised. Affiliations still continue between groups today. The phenomenon can be described as displaced group identity temporarily maintained for socio-economic advantage and made acceptable at a semantic level by purposely confusing the polysemic properties of the terms of identity, i.e. the directional and group senses respectively of the four relevant terms. The map in figure 14 shows an example of a classification of land and people into socio-spatial groups that involves displaced group identity. The data were offered to the investigatory by a larumpen man, P.J.

This analysis began with the property of spatial direction as the primary sense (significatum) of the four terms under discussion. It proceeded to generate two more levels of meaning for these terms by narrowing the conditions of reference or usage: firstly by fixing spatial parameters to the context of usage and secondly by associating

^{1.} G.P., personal communication.

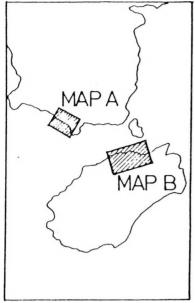
some of these spatial references with groups of people definable through social and economic activity in space. This analysis has been devised by the investigator to satisfy the sense/s of the data collected - it was not proposed by the informants. Nevertheless it has been found to be generally acceptable to the Lardil through the investigator's use of the terms in everyday speech contexts, as well as in structured interview situations. A more detailed examination is later made on aspects of the relation between the environment and the socio-geographic units discussed in this section. The findings are used to further define the properties of place generated by these units.

Lardil geography at a local scale - 'named places'

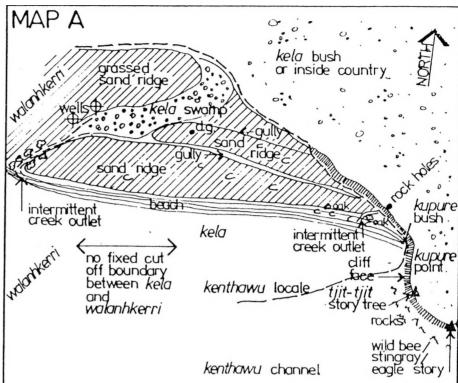
The investigator was taken fishing on occasions by small numbers of Lardil men, around the Appel Channel, the southern part of Mornington Island, Denham and Forsyth Islands. Travel was by dinghies powered by outboard motors. A Lardil man would often point to a piece of the island coastline and name it, i.e. there were 'named places' or places with a 'place name'. The men suggested that the place-names could be written down. As each piece of coastline was passed, a man would explain where 'such-and-such' a place began and ended; where the next place started; what constituted a boundary between two places; and what other special properties there might be at a place, e.g. one place might have a well and another might be a 'story place'. This pointing out of places occurred consistently during every dinghy voyage. It was obvious that the men were using a vernacular system of geography - a Lardil ethno-geography. The investigator explained to the informants that he was interested in looking closely at some of these old places, and mapping them. They told the investigator that they would take him to their 'countries'. (This unit was previously defined). Two of the countries were made available as sites for intense data collection. The findings of these studies in traditional countries are used later to exemplify properties of Lardil geography as well as the patterns of traditional use of the environment. The two countries are 'Jaurth's country' (or F.J.'s country) and 'Bunbujee's country' (or K.B.'s country), named after two of their contemporary tulmata, Fred Jaurth and Kelly Bunbujee. The geography of the two countries and parts of adjacent countries including Big Barney's country are mapped in figures 7 and 8. The properties of each named place were recorded on separate cards and smaller scaled field maps. (Examples of this data are contained in Appendix 3).

^{1.} The Lardil word for 'place' is nyerawa.

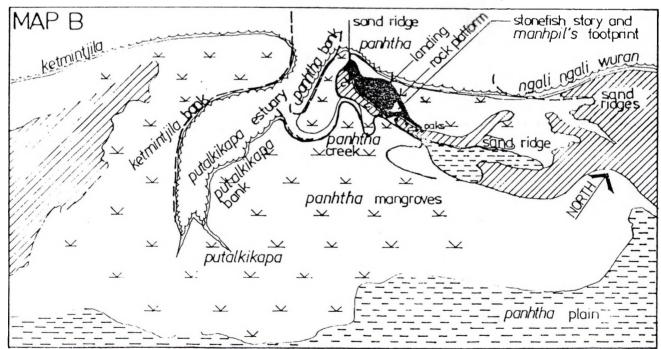
EXAMPLES OF LOCAL GEOGRAPHY IN LARDIL LANDS



Key map of langungantji or Sydney Island and the adjacent part of kununa or Mornington Island.



Map A shows a popular camping place called kela, which has access to freshwater at all times of the year. There is a fixed geographic boundary between kela and kupare point to the east, defined by the kupare cliff. However there is no specific boundary between kela and welanhkerri to the west. Both of these sand-based places are part of kenthawu, a well-known locale name. The sea to the south and the interior land systems to the north have no special names, but can be referred to by using the names of the coastal places (e.g., 'kela inside country').



Map B shows a large tidal estuary on Sydney Island called putalkikapa. Part of one bank takes this same name, but the other bank (the western one) takes the name of the adjacent coastal placeketmintjila. Similarly, the bank at the eastern mouth of the estuary is named after the adjacent coastal plain panhtha, as is the creek flowing behind this plain. Panhtha is famous as the site of the stonefish story place. The stonefish are said to procreate in the vicinity and are plentiful in the panhtha creek. There is also a footprint in the lithified rock platform which was allegedly left by Manhpil whilst creating the coastal resources many thousands of years ago.

From an examination of these maps and data cards, a number of important features can be discerned. The Lardil landscape has an extensive system of place naming at a local scale. "Every place has got little name for country." (K.B. in A.D.A,:F30). This scale is distinct from larger units such as the patriclan countries and the socio-geographic divisions named by direction, units which deal with large areas of environment that extend beyond the visible horizons. There is a variation in the density of spatial distribution of these 'named places' in the landscape. A concentration of them occurs in the coastal land systems. The data indicates that no part of these coastal systems is unnamed. These coastal places adjoin each other and often informants will refer to boundaries between places in Aboriginal English as 'cut-off places'. They say a place is 'cut-off' by another, or one place is 'cut out' by another, e.g. "The river cut him out Roy's country" (K.B.). These boundaries are usually distinguishable environmental features such as an escarpment, a creek bank, an abrupt change in flora, 1 the end of a beach, a cliff face etc; but some boundaries occur at places where there is not a high degree of physical definition to the eyes of the Western observer. Examples of both are shown in maps in figure 15. There is a linear sequence of named geographic units that extend along all of the coastlines of the islands. These are bounded by the sea on one side and the interior land systems on the other.

In contrast to the coastal land systems, the interior land systems have a much lower density of spatial distribution of named places. ² The entire coastline is made up of named places, but many parts of the interior of the islands did not always share this property, being unnamed. Named places in the interior all refer to resource centres such as swamps, freshwater holes, isolated stands of fruit trees, etc. In Aboriginal English and in Lardil there are terms to distinguish the interior land systems from the coastal land systems, the 'inside country' from the 'outside country'.

Offshore marine systems do not have the same high density of place names as the coast either. However, distinguishable features such as reefs, protruding rocks, oyster banks, permanent sand bars, often have their own name ("Reefs all got names" - K.B. in A.D.A.:F7).

mangroves begin, the new place name is piriwaka.

2. Tindale (1962A:275, 276) observes a similar distribution of named places in the Kaiadilt geography of Bentinck and Sweers Islands. The

place names are principally found along the coast also.

^{1.} e.g. on the east coast of Sydney Island one observes mangroves at pilirural. Travelling south, a sand beach begins with Casuarinas -this area is named nhangkarrukan. When the oaks stop and further clumps of mangroves begin, the new place name is piriwaka.

Further interesting characteristics of Lardil ethno-geography are as follows:- (a) In the case of a creek or stream mouth, the same name is given to the creek, one creek bank, and the land adjacent to that bank, whilst the opposite bank and land adjacent to it take on a different name. An example of this nomenclature is shown in figure 15. The different reaches of a creek or stream can take on different names. The waterholes in the beds of large streams that stay full of freshwater all year, take on separate names which also refer to adjacent nearby land. Travelling up the Dugong River informants pointed out at least seven waterholes which were traditional campsites, each with its own placename. Nevertheless there is one name that can be used to refer to the entire stream.

- (b) The boundary definitions of named places in the coastal land systems are well defined when at approximately right angles to the coastline, but are seldom clearly fixed in the direction parallel with the coast; i.e. it is not always clear how far a place extends into the offshore marine systems or into the interior land systems. In these circumstances if there is no named place in the sea or in the interior, a nearby coastal place name is commonly used to refer to the larger area of environment out at sea or in the 'inside country' e.g. as in tingkilmiya bush or kalkapa reef. Examples of this geographic extension of a place name are also illustrated in figure 15.
- (c) If one named place in a coastal region is better known and more popular than other neighbouring places, dominating over them through outstanding economic assets or some other special properties, its area of reference may be extended, and it may be used to refer to all of those local places as one tract of land, e.g. in K.B.'s country young Lardil men refer to the coastal land systems from kalkapa around to puthalkan, as paratkiya, which is only one named place amongst ten or more other places, but a very important magico-religious site. An entire patriclan country may be referred to in this way, e.g. Ian James' calls his country pelaliya after one place in it; similarly birri for G.P.'s country. Thus a person may be referring to a place that has its own place name, but he may be using the name of another place in the local region that may be up to a kilometre away from the place under reference. It is common for persons to approximate a geographic location in this way if their geographical knowledge of that area is poor. In traditional life such persons would have included visitors from neighbouring tribes and youngsters with little travel experience. Today only a minority of Lardil people have a sound knowledge of the entire geography of their lands and so the device is

commonly used.

- (d) Named places have been spatially fixed units, and their names have remained permanent throughout Lardil history according to informants. The places were named by <code>Manhpil</code> and <code>Tuiwal</code> tuiwal who were the first people to come to Mornington Island according to Lardil history. (The activities of this pair of men are discussed in the next chapter).
- (e) Place names are seldom meaningful, according to informants.
- (f) Normally place names occur only once. Rarely are two geographic names the same. An exception is kunana which refers both to a place near the mission settlement and to the entire Mornington Island. Large scale geographic units

Besides using the socio-geographic units previously discussed, reference can be made to geographical areas larger than named places in the following ways:-

- (1) Through the spatial extension of a place name to encompass wider surrounds, perhaps up to several kilometres distance. This method was discussed in the previous section.
- (2) By the use of proper 'locale names'. These refer to aggregates of named places. For example in F.J.'s country kenthawu refers to three contiguous named places on a long stretch of beach and dune ridge, viz. karra karra, walanhkerri and kela (See figure 15). Locale names occur infrequently in the study data, and are not to be confused with extended place names. Other examples include the names of entire islands: langungantji (Sydney Island), lingungantji (Wallaby Island), maltanunta (Bentinck Island), kununa (Mornington Island).
- (3) An area can be referenced by using the name of the local tulmata or the name of a person from the local patriclan, e.g. Gussy was the tulmata of Wallaby Island in early mission times, so K.B. refers to it as 'Gussy' Island. (Similarly for 'Namie' Island).
- (4) An area can be referred to by using the name of a local totem, or the name of a totemic centre which is called a 'story place' in Aboriginal English. For example 'hawk country' or 'pukatji country' refers to the locale of the hawk story place in Jacko Jacob's country. C.M. referred (in A.D.A.:F27) to Roy Bert's patriclan country by naming rocks off the coast in the sea that

^{1.} Tindale (1962A:276) notes that some Kaiadilt place names have a meaning.

^{2.} Tindale (1962A:276) cites several Kaiadilt place names that occur twice in their geography.

are according to legend, the remains of their ancestor

Manhpil: "Bert, where Manhpil stand up, his country there".

Knowledge of places outside of Lardil lands

The Lardil were well aware of the existence of most of the Wellesley Islands other than Mornington, Wallaby, and Sydney Islands which they occupied. Some islands were unoccupied by people. Flinders (1814:154) said he found no traces of Aborigines on Bountiful Island, and that the distance to Cape Van Diemen would have been "too far in a tide's way" for the rafts of the Wellesley Islands. He observed similarly (1814:157) for Pisonia Island, "the tides run too strong in a narrow, four-fathom channel, close to Isle Pisonia, to be encountered by their rafts". According to <code>lilumpen</code> informants however, Pisonia Island was visited at times to obtain turtle meat and eggs. A rocky islet to the north of the Wellesley group was well known, named <code>munthalpi</code>, and the theme of a popular dance. Similarly the rocky islet to the north-west of Mornington Island was known of, and incorporated into Lardil legends. ¹ Gully Peter, a <code>tjirrkarampen</code> man, claims this island as part of his country. ²

Because of the relative isolation of the South Wellesley Islands from the North Wellesleys and the mainland, the Kaiadilt seldom inter-acted with other tribal groups (Tindale 1962A:273). From time to time one or more Kaiadilt people were blown out to sea on their rafts by the strong south-east winds. Dick Roughsey (1971A:97) reports that "We had no contact with these people, except for one occasion, when two Kaiadilt men were blown ashore south of Sydney Island, many years ago and my people speared them". The Lardil were certainly aware of Bentinck Island. Oaktree Point on its northern end is barely visible from the southern corner of Sydney Island at kantalkiya. One informant (K.B. in A.D.A.:F7) claims that it was possible to see the light of bark torches across this distance, when used for night fishing.

Most interaction of the Lardil with other tribal groups was to the south-west, especially with the Yangkal people. (The extent of their tribal lands is indicated on figure 2). For at least some Lardil and Yangkal individuals, travel was common into the neighbouring tribal country. In 1901 the Aboriginal Protector Roth landed just west of White Cliff on Mornington Island to be met by four Aborigines, one of

e.g. "The squid and the rat". (Recorded in A.D.A.:F42).
 Tindale (1962A:273) reports that the Kaiadilt were well aware of 'men-less' islands and visited them from time to time in favourable weather conditions, but did not stay long because of water shortages.

whom was a Yangkal man visiting from Forsyth Island (Roth 1901A). Roth (1908A:161) also observed that the Aborigines not only travelled on their rafts from island to island in the North Wellesleys, but across to Point Parker as well. Informant G.P. can recall (in A.D.A.: F3) Yangkal men bringing a new dance from a mainland tribe to Horse's Place (in Robert's country) in c.1910. C.M. also recalls Yangkal men from Denham Island walking all over Mornington Island. It will be seen in a later chapter that a Lardil man named Burketown Peter had been working with cattle on the mainland prior to 1916.

Tindale (in Simmons et al 1962:306) reports that at "the time of the first European contacts there was a well recognised system of trade between Mornington and the mainland" [through the Yangkal tribe] "which included the offering of girl children to mainlanders in return for some stone spearheads". The investigator has found no evidence of the latter practice of offering children, but it is well known that the Lardil lacked good quality stone. They certainly traded axeheads as a few have been uncovered at old campsites in recent years. 2 Stone spearheads were also sought after. Emu feathers were obtained by the Lardil for dance decoration, as there are no emus on Mornington Island (C.M. in A.D.A.:F1). Tindale (in Simmons et al 1962:314) describes how a safe journey can be made by raft from Mornington Island to the mainland via the passages between the intervening islands. He notes that the Lardil acquired the eight class system from the mainland. Another feature that the Lardil have acquired from the mainland is the initiation ceremony with its cycle of songs (see next chapter). Simmons et al (1962:310) prove that there is negligible difference in the blood groups of the Lardil and Yangkal. However, Tindale stated that "inter-tribal marriages....are certainly lower for the Lardil and Janggal ³ than is usual in the mainland" (Simmons et al 1962:311).

Not all relations with the Yangkal were necessarily friendly. Dick Roughsey (1971A:102) speaks of parties of them coming to retaliate for the flood-making activities of the Lardil. 4 Other mainland tribal groups occasionally came to the Wellesley Islands with aggressive motives. Roughsey (1971A:21) relates an account concerning raids by

^{1.} Unfortunately he does not describe his data collection methods or the names of any informants.

See photograph number 206A in A.D.A., Location L8.
 Tindale's spelling of these tribal names.

^{4.} Floods caused loss of life to man and animal alike; also pollution of fresh water supplies. The Lardil claim to have received communications from various tribes concerning their flood-making activitiessometimes requests for floods, and at other times warnings against making them.

by the Yanyula for women: "I still remember an old man telling me few years back [c.1954] when he was a young man [c.1900] before he died, that these tribes came on rafts. They raided at night, and speared two of his mates, and killed them, he ran away and hid between two boulders, until morning. They went back to Borroloola, with their wives, this happened on Forsyth Island, he came back to Goonana, and told the people of his tribe what had happened, and next time they [the Yanyula] came...they killed them all".

Knowledge of other Aborigines and places outside of the Wellesley Islands and the nearby mainland was largely obtained by word of mouth. Although some individuals travelled to the nearby mainland, it seems unlikely that the Lardil often interacted with tribes beyond their nearest neighbours, their nearest neighbours being the Yangkal, Yukulda, Wanyi, Karawa, Yanyula and Minkin. Even today knowledge of foreign tribes is minimal, unless individuals have been taken there by Europeans for economic purposes.

Special classes of places

The older Lardil informants were eager to show the investigator places of significance or importance once they realized that there was a genuine interest in this aspect of their knowledge. Places of importance were resource places, campsites, initiation grounds, gravesites, story places, other ceremonial sites, fighting grounds. Such places recur throughout the Lardil environment and so constitute special classes of places. They are all located at or within a named place. Several such properties may be located together at a named place, and so some places have compound properties e.g. <code>walanhkerri</code> in F.J.'s country is a campsite with several wells, a water lily swamp and a dance ground. The properties of each of these special classes of places will now be described in succession.

Resource places

The Lardil obtained food and raw materials from each of the land and marine systems in their country. A summary of these resources and their origins will now be made.

Offshore reefs and submerged rocks provide the habitat for an immense number of species of marine fish, many growing a metre in length. Over sixty Lardil names for different species of fish have been elicited from one informant alone (D.R.), and their ethnic classification is a sizeable scientific analysis outside the scope of this study. English names used locally include shark, stingray, kingfish, queenfish, bluefish or parrot fish, rock cod, mullet, whiting, bream, flathead, travally, salmon, snapper, perch, marlin, barracuda, barramundi, etc. (Refer Appendix 4 for a more extensive list). Sand

bars and spits make good locations from which men can spear large fish. The Lardil selectively speared fish depending on their relative quantities of fat and meat which varied seasonally for many species. A variety of net types were employed. Large nets, e.g. <code>kiramunta</code> were for catching schools such as the <code>tulnul</code>, ¹ the fish being chased into them by hitting the surface of the water from rafts. Small hand nets e.g. the <code>mitjil</code>, were used to trap fish sheltering in holes and cavities in inter-tidal and off-shore reefs. They were frightened out by poking into such cavities with a spear or one's hand. The opening of the conical-shaped nets have two pieces of pliable sapling fixed around them which were held in a bent position to keep the mouth of the net open, and released to spring close when the fish swam inside.

Narrow channels and tidal estuaries were blocked at high tide with poles, bushes, and grass and the fish were left stranded at low tide, e.g. at the channel between the mangrove islands of tumanu and pekru in F.J.'s country (Roughsey 1971C:145). Poisons were sometimes used in such traps, ² e.g. the pulverised bark of Aegiceras corniculatum (tjurka in Lardil). Channels and estuaries were also used for catching prawns with nets during the wet season. Two species were common - called puya and putal in Lardil.

The same principle of trapping fish inside a barrier at low tide was employed in rock wall fish traps. These traps were commonly used throughout the Wellesley Islands, being first noted by Boyd (1896:57) at Point Parker as a "succession of walled-in paddocks of many acres in extent", and later by Roth (1901B:321) on Bentinck Island: "...I first noticed several stone dams erected in the shape of more or less of a half circle, the extremity of these dams are contiguous, and built of pieces of stone - subsequently locked together by oyster growths - to a height of from 18 inches to upwards of three feet, the general contour of the rocky beach being everywhere taken advantage of; they became covered at high water. The fish are thus blocked from going out to sea with each receding tide, and so easily caught with net or spear". If tidal conditions necessitated nocturnal fishing the men made long torches of paper bark tied in warapa vines (vigna marina).

Dugong feed on sea grasses which grow on the muddy substrate of tidal estuaries and associated coastal waters. The method of catching

^{1.} Behaviour associated with the catching of this fish is described in a later section dealing with special camps.

^{2.} Described by Woolston (1973:99). Photographs of Lardil and Kaiadilt men carrying out this practice are in McCarthy's collection (1948:nos. 276-283).

dugong in large nets is described in a later section dealing with special hunting camps. Turtles were similarly netted, but more often speared from rafts over off-shore reefs. A variety of crabs (e.g. munakanan, pingkun) can easily be harvested with spear of by dexterous hands on inter-tribal mudflats, reefs and rock platforms. Besides large mud crabs and sand crabs, several smaller edible species of crabs are also available. Oysters grow in abundance on the intertidal rocks and at least thirteen species of edible bi-valve and uni-valve shellfish are found in the sandy mud of estuary flats and shores a few centimetres below the surface at low tide. (These are listed in Appendix 4).

This latter Lardil habitat also supports mangrove species, at least one of which has an edible seasonal fruit - marran (Avicennia eucalyptophylla). One species, pilirr (Ceriops tagal) has buttress roots which were used as raft paddles. In the taller mangrove forest two types of flying fox, parrapur and kulthangurr were caught with boomerangs whilst sleeping during the day, after their feeding movements and destination were observed at night. The tracks of dingo were followed from mangrove areas in winter in order to steal new born pups to be domesticated and trained for chasing goannas and wallabies.

Tidal flats were a source of red ochre and white ochre. Red ochre was used as a body paint in dance and ceremony, and was believed to have special magico-religious powers. White clay was also used for body decoration and is referred to today as 'white ochre' or 'pipeclay'. Another use was for medicinal purposes - to cure internal pains, headaches, joint pains, eye complaints and snake bite wounds. It was eaten, drunk in solution, rubbed over the body, sometimes to the accompaniment of special songs, hand touching, breath blowing, and rubbing of underarm perspiration on the body of the sick. According to E.R. it was also used to increase flow of breast milk.

The sand based land systems support a variety of broad-leafed flora which seasonally bear edible berries, seeds and nuts. They include kukanakan (Antidesma ghaesembilla), thalar (Brachychiton paradoxum), pilkurr (Canarium australianum), wurral (Diospyros ferrea var. humilis), nyulangka (Exocarpus latifolius), kirrir (Ficus opposita), pilthurr (Grevillea mimosoides) terrwuyurr (Grewia retus-

^{1.} Hot leaves were placed on the body to alleviate pains as was a solution of grass juices (Cymbopogom bombycinus). Solutions of juices made from other plants were applied to sores. More detailed discussion on medicinal plants is to be found in Woolston (1973:99).

LARDIL RESOURCES OF THE SAND-BASED LAND SYSTEMS



Pandanus or screw palms are widespread throughout all sand-based systems, and also occur in the interior land systems. Pandanus nuts (kuriyal) were an important seasonal food of the Lardil. The bush of the interior land systems is visible in the background of this photo, meeting the rear edge of the sand ridae



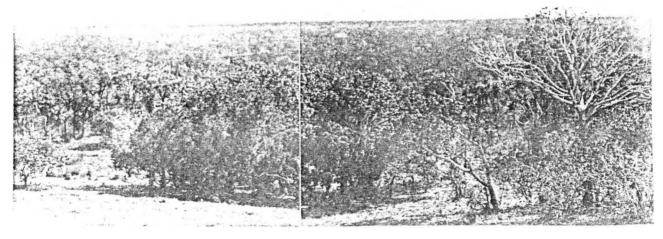
This intermittent swamp is contained in a swale in a sand platform. Such swamps yielded water lilies (Nymphae) that were harvested after the wet season for feasts. The bark of these large Melaleucas was an important shelter building material, and in mission times the trunks of these same trees have been used to make dugout canoes.



The Macrozamia palm (watat) has its habitat on sand and provides another traditional seasonal food. The nuts require elaborate preparation before being edible. This one is under the custodianship of Kelly Bunbujee.



An intermittent swamp in a sand-based system contains a pure community of Elaeocharis dulcis. The corms of this plant (nentja) are also a favourite seasonal food harvested after the wet season.



The rear of a sand ridge on the south-east side of Sydney Island meets the interior land systems. The trees and shrubs in the foreground all yield important resources and consist of:-(i) Brachychiton paradoxum (thalar) whose bark is used for string; (ii) Canarium australianum (pilkurr) whose nuts are eaten in the wet season; (iii) Diospyros ferrea (tjital) whose berries are eaten from September to December; (iv) The fins of Ficus opposita (kirrir) are consumed at the same time; (v) Securinega virosa (wulun) has edible fruit in January; (vi) Terminalia subscroptera, the crowfruit, is another popular Lordil food.

folia), parrar (Guettarda epeciosa), pintan (Hakea arborescens), pampularr (Opilia amentacea), wiwal (Planchonia careya), yilipintapan (Santalum lanceolatum), wulan (Securinega virosa), murrpen (Terminalia carpentariae), tangakurr (Terminalia subacroptera).

Plants which bore the most important seasonal staples were (1) the pentja corms of the kurka plant (Elaecharis dulcis) which were harvested from swamps on the sand platforms; (2) the stems, flowers and roots of the waterlily plants, kartar and pura (Nymphaea sp.), which grow in freshwater swamps located in swales or at the rear of sand dunes; 1 (3) the nuts of the pandanus tree, 2 kuriyal (Pandanus spiralis, Pandanus adoratissima), 3 which was located in interior as well as coastal land systems; (4) the yellow fruit of the watat tree (Macrozamia sp.), also growing on sand platforms.

Another important resource tree found growing on sand is matat (Hibiscus tiliaceus) whose bark was used for making rope (parkuwan) for dugong nets, and whose branches were used for spear shafts and fire making sticks, kungkel. Thespesia polulnea (the larrkur tree) is another favoured wood from which to manufacture spear shafts. Important grasses found in sand based systems are,kelngka (Digitaria papposa) for making general purpose string used for fishing nets, shelter building, artifact manufacture; and lulmurr (Themeda australis) a roofing material for wet weather shelters and for manufacturing grass blankets. Spinifex species such as karmar-karmar and tjaran (S.longifolis and Triodia sp.) were also employed for wet weather shelter roofs and can be found in interior systems as well. The bark of the sand-based thalar tree, Brachychiton paradoxum was the source of fishing line string.

Cassytha filiformis is a vine called thapurra which grows on sand-based systems and is a preferred material for windbreak construction. At the top of many beaches the oak tree wunhan (Casuarina equisetifolia) provides favoured shade places for daytime camp activity, and its foliage of aromatic needles is still used to serve food on. Turtles nest at night on the beaches and as many as eighty eggs might be found the day after. Birds' eggs are another diet component and were obtained from nests on coastal cliffs. Brolga, cranes, pelicans,

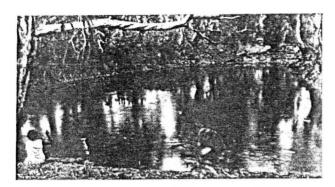
^{1.} Associated with these swamps are tall stands of broad-trunked Melaleuca sp. which were a source of sheets of paperbark up to two metres square for use on shelters.

^{2.} The pandanus leaf was sometimes used for armbands and headbands according to one informant.

^{3.} These species identified by Woolston (1973:98) and Bailey (1883:566).

^{4.} Other species used for firesticks are listed in table 3.

LARDIL RESOURCE PLACES



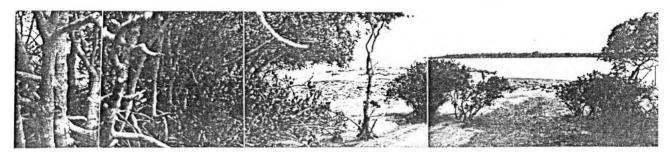
An example of the freshwater pools that occur at the head of the Gabanyari River. These provide popular sites for interior camps. They were used when strong south-east winds blew in winter. These winds caused coastal living to be uncomfortable, and sea hunting to be difficult and hazardous. The woman in the photograph is try ing to catch freshwater turtle (maals) and fish (probably perch or bream).



This water source is a pool at the mouth of Semen Creek on Sydney Island (or langungantji). It provides a freshwater supply in the dry season, if it is not inundated by an extra high tide.



rocks in the foreground are covered in oysters. from the sea at manpulkiwalan, on the south side of Sydney Island (in background). In traditional times this resource place reached by rafts (walpa). Turtle hunting is also common in these waters.



Mangroves provide the habitat with a variety of foods - the fruit of the marran tree (Avicennia eucalyptophylla), mud crabs, flying foxes, and numerous species of mudshells. One mangrove species pilir (Ceriops tagal) has buttress roots which were used as raft paddles.



This rock wall fish trap is located at karakarungun in Big Barney's country. built at parts of the coastline where there was an abundance of laterite boulder material. The boulders are quarried by the sea from cliffs and rock platforms. Fish enter the trap when the tide is high, and are caught when the tide falls. Such traps were once common along the coastline of the Wellesley Islands, being first noted by Major Boyd in 1896, and by the Aboriginal Protector Roth in 1901.

corella, pigeons, ducks, sea eagles, plains turkeys, and other birds were hunted with boomerang for meat as well as for feathers used in body decorating.

Since the coastal land systems form only a narrow perimeter band in the island landscape, areas of interior land systems are within easy range of any coastal camp. A favourite food there is 'sugarbag', the honey of wild bees, wankgapil. Wild bees make their nests in the hollow limbs of trees 'eaten out by termites. When species of boxwoods and bloodwoods flower after the first rains of the wet season, the bees are readily observed at their work and can be followed to their nests which are chopped out with wooden axes, mungkalmu. These hollow limbs were also the habitat of rats, another traditional food item. Bloodwood gum was used as a wax in manufacturing artifacts.

At least seven Acacia species occur in the island interior providing hard timber for boomerangs wangal, and other tools and weapons. The preferred species is Acacia alleniana, kurrpara which is found in concentrated stands on the gentle scarps of the Mornington plateau that form boundaries between the Tf and Czs geological map units (Grimes 1974). The leaves of one Acacia (A.holosericea) were used to generate a 'soapy' solution for body washing. On the poorly drained areas of the interior plateau occur numerous melaleuca scrublands, The bark of three species were used to make carrying containers called tumurr, as well as provide sheeting for shelters (e.g. M.leucodendron, M. viridiflora). Waterholes and lagoons in the beds of the intermittent streams in the island interior are the habitat for two important food resources - fresh water fish (bream, cod, perch, catfish) and the freshwater turtle, maali. To catch these items fishing poles were made from nukun branches (Grevillea dryandri).

A variety of lizards, goannas, frogs, rats and birds inhabit both the coastal and interior land systems, and form all-year food supplies. 3 Wallabies (kantjan) are hunted in the interior but are also found in the sand based land systems near water sources. Many edible species of roots and tubers are to be found throughout the island - six have been collected, 4 but informants can elicit at least

^{1.} The hollow limbs of such trees as boxwood and bloodwood have been

used for manufacturing didgeridoos in contemporary times (post 1950).

2. Woolston (1973:100) claims that the kurrpara tree is Acacia gonocarpa. Either a field error has been made by one investigator, or the same Lardil word is used to identify both species.

^{3.} A list of reptiles collected in 1976 by Jeanette Covacevich of the Queensland Museum is contained in Appendix 4.

^{4.} Puri (Boerhavia diffusa), yarrpar (Cayratia trifolia probably), taltjir (Cochlospermum sp.), wamurr (Elaeocharis sp.), pelparr (Hibiscus geranioides), nyungar (Vigna vexillata).

seven more (e.g. K.B. in A.D.A.:F4).

Still more food resources can be mentioned. Lists of flora and fauna are contained in Appendix 4. Materials used for manufacturing artifacts are listed in table 3. The foods mentioned above formed the regular diet in traditional times with fish, dugong, turtle and crabs as the major meat components. It is evident from the discussion that resource places were located in all land and marine systems. The Lardil landscape was one huge storehouse of the necessities of life. Water sources

Water sources are widely distributed in Lardil lands. They varied in their nature with both seasonal and perennial types. Most campsites have a water source of some sort land seasonal water sources restrict the time of usage of some camps. Water was plentiful during and after the wet season but as the year continued many water sources dried up and by November many campsites were eliminated from use. Water sources were geographically described and distinguished using the place name of the area in which they occurred. The different types of water sources are as follows:

- (1) Beach springs. During and after the wet season when the coastal dunes and beach become saturated, the water springs out along the beach in many streamlets at the level of the raised water table. This allows a range of places to be potential camps, that are not normally so in the dry season, e.g. patalpan in K.B.'s country and kantalkiya in F.J.'s country.
- (2) Rivers and creeks. These flow intermittently during and after the wet season, providing a ready supply of water.
- (3) Freshwater pools. These are found in the beds of streams which flow only briefly during and after the rain time. Most pools evaporate but some better shaded ones retain a significant volume of water all year round. ² These pools also provide a habitat for food resources, viz: freshwater turtles, water lilies, fish. See figure 3 for an illustration of a pool.
- (4) Rock holes. On laterite cliffs and outcrops natural cleavages and holes hold good water for some months after the wet season, depending on their degree of sun exposure. These places are exploited after the storms that mark the beginning of the wet season, when other supplies are eliminated or low. An example is at ngathakitikiti in K.B.'s country.

^{1.} Amongst the Nunggubuyu of Arnhem Land the actual camp was located a small distance from the water source to minimise pollution and to avoid scaring game in the early morning, according to Biernoff's study (1973:8).

^{2.} Gloe and Weller (1949:6, 7) were most impressed with the capacities of 'Bendiga' and 'Air Force' waterholes; also Goojumun Creek. The Dugong and Gabanyari rivers each contain several large perennial waterholes.

- (5) Wells (Lardil ngarlka). Many coastal campsites have permanent wells or soaks in the sand based land systems. When surface water was unavailable these were dug out with sticks and bailer shells. They are located on dune-ridges, e.g. at walanhkeri in F.J.'s country, or in the beds of creeks and streams, e.g. at wathatetan in K.B.'s country. They may have to be dug out to a depth of two metres.
- (6) Tidal rock springs. Wave-cut rock platforms in the littoral zone are in some places perforated with holes out of which bubble freshwater springs. At high tide the hole may be covered with salt water but it is sometimes possible to immerse one's head and drink underwater from the top of the spring. A well known example is at Spring Point on the west side of Mornington Island. Another is at the 'blue fish story place' in F.J.'s country.

Roads and tracks

'Bush roads' or 'native tracks'were regularly-used pedestrian travel routes in the environment. Most of themwere simply open areas of landscape such as beaches, intertidal rock shore platforms, tidal flats, saltpans, sand dune ridges, areas of open flora...i.e. land systems that afford ease of movement through them. The roads linked places of social, religious and economic importance, such as camps, resource centres, story places, dancing grounds, etc. Later discussion will reveal that the majority of these places lie in the coastal land systems most of which have a physically open nature, facilitat= ing ease of movement around the coast. Some obstacles do occur on the coast: river estuaries, mangrove thicket, streams, cliffs and areas submerged at high tide. The extensive tidal flats operated as 'freeways' for much of the year, but became boggy obstacles during and after the wet season when they were inundated with rain water and sometimes covered by exceptionally high spring tides associated with cyclones. The problem was more severe on the south-east side of the island where there were many more tidal flats than on the opposite side of the island.

Permanent obstacles to travel were caused by flora with crowns touching and paths had to be cut through such closed-scrub in the following situations:

(a) In coastal areas where mangroves were a barrier to mud-shell collection (e.g. at muntalkan in K.B.'s country); or blocked access to a desirable stream crossing (e.g. at tupure in K.B.'s country)

^{1.} Gloe and Weller (1949) reported that the water table in the vicinity of the mission was two to four feet above mean sea level.

- (b) On old sand ridges and platforms covered with low closed forest containing many vegetable resources (e.g. at tjinkan in K.B.'s country)
- (c) In the interior land systems roads were cut through closed Acacia scrub for three purposes:- (1) to obtain access to interior resources (e.g. leleka in F.J.'s country); (2) to provide a short-cut for travelling across large peninsulas; (3) as an alternative to coastal movement blocked by mangroves and/or high tides (e.g. at pikaru and munatjan in F.J.'s country). Such paths were hand cut, narrow, and kept open by constant use. They linked naturally open roads by the shortest distance. Today they are kept open by wild cattle who wander unchecked in many parts of the island.

Roads in the interior land systems facilitated cross island travel, and gave access to interior resources and camps used in the strong south-east wind times in June, July, August. The roads departed from tidal flats and followed the courses of intermittent streams to the interior of the island. Where the location of an interior camp was in the proximity of the sources of several streams, regular access was naturally provided for groups of people from different directions. Bush roads do not have place names. They either link or pass through named places. Informants called one hand-cut road in F.J.'s country after the previous tulmata of the surrounding country, viz. 'Tjaurt's road', linking metjingi to tingkilmiya.

No other special properties were found to be attached to bush roads. They served the functional purposes of facilitating travel between important places, and giving access to surrounding country for hunting-gathering activity.

Stream and channel crossings constitute other forms of defined paths. Channel crossings existed between Sydney Island and Mornington Island, and between Wallaby Island and Mornington Island. (See maps of F.J.'s and K.B.'s countries for their locations). An example of a stream crossing is at mantalngura in K.B.'s country. These crossings were normally used at low tide when it was possible to wade along a corridor of water whose depth varied, but did not exceed chin-height.

'Square-up' places and fighting places

A number of apparently different behavioural events of the Lardil are commonly referred to as 'square-up' in Aboriginal English or thalti in Lardil. They are enacted according to fixed legal rules and social models. These events may attach special properties to places

at which they are enacted. Their common characteristic is that they all aim to settle or even up over a debt or grievance. They represented a sharing of emotions. A redistribution of resources was made by a group to repay the emotional gestures of another group toward the first. A description of some of the kinds of square-up events will demonstrate their common and differing properties.

First, square-up can be used in the sense of giving a gift in return for something, or to repay a debt. For example, Elsie Roughsey (1972:164, 165) describes how if anyone praises your dancing you are obliged to reciprocate with presents of food:

"....onlookers jump up from where they were sitting and runs and grab hold of the dancer, and say, any food you hunt for you must give...give it to the one who praised you up...the dancer goes whenever they go hunting and they must hunt and collect these stuff, then its given to the one who asked for it. This certain person must sit on the ground with her or his legs crossed and sit there, as the food is given by the dancer. Then that square the whole thing, but to that, no sister or brother, uncles and aunty, mother and father, cannot eat there of, its against the law, because its from the lap leg table of that person, only grandparents and cousins are allowed to eat the food with the person who has received it. This kind of custom was called Munduda, it means ask and give, you feel proud of someone and she or her is a good dancer."

An example recently occurred on Mornington Island (c.1963) when a 'wrong' marriage took place i.e. a marriage in which the partners were not correctly paired according to the rules of the subsection system. To right this socially incorrect action the groom had to square-up with his 'in-laws', by giving them gifts of food after the wedding. A feast was held under a tree at a place slightly to the east of the current settlement on a hill known as titjinkiya. The exact site of this small ritual is still held in reverence today by the adult people who instruct the young to be quiet and respect this place. E.R. recalls that girls were forbidden to go near the place.

The term square-up can be used in the sense of avenging or making up for a wrong. The wrong could be committing illegitimate sex,

^{1.} Recalled by informants L.R. and E.R., 1974.

^{2.} When informants examined a photograph taken by McIntyre in 1921 of a Lardil man and woman they said that the couple were "going for square-up after marriage".

taking food illegally from somebody's tribal country, placing harmful spells on somebody (puri puri), killing somebody by magic, etc. In the case of a square-up after death, the family of the dead person arrange a time and place for the business. Many Lardil people from Mornington Island will attend, and people from neighbouring tribal groups may attend. An important part of the proceedings is for the bereaved family to name anybody they suspect of causing the death by sorcery. Equally important is for them to reassure others that they are not suspected. If somebody is accused, a square-up fight was arranged for sometime in the near future, perhaps within one moon's time.

Square-up after death is also concerned with the sharing of grief between the bereaved family and others. Examination of the following description by Elsie Roughsey (1972 N.S.:151, 152) will reveal some of these behavioural principles.

"When someone dies parents and relatives of the dead mourn and weep together with friends, after the burial, or furnall, the people have a great crowd to meet together, to meet the ones whose loved one have died. So when the parents come before the uncles and aunties and grandparents, they acted in throwing boomerangs at the mourners for losing the child, or the husband or wife, whatever it may be, so on the other side have to stand and cry until the last man has thrown a boomerang, always on the other side where the mourners are, they must be on the alert to keep the boomerangs off from them, so they all on both sides have weapons to use and for protection. Then all runs and grab each other and sit down in large groups and cry for each other. The old tribes, the men cut themselves with the back of boomerangs on their heads until it bleeds, the women also cut themselves with knives on the head, until blood runs out also tomahawk was also use on the head, or chest or any part of their body. I've seen broken bottles has been broken in many small peices, these broken bottles are used by the women of the tribes cutting themselves all over their laps and legs, stumocks and arms, to show all the love they had for that death. After the square-up for the dead, they have a great feast eating and drinking all together to share with everyone, so they sit and yarn and when everything has passed they sing coroborees and have dance. Also vows are passed from every lips of men and women, that they will help to take care of the parents and relatives of the dead one, help to provide for their need always.

^{1.} When citing Elsie's manuscript, spelling and grammatical errors have been preserved.

seen this important customs of my people, how their share love and sorrow alike to each other when death takes place."

Here is another description of a contemporary square-up made by the investigator in 1974 whilst observing the events unobtrusively from some distance away 1:-

"Some six evenings after K.R. died, a square-up took place, One participant had flown over from Doomadgee that morning. A group of about twelve adults (extended family) gathered outside the deceased's house and waited, quietly seated. Then at about 5.30 p.m., one of the deceased's younger brothers signalled everybody to move and take up a new sitting position grouped together in the middle of the pathway, on the sandridge. Over a period of half an hour, small groups of people who had been waiting unobtrusively at a distance, approached in succession. Meeting exchanges consisted of talking, wailing, and head bowing. Some had towels draped over their bowed heads, hiding their tearful faces. They then sat down and joined the group and continued intermittent cycles of discussion, wailing, crying, sobbing. Bursts of wailing were sometimes accompanied by people throwing fistfuls of sand into the air which fell over everybody. ² The group finally numbered about fifty adults. An hour later all began to say their farewells and quietly disperse. The deceased's house was shut up, and not occupied by his family nor anyone else, until about one year after the death".

The term square-up is also used when referring to the settling of grievances by a duel. When such a grievance is first realized there may be verbal argument between the parties concerned - swearing. weapon brandishing, violent pacing and gesturing, etc.; but the parties should, according to correct legal practice, withhold from fighting. A square-up fight is organized for some time in the near future. This is similar to a duel. The men must meet at a prearranged time and place, the place being referred to as the 'square-up place' or 'fighting place'. Fighting places were usually clear open areas either open beach and dunes, saltpans, or grassy plains.

Taken from field notes.

^{2.} Meggitt provides an interesting comparison. He mentions (1965:296) that the Walpari and associated tribes, at particular times during their initiation ceremonies, threw dust into the air to blind lurking spirits.

^{3.} Examples of regular fighting places are thaparpulang in K.B.'s country and kenthawu in F.J.'s country (K.B. in A.D.A.:F19).

Each man had a selection of weapons and was accompanied by his 'seconds', close kin and other elders who observed that events proceeded correctly. The first part of the square-up was the summoning of strength from personal totems. Totemic symbols were painted on the body with white ochre and a dance occurred in which the antagonists and their supporters mimed their totem.

"They appears to the camp with painted bodies to say, they are going to fight with their enemies. All that the enemy sees, the man who just come in from the bush. His enemy gets ready to by collecting his weapons so each side of the people are now ready. So they play saltwater the man whose totem is salt water he plays and dance pelican and brogal dance, the other side is also a saltwater, they play and dance imatiting the using of the saltwater and the rest of his brothers and sisters play, the redbill dance, also the pelican brogal totem people imatite these birds, then the play stops from both sides and a feirce fight takes place..." (Roughsey, E. 1972:76)

Another informant described the men of the windward and leeward groups lining up to face each other: \(^1\) "A dialogue occurred in which the current grievances were debated. Men who did not wish to pursue their grievances withdrew, eventually leaving perhaps only a few antagonists on both sides. From them emerged two men who wished to lead the square-up fight and the remainder would act as seconds. The antagonists fight by taking turns at throwing boomerangs or spears at each other, and may then resort to fighting sticks. When somebody is seriously hurt the adjudicator intervenes and stops the fight. The two parties must finally make friends and resolve their differences including any disputed property, e.g. a wife."

When people came together from different parts of the island a combined square-up would be held at a fighting place to settle whatever grievances existed between the groups of individuals. When the first missionary Hall arrived on Mornington Island the lilumpenta were the last group to arrive to meet him. Upon their arrival a square-up fight occurred which Hall describes (Hall 1915: 9, 10):-

"After a few days a fresh tribe from the northern end of the island came in, and those already here welcomed them with clubs... we soon found that the two tribes, evidently according to tribal custom, were going to fight each other. Those who were already

1. Description by L.R., taken from field notes made in July, 1975.

here went out a little way to a bare salt-pan to meet the others, and there the battle took place. Our previous experience with blacks was that they almost invariably fought by hurling spears at each other, but these fought solely with clubs. Dozens of them threw themselves together, and, with all their force, battered their opponents with clubs. And there was a tremendous hubbub - men were yelling, women were screaming, clubs were cracking against clubs like thousands of rifle shots. and dust was flying in clouds. One would have thought that about half of them would have been killed. But the men were exceptionally clever in warding off the blows. While his opponent was dealing a blow, the victim of his fury would hold his own club in both hands before his face and so catch the blow. I And after half an hour of that no more damage was done than that one man had the flesh of one finger burst, and another had his shin slightly grazed. After the battle was over they all marched into the camp in the best of spirits, and sat down and chatted together on the friendliest terms."

Square-up may also occur when individuals from different tribal, as well as sub-tribal groups meet. A contemporary example of this occurred whilst planning a dance festival that was held at Doomadgee in late 1974. Lardil leaders set aside the first day or two of the proposed dancing programme for square-up settlements of various sorts. Thus old grievances could be settled and then would not interfere with the success of the dance festival.

Other forms of square-up occur in initiation rites. Dick Roughsey (1971A:16) describes how an initiate's classificatory father-in-law (opposite moiety) squares-up with the initiate for his right to carry out the circumcision:

"After five or six months, the father-in-law decides to pay him back for undergoing the initiation ceremony, he is told to sit down with his legs crossed, so that the things are to be placed on his lap, first is given is the bark containing the foreskin and then the follows such articles as fighting boomerangs, comeback boomerangs, shields, spears, nets, of all uses, dancing costumes, and last of all, he is given a daughter...".

^{1.} Use of fighting sticks by the Lardil was according to a prescribed number of standard swings or types of blows and parrying positions. These are illustrated in A.D.A.:P186-199 and in figure 23, Chapter 4 of this thesis.

Strehlow (1970:126) notes that the Aranda observed the same custom the man who circumcised a youth was compelled to give to him some
years later, his daughter by way of compensation.

Elkin (1931) has described how the Lakes group of tribes of South Australia practised their settlement of grievances through a social and legal custom called 'kopara'. It is equivalent in most respects to the Lardil square-up custom. ¹ Elkin says (1931:191) that the "function of the custom is to maintain what may be termed the balance of exchange between various groups, and thereby to preserve friendship and social cohesion. The exchange may refer to gifts, women, lives, injuries, or initiation rites.... In one sense, a 'kopara' is a debt which must be settled in a definite standardized manner according to its nature." The sites where square-up repayments of various sorts have occurred in recent times on Mornington Island are held in respect by the older Lardil people in memory of the events that took place there. This imposes special emotional attachments to these places.

Graves

"...when a man knows he will shortly dies, he goes to the place where he was born, and that's where they would bury him after he died." (Roughsey, E. 1972:15). Lardil people preferred to be burried near their birthplace but other than this criteria, graves might be located anywhere near the place of death (K.B. in A.D.A.:F 29). When a death is imminent, members of the tribe gather for the rituals of death. A messenger with a message stick was sent around the island to notify all Lardil of the proceedings. People came to share their grief with the close relatives of the deceased. This was a form of square-up behaviour. Women wailed and cut themselves with stones and shells. Men similarly mourned, but also sang songs in an attempt to prevent the death (Roughsey, D. 1971C:88). The Lardil had two forms of treatment for the dead: ground burial 2 and platform graves. Ground burial is for individuals who were considered to have lived a bad life, guilty of sorcery. Ground graves were usually located in sand based areas for ease of digging. Dick Roughsey (1971C:88, 89) describes the events that occurred:-

"For grave burial the dead man's legs are broken at the knees, and his arms at the elbow. The body is bound up in a sitting position with knees under chin and arms doubled up at the sides. Rope made from fibre of beach hibicus is used for tying. The

in a sand dune at pilmalkan in K.B.'s country.

e.g. compare Elkin's comments on initiation: "The operator in a circumcision ceremony incurs an obligation, which he settles later on by giving a wife to the young man he circumcised..." (1931:196).
 An example of a ground burial is the grave of *Tjaurt* at *mantawa* in F.J.'s country. Also Maude Jowrth's father, Stumpy, is buried

man is buried in a sitting position with his face to the east - looking towards Yili-jilit-nyea. Water in a bark container or bailer shell is left on top of the grave for the spirit to drink when it returns on the third day. At night, before everyone goes to sleep an old man will stand up and call out to the dead man: 'Why should we mourn for you - you who have gone and left us. You were a bad man while you lived. But everybody would still join in the wailing for the dead man. On the night of the third day after death, the elders gather up and go to the burial place. They break a big branch off a tree and stick it in the grave so that it can act as a shade for the spirit of the dead man. They begin chanting to bring the spirit back to sit on the grave. As they chant they see the shadowy spirit and they now hold an inquest to see who was responsible for his death. As they chant they call names of people who could be the suspects. When the name of the killer is called his shadow spirit will be seen to join in the spirit of the dead man. The men call out and ask the spirit of the murderer why he killed him. If the dead man was no good, his killer may be forgiven. But if he was a good man his relatives will seek payback by killing his murderer".

Such payback is a form of square-up associated with death. Another method of identifying a person or group magically responsible for a death is through the appearance of a totem in the vicinity of the corpse or in the victim's dream just prior to his death (Sharp 1939:458). If a man is not suspected of sorcery, having led a good life, he will receive a platform burial called <code>barabal</code> (according to Roughsey, D. 1971C:89). Platforms were either built in trees or freestanding. In the latter case, the platforms were supported on four forked posts with foliage 'bedding' on top. Many tree-supported platforms were built in the woodland of the 'inside bush' immediately behind sand-based coastal camps. The corpse was laid down to face the east.

"A long piece of hair-string is tied through the dead man's pierced nasal septum and stretched eastward to another upright pole. The hair-string is called barrumbud and the pole yurubud. When the spirit leaves the body through the mouth it sees the way to travel to Yili-jilit-nyea.

^{1.} This is the place where people go after death according to the Lardil. It is discussed in the next chapter.

Men and women paint their bodies with white clay and gather about the platform to dance and sing. They are painted white because the spirit of the dead is white and they invite the spirit to join with them in farewell dance. The songs and dances recall the happy times in the past. The last song is really a chant to drive the spirit away to the east: 'Leengeer mowreea - dungathaga rubiamara' - 'Go away to the east - don't stay here and trouble people.'

They chant the song over and over while a man stands at the back of the platform striking the ground with a nulla-nulla to frighten the spirit away. When the mourning is over the people leave a baler shell of water so the spirit can have its last drink. They then return to camp.

Only the mother of the dead man can sit under the platform. She sits there and lets oils from the body drip over her. The mother rubs the oil all over her body so that another child as good as her dead son can enter her womb.

The body is left on the platform until all the flesh is gone. The bones are then taken down and wrapped in a paper-bark parcel. Uncles of the dead man carry the parcel away on their shoulders and put it in a hollow tree. The name of the dead person is not spoken again for many years. The dead are all given the name of Yahrbood, which means 'that dead person'. If you did call a dead person's name the spirit could come back and cause you a lot of trouble." (Roughsey, D. 1971C:89).

Such a burial was witnessed by the first missionary Hall and his helpers, and is briefly described by Campbell (1969:6): "A bed five or six feet up for the corpse was made of boughs of trees, then the corpse was placed face downwards and all personal belongings placed on top of him. They all stood round the corpse and set up a terribly mournful wailing and cut their bodies, with anything sharp and shed their blood."

Bush burials have not occurred for upwards of thirty years, and no platforms are known to exist intact today. However the remains of old graves are still locatable. Fragments of bone mixed with ash

^{1.} These songs and chants are reported by K.B. (in A.D.A.:F29).

^{2.} E.R. notes (1972N.S.:152) that this Lardil word also means snake, rat, or bird. She further explains that a system of kinship terms was specially used after a death to refer to the deceased's relatives.

A similar account has been provided by Cawte (1973:119).

around the base of burnt stumps are evidence of tree burials destroyed by fire. Examples can be found adjacent to the airstrip behind the contemporary settlement. Bones and bone fragments from ground graves are occasionally revealed when sand ridges and dunes suffer erosion. (A recent example is at karra karra in Big Barney's country). Known grave sites are places that contemporary adults hold in respect. Dancing grounds and dance preparation grounds

The most important formal social activity of the Lardil was public dancing. It still provides an important social role today, and hence much of the following description is in the present tense. Although a number of transformations in the structure and content of this event have occurred, many behavioural principles are still enacted as they were in traditional times.

Dances were held to the accompaniment of singing by a small group of 'song men'. They were staged on more or less permanently fixed grounds called thamurr. Dance grounds tended to be permanent, but from time to time one might be closed down following the death of an elderly person who was intimately associated with that ground and the surrounding country. Only then might a new thamurr be opened up under the direction and authority of a number of local key elders. Such occurrences were infrequent and might only occur once in a generation.

Dancing grounds are unassuming, flat sites, clear of vegetation, and usually located on sandbased land systems in the proximity of a camp and a water supply. A dancing ground is referred to by the placename of the nearby camp and is part of that place. Thus piripela on Sydney Island is the site of a camp and water source as well as a dancing ground, and the latter is referred to as the piripela dancing ground. However not every camp has a dance ground, in fact most do not. Furthermore, amongst those that do, there are more popular dance grounds. This is particularly the case when there is a locally abundant food resource near a dance ground.

Dancing grounds are roughly circular or oval in shape. Their size varies from 10-20 metres in length or diameter, depending on their degree of use. The surface of a ground is prepared by sweeping it free of foliage or debris with boomerangs and/or bushes. Although preference for dancing grounds varies amongst contemporary dancers, they generally prefer compact sand surfaces to either loose sand surfaces or a clay-based surface. Loose surfaces occur when a ground is used too frequently, whilst clay ones occasionally occur in interior land systems (e.g. at the camps on the headwaters of the Gabanyari

River). The latter are considered to be uncomfortably hard on the feet.

Dancing grounds are found in association with dance preparation grounds. The latter are used for dressing in dance costume and body decoration, as well as for dance and song rehearsal before the dance proper. These preparatory grounds are for various reasons, secretive, and are isolated from public view at two sites - one for men and one for women. This was always the case if the dancing ground proper was within easy audiovisual access of the camp. But some dance grounds were isolated at some distance from the camp, visually concealed by foliage. In this case the dancing ground may also be used as the male preparation or 'make-up' ground. The women would still require a separate site for themselves.

Dances were and still are popular entertainment and they were held whenever a key male elder or group of older adults made the decision to do so. If there was importance attached to a proposed dance, for some reason, a wider audience would be invited. Messengers were sent out to other camps to inform their occupants of the proposed event. In addition, individual dancers had to be invited to participate by the elders in charge - the song men. A large scale dance event would certainly occur if a particular new dance or several new dances were prepared for their first performance.

Messengers who travelled around the island from camp to camp, inviting people to a dance often carried a 'message stick' as a symbol of their authority and as an aid to memory. These objects are described in a later section, and an illustration of one used for a dance is in figure 29. An alternative form of notification and invitation used by a messenger was the distribution of pieces of white ochre and/or feathers. (These materials were used in body decoration for dance, and thus had a functional role as well as the symbolic one of invitation.)

Large dances always occurred at camps which were formed for the exploitation of an abundant seasonal resource. It was likely that an entire social division by direction might attend such a camp (e.g. the tjirrkarampenta) and sometimes several of these groups (C.M. in A.D.A.:Fl). The enactment of a foreign dance attracted a sizeable curious audience. Yangkal men occasionally visited Mornington Island, and some travelled right around it from camp to camp, playing one or several of their dances at different important dance grounds. They also brought songs and dances from other mainland tribes in the southern Gulf to pass on to the Lardil, and were allowed to participate in the Lardil dancing (K.B., L.R. in A.D.A.:F2). The

presence of a large number of Lardil in communal residence was an opportunity for the elders to hold political intercourse at the tribal and intertribal levels, and plan initiations, marriages, 'square-ups', etc. (J.J. in A.D.A.:F15). This was commonly carried out at the dance preparation ground.

'Make-up' or preparation grounds were important social venues as well as places for song and dance rehearsal, and preparation of body costume, decoration, and dancing artifacts. Since these grounds were sexually segregated they had the nature of being exclusive meeting places where sexist oriented gossip and discussion took place. Although a dance might not commence until evening, individuals might spend their whole day at the make-up ground for social as well as preparatory reasons. Activities there commonly included cooking, eating, sleeping, manufacturing artifacts especially dance artifacts, repairing dancing apparel, telling stories, teaching younger adults sacred and/or ceremonial knowledge, discussing social and political events, etc. Multipurpose fires were often used.

The traditional dancing costume of the Lardil male dancer consisted of string pubic tassle (wulpul), string belt, headband with wallaby teeth decoration (parmar) and bundles of leaves tied around the lower legs (tjinta). There were two forms of dancing hats, one used by the men of each moiety. Men from the subsections kamarangi, puralangi, kangala and yekamari wore a conically shaped hat (katjawur), whilst the ngaripilangi, pulanyi pangaranyi and palyarinyi skin men wore a cylinderical shaped hat (watapur). Both hats were manufactured with a paper bark structure and covered with human hair string. Other optional dress items included feather or leaf tassles in lieu of string, feathers attached to the side of one's belt, nose pegs and string armbands. Women's dance costume consisted of string skirts (tjeeyat) and hand-held dancing strings decorated with feathers.

Some artifacts were used or worn symbolically in particular dances. For example in a rain dance dreamt by G.P., men wore branches of leaves tied to their shoulders which they shook to simulate the noise of a strong wind blowing through the walls and roof of a wet weather shelter. A log might represent a dead man in one dance, whilst in another dancing strings could be used to symbolize lightening flashes. Other examples include symbolic dancing poles. These are described later. Everyday artifacts such as spears, bailer shells, rafts, paddles, were used in dances as 'props' when required. Other regularly used objects were hand-held bunches of leaves pairs of

BODY DECORATION FOR DANCE, MORNINGTON ISLAND



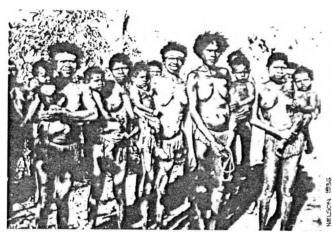
Thungulgunyaldin (Jackson Jacob) preparing for dance, with the traditional Lardil method of body decoration. A dancing taa is on the ground. It is used in the Rainbow Serpent dances to symbolise the water lily. He also wears armband tassles and feather decorations on his hair belt.



Dance paint-up in 1936. Hen on the right have painted up hurriedly with ochre paint, but still use the threestripe theme, as does the man to the left wearing a conical dancing hat decorated with mainland emu feathers. (The origin of the back design is unclear.)



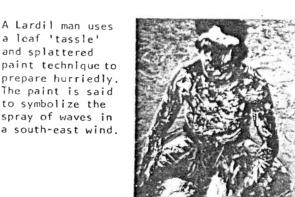
Joseph Watt wearing a variation of the traditional three-vertical-stripe theme. The white dots consist of feather down balls coloured with ochre.

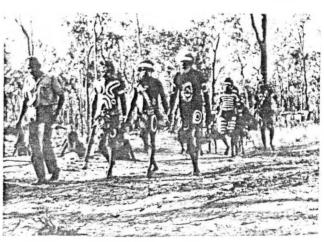


Women's dance dress, 1936. The woman with horizontal stripes is of mainland origin. The others (Lardil) wear a splattered ochre technique. Some carry dancing strings and wear headbands.



Another quick method of paint-up with white ochre. The symmetrical pair of curved bands or lines from shoulders to waist and on to upper legs is a common design theme.





Fred Jaurth in the foreground on the right wears his bluefish totem design whilst Joseph Watt behind wears the horizontal stripes of the rock cod totem. The single diagonal stripe patterns are non-traditional, but the man on the left (Larry Lanley, a Wanyi) displays the design theme of curved lines from shoulders to

dancing sticks with feathers attached to the ends, and paper bark parcels (referred to in Aboriginal English as 'bush swags').

Once men dressed in their dance outfits, they were ready to assist each other with body paint. If the dance was important and formal, it was considered most proper to use feather balls for decoration. Feathers were chopped up, mixed with white or red ochre as colouring, and rolled into small balls about a centimetre in diameter. These were fixed to the body with a mixture of human blood and red ochre as adhesive. The blood was either drawn from an individual's arm or from the penile subincision of a warama man, a high degree initiate. Individuals used blood from members of the opposite moiety and acted as donors themselves for that moiety. The use of penis blood is the reason given by informants for the exclusion of women and children from the male preparation ground. For them to view the act of drawing blood was taboo, as was seeing men painted in blood and red ochre without their final decoration of feather balls or white ochre over this undercoat (J.J. in A.D.A.:F15). Blood, especially penis blood, was considered potent medicine preventing sickness and providing strength. Any excess was consumed (L.R. in A.D.A.:F17).

Blood donors were privileged individuals who, after the dance, were due for square-up gifts of food at the make-up ground from those who used their blood. The users were also obliged to employ avoidance behaviour towards close female relatives of the donor (especially sisters), for some time after the dance (L.R. in A.D.A.:F2).

Applying small feather balls all over the front of the body was a tedious and time-consuming task, and if the dance was not considered very important in that it did not express any major domain of sacred knowledge, then a quicker method of body decoration was commonly employed - that of painting white ochre marks over the red ochre and blood underlay. Men who arrived late at the preparation ground, or lacked sufficient feathers or who were simply lazy were also likely to use this method. Both are acceptable Lardil styles but the former is considered to be the more correct in formal circumstances.

The correct Lardil design of male feather body decoration consists of three vertical white stripes on the stomach and chest, and continuing up the neck, face, and on to the dancing hat. The design of many painted white ochre stripes on male dancers display a similar visual structure to this feathered pattern. Examples are in figure 18. However, although key informants will maintain that there is only one proper Lardil way of body decoration, this rule is by no means adhered to. A number of striking anomalies exist with respect to this

assertion, both in the contemporary data as well as the earlier available material such as Nelson's photographs (1936:his nos. 180-202). First of all one observes endless variation on the above primary theme (or underlying visual structure). Photographs of feather make-up display individual variations in every case. Secondly, many dancers (including some of the investigator's informants) wear individual designs that are totemic symbols and which are said to have been given to them by their fathers. Some designs are symbolic of the inhabitants of totemic sites in an individual's patriclan country. Such sites are called 'story places' and are described soon. These designs are symbols of place in body art. Observed examples of personal body designs include the following:-

- (i) F.J. wears paint-up in the form of a number of white circles which he says (in A.D.A.:F4) represent the blue fish story place on Sydney Island, a place at which there are a number of holes in a rock platform (see figures 18 and 22).
- (ii) P.J. regularly uses a set of white marks representing a cloud (semi circle) and falling rain (dots). This he says is symbolic of his rain 'dreaming' (see figure 65).
- (iii)P.J. (in A.D.A.:F32, F33) and others claim that a paint-up technique which consists of splattering white ochre all over the body, is symbolic of the splash of the saltwater on the beach (refer figure 18).
- (iv) F.J. (in A.D.A.:F5) says that *palyarinyi* subsection people can use the mark representing the fat of the shark *wulakat*. This appears to be a symbol that can be used by a semi-moiety.
- (v) Joseph Watt regularly uses a design consisting of a series of horizontal stripes which is allegedly symbolic of the rock cod, an animal which has its story place in the user's patriclan country (which is also K.B.'s).

Whilst men were preparing their costumes and body decoration at the make-up ground, the songmen practised the songs for the dance. Once a number of men were 'dressed', they would begin to practise the dances also. At the same time young men might be invited to attend to learn new dances and to join in the singing as potential future songmen or dancers (L.R. in A.D.A.:F2).

When all was prepared for a dance and sunset was approaching, the songmen and/or other key elders would summon the people in the camp to attend the dancing ground, and then call the dancers from their preparation grounds. If the dancing ground was concealed from the camp, then an added theatrical advantage was provided. Special artifacts

such as shelters and decorated dancing poles could be already located in situ, e.g. G.P. remembers as a child, a waterspout dance: Upon arrival at the ground, he saw all the dancers lying down still. He thought they were dead, but they were merely in position ready for the commencement of a new dance that was first on the programme.

Mention has been made of the 'song man' or 'song men' in Lardil, called wayi (C.M. in A.D.A.:Fl). A number of 'song men' normally sang at a dance, as many as five or six but more commonly two or three. Each man's musical instrument consisted of a pair of boomerangs which he clapped together as a percussion backing. Amongst them there was a leading song man muiyanta, referred to in Aboriginal English as the 'chief song man'. This man may have earned his position through one or more of a number of attributes:- age, degree of knowledge, political dominance, or ability as a singer or performer. He would act as the 'master of ceremonies' at the dance ground directing people where to sit, introducing time cues to the dancers and audience when particular stages were to occur, requesting noise to stop, etc. Since all dancing was performed with songs, and as most songs were an expression of sacred knowledge (as is explained in the next chapter), then the song men were considered men of knowledge, 'keepers of the law', - men of status, both politically and socially. They are also referred to as 'big men' in Aboriginal English. Important song men in the period c.1910-1925 included Kungkamiruu, Warkatjaa, Yerrakerra and Stumpy,

Despite the nature of the dance example from G.P.'s childhood memory, most dance events began with some dancing by the women (K.B. in A.D.A.:F16). The male dancers may not be present, or if they have arrived, they sit in a group around the song men providing a vocal accompaniement for the females' actions. The women then combined with the men when they started to dance, but played only a secondary role. The dancing proceeded until it was on dark, when a break was called for a meal. This was either cooked and consumed on the dancing ground or in the camp, depending on the distance necessary to travel between the two. The dancing then resumed, continuing for several hours into the night (C.M., F.J. in A.D.A.:F1, F5). The most important dances of the Lardil were those expressing sacred knowledge of

^{1.} Clapsticks and didgeridoos are recently acculturated dance instruments on Mornington Island. Their origin is discussed in Chapter 6.

The Aboriginal Arts and Crafts Pty. Ltd.' have recently published a pamphlet which is titled "Aboriginal Music", and which was written by Alice Moyle. There is a map showing the distribution of dance instruments in Aboriginal Australia and the Mornington Islanders are indicated as using a skin drum. This is erroneous.

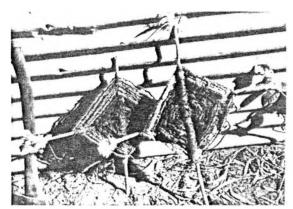
ancestral beings and the modern implications of such knowledge. These dances were usually kept as the concluding dances for the night. They are called 'big dances' or mutha putal, as opposed to 'little dances', kiti putal.

The song men all stand at one end of the dancing ground with a fire nearby, the leadingsong man positioning himself in the middle of the group (K.B. in A.D.A.:F2). If the dancers have arrived they assemble at the opposite end of the dance ground. Informants say that the audience sat (and still sit) in their groups by geographic direction, i.e. larumpenta, lilumpenta, etc. (e.g. F.J. in A.D.A.:F5). However, as discussed previously, this idea is more of a generating principle behind the spatial structure rather than an exact form. Individuals might sit outside of their social groups for a number of reasons, sometimes making the definition of such spatial divisions difficult for the outside observer to perceive. The audience sat in two lines radiating to either side from the song men. They sometimes closed behind the song man but normally left a gap at the end opposite the song men which was used by the dancing men to enter in, or exit off the ground, or to sit in. The audience's sitting position is also at the edge of the cleared ground either just inside the grassline or behind it, depending on the location of debris piles and/or the physical nature of the grass at the time (short and green is good to sit on, but not long and dry). This sitting behaviour reinforces the physical boundary properties of the dancing ground,

The audience have fires in front of them for warmth and illumination of the ground. The latter function required them to be larger than normal camp-fires. There may be no other physical components on the ground. However some dances called for special dancing poles or shelters to be built beforehand. Shelters were used by the dancers and were located at the end of the ground opposite the song men. They functioned as (i) a place for the dancers to hide behind before the dance began; (ii) a concealed place from which to emerge at the beginning, as a surprise; (iii) a place at which to rest between dances. The shelter was orientated into the dance ground towards the song men (K.B. in A.D.A.:F2).

The investigator knows of only one explicit example in the Lardil culture when a shelter had a symbolic role. This was in the dance of Thuwathu, the Rainbow Serpent: "yaputjanta..." In this dance, high parallel windbreaks were constructed surrounding each side of the dancing ground, and these represented the mangroves lining the Dugong River on Mornington Island. Thuwathu, the Rainbow Serpent allegedly

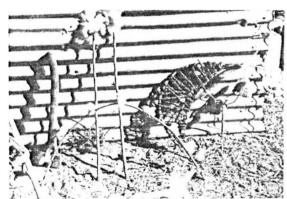
SOME LARDIL DANCING ARTIFACTS



Tjarramarra crosses are hand-held by men for particular Rainbow Serpent dances. The artifact is recognized by the Lardil as originating from the mainland.



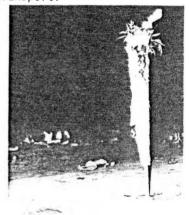
Song man lan James making some artifacts for a dance. They are called 'bush swags' in Aboriginal English, and consist of leaves wrapped in paperbark and tied with vines. This was a traditional method of protecting objects for safekeeping or transport.



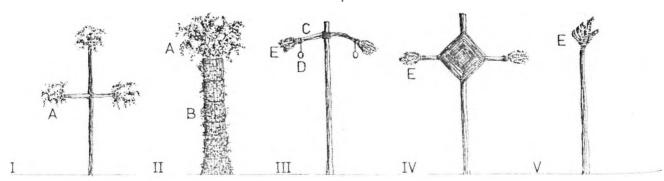
In this plate there are two bow or crescent-shaped pitipir, symbolic of both the rib-bone of Thuwathu and the new moon. They are used in contemporary Rainbow Serpent dances by men of the kamarangi, puralangi, kangala and yekamari sub-sections. The two straight sticks with feather decorations are also hand-held by both men and women.



Song man, Lindsay Roughsey, with a dancing pole made from a sawn board. It is to be used in a dance of Thuwathu, the Rainbow Serpent. The inspiration for this pole was not from a dream but from a similar pole which Lindsay had seen in a photograph of a Walpiri ceremony.



A dancing pole in place on a dancing ground at night. It consists of a long paperbark and leaf torch bound on a pole. The torch has just been lit and the dance which will take place around the pole is about to commence.



Examples of Lardil dancing poles. I and II represent the waterspout, whilst the remainder are used in dances concerning the Rainbow Serpent Thuwathu. Common decorative elements include (A) hushes (B) bark wrapping (C) becomerangs (D) bullroarers (F) feathers. On IV there is a transmarra cross of human hair string, a sacred object known to have originated from the mainland.

113.

formed this stream as he writhed through the land after being burnt alive in his shelter. As he travelled, he left the river banks and mangroves behind in his wake.

Dancing poles consisted of a timber pole to which was attached one or more of a number of things: branches of leaves, bunches of feathers, bark wrappings, cross spars, artifacts such as boomerangs and bullroarers. A dancing pole was a unique artifact prepared for that particular dance, having a symbolic role and unlikely to be seen in any other cultural context. Examples are in figure 19. The dancing pole stood in a hole in the ground that was prepared beforehand so that the pole could be carried in or out the ground at the required time before and after its dance. This action helps to achieve a dramatic effect, and then allows other dances to proceed on the open ground in a functional manner, free of obstructions. It is claimed by contemporary informants that it was also to ensure that women or children were not exposed to what might be a sacred, secretive and powerful artifact for any longer than necessary.

As mentioned before, the chief song man was responsible for selecting the programme of songs and accompanying dances, although he usually conferred with the dancers. Some dances were more popular than others. Such fashionable preferences were consistently requested by audiences.

The Lardil word for song is putal. Except for key words in some songs, most sounds that are sung are not proper Lardil words. There is an underlying theme or story to each song and its accompanying dance. Such themes varied: from minor or secular matters, sometimes humorous, such as camp events, hunting episodes, animal behaviour and legends, seasonal observations, etc...to important pieces of sacred knowledge such as the travels and actions of ancestral heroes and the behaviour of invisible entities in the environment. From the available information on Lardil dance, the investigator has compiled a list of some 80 individual dances performed in this century, and with titles in Aboriginal English such as 'alligator', 'blind man', 'brolga', 'dying man', 'bush fire and sparrow hawk', 'hollow logman and caveman', 'dog', 'fish hunting', 'fine weather', 'flying fox', 'mosquito', etc.

^{1.} As well as witnessing numerous dances both on Mornington Island and at demonstrations for white Australians, the investigator has obtained data on dance from the following informants, all held in A.D.A.: K.B. (F2,6,16,19,24,29,31), F.J. (F3,4,5,21), C.M. (F1), J.J. (F15), G.P. (F3), L.R. (f2). Other data sources are Keen (1970), Roughsey, D. (1971A:57,58,61-71), Cawte (1972:27), "Gidegal Moon Man" (dance tour programme 1976), dance programme for Doomadgee dance festival 1974 (Memmott 1974). The Mornington Islanders Corroboree Souvenir Programme (1965).

SOME MORNINGTON ISLAND DANCE EVENTS



Lardil men performing at the mission camp dancing ground in 1936. The song men are standing, a trait seldom observed to-day.



performing a shake-a-leg action. Note the well-used surface of the dancing ground. A conical dancing hat is to be seen on the right.



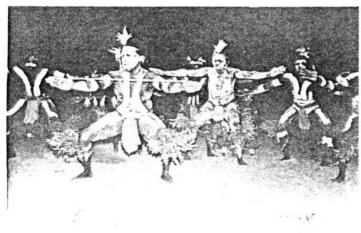
The same 1936 dance with two men Lardil women also dancing in 1936. They are wearing string skirts (tjeeyat) and some have hand-held dancing strings.



A dance performance at a non-traditional place and time. It was held in 1975 on the school oval to entertain a visiting Country and Western entertainment group. Lindsay Roughsey is lead song man with lan James and others backing. Larry Gavenor and Larry Lanley are playing didgeridoos - an acculturated instrument.



At the same 1975 dance - the men are singing songs before commencing the dance proper. Other acculturated features are the wearing of underwear and head feathers.



A nocturnal performance at the village dance ground in 1974. The man in the foreground is holding a dancing string, usually used by women. All wear paint decoration, wallaby fur tassles, headhands, and leaf decorations on lower legs.



Lindsay Roughsey is again leading song man at this dance with other song men behind. Although a night performance, it is being held in a non-traditional location - on Lardil Street.

The length of Lardil songs is short. In structure each consists of two lines of syllables (A, B) which are repeated as verses either in the pattern AB, AB, AB, AB, ... or AA, BB, AA, BB, AA... Individual song men varied their presentation through different rhythmic accents, running syllables together and separating them in different patterns, and adding in or repeating sounds or syllables. No song man is explicit about why these variations occur, but it certainly affects the aesthetic results. The song man repeats the two verses of a song for a number of times, perhaps six or eight or twelve, bringing the dance to a conclusion with subtle changes in rhythmic speed, emphasis and vocal volume. This might only take several minutes, sometimes less. The whole dance is then repeated, at least once, and perhaps two or three or four times depending on audience response, which consists of cheering, shouting and heckling.

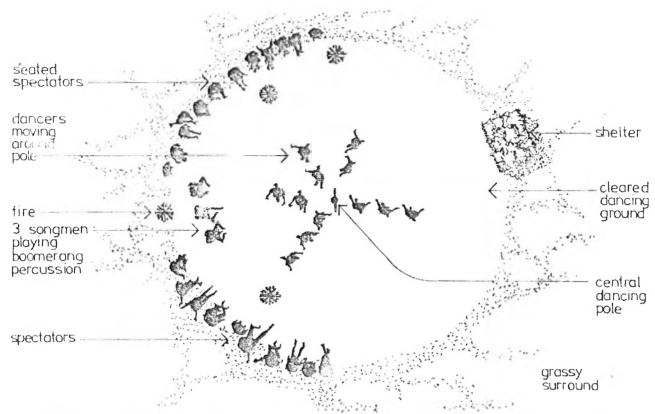
Each individual Lardil dance was characteristically different in its behavioural enactment as well as in the accompanying sounds of the song. (The meaning of songs is discussed in the next chapter.) Nevertheless many of the dancing actions called laka or 'tricks' were repeated as elements of many dances, e.g. hopping, vigorously stamping the feet with high knee action and arms outstretched, running, hopping whilst squatting, shaking the knees, prancing, etc. Individual dances were thus 'behavioural episodes' consisting of units of 'molar behaviour' to use Barker's description (Barker and Wright 1955:10), or of 'tricks' to use the Lardil unit. Many of the dancing actions were mimes of pieces of human and animal behaviour, e.g. pretending to make a fire with firesticks, pretending to chop wild bee honey from a hollow tree limb, pretending to be a feeding wallaby or a dancing brolga, simulating bird calls, etc. It was common for individual dancers to mime their semi-moiety totems or personal totems in dances involving those entities.

The male dancers dominate over the women with the variety and intensity of their actions. They are usually orientated to the song men, and gradually move forward from the rear of the dance ground, to finish a few metres from the song men at the climax of the dance. In other dances the men move in a large circle around the dancing ground, perhaps approaching a central dancing pole or fire, by moving in then out whilst continuing to move around.

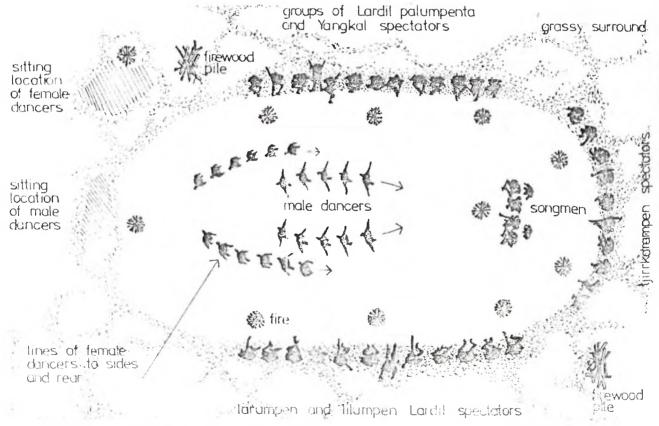
The male dancers were commonly divided into two segments by moiety

^{1.} Such differences are even noticeable when an informant says the words of a song slowly in speech, and then sings them.

SPATIAL STRUCTURE OF LARDIL DANCE GROUNDS



A. Plan of a small dance ground with a central decorated pole being used in a dance of the water apout. The shelter at the rear of the ground is to be used as a hide for the male dancers who will imitate flying foxes in another denoe.



B. Plan of a larger dance ground with spectators seated in tribal and sub-tribal groups. The dancers are spatially arranged for a dance of the Rainbow Serpent.

either in lines or loose groups. The moieties and semi-moieties were expressed through a number of other means:- (a) by the depiction of the totemic designs of a semi-moiety in body decoration; (b) by role playing an animal or other phenomenon which is totemically affiliated with a moiety or semi-moiety; (c) by individuals dancing with symbolic artifacts in particular dances, that were believed to be associated with a moiety, as well as with that dance. For example in the dance of 'Thuwathu', the Rainbow Serpent (yaputjanta), the pitipir, a bow-shaped dancing artifact is symbolic of the rib bone of the Serpent and can only be used by the men of the kamarangi, puralangi, kangala, yekamari moiety. Hunting boomerangs with feathers attached to the ends are also used as symbols of the Rainbow's ribs. In this dance, bark containers (tumurr) are hand held by the men of the opposite moiety, and symbolically contain the internal organs and meat of Thuwathu. The men of each moiety take on a separate role in this dance, but this is not always the case. In many dances, all the dancers take the same role, whilst in some dances there are principal roles for some men, Once during an interview, K,B. (in A.D.A.:F2) called the 'mob of the dancers' kakalwaa, the principal dancers as putawitjingi, and the two secondary lead dancers as kuringi. Some typical examples of dancing positions are shown in figure 21, i.e. spatial locations of dancers on the dance ground,

The female dancers are usually to the sides and rear of the central group of male dancers. Their actions tend to be repetitive and to the Western observer seem neither as dramatic nor energetic as the men's. Their footsteps are shuffles or small kicking steps. The arms are swayed in time with the music. In many dances, dancing strings are held between outstretched arms.

The spectators who sit in family or larger social groups watch keenly, shout support, make fun and occasionally derision. They spend intervals conversing with neighbours, consuming food, and attending to the children as they create mischief and then fall asleep. After a dance, a spectator may jump up and clasp a dancer, praising him or her for their efforts. Such praise may result in the giving of square-up gifts as noted previously.

Another incident that sometimes occurred was for a man to throw a boomerang amongst the dancers. This was socially permissible and enacted by a person who was enjoying watching the dancing performance, but who felt grieved for not having been invited to dance himself. The dancers are not allowed to retaliate or flinch in these circumstances (L.R.).

Between dances, the ćhief song man walks around the dancing ground conferring with the other song men, with the dancers at the opposite end of the ground, and with members of the audience. He may ask them how they are enjoying the performance, and discuss requests for particular dances, and then he announces what the next dance is to be.

The Lardil dance is a form of man-environment interaction that can be classified as a behavioural setting. This unit was devised by Barker and Wright (1955) and elaborated upon by Barker (1968). It was described in Chapter 1. Thus the Lardil dance event has its specific setting - the dance ground, and its specific time of enactment - from late afternoon to the middle of the night. These things comprise parts of the milieu as do fires and dancing poles. The roles people play, and the typical sequences of behaviour enacted by the participants and the audience occur regularly at all dances, irrespective of who attends or who dances or who is the leading song man. When a dance occurred, all the people in the vicinity would normally attend, except perhaps for some very sick or aged individuals. There was seldom any outside event to disrupt the unity of the setting. One can distinguish sub-units of the setting e.g. an individual dance performed with special artifacts. Although such a sub-unit can be isolated as a separate synomorph to the total setting it is still interdependant with it, and does not occur outside of the dance ground setting, except at the practice dance ground, (another behavioural setting). There are thus similarities and connections between these two types of place, but their independance is enforced by access restrictions to the latter. (The type and degree of independence between individual synomorphs inside the setting with others outside the setting is an important evaluative test in defining a behaviour setting (Barker 1968)).

The boundary of a behaviour setting is generated by the behaviour, and is circumjacent to the behaviour. Repetitive use of a dancing ground results in it being free of flora or groundcover. As mentioned, the type of surrounding grass or groundcover will dictate whether people sit on it, or inside it on the cleared sand or soil. The spatial structure of the audience's sitting position generates a physical and behavioural boundary. This definition is reinforced by the interior focus of firelight and dancing action in the middle of the setting.

The behaviour setting puts people in the situation of contributing their personal behaviour to setting maintenance. At the same time their individual life styles and life spaces are shaped by the setting. This is what comprises the synomorphy. At a Lardil dance deviant

117.

behaviour is corrected by the persuasive heckling of the audience or by the authority of the song man.

It can be seen then, that although dance grounds have minimal articulation with physical objects, they nevertheless have a complex sociospatial structure which conforms to the concept of the behaviour setting, as devised by Barker and Wright and others in mid-west towns of the U.S.A.

Initiation grounds are the next type of Lardil place to be examined. The data on them are by no means as extensive as those on dance, but it can be recognized that initiation grounds display the characteristics of behaviour settings when in use, also.

Initiation grounds

The most significant ritual or ceremony ¹ of the Lardil was that of male initiation, involving circumcision and subincision. All of the adult members of the tribe usually attended, not withstanding feuds. The favoured time for this event was during the dry season. Some ceremonies were inter-tribal ² with the Yangkal in attendance (Sharp 1939:45). C.M. was thus initiated at kununa on the Appel Channel with other Lardil and Yangkal youths.

The circumcision ceremony had to be held at a special site called thukan in Lardil. Not every patriclan country possessed such a site. Boys from K.B.'s country were taken to a ground near Elizabeth Creek in Gammon's country or to one at White Cliff (K.B. in A.D.A.:F16). The choice of a ground involved political factors as well as economic ones. The most popular grounds were located near food resources on which the participants and their families could subsist for up to five or six weeks in good seasons,

There are a few reports of grounds that have been 'closed down' or 'opened up' on irregular occasions by dominant key elders (the 'boss of the ground'), but generally speaking, initiation grounds were fixed places for at least several generations, if not many more.

The physical character of an initiation ground, like a dance

1. As mentioned elsewhere, the ritualistic life of the Lardil was not as prolific and elaborate as other Aboriginal groups. Besides the initiation ceremony there occurred the flood-making ritual, secret rituals to obtain somebody's love, and regular public dances which were an expression of sacred knowledge.

2. A contemporary initiation has been planned at Point Bayley on the mainland coast, involving the Lardil, the Yangkal, Wanyi and Yukulda tribes. Spencer and Gillen (1904:369-372) have described the Janjula initiation, and although there is certainly not an exact resemblance with the Lardil ceremony, there is congruence in some of the principles underlying the event, e.g. (a) use of square-up practices; (b) sequence and timing of events; (c) minimal visual access allowed for the initiates who are covered with leaves or bark; and (d) similar roles in the event for the various classificatory kin.

ground, is unassuming. It is seldom more than a flat cleared oval of ground, some 20 metres long. Despite this, such grounds are sacred places, particularly because penis blood has been spilt on them. For this reason, they are normally out of bounds to women and children who must observe avoidance rules. The general restriction of access for women is lifted for certain parts of the circumcision ceremony, except in the case of pregnant women. The Lardil say that if a woman, pregnant with a baby boy, walks near an initiation ground without a firestick, her son will be born circumcised (Pearn and Sweet 1977:150)

Grounds are thus sited some distance from regular camps and may be located in the interior land systems, although seldom far from the coast,

The behavioural events at an initiation ceremony were enacted according to a set procedure that could not be violated for fear of reprisal from Lardil leaders, as well as from mainland elders. (The ceremony came from the mainland). Unfortunately the structure of the behaviour associated with initiation grounds is not easily reconstructed despite the fact that the most recent occurrence of the ceremony was in 1972. Besides the secretive nature of the ceremony, there are historical reasons for this difficulty. As is revealed in Chapter 6 at least one missionary attempted to stop the ceremony and most of them forbade certain parts involving free sexual intercourse to occur. The circumcision operation was eventually to be presided over by European medical staff.

Traditional initiations occurred every year or every few years, but such was the influence of the missionaries, that the regularity of the event ceased. The number performed since 1914 are few. C.M., with others now deceased, was initiated fully in c.1916. After this at least two ceremonies are reported to have occurred prior to the war. The initiates were G.P. and Pat Adams respectively (D.R. in A.D.A.:F22). After the war a ceremony occurred in 1956 when Pompey Wilson was initiated. It was reported by Dr. Winterbotham (1959) 3 who performed the circumcision and made a film of the event (A.I.A.S. L7.

3. He may have been partially responsible for instigating the event.

^{1.} Informants claim that one of Lois Watt's sons was born circumcised because she passed too close to a disused initiation ground ('closed up') at kangalan in K.B.'s country.

^{2.} L.R. reports that severe repercussions for the Lardil initiation ceremony came from Doomadgee. In c.1939 the resident missionary at Doomadgee used stringent methods to stop the custom.

"Mornington Island Circumcision Ceremony"). Another revival of the ceremony occurred in 1972 when J.J. was initiated (filmed by Curtis Levy for A.I.A.S.) The latter two initiations did not involve subincisions, and in 1975 there were only two subincised Lardil men alive on Mornington Island. Not more than ten circumcised men remain and those elders who administered the 1972 ceremony were mostly uncircumcised.

It can be seen then that (a) the number of occurrences of the ceremony in the last 60 years have been few; (b) at least some components of the ceremony are no longer performed; (c) it is likely that the properties of other components have changed; and (d) there are very few individuals alive who have participated in a fully traditional ceremony. Nevertheless a reconstruction is attempted here, although it is pointed out that the exact nature and order of some events is in doubt or unknown. The material is largely derived from Roughsey (1971A:11-17, 1971C:58-62), and supplemented with data from Cawte (1972:32,37,101), Winterbotham (1959), Sharp (1936:167, 1939:456), A.I.A.S. films, "Luruga" (1974) and L.7 "Mornington Island Circumcision Ceremony", and material in A.D.A.: K.B. (F31), G.P. (F3), F.J. (F3,F4,F33), L.R. (F25), P.J. (F32,F33), C.M. (F18), D.R. (F22,F23).

Events prior to the actual ceremony but which were not directly associated with the initiation ground included the following:-

- (a) Choosing and agreeing upon whom the initiates were to be, and obtaining the necessary permission from patriclan relatives. From this point there emerges a small group of older initiated men who take responsibility for organizing the ceremony. They choose the initiation ground on which to conduct the ceremony.
- (b) Announcing the proposal to each chosen boy, accompanied by the presentation of a waist belt made of human hair string, by a classificatory father-in-law. The headband with wallaby teeth decoration (parmar) may also have been presented at this time, or alternatively later in the ceremony with other gifts.
- (c) The main participants in the ceremony were chosen and informed by the elders.

^{1.} For example the data gives no indication as to whether circatrix scars were cut during this ceremony. The Lardil certainly practised this custom. K.B. (in A.D.A.:F50) has explained that an adolescent has his nasal septum pierced by his father-in-law, but there is no evidence to clarify whether this was performed in connection with initiation.

- (d) The intention to hold the ceremony was announced to the tribe. This sometimes involved the use of messengers with 'message sticks', but the boys themselves also travelled in the company of relatives around Mornington Island from camp to camp, to announce the event and to enact a number of required communication exchanges.
- (e) Ochre and feathers were collected for the body decoration of all adult participants. Women wore red ochre. Men decorated themselves with designs using feathered balls, similar to the method used for dance.
- (f) The adults played a popular game of handball. The ball (mitjal) is made from hairstring or a fishing net stuffed with grass. The game involves two sides each comprising the members of a moiety.

When the main ceremony was imminent, the boys were led to the ground in a theatrical display for the women and children. The latter were invited to the ground to observe but certain classificatory female relatives were not permitted to look and kept their faces covered with leaves. The men wore feather body decoration and each carried a hunting boomerang, or possibly both a boomerang and a fighting stick. They entered in a line in a slow and rhythmic manner. With each slow pronounced step they all made a vertical sweep with their boomerangs and after several forward steps they stopped turned 90 degrees to the right and pointed their boomerangs in the same direction, then proceeded forwards again. Whilst performing these movements they made a high pitched sound: "krrr, krrr, krrr,.," (This is possibly an imitation of the red-bill). The novices advanced inside the line of men. Their heads were covered with bunches of leaves. At first they were led by a string, but as they drew nearer to the ground, they were each carried sitting on a man's shoulders.

These men in charge of the novices, are their mothers' brothers or mothers' fathers according to MacKnight (1975). On arrival at the ground, the boys were sat down in front of their real and/or classificatory mothers. As they made their farewells, the men commenced singing. The women and children were then sent away.

The main ceremony lasted for a night and a day. For one or several nights preceding this, sacred dances and songs were practised. During the day the boys were kept immobile at the ground with bunches of leaves tied over their heads to restrict their vision. The old men began to teach them to communicate with sign language. In a report of one ceremony (D.R. in A.D.A.:F22) practice nights were held

at a number of grounds around the island. People travelled during the day until all were finally assembled at a final site for the ceremony. The main ground surface was cleaned free of debris by sweeping with bushes and/or scraping with boomerangs.

The first part of the activities of the main night consisted of singing and dancing. The men sat on the ground in a spatial structure corresponding to the four sociogeographic groups by direction (the larumpenta, lilumpenta, etc.). Songs were sung to make the boys fat and to loosen their foreskins for the operation. A sacred dance called 'shake-a-leg' in Aboriginal English was repeatedly performed. This was similar to, but not exactly the same dance action used in the 'shake-a-leg' performed publicly at dances. The elders chose one or more classificatory brothers-in-law of each boy, to enact this dance for him. There is a camera shot in the Luruga film (1974) of two men doing this dance whilst each holding the opposite end of a fighting stick positioned horizontally between them. The shake-a-leg could not be viewed by women.

The themes of sacred songs sung through the night covered a broad range of sacred knowledge, but the most important set of songs involved the travel of many ancestral animals around the Southern Gulf and the Wellesley Islands. This was the <code>kutjika</code> song cycle. Particular attention was paid to the dingo who allegedly brought many of the customs concerning initiation and sexual customs. Personal gifts of weapons were presented to the boys by adults during the night.

At a certain stage the married women were called for, to demonstrate some of their sacred dances - yiritjili (or perhaps yiritiri). Late in the night a married woman was brought from the camp who had sex with many or all of the men at the ground. More women were sent for, until all the male participants' wives were in sexual attendance upon whichever males asked for their pleasures. After intercourse, the genitals were washed in a bark container of water and the contents drunk. Older women had sex several times with the novices to ensure that they did not have an erection during or after the operation. The novices too, had to drink their genital fluids, which were supposed to induce the manly attributes of strength, courage, skill at hunting and sexual prowess.

After sleeping at the ground the boys were circumcized in the early morning. Three or four of each boy's classificatory brothers-

^{1.} It may not be coincidental that Meggitt (1965:37) mentions kadjiga ceremonies enacted in connection with circumcision by the Djingili tribal people, with adults from the Walpiri, Warramunga and Walmanpa groups also in attendance.

in-law lay face down side by side to form an operation table on which the boy reclined facing up. The foreskin was cut off by the boy's classificatory father-in-law with the tail barb or pin of a particular species of stingray. It was then covered in fire ash and wrapped in paperbark. Special songs were sung by the remainder of the men whilst the operation was in progress.

The boys were kept away from the main camp. They communicated only with sign language, and were taught weaponry and marine hunting techniques. A period of several weeks elapsed whilst the boys recovered from their wounds (Roughsey 1971C:61). They were then taken to the sea to be immersed and bathed. A female participant placed a fishing net on each boy's head as he emerged, symbolizing his new authority to hunt in the sea. The boy responded by symbolically throwing a spear into the sea. The men then rubbed the initiates with underarm perspiration and blew their breath on them. Women brushed them with bushes, allegedly to prevent the initiates' sisters from smelling their penis blood.

A final stage of the ceremony is 'going through the smoke'. The men dug a hole in the ground with base broader than opening, and filled it with partly green <code>Acacia</code> leaves, to make a slow burning, smoking fire. The initiates immersed both their heads and bodies in smoke which was said to purify their wounds. The older men rubbed underarm perspiration on them and blew breath on them whilst they were 'smoked'. Then the classificatory brothers-in-law rubbed their underarm perspiration on a spear thrower, and placed it in the mouths of each newly circumcised man. The brothers-in-law applied more underarm perspiration and the women again brushed their bodies with bushes. The silence ban on the initiates was then lifted.

The concluding part of the initiation involved the father-in-law squaring up with the initiate he circumcised, for undergoing the ceremony. He returns to the son-in-law his foreskin, as well as giving him numerous gifts including a daughter as his wife. This occurred at the initiation ground to the accompaniment of shake-a-leg dancing and singing.

The circumcision ceremony was called *luruka* or 'first degree' in Aboriginal English. Some months after this, the initiate may have requested (through his elder borther) to undergo the 'second degree' ceremony or 'warama', involving subincision of the penis. There is little data available concerning the nature of this event. The man stood rather than lay on the ground when his penis urethra received the *lingka* cut. Roughsey reports (1971C:61) that a stone knife was

used. The man stayed secluded during healing whilst he underwent a learning programme of secret knowledge. Some symbolic aspects of this ceremony are dealt with in the following chapter.

Story places

There are many sites distributed around Mornington, Sydney, and Wallaby Islands which the Lardil call 'story places' in Aboriginal English. Dick Roughsey (1971A:110) describes his memory of the 'wallaby story place' on Sydney Island:— "As a boy I was told not to go anywhere near this spot, but always walk around by the beach. With leaves over our heads to avoid us looking to that direction..." And later as a young man:— "We stood at the place, and noticed a lot of holes in the flat rock surface, and some were large, some were small. During the wet season these holes were like springs, water would be coming out, and legend says that these were the bad smell of the male wallaby penus. The tribal name for this place is called Booga-Nullwad-a Gunjina, and Booga means bad, Nullwad means penus, Gunjina means wallaby."

Story places are found within named places, but in addition each is named after the natural phenomenon with which it is associated. Thus there is the 'dog story place', the 'messmate tree story place', the 'green frog story place', etc. etc. "Every animal and thing got story place". (K.B.) These natural phenomena are often fauna or flora species that are important food or economic resources, but are not always so. Some sites are named after insects and meteorological and planetry phenomena, e.g. the mosquito story place, the cyclone story place, the flood and waterspout story places, the moon story place. Generally speaking, each story place has a different species or inhabitant associated with it, but there are a few exceptions, e.g. there are two wallaby story places (in K.B.'s and F.J.'s countries), and two pandanus story places (in K.B.'s and Nicholas Dugong's countries).

Usually there is a distinguishing physical feature at a story place, e.g. a freshwater spring (blue fish story place), a clump of rocks containing birds nests (pigeon, brown hawk, sea hawk), distinctive marks or stains on a rock (rock cod, wallaby), a configuration of boulders and aggregates (redbill - see figure 32), a sand bank (flood story place in Sam Bush's country), etc. However such physical features are not necessarily the most outstanding in the surrounding landscape as seen by the uninformed observer. In some cases the physical features of the story place are not markedly distinguishable from their surroundings, e.g. at the barracuda story place where there

SOME LARDIL STORY PLACES



Bluefish or tjaurral a freshwater spring coming through a hole In a littoral, wavecut, rock platform, Sydney Island.



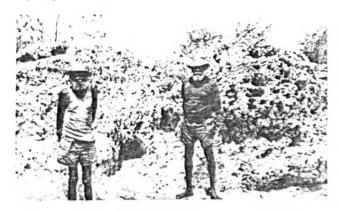
Freshwater turtle, mali - water holes at the headwaters of an intermittent stream the Gabanyari River.



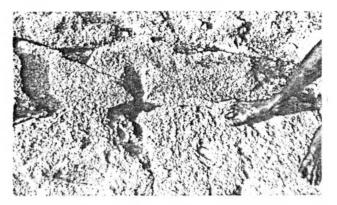
Moon or Gidegal - a tuft of grass growing from the side of a sea-cut cliff in Robert's country is said to be Moon's beard.



Barracuda or tangka story place - a small gorge behind the beach and some titrees, on the Appel Channel.



The female wallaby, makura - small holes in a rock mound behind the beach, Sydney Island.



The stonefish story place - an imprint in a lithified rock platform, Sydney Island.



Rock cod or tipriti story place in Kelly Burbujee's country - the white stains on the rocks are the rock cod's semen.

is a special *Melaleuca* tree amongst other *Melaleuca* trees. In other cases the actual physical feature may be difficult to locate, e.g. at the stone fish story place where informants searched for hours for a particular depression on a rock platform (see figure 22).

The natural phenomenon associated with a story place is said to inhabit that place, although there may not be any apparent physical evidence to support this claim. Generally the inhabitant/s are said to be 'inside' or under the ground. Some sites are said to have been made or marked by the inhabitant, or contain an original part of the inhabitant. Thus the stains on the rock at the wallaby and the rock cod story places are said to be sperm droppings; the grooves in the rock at the moon story place are said to be the moon's tracks as he rolled; and a large tussock of grass growing from the side of a cliff at the latter site is said to be the moon's beard. Such things provide indices of the inhabitant's presence. Further details concerning the origin of these places is discussed in the next chapter which deals with aspects of ancient Lardil history.

Some 74 of these Lardil story places have been named by informants, or mentioned in the literature (Roughsey 1971A,B,C, Cawte 1973, Sharp 1939). Another ten have been elicited as being in Yangkal tribal country. Of all these, the investigator has mapped 19. With the exception of one, all of the Lardil story places are located around Mornington, Sydney and Wallaby Islands in the coastal land systems, the littoral zone and the off-shore region. The exception to this geographic pattern is the freshwater turtle story place which is a series of rock waterholes in the middle interior of the island, at the headwaters of the Gabanyari River in Big Barney's country.

The Lardil observed (and still observe) certain behavioural codes at story places. Although women and children can go near these places, everybody must keep quiet, talk softly, and act reverently. The men may instruct everybody not to look directly at the place and on some occasions (as described by Dick Roughsey above), to shield one's vision with a bunch of leaves. Whistling, shouting, singing and laughing are forbidden. Sharp (1939:458) reports that "non-secret increase ceremonies are now conducted by the individual who owns the site or by other persons. When the site is stirred up in various ways, the totemic spirits....which stem from the ancestral totem... left there, are "hunted out" for the benefit or harm of the whole community". There is no evidence to suggest that such 'ceremonies' closely resemble the elaborate increase ceremonies seasonally performed by the other Australian Aboriginal groups, and involving dance, song,

body and ground decoration, special behavioural roles, etc. (e.g. the Aranda as described by Spencer and Gillen, 1927) 1.

However, certain simple actions were performed at some of the places to cause an increase in, or the fertility of a resource, and thus to invoke good hunting or gathering for the immediate future; e.g. at the wild grape story place in K.B.'s country. "...if you want black grapes to ripe, you brush them with bush, any bush." (K.B., in A.D.A.:F29). Other common methods include hitting or poking a particular story place with a stick and shaking bushes at places (e.g. at the barracuda, mudcrab and goanna story places). Some actions can cause discomfort for one's fellows, e.g. cutting the tree at the mosquito story place induces mosquito plagues. Interfering with some story places may result in body sores e.g. by digging at the white ochre story place in J.J.'s country or at the dog story place in Dan Bush's country.

Many actions at story places affect the climate. Winds may be caused by breaking the branches of trees at some. Winds are said also to result if one digs the sand out of the bluefish story place hole in F.J.'s country. If a branch is removed from the bush at the firestick story place, rain may occur, and similarly if one burns water lilies from the waterlily story place in Robert's country. If spinifex and wattle leaves are burnt in cold weather at the brown hawk story place in Terin's country, dust storms could follow. The south-east wind may be 'stirred up' in a number of ways, for example by hitting the pandanus tree at its story place in Nicholas Dugong's country.

Sharp (1939:458) observed that men deliberately influenced the weather by such means, e.g. by increasing the south-east wind cycles to bring the wet season to a close. Other examples are the flood and cyclone story places in the countries of K.B., F.J., G.P. and Sam Bush. Those phenomena are induced by taking white ochre into the sea at the story place site. The most famous example is the flood-making story place off Sydney Island where clay is rubbed inside several underwater caverns. This is an exceptional case in that it is the only story place where an elaborate ceremony has been reported to be performed. (Roughsey 1971A:63-74, Trezise 1966).

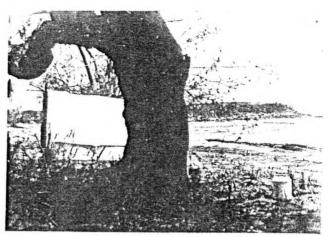
Although story places are said to be sacred, the investigator

^{1.} Strehlow (1970:102) mentions an Aranda honey ant cycle of ceremonies that takes from 15 to 20 years to complete. Furthermore one cannot argue that Lardil local population distribution was largely controlled by individuals having regular ceremonial obligations at specific sites, as has been generally argued by Berndt in Peterson (1976) and Strehlow (1970).

LARDIL CAMPS



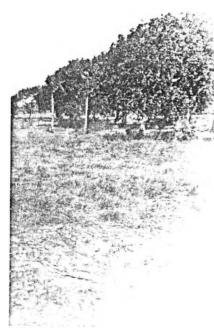
An open winter base camp on a sand platform called parartkiya in Kelly Bunbujee's country. Here the lilumpenta and their neighbours are assembled for dancing and feasting. Water lilies and pentja corms are obtainable from nearby swamps. There is a large semi-circular shaped rock reef (kwelarar) off this part of the coast. It is said to have been made by Manhpil, and is used for hunting dugongs, turtles and fish.



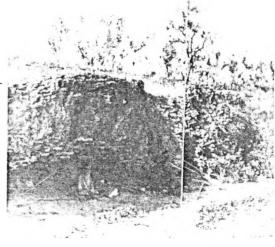
This is a popular beachside camp at kela in the kenthawu locale (once Big Barney's country). It has a dancing ground, and water is obtainable all year from local swamps, rockholes and wells. There is a plentiful supply of kurparra timber for weapons and utensils in the bush country behind this camp. Dugongs feed in the muddy off-shore shallows. The cliffs of kupare are in the background - the site of the legend explaining why there is no wild bee honey on Sydney Island.



An open wet weather campsite at tukure - a high sand ridge on Sydney Island or language ngartji. The site is free of tidal surges and exposed to the breezes so as to minimize mosquito attack. Freshwater is available from beach springs during wet weather, and from a freshwater pool in nearby Semen Creek in the dry season. Turtles abound off shore.



This high wet weather camp is at tinkilmiya in Fred Jaurth's country The site is open and grassed, with stands of shady trees for daytime use. There is a dancing ground which at times was attended by the entire large division. The ground surface in the foreground has been disturbed by a wild bullock exposing the sun-bleached mudshells and bone fragments, typical of all Lardil campsites.



At a number of places on Mornington Island rock cliffs and platforms have been undercut and notched by the seato form natural wet weather shelters. This example is in Robert's country on the vestern side of the island.

was allowed to approach and photograph these sites in the company of the local <code>tulmata</code> and other elders, providing the above behavioural rules were observed. To an uninformed observer it becomes obvious that the full meaning of these places is not self evident. The old men do not readily offer any explanation of the invisible properties attached to them. A more complete understanding of their significance can only occur in the context of cosmological models which are elaborated in the following chapter.

Campsites

For the Lardil, camps were not only places to sleep, eat and perform other body functions, but were also places of major social interaction and the base for economic activity. Their properties were multiple and varied, and require some extensive discussion. The association of behavioural traits and artifacts with the natural properties of campsites and their environs leads one into differentiating between seasonal shelters, forms of seasonal food exploitation, specialized food processing methods, specialized tools for carrying out economic tasks, and thus between different types of camps, Special camps were also used for social and ceremonial activity. Camps were all fixed places but the time, frequency and purpose of use, and the number of occupants varied. The decisions of when to shift camp and where to locate the next camp, were made many times by each Lardil family throughout the seasonal year, under varying social and personal circumstances, as well as within the economic context of seasonal food resources. Consideration of these decisions leads to some understanding of the patterns of movement and population distribution throughout time in Lardil lands.

Given a choice of campsites, two properties are always considered as criteria of fundamental importance: to camp on the beach and to camp where there is a fresh water supply. Water sources have been described as small units of place located within or nearby campsites. Most are only usable at certain times of the year, this being one of the many seasonal factors influencing the choice of where to camp. Seldom would one camp distant from a water source. (To carry quantities of water large distances in open bailer shells was not an easy task.) An exceptional circumstance was carrying water to exposed sand spits and bars that were used as camps to avoid summer mosquito plagues and from which to conduct dugong hunting at night. The most plentiful supplies of easily obtainable, all-year water are located in the centre of Mornington Island in the interior land systems. These interior campsites were used when the strong south-east winds were blowing

^{1.} emphasised by P.J. and D.R. in A.D.A.: F28 and F22 respectively.

causing sea hunting to be difficult and poor. Most of the time the people were camped on the coast.

A primary advantage of coastal camps was ease of access to food resources. Any coastal camp was within daily range of most of the land and marine systems. The diversity of these geographic units ensures a great variety of habitats for many animals and plants, as previously described in the description of resource places. A variety of foods could be obtained in a day's work or less. Division of labour was another principle often utilized to allow different habitats to be exploited in a day, thus ensuring variety in the diet. The coastal camps were sited on the beach or on the first sand dune or ridge behind the beach, except for a few located in mangroves for mudshell feasts, 1 and the few on sand spits and bars mentioned above. The Lardil enjoy most of all to camp on sand. The beach provides a clean soft surface free from the threat of snakes, centipedes, scorpions and grass fires. Such sites provide clear visible access to the movements of the sea and to the activities of its inhabitants who provide the staple meat foods. The most popular beach camps had shade trees: individual clumps or lines of wunhan oak trees (Casuarina equisetifolia) at the top of the beach, and a variety of broad-leafed species behind such as matat (Hibicus tiliaceus).

Lardil campsites were fixed and permanent but were not always in use. Distribution of population in Lardil lands varied from time to time and some camps were more popular than others. These properties will be examined later. The number of residents of a camp varied from a single family to large groups, sometimes the majority of the tribe. With Yangkal visitors this may have numbered between 200 and 400 according to the early population estimates by Europeans. This variable was largely dependent on both seasonal and social factors. The influence of social factors on the settlement pattern of camps.

Lardil informants describe three principal types of domiciliary groups in traditional camps:- (a) the nuclear family consisting of a man, wife or wives, young children, uncircumcized sons, unmarried daughters; (b) single men, unmarried initiated males, mostly young adults but some middle-aged and elderly individuals also, - boys left their parents' domiciliary group after initiation to join the single men's group; (c) widows. (Alternatively widows became the wife of another husband or slept in a son-in-law's camp.)

The division of camp occupants into these three types of domiciliary groups, is often mentioned in the Australian literature 2 ,

e.g. muntalkan in K.B.'s country.

^{2.} Rapoport (1972) has also reviewed some of this literature.

e.g. Meggitt (1965:75-77) for the Walpiri, Smyth (1878:Vol. I, 124) for Victorian groups, Mathew (1890:391), Thomas (1906:75-76) and Massola (1971:96) for eastern groups.

Other structural principles underlying camp layouts have been mentioned by Australian ethnographers. Some central desert Aborigines camped in two spatially separate groups, each consisting of individuals from a moiety (Thomas 1906:74-75) ; or in four groups each consisting of individuals from a semi-moiety, e.g. Aranda (Spencer and Gillen 1899:31). The groups were well separated by a natural feature and control of socially prescribed avoidance behaviours between the members of the various subsections was spatially facilitated. Reser (1977:77) reports similarly for some Arnhem Land groups - moiety division was used to facilitate avoidance relations in camps.

At the same time one could argue that the division of camps into semi-moiety groups derived directly from the strength of father-son relationships, rather than from in-law avoidance relationships.

Reay (1962:111) reported this amongst groups at Borroloola: personal kinship relations between son and father, or son and father's brother dictated the choice of company when selecting one's campsite. Nevertheless the semi-moiety system was also influential: "if a man has no actual father or father's brother living he may camp with a man who is a classificatory father by virtue of subsection membership."

(Reay 1962:111). In general then, close father-son relationships, semi-moiety affiliations, and avoidance relations between in-laws, can be said to be mutually supportive controls in camp spatial behaviour.

Amongst the Lardil, location of one's campsite or shelter was also influenced by in-law avoidance relations. K.B. reports (in A.D.A.:F50) that a married male chose his family's nocturnal campsite at a good distance from his parents-in-law. However there is no evidence to suggest that camps were divided into the moieties or semi-moieties. People camped next to whoever they wished given the above limitation. In general, preferred camp location was near close relatives, and the association of domiciliary groups was generated from the affiliations of the members of the patriclan and of members of spatially contiguous patriclan countries.

Nevertheless it was probably common for a nuclear family to camp near the wife's mother at times depending on the personal nature of individual relationships and immediate circumstances. Such reasons

^{1.} Reser (1976:18) also reports this for contemporary Arnhem Land groups camping near Maningrida, Milingimbi, Ramangining and Nungalala.

have been noted by fieldworkers for other groups (especially Biernoff 1974:5) and could include: (a) obligations to wife's family after marriage, ¹ (b) dislike of internal fighting within husband's patriclan, (c) quarrels between the wife and members of the husband's patriclan; (d) to seek help from the mother-in-law in looking after small children or the wife when pregnant; and (e) when a woman's husband is from a neighbouring or distant tribe who do not have significant representation in the camp.

Two literature references, Mathew (1890:391) and Thomas (1906: 75) 2 describe groups who located their campsites in a spatial structure based on close kin relations of both an affinal and cognatic nature, e.g. "...a man and his wife were on the west; five paces north-north east from them was his married son, ten paces south-east, close together, his wife's married brother, and his father's sister, if she were married, twice as far away north-east were his father and mother and his married brother..." and so on. 3 There is no evidence to suggest that the Lardil observed such a rigid custom of camp location.

Another well-reported factor exerting influence on the spatial structure of large camps containing groups from different tribal and/or subtribal divisions is that of camping in the direction of one's homeland. Curr (1886, VI:98) noted that thirty yards of space was left between such tribal campsites. Roth (1897:134) observed it in Boulia, and Thomas (1906:75) in Central Australia - "the southern men... camp to the south and the northern men to the north". Smyth (1878: Vol.I, 124) provides an example of a Victorian camp of about 800 people representing eight tribes which were arranged "as if they had been set by compass." McConnel (1934:335), whilst speaking of the Wik-Munkan and their neighbours in Cape York Peninsula, maintains that "in any large camp met together for economic or ceremonial purposes, tribes will take up their position according to the direction whence they came - N.S.E. or W. Similarly, within the tribal camp families will group themselves nearest those most intimately related, usually by clan ties..... This relative intimacy largely corresponds to the local proximity of intermarrying clans and tribes on their own grounds."

^{1.} Strehlow (1970:100) reports that in Western Desert, a male slept in his in-laws' camp after marriage, before returning to his patrilineal core group.

^{2.} Thomas is discussing the Wurunjerri and the Kurnai.

^{3.} Thomas (1906:75) for the Kurnai. McConnel (1934:335) also mentions that amongst the Wik-Munkan, parents and parents-in-law may attach themselves to the camp of a son or son-in-law.

Downing (1975:5) mentions that this pattern is a contemporary phenomenon at Haast's Bluff as does Reser (1976:18) at Maningrida, Milingimbi, Ramangining, Nungalala; similarly Gould (1969:173) for the Ngatatjara who consider the custom as "traditional desert etiquette", and camp with up to 1,000 feet between tribal groups. It has been said that Aboriginal people carry out this practice so that they can make a speedy retreat back to their countries should a serious quarrel or fight arise. No firm evidence has been provided to support this hypothesis. The literature does not provide any detailed maps of such camps and the phenomenon is generally poorly described.

Hamilton provides insights (personal communication, 25/8/78). that generate an alternate hypothesis on the function of this spatial convention. He discusses Victorian Desert groups arriving at a camp occupied by the traditional occupants of the locality to whom he refers as the 'home team':- "I have been in an advance party [of travellers], determining where they will settle and this concept[of camping in the direction of homeland does not appear to apply as the motivating force. Rather they stop at a threshold between being 'too close' and 'too distant' from the 'home team'.... The direction of the approach will be retained, but the distance will be modified by local topographical features, and availability of building material. In no case did an approaching group pass through, or go around a settled group, to get to what might be a good camping area in some other location." This suggests that significant factors influencing camp layout may be (a) concepts of crowding and privacy between groups, and (b), an etiquette of approach behaviour.

The Lardil acknowledge that they observe the practice of camping in spatially separate groups, both when camping amongst other tribes and when members of the different sociogeographic groups came together. In Chapter 5, the history of the Lardil/Yangkal trading camp adjacent to the mission is studied and informants' evidence clearly indicates a division of camp space amongst the larumpenta, the tjirrkarampenta, the lilimpenta and the palumpenta, the latter group consisting of both palumpen Lardil and Yangkal men (refer figure 37). The groups camped with a space of neutral territory in between but within audible distance of each other. Informants could not give any explicit

^{1.} Biernoff (1974:10) reports a space of 30 metres between lineage clusters and 50-100 metres between clans in the larger traditional camps of the Nunggubuya.

(N.B. Ali Lardil words aru spelt using a practical orthography devised by T. Klokeld (1974)
- no claims are made for accuracy of phonetic transcription)

Reference Number	name	English description	Materials	Common usage	Notes
÷	miya also matutjur	long hunting spear with smooth round pointed wooden tip of hard wood, shaft made of lightweight timber.	tip of kurparna wood Acacia alleniana) spear shafts made from lightweight matat, Hibiscus tiliaceus or Thespesia polulnea (larrkur)	turtle and dugong hunting, hunting generally.	shorter length spears called <i>miyabalbal</i> , average length spears called <i>miyakatjaka</i> . Small spears - <i>palpal</i> . Very large dugong spears -
	китетри	pronged fishing spear, light-weight timber shaft with prongs made of hard timber, 3 or 4 prongs normally,	prongs of kurparra wood	fishing, collecting crabs	wdrkt. a small two-pronged spear was often made for a young boy to use - called pingkil.
т́	गदाम्या दंगेका	fighting spear, a hard flat wooden head with carved barbs on either one or both edges, the lowermost one or two barbs may be reversed upwards in direction.	spearhead of <i>kurparna</i> wood	fighting (between men)	Another Lardil word meaning 'fighting spear' is <i>takata</i> n.
. .	lematuil	hooked spear		for hunting and fighting	
÷	murraku	spearthrower - head notched and throwing handle with knob	Wrightia saligna (Lardi) Kirrin) is preferred but any convenient lightweight wood will suffice	throwing spear also used as a digging stick	
ý.	tængkal vængal	'comeback' boomerang, one end often decorated with red and white stripes in a manner unique to the family of the manufacturer	kurparra timber is preferable but Acacia, aulocarpa, A. Leptocarpa, A. Sprulosa, Hakea aborescens and Melaleuca stenostachya are also used, several boomerangs may be obtained from one section	hunting birds and flying foxes, used by initiated men only	boomerangs are often used in pairs as percussion instruments by song men at dances, left- handed and right-handed boomerang differentiated.Boomerangs were often finished with bees wax or gum as a protective coating
	wangal or tjiliwa	fighting/hunting boomerang, one end also decorated with transverse stripes	of limb. ditto	hunting small game (e.g.wallabies) and fighting, (males), Pairs of boomerangs used as a percussion instrument in dancing	boomeramgs may take on an important role in some dances as objects denoting some special meaning, another use is in love charming
	mangkapa t	hooked or gooseneck boomerang, nose and neck may be decorated with red and white stripes	ditto	fighting, used by initiated men only	the rounded surface of one side of both the fighting and hooked boomerang were fluted by the older initiated men, the practice Is no longer carried out, being of magico-religious significance. Some informants claim that the practice of scribing was obtained from the mainland in recent history.

Notes		film footage by D.McKnight in Aust. Institute of Aboriginal Studies depicts the skilful use					good photographs of 'walpas' were taken by McIntyre (1921) and Howard (1916) (in A.R. for 1917). Walpas have been observed and described by Flinders (1814:137), Lt. Connors in Anon. (1875), Pennefather (1880:3), Boyd(1896: 52), Smart (1951).		These torches have been described by Roughsey (1971A).		A photograph of one of these was taken by McIntyre (1921).	Roth observed 3-ply string made by rolling a single on to a double ply (Roth 1901A) Manufacturing string is a woman's task normally
Common usage	defensive fighting- blocking blows or deflecting spears, sometimes used in dance (e.g.dugong	fighting in a manner similar to English staff fighting, blow for blow		flghting sticks used for many everyday pur- poses, e.q.diqqing holes	3		used for travel around and between islands and mainland - used in hunting turtle and dugong, larger rafts can carry 2 adults and some small children	paddling rafts	larger torches used for night fishing and hunt- ing, shorter torches used for night travel,	general purpose rope, e.g. rafts, shelters.		general purpose string, used for nets, shelters, etc.
Materials	kurparra timber	kurparra timber or another acacia of equal hardness		kurparra timber	= =	Any convenient strong piece of timber	Constructed of white mangrove or dry lightweight driftwood that may be available, limbs of hibiscus tiliaceus also used. Timbers lashed together with bark rope, a cushion of grass or seaweed is placed on top.	made from buttress root of a mangrove species, <i>Ceriops</i> tagal (Lardil pilirm)	paperbark, (Melaleuca sp.) A common vine is Vigna marina.	bark of hibiscus tree, Hibiscus tiliaceus (Lardil: matat), also Acacia hamondii (karrubakarr)	made from bark rope $paku\omega \sigma$ and two long poles	made from <i>Digitaria papposa</i> (<i>kelngka</i>). Stocks of this grass are obtained when green, between february and June.
continued English description	timber shield with handle carved in rear, rectangular surface on front about one metre by 16 cms.	men's fighting stick, round shafted	men's fighting stick, flat shafted	women's fighting stick, various lengths	clubbing stick	walking stick	V-shaped raft of lashed timber members, sizes varied up to . 5m long and 1.6 in.wide at rear	paddle	torch made of paperbark up to 2 metres long and tied with vines, top bark tapered to form a wick.	bark rope	dugong net	grass string
	~	mulkuni	ngaval	thausurr	karbalan	kulalin	walpa	ailiq	meka	parkusan	parr una n	pirka
Artifact Reference Number	o.	0	Ė	12.	<u>.</u>	÷	<u>×</u>	<u>.</u>		x i		20.

TABLE 3	continued				
21.	mitjil	types of small hand nets, and/or carrying bags,	grass string and short lengths of saplings	fishing, carrying objects and food	fishing, carrying objects and food shape with a draw string at the top, some nets were strengthened by doubling the fabric.
22.	יוערטשטו	usually cone shaped with the edge of the opening fixed to two lengths of pliable stick			
23.	wengkru				
24.	kiromonta	tulnul net	grass string	catching schools of fish that run only seasonally for one month	The fish are cooked and eaten in a special way - no bones can be broken
25.	kiramarpa	large fishing net	=	A casting net to obtain bait	
26.	kirrin	net manufacturing stick		knotting string in manufacturing process	
27.	٠.	fishing line	line of grass string from bark of Brachychtton paradoxum (Lardil:thalar) hook made from splinter of kurparra tree	used by women	Roth (1901A) noted the use of a bait string in conjunction with a fish hook. Hooks were a bent nail removed from driftwood.
28.	le îpunyan	small digging stick	<i>kurparra</i> wood or another hard acacla	digging roots and tubers	Roth (1901A) observed one foot long digging sticks with pointed ends
29.	morgkalmu	wooden axe	kurparra wood	obtaining 'sugar bag' or wild bee honey from hollow limbs of trees, chopping and pounding softer materials	•
ė.	tumur (iarge size)	bark containers or 'coolamuns' up to 60 cms long	bark of ti-tree Melaleusa acacioides (menal) M.viridiflora (peerr)	carrying foodstuffs e.g. pentja corms), water, ochre, carried on head as well as from shoulder on string	describe the manufacture of this artifact. A piece of bark 1'0" to 2'6" long is cut by pounding the trunk and then heated to obtain pliability. Roth (1901A) also describes the manufacture of this artifact and notes its use by the Kaiadilt as well as the Lardil
31.	kulakul (small size)		=	used for carrying babies - believed to strengthen baby's back, also used as a dancing artifact	
32.	yipir	wooden container or 'coolamun'			possibly of recent origin from mainland Aborigines

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Described by Colliver and Woolston (1967) and Tindale (1949), this is definitely an individually possessed artifact and it is carried from camp to camp, the stone was also used for sharpening nails, knives and tomahawks when such items were first obtained.	This is described by K.B. in A.D.A. (F31)	Observed by Roth (1910A). A hole is sometimes made on one side in which the thumb is inserted to provide better grip.	that these shell knives have not been used since first European contact, this claim would seem difficult to fully substantiate, although the steel knife would certainly have replaced the shell knife for general purpose use in the early stages of contact. Simmons et.al. describe how the Kaiadlit manufactured shell knives with their teeth (1962:307). Colliver and Woolston (1967:60) report that the shell knives were cut out with the mariau stone.	Also can be used for carrying water.
- used by both men and women - used for breaking and peeling oyster shells, often in conjunction with the <i>tjelka</i> - used in the manufacture of wood implements by scraping away charred wood, also used by women for chopping out roots	used in conjunction with the marriau to peel oysters from their shells also used for opening nuts and killing hair-	carrying water; mixing ochre with water in it for body decoration before dancing; digging sand e.g. used in digging out wells	many cutting and scraping uses e.g. cutting bark, meat, pandanus nuts, small shells also used for heating animal fat	used for sending audio signals, e.g. upon returning from a hunting trip on a walpa with a successful catch, a man may signal to prepare for a feasting
quartz porphry. There are quarries of this hard stone at nithalan patawa the headwaters of the Gapanyari river and wixratjerra. (Referred to in Aboriginal English as 'ballast stone'.)	китратта wood		small baller shells	large spindle shell
stone ogster hammer (a biface stone implement)	wooden oyster pick, a length of 'dowel' up to 30cms long and pointed at one end	large bailer shell (up to 2/3 m.long)	sheil scraper or knife	shell horn made by punching a hole in one ned
mariuu or perhaps meriuu	tjelka	lewalon	tanaka	me Langka
33.	3 4 .	35.	. · ·	37.

	A photo by Nelson (1936: photo 171) shows men using these sticks					Hair was kept dry in fire ashes so that it would not be too. slippery to spin	Side feathers called wana! by some informants, wulpu! by other informants, strings often attached at side to carry objects or fish whilst hunting. Obtaining hair from individuals was controlled by kinship rules.	Fat of the <i>kalthat</i> fish used to keep the belt greasy. Worn only by subincised men.	Some informants use the word wulpul which also refers to feathers attached to the side of the belt.	Also called <i>tjinta</i> meaning simply leaves.	
	making sparks to light fire tinder	moving coals, ashes and food around in fire, (also used in vertical stick fish trap)	used to crush and pulp pandanus nut and to pound meat on the parmga stone		used for spinning hair to make string (parampar)	used to make belts, dancing hats and other dancing artifacts	used especially in dancing and circumcision ceremony - $lumuka$, more esoteric uses involve its magicoreligious powers	used especially in dancing and circumcision ceremony	used in dancing and ceremonial activity	dencing decorations, used by males	used especially in dancing
	wood from hibiscus tiliaceus (matat) Clerodendrum ineime (purrul), Premia acuminata (thapal), premia corymbosa (piyal), or Vitex trifolia (wulthumulthu)	kurparra wood	= ,	flat stone	forked stick	human hair	hairstring and grass string feathers	string made from grass sp.(<i>kelngka)</i>	feathers and string	bunches of leaves	made from grass string (kelngka)or cotton pod of wild cotton tree
	firesticks consisting of two lengths off dry wood about 1 cm in diameter wrapped in bark to protect from moisture (one stick has a small hole cut into it to receive the end of the other stick which is vigorously rubbed)	timber fire utensil, either flat or round profile and up to 1 m. long	food pounder	stone base on which to pound and grind food with thupun	spinning stick	hairstring, single strand and two stranded	man's hairbelt (with side feathers)	man's string belt	man's public tassel made of feathers bound in a bunch	leaf dencing decorations used by males, bound bunches of leaves are used as tassels, leg decorations and as handheld dencing artifacts	women's skirt
continued	kungkel	wiya	thupion	parmga	pelmtir	wangkakwen	paranpar	wiyawa l	1nd1na	kulthakusen	tjeeyat
TAULE 3	38	39.	4 0.	41.	42.	. 1 3.	· •	45.	.94	47.	· 8

	Manufactured by women. d	Makeshift headbands and armbands were sometimes made from pandanus leaves.	Often decorated with small balls of chopped feathers coloured with red or white ochre. Emu feather decoration on top is acculturated from the mainland in mission times.	Ditto Hats often have ashes rubbed into hairstring, a deterrent to insect attack according to one informant.		L	May symbolize the new moon or the y ribs of the Rainbow serpent ly	This represents the eye of the Rainbow serpent according to one informant (J.J.). Sapling bent by heating in fire.	lances	for love	n aid mormal messages pertained to ol of feasting, flghting, flood n as a warning, initiation, dance.
	used especially in dancing by initlated men	used in dancing	used in dancing by the men of only one ; moiety	used in dancing by the men of only one moiety	a dance decoration held in hands with arms outstretched in front	a personal decoration	used for particular dances by men of only one molety, especially dances of the Rainbow serpent,	= = = = = = = = = = = = = = = = = = =	used for particular dances esp. Red Ant dance	used secretly by men for obtaining a woman's love	the stick acted as an aid to memory and a symbol of authority rather than as a proper language media
	made from grass string	made from grass string and/or wallaby fur string	base of cone is a cylinder of melaleuca bark, upper part is of grass tied at top, hairstring is bound around the cone	<i>Melalewa</i> bark cylinder with hair string covering	grass string, feathers	grass string and grass stalks	sapling, grass string, feathers	sapiing, hair string, feathers, white and red ochre	sapling, feather, grass string	китратта моод	any convenient short length of wood, feathers (cockatoo, brolga, duck or whatever is available
	man's string headband or 'fore- head plece', it decorated with suspended wallaby teeth on both sides and ochre paint, and some- times feathers	pair of armbands	male dancing hat, conical type up to one metre tall decorated with balls of chopped up feather mixed with red and white ochre	male dancing hat, cylindrical type about 20 cms.high	women's dancing string, about a metre long and with small bunches of feathers tied along it at regular intervals, a loop at either end for finger holes	women's necklace. Lengths of hollow grass are cut up to make 'beads'	bow-shaped dancing artifact - a short length of sapling bent with ends tled by a piece of string to make a bow shape, feather decorations attached, hairstring may also be used to decorate it	circular dancing artifact a thin piece of sapling bent into a circular form and tied, hairstring wound around and decorated with chopped feathers	pair of dancing sticks with ends decorated with feathers	'bullroarer' - flat oval-shaped timber artifact with length of grass string attached at one end	message stick, a length of wood with marks carved on it and some marks painted with ochres, to one end is attached a carrying string and to the other, some feathers
continued	ратаг	۵.	katjanur	watapur	pirka	ngiraku	pitipir	taa	٠.	wanari	пдионустди
TABLE 3	.64	50.	51.	52.	53.	54.	5 5.	.	57.	58.	

TABLE 3	TAulE 3 continued				
.09	kuta	sharpening stone		sharpening spear points	
61.	pukamitjal	playing ball mede of a ball of string	hair string, or sometimes made of a fish net; bunches of leaves and grass used as stuffing	used to play a popular game of handball or football	Sharp (1936) mentions a game using this ball which is part of the initiation ceremony.
. 62.	yurrapur	nose peg (worn in pierced nasal septum)	made from (a) wooden dowel- shaped pegs (b) short length of bone (c) feather quill or (d) length of thick grass	used for body decoration by men	
63.	katma titjar	pair of pointing bones	made from jabiru leg bones	used for sorcery	Individual sorcerers kept a private collection of 'magical' objects. Cawte (1973:102) has photographed such a set.
64.	mirtathavara	circumcision knife	made from a stingray barb	used in initiation ceremony	Often with a paperbark sheath and handle bound on with string.
.59	le lpinyin	root tapper	kurparna timber	used for knocking earth off edible roots	The same word means 'clapstick'.
.99	۷.	fishing rod	branches of silky oak or nukun (Grevillea dryandri)	used for catching fresh- water fish in interior water- holes	
67.	<i>c.</i>	umbilical cord necklace	a baby's umbilical cord was wrapped around with grass string and decorated with bird feathers	The mother wore the necklace during her child's infancy to aid it in finding the breast and as a charm against excessive crying. It was then transferred to the maternal grandfather until formally presented along with other gifts in middle childhood.	Reported by Cawte (1972: 99)
68.	ngalka	hairstring		used for tying the hair back	

reason as to why they adhered to this custom. 1

Although this Lardil camp was divided into sociospatial divisions, each group was not necessarily positioned in the exact direction of their homeland. Such an arrangement necessitates a flat site fairly free of obstacles. Most Lardil camps were situated on the beach or on sand dunes whose physical character often necessitated a long-itudinal arrangement of camps (e.g. at tingkilmiya in F.J.'s country). People usually arrived from only two directions - either end of the beach (the 'bush road'). This spatial division of people did not represent a total classification of all individuals, but rather it was only one amongst other generating principle underlying spatial structure. Some individuals may have chosen not to camp with their homeland group, due to a variety of reasons involving socio-political affiliations and disputes. The separate camps contained a majority or a 'core' of individuals from one sociogeographic group together with persons from other groups with different forms of social ties.

The main social factors influencing the settlement pattern of Lardil camps seem to have been (a) the division of the inhabitants into domiciliary groups based on the units of the nuclear family, single men and widows; (b) the division of large camps into spatial units containing a core of members from the Lardil sociographic groups defined by direction.

The artifactual environment of camps

As the base for social and economic activity, camps contained numerous artifacts that contributed to their uniqueness as places. The Lardil manufactured at least 68 items of material culture for their everyday needs according to elderly contemporary informants (F.J., K.B., G.P., L.R.). These items are briefly described in table 3 as well as notes on their use and material properties. ²

For discussion purposes they have been classified under the following categories on the basis of purpose and use:-

- (a) hunting and fighting weapons (numbers 1-13, 66)
- (b) strings, ropes, fishing lines, and nets for catching sea animals (nos. 18-25, 27, 43)
- (c) food gathering tools (nos. 28, 29-35, 65)

2. Examples of most of these artifacts were manufactured by the investigator's informants and purchased on behalf of the Anthropology Museum, University of Queensland, where they are currently stored.

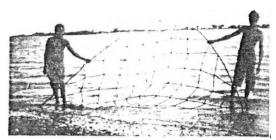
^{1.} One middle-aged Lardil man, Kirk Jacob, told the investigator that he had not recognized that such a structure existed in a contemporary camp on Denham Island. However once it had been brought to his attention he agreed that it existed, and added that he only notices such things when Western observers point them out to him.

SOME TRADITIONAL SKILLS OF THE MORNINGTON ISLAND PEOPLE





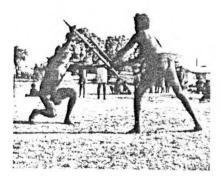
Spearing fish using spearthrower and spear with timber prongs (1936).



A net for drowning dugong. The rope is made from the bark of Hibiscus Tiliaceus, the matat tree (1921).

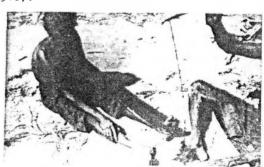






The walpa or raft used for channel crossings, constructed of low density buoyant timbers (1916).





'mission camp' (1936).

Manufacturing string of human hair (1949).



Men demonstrating the use of fighting sticks and duelling behaviour (1975).

A Lardil woman digging out a we'l on Sydney Island (langunhantii) with a steel, 'diggina stick' (1975).

Woman digging for pentja corms, Elucocharis dulcis, in a swamp after the wet season (1536).

- (d) food preparation and cooking tools (nos. 38-41)
- (e) tools for manufacturing other artifacts (nos. 26, 36, 42, 60)
- (f) everyday body apparel (nos. 14, 45, 54, 62, 67, 68)
- (g) dancing apparel and dancing artifacts (nos. 44, 46-53, 55-57)
- (h) artifacts used only by knowledgeable 'law' men or 'clever' men for ceremony, sorcery, curing illness and other specialized magico-religious purposes (nos. 58, 63, 64)
- (i) miscellaneous items (nos. 15-17, 37, 59, 61)

Another important category of artifacts not included in the accompanying list was shelters. How shelters can be described as simply artifacts and not something of a more complex cultural nature is a point that will be returned to after they have been discussed. The above categories are by no means mutually exclusive. Although many artifacts are referred to in Aboriginal English by a title inferring a specific use, many of them were multi-purpose tools. For example a fighting stick could easily be used as a digging stick, a walking stick, a missile, or as a component of a makeshift shelter; small fishing nets were used as carrying bags; the meriwu stone was used for scraping, cutting and pounding as well as for breaking oysters; and so on. Richard Gould has suggested that such versatility of use of a few 'key' artifacts permits the 'baggage' of individuals to be lightweight and hence facilitates mobility as people move about their country, mobility being an important factor to the economic success of the hunter/gatherer.

In the material world of the Lardil the distinction between an artifact and a raw material is by no means precise, but dependent on the intent of the user. Branches of leaves originally collected for a shelter may be used as 'instant' paint brushes to apply ochre paint for a dance, or as actual dance decoration tied to the body, as well as for fanning away insects, sweeping the dance ground, etc. The Lardil improvised with their raw materials and artifacts just as creatively as other cultural groups. ²

It must be stressed that the artifacts listed in the table were those regularly used in everyday activities by most people. Some individuals probably manufactured or obtained artifacts of a unique or unusual nature. For example individuals have described shelters that they have seen or built that are not recognized as part of the

^{1.} At a lecture at the Anthropology Department, University of Qld., 25/8/77.

^{2.} Richard Gould has described 'instant' tools used by the Western Desert Aborigines (25/8/77) and we certainly do the same in our own culture.

133.

Lardil tradition by all of the key informants, Other examples might have been objects used in sorcery practices. Cawte (1973:102) photographed an armory of sorcery and medical objects when he was on Mornington Island, Informants have mentioned a few artifacts each of which was unique and owned by a particular 'clever' man (or sorcerer). An example is Jimmy Dugong's spyglass through which he allegedly could see events happening beyond the horizon. It consisted of the decorated fibula of a pelican. Certainly artifacts used in some dances were unique and probably non-recurring outside of performances of that particular dance. Informants have described different 'totem poles', or more correctly decorative and symbolic constructions consisting of a pole and attached spars, leaves, feathers, boomerangs or other artifacts and materials. Each of these was used in one specific dance only.

Some of these anomalies in the artifactual world were probably a result of material exchange with the Yangkal people to obtain exotic objects of distant mainland origin. Even today an unfamiliar object obtained from a Central Australian or Arnhem Land tribal group is prized by the owner and examined by others with reverent interest and even distrust sometimes.

Traditionally the Lardil shared 2 food liberally according to

1. This use of the term 'totem poles' does not necessarily refer to the anthropological sense of the word 'totem', but is merely a piece of Aboriginal English acculturated from American Western movies. 2. In the above context 'shared' means to distribute or to take, and to possess jointly in common with others. It implies that there was an original possessor of the item of food, who has relinquished his possessive attitude, save towards the portion of food he retains for himself. In "The Australian" newspaper (17/3/73), Professor B. Boettcher of Newcastle University (N.S.W.) was reported to have said that this concept of sharing was not part of Aboriginal behaviour. He suggests that there was no concept of food possession and that the attitude to food was one of having equal rights of access. The use of the possessive pronoun whilst referring to food in Aboriginal English by contemporary elderly Lardil (e.g. as in "my fish") suggests that they do employ a possessive attitude towards food. Unless one has a socially approved right to take food, such an act is considered improper and an act of theft. What impact mission teaching has made on these concepts is unclear. Spencer and Gillen (1899:17) reported that members of the Aranda passed clothes between each other, to experience them for only a few days before passing them on to somebody else. It is possible that this observation supports the idea of 'equal rights of access' to things. Alternatively an individual may have worn clothes as a novel experiment but perceiving the custom not to be very practical, passed on the clothes to a curious friend who was also eager to at least experiment with the phenomenon. (Not unlike a Westerner who may be given, or request, a book from a friend thinking it to be interesting at first, but then subsequently lose interest in it). A third explanation is that individuals used clothes as a material media for 'square-up' over social issues. The Lardil also enjoyed a novel experience with clothes when the first missionary Hall arrived in 1914, Campbell (1969:4) describes the dress of Big Billy at this time: "..he came round the corner looking very important

134.

kinship obligations as well as among the wider range of camp occupants. However they did not often share their artifacts, being possessive about them (Roughsey, E. 1972:53). The longer a person owned an artifact the more likely it was that others would remember its individual character, be able to visually recognize it and associate it with its owner. (In 1975 older Lardil informants were able to remember the owners of many Lardil artifacts in the University of Queensland's Anthropology Museum, although some of these artifacts were placed there 30 years before.)

When not in use, artifacts were stored in the domiciliary space of the individual (the territorial confines of the owner). Not all of an individual's artifacts were necessarily in one camp. A man and wife might have their possessions distributed in a number of camps, especially within their own patriclan country. Some objects were too heavy or impractical to transport, and some were associated with special types of camps. For example dugong nets, rafts and paddles, shell horns were most likely found in a coastal camp near a channel or estuary favourable for dugong hunting. Knives, scrapers and stone axes used to manufacture wooden artifacts were stored in a camp specializing in this activity due to its proximity to ample supplies of suitable timber.

Some camps were more popular than others due to richer resources in the locale. In each patriclan country there would be one or several of such camps. "Always main camp in every country somewhere; every man in their country got main camp." (K.B. in A.D.A.:F19). At such camps it was likely to find artifacts stored that were not normally carried about, e.g. extra supplies of weapons, pounding stones, magical items. These camps will here be referred to as 'base camps'. Besides the artifacts mentioned, camps contained other distinctive physical components, including raw materials awaiting use of processing, food awaiting to be cooked, or stored if it was surplus, water, bundles of firewood, and hearths. Dogs were another ever present feature. (The Lardil stole the pups of dingoes and trained them to track goannas and lizards to their burrows.)

The methods of storing objects in camps further characterized them as places. As well as objects actually used in camps, tools and weapons used away from camps for hunting gathering, dancing, fighting

^{1. (}cont.) and showing some excitement. I was wondering if he was proud of his new clothes which came in a Christmas case sent by the Victorian Churches. He was dressed in a straw boater hat (College boy style) and a waistcoat. Nothing else. He had forgotten about his loincloth".

and other activities were also stored inside camps when not in outside use. Smaller objects were often hung up on trees or shelters, inside fishing nets (mitjil) that functioned additionally as storage and carrying bags. Another storage media for smaller items was paper-bark used for wrapping and protecting against rain (e.g. firesticks, kungkel). Some objects were buried in the vicinity of one's shelter. Special reasons for doing this included (a) to protect timber artifacts from drying out in winter, which might have caused cracking and warping; (b) to secretly store powerful or magical objects out of sight, especially from women or children.

Food such as fruit and roots were stored in bark containers (tumurz: that could also be used for keeping water in if well manufactured. Bailer shells were more common for storing water. Surplus meat was wrapped in oak leaves and kept close to the fire. The storage of food was always problematic due to the presence of many dogs. High locations were favoured such as in trees and on shelters. Elsie Roughsey (1972:77) describes how shelter tops were used for drying out supplies of ochre obtained from tidal flats and other sources (e.g., from mantawa in F.J.'s country). These high locations were also used to keep important things out of reach of children. Spears were sometimes stored on shelters or against trees but were also stored vertically into the sand at coastal winter camps to keep the heads from drying and the shafts straight.

Individuals stored their artifacts inside the domiciliary space of their camping site - the area in and around their shelters and fires. This reinforced the sense of attachment of individuals to these particular sub-units of camp space. Each domiciliary space is an individually differentiated place within itself. Further properties of these spatial units in camps are discussed in the subsequent sections on shelters and camp layouts.

The social focus of camps was largely about structures and fires, and a detailed discussion on these follows. Some reference to Lardil shelters are in the early ethnographic literature and this material will first be examined. Early observers were unable to notice the variety of seasonal shelter types used by the Lardil and so this literature review will be followed by a more detailed examination on the complete range of ethno-architecture based on informants' data. Early literature on Lardil architecture

One of Australia's foremost ethnographers Walter Roth visited Mornington Island on several occasions in the early part of this century and made some observations on the indigenous architecture: "...the most primitive form of artificial breakwind is to be seen in the native camps scattered over the Wellesley Islands" (1910A:57). They "excavate a shallow circular space in the sand, with a few bundles of grass" (1908B:560), "cuscata, leafy switches, or blood-wood boughs with the stem outwards, just thrown on the ground and arranged in such fashion as to form a semicircular hedge up to between eighteen inches and two feet high surrounding the circular excavation...there they lie in the open to leeward of the heaps. At that edge of the space free from the grass bundles is a fire, kept burning all night, around which the occupants of the 'tenement' coil themselves, there are usually two individuals thus camped together." (1910A:57), 1

In 'Huts and Shelters' (1910A) Roth discussed various architectural forms using the criteria of 'sophistication of building construction'. He described attributes using terms such as 'simple', 'primitive', through to 'specialized', and 'advanced principles of construction'. Roth was hypothesising about the intellectual capacity of these people, as expressed in the complexity of details in their architecture. Such practise was common in the evolutionary anthropology of the time. As Roth and others had only observed simple windbreaks on their visits to Mornington Island, it was suggested that these people were more primitive than other mainland tribes of Australia and without the technological initiative of the latter groups. However it seems most likely that all of the visits of Roth and other observers to Mornington Island had been made in the season most suitable for sailing, the dry season, and their observations were based on only one seasonal example of shelter usage.

Roth reported (1910A:56) that he saw no evidence "of the apparently numerous pits described by Flinders, although it is possible that in the interval between his visit [Flinders] and mine [Roth's] - upwards of a century - the pits have become shallower and shallower until they are now represented by the circular excavations referred to [above].

Flinders had seen these pits on Bentinck Island which is inhabited by the Kaiadilt tribe. The Kaiadilt are culturally and physiologically different from the Lardil in many ways.

4 Contact with the Lardil

^{1.} Windbreaks were also observed by Howard (1908:5) during August, and by Hedley (1903:89).

^{2.} Roth discusses the architecture of these other groups (1910A).

^{3.} Flinders in November, Howard in August and October, Nelson in June. Dates of visits by others are not contained in the literature.

^{4.} e.g. See Simmons, Tindale and Birdsell (1962) for a blood group genetical survey. Field observations of the investigator also support this statement.

occurred rarely (Tindale 1962A:273),

It is therefore invalid to assume that the pits were used on Mornington Island. Flinders only suggested that they were "foul-weather residences". He said (1814:145) these "caves" contained "two apartments...in each of which a man might lie down", and he speculated that natives seen from his ship from the shore disappeared quickly by hiding themselves in these caves dug in the ground. The holes were probably in sand if they were adjacent to the shore. (The land systems of Bentinck Island are very similar to those of Mornington Island \(^1\)). It seems more reasonable to assume that these pits were used for purposes other than shelter. They could have been one of the following:-

- (a) beach or dune soaks. Flinders reports digging out one well to a depth of ten or eleven feet a space into which two men could fit (1914:140).
- (b) holes dug in search of a turtle's nest of eggs, a popular food of the Kaiadilt.
- (c) holes dug in search of frogs, another food and source of water. ³ Flinders' observations were made in November, not the time of the year for windy or wet weather. November is a very humid time, with an occasional storm ('first rain time'), which would be welcomed as a refreshing relief. At this time people sleep in the shade of trees during the day and at all times seek a breeze for comfort. It is unlikely that holes in the ground would function as shelters in November.

An indication that the Lardil used more than one shelter form for different seasons is given by Dick Roughsey (1971C:19):- "For the cooler hours of the night we had windbreaks and we kept small fires going throughout most of the year. But for the wet season we built round humpies with sticks, grass and bark. If it was really wet and cold we covered ourselves with large sheets of soft paperbark."

The influence of climate on camp and shelter structure

The Lardil consistently used three types of shelter structures: the windbreak, the wet weather shelter or 'humpy', and the sunshade. Together with fires and other artifacts these physical units were used seasonally, combined together in different ways according to the prevailing weather conditions, to generate three principal types of

^{1.} cf. Tindale (1962A).

^{2.} Howard observed wells on Mornington Island to a depth of not more than four feet (1910:8).

^{3.} There is a photograph of Kaiadilt women digging for frogs in Nelson (1936).

seasonal camp forms - the 'cold weather camp', the 'wet weather camp' and the 'mosquito time camp'. These camps were further distinguishable by the different patterns of behaviour that occurred in them, especially the sleeping behaviour of domiciliary groups.

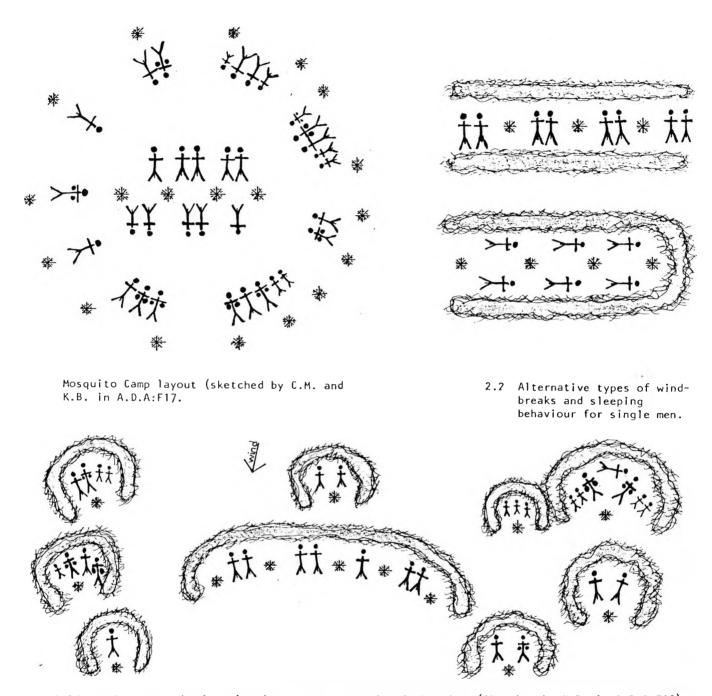
At night, each of the domiciliary groups normally occupied a single shelter, sometimes two, or occupied a defined space whose perimeter was marked by artifacts, fires or by subtle excavations and tracks in the sand. This territory is referred to in this study as 'the domiciliary space'. The number of domiciliary groups in a camp, i.e. the size of a camp, varied for a number of reasons that will emerge in subsequent discussion. Two Aboriginal English terms are used to indicate size of camps as follows: A camp which consists of only several domiciliary groups is called 'short-short' or a 'short' camp (i.e. a small camp). A camp comprised of a larger number of groups is called a 'long' camp (i.e. a large camp). The terms are also used to indicate the accommodation capacity of sleeping shelters. A 'short-short' windbreak is small and for one family group; a 'long' break is larger perhaps for six or eight single men.

Cold weather camp 1

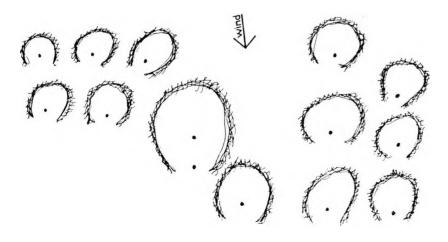
After the wet season finishes the weather becomes colder as winter approaches. In May the wind begins to blow from the southeast. This is the beginning of the larumpen wanhngal (south-east wind). As described in Chapter 3, the wind cycles are at their strongest in July and decrease in intensity through to October and November when the north-west wind begins to blow. The winds strengthen in the early hours of the morning and blow through to mid-afternoon. The structure used for protection throughout this time of the year is the windbreak. It was explained earlier how the strongest cycles of this wind forced the people to move inland from their coastal camps. In both inland and coastal camps they used windbreaks. In its simplest sense the Lardil word for windbreak (or 'break') wungkurr, means a device to block the wind and the term is used in speech to refer to a variety of shelter elements. However its primary sense is a structure formed as a low curved or straight wall used for shelter from strong winds. The curved forms were roughly circular, about a 3/4 arc, and were accurately described by Roth and others before. This circular unit was used at night by the nuclear family, by small groups of single initiated men, and by small groups of widows and spinsters, i.e. each domiciliary group occupied a windbreak. A warming fire was in the middle of the entry space and the occupants were

Prepared from informants data in A.D.A.: - K.B. (F4, F17, F19), G.P. (F3), D.R. (F23, F20, F22).

LARDIL CAMPS: NOCTURNAL LAYOUTS



Cold weather camp showing sleeping arrangements in windbreaks. (Sketches by K.B. in A.D.A:F19).



Plan of Lardil cold weather camp of windbreaks (dots indicate fires). Drawn by Wanyi Tribesman Don Robertson.

spaced around the fire with their feet pointing towards it. Such a layout for a man with two wives and children is indicated in figure 23. One informant, K.B., explained that the husband's sleeping position may be either parallel or at right angles to his wife or wives. Circular windbreaks seldom needed to be built at a scale larger than this by a family. Sometimes older uncircumcized boys had a small windbreak windbreak adjacent to their parents. In such structures the people are said to be sleeping 'short-short' in Aboriginal English,

In the case of a large number of single men camping together, a long windbreak would be constructed. These were either formed by a shallow curved wall or by two straight parallel walls (see figure 25). The ends may be closed off on the latter structure which is referred to as a 'two side break'. This shelter form is most useful if the wind is fluctuating in direction e.g. south-east wind changing to north-east. The men sleep 'two and two', i.e. two men sleeping parallel to each other and sharing a fire. They were either parallel to or at right angles to the walls of the structure. I

In the case of the circular type windbreak when the wind changes, the wall may be extended, or a secondary wall may be added (see figure 26), the original structure remaining in position.

All of the windbreaks are oriented in the same direction, and within several metres of each other, forming an aggregate of repeated forms at six to nine metre centres. ² The walls of the structure are low enough to see over and so orientation was not influenced by the desire to maintain a view of neighbours or entry paths to the camp. 3 The number of windbreaks in such a camp varied due to factors discussed elsewhere from a few to twenty or more.

The south-east winds blow coldly during the day in winter as well as at night, and windbreaks were used for daytime camp activity. Separate windbreaks were often built as daytime activity focused at a different part of the camp site to that used for sleeping (e.g. in a shaded area or at a dance ground). Daytime windbreaks may be less carefully constructed and spaced more closely, presumably to allow for better speech interaction. Cooking fires were built and the usual daytime activities carried out. A clear photograph of a daytime shelter was taken by Bleakley in 1916 - (see figure 28). An excellent set of photographs was taken by Nelson in 1936 of the village camp which

3. As reported for some Aboriginal groups by Thomas (1906:75).

^{1.} A similar structure and sleeping arrangement was used by Nunggubuyu

single men according to Biernoff (1973:fig.5).

2. Biernoff (1974:10) reports wider spaces between the sleeping structures of the Nunggubuyu - from five to ten metre spaces in between.

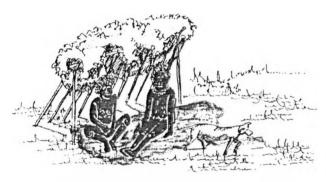
LARDIL SHELTERS



A grass blanket, kupal, providing protection from cold, wind and light showers.



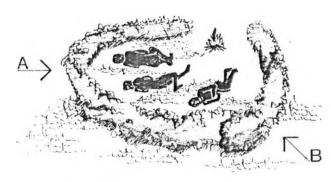
A late afternoon shade or wika made by inserting a leafy limb in a hole. The unit can be repeated lineally to provide a larger area of shade.



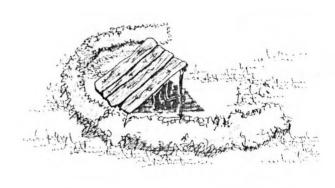
A mid-afternoon wika using two forked posts and foliage.



. A flat-roofed shade parrapar, constructed of four forked posts and cross-rails.

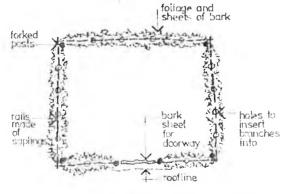


A windbreak with an extension added after a change of wind direction. (A) Original wind direction. (B) New wind direction.

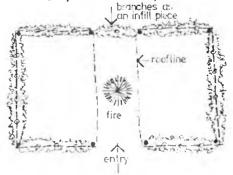


A combined windbreak and bark-roofed shelter for fluctuating wind and rain conditions (May or November).

branches ds. an infill piece



Plan of a wet weather shelter, ngampirr.



An alternative wet weather space for a large domiciliary group, made by placing two agampir opposite each other, and sealing off with a limb between two end walls.

informants say was in the traditional format. In these photographs the contrast can be observed between the thick curved night time windbreaks built in combination with other forms of structure and the loosely constructed, straight breaks being used for daytime activity (see figure 28).

As Roth noted, materials for these structures were drawn from any convenient flora - leaves, grass, vines, branches. Sometimes a support of short pegs was improved to take thapurry vines (Cassytha filiformis). (This construction method was used by informants whilst the investigator was on a field visit in Big Barney's country in 1975). Roth reported finding the sand 'floors' of windbreaks excavated to a shallow depth (1910A:56). According to informants who still employ this practise, this is done to clean, level and slope the floor correctly for sleeping, as well as to provide an extra weather barrier of sand at the base of the windbreak. A common body action to carry out this excavation was to push the sand back with the soles of both feet from a sitting position on the ground, systematically working in all directions until the full circle has been excavated. This perimeter mound of sand is used for burying important artifacts for safe keeping. Other artifacts may be stored under the bush materials of the walls of the windbreak.

Wet weather camp

Towards the end of December, the seasonal rain of the north-west monsoons usually begins, perhaps together with the occurrence of cyclones. In this wet season period rain is likely to fall consistently for days and the Lardil built wet weather shelters. "...we know wet season when...my father, grandfather, uncle...they make im humpy ready...wet season might come anytime..." soon (G.P. in A.D.A.:F3).

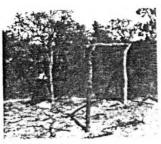
Each domiciliary group occupied a wet weather shelter which was called in Lardil a ngampirr. It was rectilinear in shape "like a bunk" (G.P.). Four forked posts were erected in holes in the ground, to make a rectangular floor area, size being estimated according to the number of people that were going to sleep inside. The holes were called ngarka and were made with digging sticks to about one third of a metre deep. [All straight poles used in construction were obtained from tree saplings or tree trunks and were known as thungal. This included rafters and side rail members. The four forked posts were $nganar\ thungal$. The side rails, two or three for each wall surface, were lashed to the forked posts with vines $warapu\ (Vigna\ marina)$

^{1.} Prepared from informants' data in A.D.A.: F.J. (F34), G.P. (F3), P.J. (F28), K.B. (F17), D.R. (F22).

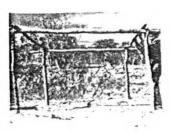
CONSTRUCTION OF A LARDIL WET WEATHER SHELTER



1. Assembling large pieces of ti-tree or messmate bark (kuuwan).



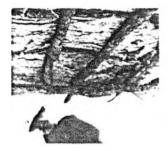
Four forked posts (nganar thungal) are erected in holes in the sand (ngarka), made with the digging stick.



3. Four roof beams (thungal) are positioned.



4. Bark sheets are laid over a system of sapling rafters.



5. The bark pieces are carefully lapped to form the roof sheeting.



Adjustments are 6. made to ensure adequate waterproofing.



 Foliage (tjinta) is gathered for the



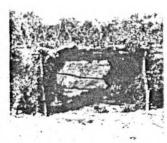
8. A row of holes is dug between the forked posts to take wall foliage.



9. Side rails are lashed to the posts with bush string and vines (vigna marina).



10. The side rails form a frame to take foliage, making three walls.



11. Each limb is inserted into a ground hole and its leaves are woven between the rails.



12. The ground holes are tightly filled with branches.



13. Bark sheets are also woven between the rails. (A fourth wall with an opening, also can be added later.)



14. This photograph shows the weaving technique.



15. The shelter took two men one hour to build, after spending three hours collect-ing bush materials with the aid of a truck and axes.



The shelter is also used in dances. (The roof can be further waterproofed with grass, and then a layer of sand to form a gentle slope.

LARDIL PROPERTIES OF PLACE

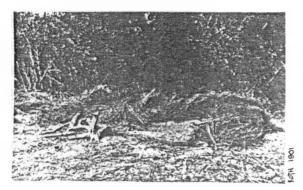
or bush string. Two roof beams spanned between each pair of forked posts. The side rails were attached on three sides of the shelter. This construction process is demonstrated by two informants in figure 26. A variety of claddings were used - long lengths of grass, paperbark, leaves, depending on what was locally available. Three sides were first clad by inserting branches of leaves (tjinta) in a series of foundation holes dug in a line between each pair of upright posts. The leaves were woven between the rails. The wall cladding was collectively referred to as wungkurr, i.e. of windbreak elements. Sheets of paperbark (from Melaleuca species) were usually laid over the closely spaced rafter members to form a roof lining. They were carefully lapped in both directions to effect a roof fall. These bark sheets were as large as 1250 x 625 mm and were called kuuwan. Bark sheets were also used on the walls if easily available, together with other materials.

Bark roof lining was covered with a layer of leaves. An alternative system of roof covering was with spinifex grass (Spinifex longifolius, or Triodia species), then a layer of sand. The sand was gently sloped to the sides to produce a shallow curve on the roof. The sand served a double purpose of absorbing water and providing dead load to resist movement of the roof by cyclone winds. Vines or bush string were often tied between structural members to keep cladding foliage firmly in place. As the rain became more intense the open front side was enclosed leaving an entry opening in the centre or to one side. One or two extra forked posts were used to form the opening (refer figure 26).

Another method was used to increase the degree of enclosure. This was to construct two of these shelters standing a little distance (up to one metre) from each other and facing each other (see figure 26). Two side walls would be joined with a piece of 'break' (wungkurr), either bark or leaves. The other two side walls would form an opening between them as an entry. Two closely related family groups would live in this duplex unit.

The wet weather camps were sited on high sand dunes that were well drained and out of reach of the abnormal high tides and tidal surges associated with cyclones. As these dune systems are linear in shape, the shelters were often arranged roughly in lines, and closely spaced (at six to nine metre centres). Naturally sheltered sites were also utilized for extra protection e.g. against a tree trunk. The shelters were orientated in the same direction as the rain bearing winds if this was predictable - usually facing south-

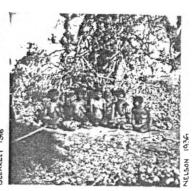
LARDIL SHELTERS



Windbreak photographed by Roth, Wellesley Islands, 1901.



Daytime windbreak, wungkurr, 1916.



Cold weather daytime windbreak, 1936.



Night windbreak constructed of a circle of pegs, with thapurru vines draped over, 1975.



Cold weather night , 1936. Central windbreak contains a sheet iron lean-to.



Daytime windbreak of bushes, 1975.



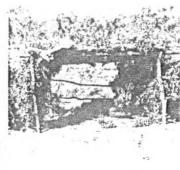
Shades or wika, 1975. Spears stored on flat roof type (parrapar). Note acculturation of shade cloth.



Instant melaleuca bark shelter for rain protection. Bark blanket, kuuwan.



Kupal - standing grass clumps used for protection against wind and rain, 1949, with portrait of a Kaiadilt man.



Wet weather shelter, ngampirr, partly constructed by informants, 1975. Cross rails to have foliage woven between.



Wet weather shelter detail. Foliage for walls secured in holes in sand, then woven between rails.

LARDIL PROPERTIES OF PLACE

east.

The wet weather shelters were used both day and night in heavy rain. "After a big storm and flood, the people will be hungry after days of huddling in their humpies." (Roughsey, D. 1971C:68). Fires were kept burning for both warmth and cooking, and storage space was made for firewood, food and water contained in large bailer shells. As with the wungkurr artifacts could also be buried in sand inside or stored in the wall foliage.

During the wet season the tidal flats would flood over becoming muddy quagmires. This made coastal movement more difficult since what were bush roads became natural obstacles. Wet weather camps were thus usually occupied for comparatively lengthy periods — up to six weeks. Shifting of camp occurred occasionally when the rain stopped for a day or two. The wet weather shelters were the most elaborate structures of the Lardil, and more energy was invested in their construction than the other two shelter forms.

Mosquito camp

During the wet season and the transition period following, (December - April), night sleeping at Mornington Island can become very difficult due to the presence of swarms of mosquitoes. methods were used conjointly to avoid this discomfort: (1) choosing a campsite exposed to the wind, (2) use of fires spatially arranged with respect to sleeping positions, so as to form a smoke screen barrier around the camp, For a large camp (a 'long' camp), the result was a spatial arrangement as indicated in figure 25. The central line of fires shown were not necessarily used depending on the severity of the mosquito attack. The orientation of this fire line was not in any spatial direction either. (Wind direction is not an influential factor in this arrangement). The single men slept in the central area, each man close to a related family group (father or father's brother). Each domiciliary group had its own fire, all of which provide an outer perimeter of smoke. To increase the effectiveness of the smoke as a repellant, turtle and dugong bones, green grass and leaves were burnt, as well as the wood from the tjilir tree (Excoecaria parvifolia) and the sandalwood or yilipintapan shrub (Santalum lanceolatum),

The campsite was chosen in a place relatively free of obstructions, open to any wind that may blow. No physical structure or body coverings were employed. The most desirable place for such a camp

^{1.} Prepared from informant's data in A.D.A.:K.B. (F2, F4, F17), D.R. (F22).

was on a high clear sand dune ridge. A beach site for a camp was also employed if the prevailing wind was blowing on-shore. (In April the prevailing wind is beginning to vascillate from north-west to south-east.) Such a beach camp had an advantage over the dune camp. The latter was grassed thus providing a habitat for mosquitoes, whilst the beach camp was free of grass. If a group decided to travel inland, a sleeping site would be chosen on a tidal flat or on an open grassed plain to ensure maximum ventilation. Permanently exposed sand bars were sometimes used to escape from extreme mosquito attacks.

The camp arrangement indicated in the figure is of a maximum size. If more people were present they would form a similar unit nearby. Several such camp units may thus be in close proximity containing members of the different socio-geographic groups. At the end of the wet season, camps were not necessarily large like the one illustrated. 'Short' camps were common, but the same two principles of exposed site and smoke barrier would be employed.

Shade structures

Night-time structures have been discussed and it was noted that they were not normally used during the day. In the colder time of the year daytime activities would be carried out in windbreaks as described. In the hotter periods shade was a pre-requisite in the camp. If shady trees were not close at hand, the people would construct sunshades. The Lardil word for shade is wika meaning both shade and shade structure. Several types of shade structures were built. Only one has a special name: parrapar. It is a flatroofed shade. A rectangular plan is formed by positioning four forked posts. These carry two cross beams and a series of rafters obtained from bloodwood or other saplings. Foliage was placed over this roof structure. The structure is therefore similar to that built in the first stage of construction of the wet weather shelter. This shade was most suited for use in the middle of the day when the sun was vertically overhead. For early and late in the day two other forms of shade were used. The sloping-roofed shade consisted of only two forked posts supporting a cross beam. Rafter members were leant up against this and the structure covered with foliage. A simple variation of this was to tie long branches on to the horizontal beam and omit the 'rafter' members. Vertical shades were made by inserting a bushy limb in a foundation hole. This type of wika was often repeated forming a line of vertical shade branches. (See figures 26

^{1.} Prepared from informants' data in A.D.A.:K.B. (F17, F30), F.J. (F34), C.M. (F18).

and 28 for illustrations of these types of shade structures).

The parrapar (flat-topped shade) was used before and during the wet season on hot days. If this structure happened to be located in a wet weather camp, it was sometimes converted into a wet weather humpy. Conversely at the end of the wet season the ngampirr could have its walls dismantled and converted back into a parrapar. The structure was useful at any time of the year for storage of artifacts and food on top.

Other shelter forms used in camps

As well as the three major architectural structures of windbreak, wet weather shelter and shade, a number of other supplementary shelter forms were used during transition periods in the climate when weather conditions were changing and unpredictable, or in extreme climatic situations. These shelter forms are illustrated in figures 26 and 28.

- (a) If unexpected rain occurred in the dry season (winter showers) a 'lean-to' structure may be constructed inside a windbreak. Two forked uprights support a cross beam on which was leant sheets of Melaleuca bark and foliage. The lean-to roof is orientated to the south-east providing extra protection from the cold winter winds. Structures of this type can be seen in a photograph of the mission camp taken in 1936 by Nelson. Elsie Roughsey (1972:154, 155) recalls an expérience of being caught by unexpected rain whilst camping in the bush in 1953:
 - "...the only think to shelter from rain and stormy weather was just to lie in the windbreaks with ti-tree paper barks and than grass is thrown over the top, they lie very still until the storm and rain clear away, sometimes when the rain is pouring down day and night, they shelter under cave rocks, and make great fire to keep themselves warm and dry...,everything get so wet also children lying in the poor shelted windbreaks with a small bar shed over head with raining leaking through everything, water trickling down.... While I am doing my best to break and root up grasses to put on the top of the bar shed [bough shed] to save the boys from getting wet. While faithful father Goobalathaldin is racing up the bush to break some barks off the trees to shelter the two boys at the same time collecting huge logs and other small twigs to start up a fire to the entrance of the windbreak to keep the boys warm and dry. Dick and myself stands out in the rain with one each barks over us,

and enjoying the warmness of the fire."

- (b) During the hot-wet dry transition periods occasional storms were likely to catch people without a wet weather shelter. A quick way to keep dry was to lie or sit under a large piece of messmate bark. Such a make-shift shelter was called <code>kuuwan</code> in Lardil, meaning 'bark blanket'. This shelter solution although immediate, was uncomfortable, causing perspiration. Bark was used in the same way to protect fires from showers of rain.
- (c) A kupal ² consists of a quantity of grass as long as can be conveniently found, perhaps up to 1.6 metres long, tied together at one end to make a structure used to sleep under, one perperson normally. Although it also caused perspiration in humid weather it provided protection from cold winds being a combined blanket and windbreak. The preferred species was lulmurr, Themeda australis (K.B. in A.D.A.: F50).
- (d) Grass was also used to make a thick two dimensional blanket. Tufts of lulmurr were collected taking care not to disconnect the root structure, and tied together with string to form rows, each row overlapping with the next. 3 These blankets were used inside windbreaks to provide extra protection from the cold south-east winds.

The foregoing shelter types represent the range of architectural forms used traditionally by the Lardil, as agreed upon by a number of key informants. Occasionally however, an informant will provide a description of a shelter that is unusual or unique, and that will result in the shaking of heads amongst his fellows, and in statements of : "not proper Lardil!" It seems likely that not all shelters were 'copy book' specimens as described above, but adapted in form and structure perhaps in response to availability of materials, or other site characteristics (e.g. the incorporation of a tree trunk). Occasional innovations may have occurred, as well as influences from mainland tribes. One might argue that there may have been variations in the forms of shelters, but that all were generated from a similar set of construction techniques. However Hamilton's findings (personal communication 25/7/78) provide a warning against such an assumption. Amongst Victorian Desert groups he has observed shelters that are similar in external appearance, but differ in their structural technology.

The role of shelters as artifacts

Traditional shelters were used like tools to make everyday life more

1. Description from informants data in A.D.A.:G.P. (F3), K.B. (F17),
F.J. (F34).

^{2.} Description by K.B. IN A.D.A.:F17.

Ibid.

comfortable from inclement weather (rain, cold winds, hot sun). As such they were pleasurable and secure things for the time they were used. Their life span seldom exceeded a season and was more often several weeks or less. Although the timber frame structures may have endured through several seasons, they would ultimately collapse under white ant attack, or be used as firewood or components in a new shelter.

No special significance or symbolism was attached to these shelters as is often done in other cultures. 2 nor were they embellished with any decoration. They were not a 'home' in the Western sense of being a permanent structure for physical protection against climate and other physical hazards, to which is also attached personal decorations, colours and symbols. Perhaps even more important associated properties with the Western 'home' are the multitude of memories of past experiences and daydreams in its spaces that stretch back through one's time of occupancy perhaps as far as childhood (Bachelard 1964). For the Lardil, memories and experiences were associated with campsites and other places in the landscape, not with specific shelters which were too many, too similar and too impermanent to provide such a wealth of stable links with the past. As Wallace said of the shelters of the Pitjandjara (1976:47): "It is not a primitive house, but is an adequate structure that has always been an integral part of traditional life. Their 'home' is the outdoors, their tribal land,"

Using Roth's criteria discussed previously, it can be demonstrated that the shelters of the Lardil were not 'primitive' in comparison with other mainland Aboriginal groups as he suggested. He said (1910A:58) that the "ridge-pole would appear to be the most advanced of all, not only in principle, but in the requirement of specialised, i.e. forked, uprights." The ridge pole was certainly in use on Mornington Island. The shelter which Roth used to illustrate this construction principle was also used at Mornington Island. 3 Other

Rapoport (1972:2) has similarly reported that there seems no indication that Aboriginal dwellings fulfilled any symbolic function. However exceptions to this have been reported in eastern Arnhem Land. Reser (1978:30, 31) speaks of a number of clan groups who regard shelter components as sacred totemic objects, their symbolism often relating to the mythology of the Wawilak sisters. Thomson (1949A:6) noted that the name of domed, wet-weather shelters in the vicinity of Blue Mud Bay literally meant 'head of the eagle'.

2. e.g. see Rapoport's "House, Form and Culture" (1969), and Oliver's

[&]quot;Shelter, Sign and Symbol" (1975).

^{3.} Roth (1910A:Plate xiv, fig. 2). It is a shade structure made of a ridge pole with leafy switches leant against it.

construction principles used by the Lardil were found in mainland structures ¹, e.g.fixing upright members into holes dug in the ground, and intertwining foliage between saplings (Roth 1908B:561, 1910A:63). However a comparison of the traditional Lardil shelters with those of the nearby mainland tribes does reveal one puzzle. The evidence shows that wet weather domes were not in use on Mornington Island, although Roth observed them in use at Cloncurry and Normanton (Roth 1910A:63, plate xiv, fig. 1). Roth's illustrations and photographs of huts and shelters are contained in Appendix 5.

Camp fires

Fires were a constant feature of camps both during the day and the night. They were used to cook food, to warm oneself, to keep mosquitoes away, to provide light at night and in manufacturing artifacts. When travelling, people often carried a lighted limb, a bark torch or fire-making sticks 2 to enable a fire to be swiftly lit. The collection of firewood was a woman's task and bundles were tied up with grass string and carried, balanced on the head, back to camp. Elsie Roughsey (1972:48) recalls that "...when the fire dies out at night, they would stock more wood on [to the fire] to make them warm also to give light in the camp. That fire is to go all through the night until daybreak, because out of the same firewood that is burning, is also for the day cooking even when you go out for hunting, you must carry firestick, sometimes if you have gone to far for hunting and the evening comes too quick to be dark, well the firestick guide you on your way home back to the camp."

The nocturnal association of fires with shelters has been discussed. The most common locations of night fires relative to sleeping position were at the feet or by the side. Fires were kept burning through the night for warming in the cold months, and for driving mosquitoes away during and after the wet season. They were subtle environment controls at night carefully controlled in size, and differentiating the space inside and outside of shelters and camps by the presence and/or absence of light, even if there were no shelter structures to support this definition (e.g. as in a mosquito camp).

Cooking and other daytime fires were usually spatially separate

2. A photograph of men making a fire by friction with sticks is in fig.24.

^{1.} cf. Roth (1910A:57, 58); also Biernoff (1974) who describes similar shelters used by the Nunggubuyu, a tribal group living in eastern Arnhem Land, at a latitude 2½ closer to the equator than Mornington Island, and utilizing coastal resources under the influence of a monsoonal climate. However at least two of the structures of the Nunggubuyu were not in use on Mornington Island, viz. roofed stick sleeping platforms and bark huts in the form of barrel vaults (Biernoff 1973:fig. 9).

from night warming fires. The Lardil people were fussy about polluting fires - seldom does one see food scraps incinerated. A cooking fire would serve at least one domiciliary group and possibly several adjacent groups if the occupants were close relatives. Two separate cooking fires might be used for land and sea food. This was because the Lardil believed in a fundamental antipathy between land and sea, and that careless juxtaposition of things from these two different environs may result in an illness known as malkri. The nature of this illness will be explained in the next chapter.

Common cooking processes were (a) roasting of fish by raking aside coals and placing the fish on the hot sand, then raking back the coals over the top; (b) roasting meat and crabs on top of ashfree coals; (c) boiling and heating fluids in bailer shells; (d) parching some vegetable foods, e.g. watat fruit (Macrozamia sp.) A flat bladed wooden implement called a wiya was used to move things around, in and on the fire. Surplus cooked meat was smoked and kept hot by storing it next to the fire, covered with ti-tree bark or the needle leaves of the beach oak. This practice prevented the meat from going bad and kept it free of flies. The meat was recooked every day and eventually had to be pounded with a thapun on a stone to make it tender. Because of this practice one informant observed that the fire was the Lardil refrigerator.

When men or women were sitting around the camp manufacturing and maintaining artifacts, they often began a small fire nearby for a number of uses including heating bees' wax, straightening spear shafts, removing the hair from wallaby skins for string, burning and charring off excess wood on timber implements being manufactured.

Rapoport (1972:3) suggests that Aborigines attach some "symbolic value and social and ritual roles" to fires, which help to fulfill "sociocultural and symbolic environmental functions". No special symbolic associations with fire were discovered amongst the Lardil its functions in camps were, and still are utilitarian, as described above. ² However, in so far as the fire is associated with all camp types, fires can be said to symbolize the place of dwelling.

Behaviour at camps

"It was nice to take a nap for a while under those oak trees...

^{1.} Dick Roughsey (1971A:32) recalls this, and so does K.B. (in A.D.A.: F19) who mentions a seasonal fish being kept in this manner for several weeks.

^{2.} As in contrast for example to the Walpiri who conduct an annual fire ceremony. (The investigator participated in this ceremony in August, 1975).

but then, its time to go on, to get to the next place, where we shall camp, at last the journey has ended, we are happy, next to gather grass and branches of trees, to make our camp for the night, collect enough wood for the night," (Roughsey, E. 1972:48).

Activity at a new camp site was preoccupied with the provision of shelter, fire and water. A well had to be dug out if there was not a more accessible water supply. If the camp was already occupied by others, a site was chosen close to friends or relatives. This might result in minor changes to local structures until orientations are acquired, adequate to maintain any necessary avoidance relations with neighbours. 1 When these preliminary tasks were completed huntinggathering activities could begin and people came and went from the campsite as the demand for food necessitated. After these demands were satisfied people remained in or nearby the camp. No purposeful storing up of food occurred, but if a catch of fish, crabs or other game was plentiful or if a dugong or turtle was caught, several days of leisure time would be available. In this respect the Lardil can be compared to the Aranda who relaxed and played with their children once immediate food requirements were met according to Spencer and Gillen (1927:15). However unlike central Australian groups the Lardil were never preoccupied with series of lengthy ceremonies. 2

Camp activity focused on shelters and fires. Each domiciliary group took possession of an area of space in which to construct the appropriate seasonal form of night shelter, to build fires, and in which to store their artifacts, food and water. This unit of space will be referred to as the 'nocturnal domiciliary space' as it was used predominantly at night. Some aspects of nocturnal sleeping behaviour have been described. Reser (1976:24) has pointed out that many of the body contact taboos of European culture did not exist amongst Aborigines. A family slept together, both parents and children with the exception of adolescent boys completing or preparing for their initiation. They would sleep in a separate domiciliary space but may also sleep close together for body warmth. In larger camps whose occupants were from different patriclan countries

^{1.} Similar transformations have been noted by Wallace (1976:49) in Pitjandjara camps.

^{2.} In A.D.A.:F23 informant D.R. says that the only ceremony performed by the Lardil was that of initiation. Spencer and Gillen (1904: 194-196) in a six week period observed the Warramunga perform a ceremony each day for the majority of this time (30 days) and on some days, several ceremonies. Also Biernoff (1974:4) claims that the Nunggubuyu of Arnhem Land had many time consuming ceremonies.

or even from different tribes, sleeping close together with kin was desirable for mutual protection. No attempt was made to conceal sex from children or from neighbouring domiciliary groups (fires were kept burning).

If a campsite had no attached dancing ground for night-time entertainment, people remained in their nocturnal domiciliary spaces, reclined talking around their fires, gossiping, 'snacking', sometimes singing, and telling stories of legends and experiences to children. A high degree of division of activity in space occurred with respect to day activity and night activity. In the winter months separate day and night windbreaks were used in camps. As the wet season approached and the weather became warmer, shades for daytime use were constructed but night-time windbreaks retained. In the wet season and the following transition period wet weather shelters and mosquito camp layouts were employed for sleeping. Much of the wet season rain falls at night, and many days are sunny and humid with occasional showers. Diurnal activities were carried out under shady trees or shade structures which also afforded some protection from day time showers.

The nocturnal domiciliary spaces were arranged in a close spatial structure with only a few metres between shelters. This aggregate of units will be referred to as the 'nocturnal domiciliary zone'. Daytime activity was usually located at a distance from this nocturnal zone. Informant D.R. says that the reason for this was to free the better-constructed night shelters from active children who may harm the structure. Sparks from cooking fires could be particularly hazardous. Separate daytime activity areas certainly enabled better options for social interaction with a variety of individuals. There was little spatial segregation of sexes. People sat with whom they preferred. Such preference might result in a group of men or women isolating themselves, but there were no explicit rules governing this small group behaviour other than the normal kinship rules controlling the interaction of classificatory relatives. The place for socially prescribed sexual division was the dance ground with associated 'make-up' grounds, usually a short distance from the camp proper. In general there was a tendency for groups to be distributed between particular spaces at particular times carrying out different activities. The norm was for the domiciliary groups

^{1.} The use of separate nocturnal and diurnal living areas is illustrated in the photographs in figure 28 that were taken in the mission camp in 1936 by Nelson.

151.

(nuclear families) to occupy the domiciliary zone at night and for casually formed groups to occupy adjacent areas of the camp during the day.

Individuals attended these domiciliary spaces in camps from time to time to repair or modify their shelters according to microclimatic adjustments, to deposit firewood for night fires and to retrieve or deposit food, water and artifacts.

Regularly occurring daytime activities were as follows:

- (1) Resting and sleeping (under trees, shades and in daytime windbreaks).
- (2) Talking, gossiping, passing news, teasing, joking, singing.
- (3) Preparing, cooking and eating food. The use of fires has been mentioned and many types of edible flora and fauna are contained in Appendix 4. There were no fixed sex roles in cooking food, - individuals usually cooked the food which they obtained. However since there was often a division of labour in hunting and gathering on a sexist basis, the end result was that women cooked vegetable foods and shell fish and men cooked meat in many circumstances. Many vegetable foods required processing before being edible. The food pounder and stone pounding base were frequently used for breaking up meat, breaking and grinding nuts and seeds. Some processes were quite complex involving the soaking of foods and the leaching of poisonous chemicals. For example, the watat fruit was roasted, cracked open, the nuts removed and wrapped up in grass and vines and the parcel submerged in a selected type of mud in a freshwater swamp for a month. Turtles and dugongs were carved up on the beach by men into regular cuts, and the portions were distributed to particular individuals according to socially prescribed rules. When food was being cooked, the fire became the centre of attention as hungry bystanders expectantly waited. Certain classificatory relatives had rights to receive portions of food and in addition sharing was common with others (even strangers

^{1.} Richard Gould (in the Anthropology Dept. Uni. of Qld., August 1977) has argued that for Western Desert groups, the food sharing ethic acts as a form of survival mechanism. The successful hunter attains status amongst his contemporaries through providing in-laws and affinal kin with food. He may receive little of his catch himself. Nevertheless in reinforcing the sharing ethic, he secures the right to receive food back from others which may be a vital need in times of prolonged poor hunting. It is to be noted that such a sharing ethic precludes much accumulation of food which suggests a type of non-possessive attitude towards food amongst these people. The same could be argued for the Lardil.

- according to K.B. and E.R.). People eligible or eager for food would position themselves nearby waiting to be invited to share the food. The Lardil consumed food as soon as it became available if they were hungry. Surplus food would be stored for regular 'snacks', especially in the evening and in the early morning upon awakening.
- (4) Manufacturing and maintaining utilitarian artifacts tools, weapons and wearing apparel. These tasks were carried out regularly in all camps. Timber artifacts were mostly cut out by men at special camps ('handcraft' camps) proximate to timber resources and these will be described later. The final tasks of shaping and finishing, joining of elements with string, wax or gum, and ongoing maintenance occurred at all camps. Fires were employed in these activities. Women made string from grass, fibrous bark, the cotton pod of a native cotton tree and human hair for nets, belts, skirts and general purpose use. Important dancing artifacts were not manufactured in camps nor were items for ceremony and magic.
- (5) A popular camp game was played by adults using a handball called pukamitjal, grass and/or leaves were rolled into a ball and bound with hairstring or a piece of fishing net. The adults formed two teams, energetically throwing the ball to each other until they tired.
- (6) Much time was spent attending to children, playing with them, and teaching them knowledge. Children were often taught by making them sit quietly to watch adults demonstrating a particular skill. Contemporary adults can elicit places at which they remember being taught something by a relative. Men made their sons small spears (pingkill) and boomerangs from the bark of gum trees. Informants make no mention of any formal toys other than 'cat's cradle' strings. Children improvised their playthings from elements of their natural surroundings which also provided their playground. A popular pastime was foraging for fruit, nuts and berries, small fish and game. In this way they were teaching themselves some of the skills required for adult economic life.
- (7) Spontaneous quarrels and fights were not uncommon, especially

^{1.} Dick Roughsey describes this game (1971A:13) which is no longer practised.

^{2.} Roth (1902) observed the popularity of this game amongst the north-west Queensland Aborigines.

- between man and wife, and between women. Serious disputes between men were not settled in camp but at 'square-up' places previously described.
- (8) Circulation. People were always moving around the camp area between activity spaces. The nocturnal domiciliary spaces of others were bypassed and not transgressed unless interaction was required with their occupants. Individuals moved away from the camp area to range for food; to attend the dancing ground; to obtain water from the local fresh water source; to collect supplies of firewood, and materials for shelters or readily made artifacts; to defecate and urinate. This last activity was not done in any prescribed zone according to informants, just well away from the camp and beach.
- (9) Washing. This was not necessarily a frequent activity. Hunting in the sea and collecting food and water from swamps were self-cleansing activities. However whenever dancing occurred, adults covered their bodies with white and red ochre as body decoration, and until this was removed they were reluctant to go near the sea for fear of becoming sick with malkri. This is another behavioural expression of their belief in the natural antipathy of land and sea elements. If an ample supply of fresh water was available from a local source, body washing would be readily performed to enable one to go into the sea without fear of violating this taboo. If water was scarce individuals left ochre on their body until it wore off or until an adequate water source was visited.

It seems that the everyday camp life described above was in many ways similar to other Aboriginal groups. For example compare Spencer and Gillen's comments on the Aranda (1899:32): "During the day the women are sure to be out in search of food, while the men either go out in search of larger game, or else, if lazy and food be abundant, they will simply sleep all day, or perhaps employ their time in making or trimming up their weapons. When conditions are favourable everyone is cheerful and light-hearted though every now and then a quarrel will arise, followed perhaps by a fight..."

These everyday activities were occasionally disrupted. A major cause for the transformation of camp properties was the occurrence of a death. Mourning behaviour ensued, with the associated 'square-up' practices and burial as previously described. Shelters were destroyed and the campsite was evacuated.

154.

In large camps where people gathered from several or more patriclan countries, social interaction was intensified. News and gossip were exchanged; recent deaths, births and fights reviewed. The camp acted as the centre for information dissemination. Individuals continually attended to their position in the social structure so as to facilitate proper kinship behaviour between each other. Attention structures were always operating. Jealousies, disputes and fights were likely as individuals were in the company of potential marriage partners (classificatory sisters- and brothersin-law). The location of one's sitting position and orientation was chosen carefully to enable easy communication with appropriate classificatory relatives or alternatively, to allow others to intermediate with those to whom one was not allowed to speak. When approaching or passing close to domiciliary spaces auditory signals were purposely used to make others aware of one's presence.

Visual access to others was interrupted in several situations: (a) where the camp site contained extensive foliage and was not all within a single visual field; (b) when wet weather shelters were in use; (c) at night. Sensory space was then further articulated with audio communication. "One man broadcast news from over there" (K.B.), and so on. Messages were passed between nocturnal domiciliary groups. 2

In summary, the campsite can be spatially divided into the following sub-units:-

- (a) The 'nocturnal domiciliary zone' which consisted of 'nocturnal domiciliary spaces', each occupied by a domiciliary group at night, as a discrete individual territory. 3 Each domiciliary space contains fires and shelters appropriate to the seasonal conditions.
- (b) Daytime activity spaces also containing fires and shelters appropriate to seasonal conditions. These spaces were used for cooking, eating, social interaction, attending to children,

1. This type of behaviour ensured a degree of privacy according to

- Hamilton (1973:5) in his discussion on the Tjankuntjara,

 2. This nocturnal phenomenon of airing grievous issues, 'broadcasting' 'talking to the night', has been well described for other Aboriginal groups, e.g. Hamilton (1972:10, 11) and Wallace (1976:50) for Victorian Desert groups. There is a short account in Smyth (1878:VI, 137, 138) of how the Dieri elders address their camp late at night with the next day's problems. Reay (1962:113) has observed elderly people at Borroloola telling stories at night about past experiences and legends that somehow allude to current community issues. The speech is made aloud, not directed to anywhere in the camp in particular, but all who care to listen hear it.
- 3. This has been generally reported by Rapoport (1922:2): "...each shelter or dwelling is for one family and outsiders do not enter without invitation, there are strong feelings of personal space and kinship avoidances".

- making artifacts, sleeping.
- (c) Spaces in between and around the above units were public and used for such activities as circulation, discarding refuse, fighting, playing handball, washing.

The artifactual contents of camps, including shelters, were adjustable and changing. Nevertheless behaviour was well structured in space. Certain behavioural units were clearly associated with particular spaces, and architecture acted as a fluid support system for these camp activities.

Daily hunter-gatherer activity

The most important advantage of a coastal camp site for the Lardil was the ease of accessibility to the variety of foods in the coastal land systems of each camp locale. If several or more families were camping together, the men and women obtained food separately (Roughsey, D. 1971A:31). Men usually hunted dugong, turtles, fish and whatever coastal food resources they discovered in their daily range, e.g. crabs, turtle eggs, sand goannas. The women obtained vegetable products and small game from the interior land systems ('sugar bag', water lilies, roots, tubers, lizards, snakes, goannas) as well as exploiting the coast for crabs, oysters, mud shells, mangrove fruits, water lilies, and pentia corms when in season (D.R. in A.D.A.:F22). They maintained the rock wall fish traps which can still be observed today (e.g., at karakarungan in F.J.'s country). The women's daily range was more often in to the interior land systems than the men's, and more normally carried out in the day. The men's hunting activity was orientated to the sea and dependent upon tidal movements. Dugongs, turtles, fish were most easily speared or netted at low tide.

Much of the men's labour thus occurred at night. Dick Roughsey (1971A:9, 31) describes men returning from a successful night's fishing, cooking and eating their fish, and then sleeping all day in preparation for another night's hunting. The most important factors organizing the daily coastal economic activity which typified much of the Lardil lifestyle, were division of labour, tidal movement and daily range to both coastal and interior land systems from coastal camps. This daily coastal pattern was disturbed by seasonal and social factors which are discussed later.

Leaving a camp

On leaving camp, tools and weapons were gathered for carrying as well as surplus foods. A burning fire stick or bark torch may be taken if travel was at night or in rainy weather. Fires were extinguish-

ed but shelters were left standing. Some objects may have been left behind for a number of reasons. If the camp was for a specialist activity some artifacts associated with that activity may be left there more or less permanently, e.g. a food pounding stone at a pentja camp; cutting and scraping stones at a camp in which artifacts are regularly manufactured, as well as objects under manufacture; a raft at a dugong camp. Objects might be left if loads were too excessive, especially quantities of surplus weapons which were kept at a more regularly used camp in one's patriclan country, K.B. has pointed out (in A.D.A.:F19) that "always main camp in every country somewhere - every man in their country got main camp", 1 Objects left in these camps were not normally touched in the owner's absence by passers-by, or others frequenting the camp from time to time, unless it might be a close relative. Such interference with an individual's possessions might result in a fight. Objects thus left buried or hidden by a person who subsequently died may never be retrieved. ²

If a camping party departed before some of its members returned from hunting, or if others were expected to be following behind, a simple directional sign may be drawn in the ground with a stock on the site of the old camp....."That's just like a signal...that's just a sign, a footprint mark" (K.B. in A.D.A.:F19). The sign only indicated in which direction the camp had been shifted along the coastline. "They knew which way to follow as long as they follow beach round". The coastal 'roads' were the normal paths of travel. Travelling on these paths presented opportunities for informal food collecting by families and individuals.

Artifactual remains of camps

As well as the physical components of camps that have been discussed, everyday behaviour gave rise to artifactual remains at these places. Some of these remnants still distinguish these places as campsites today, despite their lack of use for up to 60 years. Shelter structures were not demolished but left standing. Timber framework was re-used in the future either in situ or incorporated into a separate new shelter if structurally adequate. Otherwise shelter components would eventually be removed by white ants, wind and cyclone, or for firewood.

Sand and mud shells and the bone fragments of fish, turtle, dugong and other animals are found in all coastal camp sites scattered in the

^{1.} These camps are herein termed base camps.

^{2.} Biernoff (1973:8) notes this for the Nunggubuyu in eastern Arnhem Land.

sand. At interior camps bone fragments were those of freshwater turtles, fish, wallabies, goannas and other small animals. It was the custom of the Lardil to throw food waste away to one side from where one was sitting eating. Food scraps were not incinerated and there were not specially designated places for waste disposal. Scraps were consumed by dogs and other scavenging animals. Charcoal from fires was also mixed in with soil providing another physical marker of campsites. Such waste material gives an indication of the size of campsites. On sand-based systems, they were commonly half a kilometre long and several hundred metres wide. A large camp associated with seasonal feasting and dancing might extend for up to a kilometre, e.g. tingkilmiya in F.J.'s country and wanantji in K.B.'s country. Only one camp site has been found by the investigator that contains a shell midden. This is surrounded by mangroves in K.B.'s country at a place called muntalkan. This midden is a low mound, about a metre high, a hundred metres long and in the form of a crescent. It was used in association with the nearby sand-based wet season camp, minhtange.

Lardil travel

Two types of movement have been differentiated: daily range from a camp to obtain food and material resources, and travel between campsites. This latter form of travel will now be examined and the following questions are discussed:— Why did people travel between campsites? Did they travel only within patriclan countries or did they travel outside of them? If there were wider patterns of movement beyond one's own country, did such patterns place regular properties of time usage on various camps, or was choice of camp site a flexible decision?

On beginning to question informants, "if and when they moved out of their home countries", there was a common response: that people were moving consistently all around Mornington Island, both inside and outside of their own patriclan countries. "My mother and father no more sit down one place - walk about everywhere. They move all around over in the place." (G.P. in A.D.A.:F3). "Father and mother go round everyplace...travelling all time...when you got nothing to do [in] your country, well you travel around... but come back sit down [in your own] country now." (F.J. in A.D.A.:F5).

^{1.} It shows up clearly on an aerial photograph at scale, 1 cm to 200 m (roughly 1:15,000). It is possible that similar middens may exist in other patriclan countries in the larger areas of mangrove forests. K.B. has confirmed that there are some middens at the mouth of Elizabeth Creek.

"They gotta go place to place...they keep shift about all time; can't stop one place." (K.B. in A.D.A.:F19).

"My people travelled about in small groups of perhaps twelve or fifteen persons, two or three families living mainly off the reefs, and shore where we got our food at low tide." (Roughsey, D. 1971A:55).

Informants gave many reasons as to why people shifted camps. An important economic reason was the harvesting of seasonal foods. Dissatisfaction with the diet available from the immediate locale also caused movement to a new campsite, and was supported by other motives such as the expectation that attractive foods might be available elsewhere, and the desire to obtain a needed resource not available locally, e.g. timber for artifact manufacture, or medicinal plants. ²

People travelled to share in a large catch of dugong, turtle or fish. Environmental factors that caused dislike for the existing campsite and consequent movement were:-

- (a) Pollution of campsite with food scraps and accompanying flies.

 (This is one of the few motives arising as a consequence of the internal properties of the camping place).
- (b) The commencement of monsoonal rain required a wet weather campsite to be sought.
- (c) Attacks of mosquitoes required shifting to a site suitable for a mosquito camp.
- (d) When cycles of strong south-east winds brought poor hunting and uncomfortable conditions people moved to interior camps. However, for most of the year, coastal food resources were adequate and preferred - in K.B.'s words "all good place right around, you can go anywhere round".

A death would result in the immediate evacuation of a camp (K.B. in A.D.A.:F50), whilst a funeral was likely to attract a large number of the deceased relatives from all over the island. Social factors motivated large groups to travel and meet at large camps to attend and/or participate in a number of frequently occurring events:-dances, initiations, 'square-ups', fights. Such events were usually accompanied by feasts.

2. Some of the plants used by the Lardil for medicinal purposes have been described by Woolston (1973).

l. This diversity of reasons would not support any generalization of Wallace's claims (1976:50) concerning Pitjandjara camp shifts, viz. that a spiritual basis is the main reason underlying such shifts.

Although almost the entire Lardil tribe may attend such important social events, two or three people might remain behind at a favoured camp in their individual patriclan countries at which were to be found fairly reliable food and water resources, e.g. at palantere in K.B.'s country and in the kenthawu locale in Big Barney's country. Such individuals acted as country caretakers in the absence of the tulmata"some gotta stay and look after the place" (K.B. in A.D.A.:F19). Such a camp will be termed a 'base camp'. In these camps were often found people whose ability to range was handicapped. For example, older people, and sometimes pregnant women, stayed in base camps due to (a) their lack of mobility, (b) a sense of security in their own countries, and (c) because of emotional attachment to such places. Young children might be left in the care of these individuals when their parents were travelling to other parts of the island.

Individuals or small groups left their camp to visit relatives or friends, to maintain a love affair or look for a wife or to take gifts to people. Separation from a group also occurred due to internal disagreements, fights, boredom or need for privacy. A less regular cause of travel was to examine something unusual or curious such as a passing European sailing ship, unique objects washed ashore, ship debris, sea animal remains, etc.

More than often a number of the above motives operated in conjunction. For example, Elizabeth Creek was a popular place for the initiation of *lilumpenta* boys during the month when the *tulnul* fish was caught. People would gather for feasting, ceremony, and dancing at a camp in Gammon's country (K.B., C.M. in A.D.A.:F16, 27).

The formality of some of the above social and economic events motivating travel, is demonstrated by the use of messengers who carried message sticks and other devices to ensure all appropriate individuals were invited.

The use of message sticks

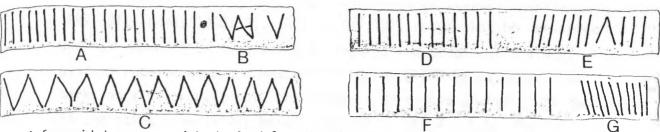
The Lardil sent messages using message sticks (or 'bush letters' in Aboriginal English), for reasons in common with other Australian groups according to the ethnographic literature (Roth 1897:136-138, Howitt 1889, Thomas 1906:30, Spencer and Gillen 1899:41), namely:

(a) to announce an initiation, (b) a call to attend a fight or raid,

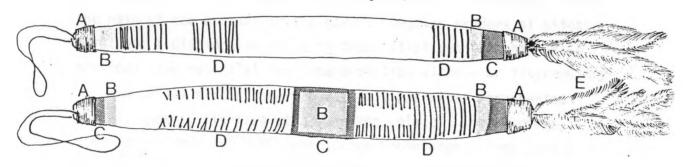
(c) to convey news of a death, (d) to issue an invitation to a dance, a feast or a joint hunt, (e) to request special resources, (f) to request a meeting. Although local variations in the use of message

1. Also called a 'main camp' by some informants, e.g., F.J. in F20.

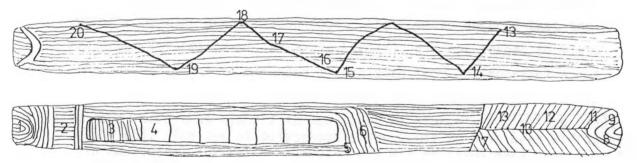
LARDIL MESSAGE STICKS AND MAP STICKS



A four-sided message stick obtained from the missionary Belcher. It announces a proposed initiation ceremony. The parallel strokes represent the various social groups to be involved. Group A are the people at the mission camp. D and E represent the Yangkal tribal group, D being those from Denham Island and E those from Forsyth Island. F and G represent the larumpenta division of the Lardil, and probably the tjirrkarampenta division. B is the campsite (next to the mission station). C shows ten boomerangs which are symbols of authority, a warning of the importance of the event. The stick itself is a piece of milled softwood. Traditionally sticks were cut from bush timber and were two-sided as in Figure 3.2.



A message stick announcing a forthcoming dance made for the author by Fred Jaurth. The decorations consist of grass string binding painted white (A), bands of white ochre paint (B), red ochre paint (C), marks incised with a piece of glass (D). At one end there is a string handle for carrying whilst at the other end there is attached a bunch of feathers (E). The rectangle represents the dancing ground, and the parallel lines represent individuals from the clan divisions or 'sociogeographic' groups of the Lardil.



An example of a 'map stick' made by Lardil man Fred Jaurth as a gift for the author. It depicts places in Lardil lands where he and the author travelled recording traditional geography. The rectangles represent a series of underwater caves at which flood making ceremonies were Carried out. It is not an object that was traditionally used by the Lardil. The visual style of the marks is borrowed from nearby mainland tribal groups.

The geographic meanings of the stick's marks, as told to the author on 8/11/75 by Fred, are as follows:-

- 1. sea break on beach long tukure
- reef at yanhtjika
- 3. kwwarrakan where story belong sea and pitjinatja
- hole in outside reef
- 5. lililta beach
- short beach at corner
- 7. hill where we walk along near terana
- tjelpakan where pigsty or yard
- aeroplane wreck where we sit down 10. river
- 11. ngalingaliwuran where the oak tree
- 12. paintha
- 13. pedrru
- 14. tumonhu
- 15. njilnjilkan
- 16. tjingkilmiya
- 17. up river to redbill story
- 18. metjingi
- 19. tulmanhthana
- 20. tjintjinnganh where climb up from plain, come back from redbill story

(This data is held on cassettes F20, F21 in A.D.A.)

sticks occurred across the continent (Howitt 1889:315), many principles were shared between groups, including the Lardil. The sticks functioned as (1) an aid to memory, and (2) as a symbol of authority for the bearer whose motives might otherwise be suspect (Howitt 1889:331, Thomas 1906:30). Roth (1897:137) notes that no "messenger who was known to be such was ever injured for people were always glad to receive news and messages". In general the meaning of the marks on a stick were only translatable by the manufacturer or bearer of the stick (the latter being informed by the former). They could represent quite arbitararily anything (Roth 1897:137); 1 but since only a limited range of formal messages were sent using sticks, a plausible guess could be made as to the contents. Many individuals could (and still do ²) make interpretations of the message without the help of the carrier or the maker. Regular senders of sticks developed a distinctive style in their stick designs which also provided some potential for interpretation without an intermediary.

On Lardil sticks, short parallel lines often represented people, spears, fighting sticks, camps, places, social groups. Lines drawn thus, ((()) represented boomerangs. Some Lardil message sticks are shown in figure 29. A common and important operation was to make a separate stroke on the stick to represent each person who was to receive the message. Such a count could not be simply remembered in spoken language as the Lardil had no words for specific numbers greater than four. These marks ensured that the messenger (or 'mailman', kurka in Lardil), did not forget to visit somebody who might be offended if excluded from an important event.

Figure 29 shows a typical message stick used for notification

^{1.} They were thus symbols in the sense of Pierce's definition (1932: 165-168). The use of polysemous signs seems to have been widespread in Aboriginal Australia. Spencer and Gillen (1904:697) report on the decorative art of Central Australian groups: "The origin of these geometrical designs is quite unknown, and their meaning, when they have one, is a purely conventional one. Thus, for example, a spiral or series of concentric circles incised on the face of one particular Churinga will indicate a gumtree, but a precisely similar design on another Churinga will indicate a frog..."

^{2.} Contemporary informants usually make incorrect interpretations due to the polysemous nature of the marks although the number of themes they invoke are usually limited by the set range of motives for sending sticks.

^{3.} It is interesting to note that when Lardil man Tom Jacob was asked to draw a map of the contemporary Mornington Island mission settlement, he produced a series of strokes, one for each household. The strokes are arranged in several rows but these do not appear to reflect any systematic spatial or social structure of domiciliary locations. They are merely a tally. This map is illustrated in Appendix 3.

of a dance or for practising a new dance. (In the latter case, the stick would be sent by the originator of the dance). The parallel strokes represent important male individuals who must be invited from the different social groups by direction (larumpenta, lilumpenta... etc.). The invitation automatically extended to the members of each man's domiciliary group. Such sticks were made from any sort of wood, decorated with red ochre, and sometimes with some white ochre, feathers (from any bird), and a string for carrying.

Any Lardil man might be a messenger but there were more regular messengers according to K.B. (e.g. Shilling and Charly Adam). The messenger presented a stick to a man by placing it on his lap whilst in a sitting position. The man would study the stick and discuss its meaning with the bearer, finding out who else was attending the dance. He may then cut a mark on to the stick symbolizing his acceptance of invitation and support for the proposed event (J.J. in A.D.A.:F15). The messenger would take advantage of his visit by talking to relatives and distributing personal gifts of meat (K.B. in A.D.A.:F2).

In lieu of, or in addition to such a stick, other devices may be carried to notify people of a dance, which fall under Howitt's category (1889:314) of 'emblematic tokens'. A bundle of feathers may be taken (wrapped in bark), each one being given to a key individual or a camp. Alternatively, lumps of white ochre could be similarly distributed (K.B., C.M. in A.D.A.:F2 and F1). Both of these materials were symbolic of a dance, since they were used by men as body decorations in such events. If such tokens were distributed by a messenger in sufficient quantity they would be used for this purpose (i.e. they were functional as well as symbolic in use).

The method of notification for initiation has been described. One or more initiates-to-be are taken around the island with a hairbelt; again an emblematic token of the event as the artifact has a ritualistic role in the ceremony. A message stick may also be sent to inform people who are being invited to attend. A stick shown in figure 29 invites the <code>larumpenta</code>, <code>tjirrkarampenta</code>, and the Yangkal of Denham Island and Forsyth Island to attend an initiation.

^{1.} Howitt (1899:321, 327) has reported that the Wirajuri of the Lower Murrumbidgee River and the Tongaranka near Tarella sent a man's hairbelt together with other emblematic tokens to call their neighbours for an initiation.

^{2.} In the information accompanying this message stick, currently stored in the Anthropology Museum, University of Queensland, the spelling of this group is 'dugoorabin'. The interpretation of this word by the investigator to be tjirrkarampen is only hypothetical.

The Lardil were famous throughout the southern Gulf for their ability to make floods (Roughsey 1971C:63). Message sticks were used by Lardil elders to notify other Lardil friends and relatives of their intent to make a flood. Groups who were antagonized by these activities reciprocated with message sticks threatening square-up fights. The nature of these floodmaking activities is discussed in the next chapter.

Special camps

Many of the above movements culminated in the formation of special camps which are differentiated as such by Lardil informants, who name them in Aboriginal English as follows: dugong and turtle camps, inside country camps, water lily camps, pentja camps, pena camps, tulnul camps, pandanus time camps, handcraft camps, dancing camps, initiation camps. All of these camps can be seasonally categorized as wet weather, cold weather or mosquito camps,

The largest camps involved a combination of special properties. For example if a tulmata noted that a large pentja swamp in his country was ready for harvesting, and simultaneously noted optimal conditions for dugong hunting in the locale, he may decide it opportune to invite the entire Lardil for feasting and simultaneously present to the tribe a number of recently acquired dances. It seems such large-scale camps were commonplace in Aboriginal Australia, e.g. compare McConnell's description (1934:335) of a Wik-Munkan. gathering:-

"...whilst it is usual for clans to hunt on their own grounds in small groups which follow their own bent and maintain a certain privacy, it is usual when special foods are available in certain areas for people to come from far and near to share in the hunting advantages of their relatives. Such propitious spots as "panja" swamps, water-lily lagoons and river reaches where fish abound are recognized meeting grounds for all and sundry. These big camps afford a fitting occasion for the holding of initiation ceremonies for maturing youth, for the discussion of affairs of social importance, for the rediscovery of old ties and the forging of new ones. Relatives newly acquired are introduced and their social position reconstructed. Courtesies, compliments, gifts and gossip are exchanged freely. It is a time of gaiety, of renewal of old friendships, as well as marriage settlement and exchange."

Informants have offered detailed descriptions of events at these camps which had unique properties of place attached to each of them, in addition to the normal properties of camps previously discussed. Some properties of several of these special types of camps will be described to exemplify their uniqueness, viz. inside country or interior camps, dugong and turtle camps, handcraft camps, and tulnul camps.

Dugong and turtle camps

"The dugong or dilmooroo as we call it, was the largest animal we hunted and always the greatest prized." (Roughsey D. 1971A:98).

Dugong dugon is the only exclusively marine mammalian herbivore. It feeds on sea grass growing in shallow water in the inter- and subtidal zones with sandy/muddy substrate (Heinsohn and Birch 1972). Lardil men occasionally speared a dugong, but the normal method of hunting was with nets in channels or stream estuaries at low tide. The nets varied in size, occasionally as large as ten metres wide and five high, but more often two metres high and wide. The nets had a pole attached to each side (see photograph in figure 24). Several nets were placed in a line across a channel with a wall of branches extending from the ends of the line of nets so as to effectively 'wall off' the deep water. The poles were pushed into the bottom of the channel and hand-held by men, sometimes chin-deep in the water. Others observed the movements of individual animals or schools. At night this was done by listening to their calls from rafts (walpa) whilst during the day lookouts were posted on high vantage points such as cliffs or sand dunes (e.g. at kupare in Big Barney's country). The raft men chased the animals towards the trap beating the surface of the water. The men at the nets who may have been camped on a nearby sandbar ² were alerted. Pre-arranged signal fires ³ were used during the day and bark torches at night. When a dugong swam into a net, the men in the water immediately let go of the poles. The animal entangled itself and drowned. The men on rafts attended the death with spears ready to obtain their catch. Occasionally dugongs were caught in inshore pools at low tide. Dick Roughsey (1971A:98, 99) tells of an occasion when seven men speared and netted ten animals in this way.

Turtles were also caught in nets, but were more often speared

^{1.} This reconstruction of hunting and associated camps is from inform-

ants' accounts in A.D.A.:K.B. (F19), G.P. (F3).

2. At such night camps sandalwood was preferred for fires as it was supposed to bring good luck for hunting dugongs.

^{3.} Gould (1971:20) reports that the Western desert Aborigines used signal fires: "...There had either been an arrangement made beforehand concerning what the signal would indicate, or else, as Mountford has proposed, there was a limited set of possibilities from which accurate deductions could be made."

from a walpa (raft) over rock reefs at low tide. Sometimes female turtles could be found on the beach at night laying eggs. Turtles were highly prized as game also.

If a number of dugongs or turtle provided considerably more meat than was required for the immediate demands of the local camp occupants, invitations were sent out for a feast. Invitation was sent either by word of mouth and/or by the use of grass signal fires. "When we see fire, we know plenty dugong, palumpenta come, tjirrkarampenta come." (G.P. in A.D.A.:F3).

Dick Roughsey (1971A:100) tells of a catch of "eight dugongs enough to feed a lot of people. Two men were sent across the island to gather up the nearest people and bring them to the feast. They set off with some pieces of dugong to cook on the way. A day after they got to certain camps they sat down for a while to eat and give them the news of the dugong. Now they came to get them and take them back to the place where the big serving camp was waiting, then they all travelled together from each camp and travelled towards the camp where my folks lived; then my father and grandfather took the cook dugong meat and cut them in pieces and gave each man from the different tribes and shared every bit of the meat..."

The meat was distributed by the <code>tulmata</code>, or in his absence, another senior man.

There was often enough meat to feed 50 or more people in this way. Such camps may have only lasted a few days, but if there were further schools of dugong or turtle in the vicinity, hunting, feasting and dancing may have continued for up to 25 days. The visitors would then move away, carrying any excess meat with them.

'Handcraft' camps

The timber most favoured by the Lardil for manufacturing weapons, tools and other artifacts was that from the *kurrpara* tree, *Acacia alleniana*. If a sizeable stand of these trees was in the proximity of a campsite, that camp would take on the special function of being a regular camp at which to manufacture such artifacts. Stone axes, stone and shell knives and scrapers were kept and used in these camps. The contemporary Lardil refer to these items of traditional material culture as 'handcrafts', and to these traditional camps as 'handcraft camps'.

A family may have stayed in such a task-specific camp for a week obtaining wood supplies and manufacturing things such as spearheads, boomerangs, fighting sticks, food pounders, oyster picks, etc.

^{1. &}quot;one old man talk" (D.R. in A.D.A.:F20).

(See table 3 for a list of traditional Lardil artifacts). Cutting out wood slabs with wedges, and sizing them down to the shape of the required object with stone tools, was a time consuming business as Jackson Jacob describes (in A.D.A.:F14):-

"In the old days the old people they, out of one wood boomerang tree, they used to get one or two boomerangs out of it and when they cut it they split it and when they split it in half to get two boomerangs out of it they put it in a hole or they have a stone axe and they just chip, chip, chip, around the edges where they want it to [split] and they have splinters coming out of the wood everywhere and then they put it in the fire and they burn it...they used to just bruise it along there [down the centre of the limb] and throw it in the fire and they get burned down and they start bruising it up again and just keep throwing it back in the fire and burning it down...

...and when it start to get it into charcoal, start getting burnt well, they just scrape it off then. When they think it's just about right they scrape it off with a stone axe or even with a bailer shell, they just scrape it off with that..."

Quantities of spears and boomerangs were often stored on the tops of shelter structures in such camps as an 'ammunition supply' to which one would have to quickly return if a serious fight became imminent (K.B. in A.D.A.:F19). Newly-made objects were buried in the sand to minimize loss of moisture from the timber and reduce the likelihood of the object cracking.

Interior camps

Interior camps were located on perennial waterholes and swamps in the interior land systems. Popular foods obtainable from these camps were freshwater turtle, fish, sugar bag, water lillies, wallaby, goanna and pandanus fruit. The intensest use of these camps occurred when the strongest cycles of south-east winds were blowing in the winter. Coastal fishing and hunting became inefficient due to poor visibility in the water and the difficulties of manoeuvering rafts in the strong winds. Informants tell of these movements:-

"One day we left our camp in the coast, we were going inland, because the south wind camp up, and we could not hunt any more, the sea was rough, and dirty, and we were not able to get our dugong, turtle, and fish....we travelled all that day." (Roughsey, D. 1971A: 104, 105).

When the "south-east comes along, go down to Dugong River...

fish, get him all kinds of [freshwater] fish on top of river there.

Boss of that country Punch, he let anybody can go down there, get
fish. My people always go down there for fish." (G.P. in A.D.A.:F3).

After several days when the wind subsided, the people returned to the coast. F.J. recalls (A.D.A.:F5): "Then when it fine weather, now come back, night time get dugong with net."

The largest of these camps was found at the headwaters of the Gabanyari River. In the dry season the top of this river consists of a string of water holes stretching for approximately two kilometres and surrounded with shady trees. Each large water hole had a camp site adjacent and was named. There were two dance grounds in the vicinity. An initiation ground was located downstream from the waterholes on an open grassed plain called tumparumpakan. All of these places were part of Big Barney's country. Important resources some distance to the west of these places were located on streams claimed by the tiirrkarampenta, since those streams flowed to the north-west side of the island. Due to the richness of resources in this area, it was an important meeting place for the windward and leeward groups, used often whilst travelling across the island between opposite coasts. Elsie Roughsey (1972:49) describes it as having local boundary properties dividing windward and leeward owned resources. "in the heart of the bush, separated the boundary from North and South, country from the people, that cuts off the two sides of our peoples land side and limit where tells where the end of the line is, well I saw the place, and dad showed me this is the place that belongs to his side of the people, and the other side on the south is belongs to my grandfather Barney and my mother's side of people..." 2

The north-eastern tributary of the Dugong River has its source near the headwaters of the Gabanyari River, and another set of waterholes here were owned by Punch, the tulmata of the Dugong River country. The Gabanyari and Dugong River waterholes provided all-year-round campsites with good food resources and opportunity for social meetings, dancing and initiation. Being in the centre of the island these places were equally accessible to all groups except the lilumpenta from the east, who nevertheless came from time to time also. Families would travel from the coast, camping and hunting at the various waterholes on the way. A popular time to travel in this

^{1.} Verified by F.J. (in A.D.A.:F34).

^{2.} Although these waterholes were carefully divided amongst the various local tulmata informants refer to the surrounding bush as "anybody's country".

TABLE 4 . PROPERTIES OF CAMPS IN (A) FRED JAURTH'S COUNTRY AND IN PART OF BIG BARNEY'S COUNTRY, AND IN (B) KELLY BUNBUJEE'S COUNTRY

			aso Lyp			Soci cere#	o- onial		Sp	eci ty	al pes	Camp		ate				Comments
(A)	COVER 40 SALV		first rains	wet season	mosauito	initiation ground	dance ground	base camp	handcraft	water lilies	pentja	guognp	marran	lagoon	rock holes	wells	beach springs	
kararrkan				х	х							X						turtles, oysters
kattatikun	х			^ .	•					X		X		х				tarries, systems
kela	X		X				X	Х	X			X		X	x			fish spearing at kupare
kunpalkan	X			X	X		.,	•								X	X	turtle,oysters. Well at IIIIIca
kuraliya				Х	X							X	X				X	Big Barney's small camp
lililta	Х			X				X			X	X				X	X	
metjingi	,,			X					X		-		X					
milngat ja				X	X							X						turtle, oysters
ngalingaliwuran				X								X	X					fish,turtle,dugong at pekru
nhathatjamboli				x								X					X	
punta				x									X				X	
pinparakan				х	χ							X		X				turtle, oysters
piriwaka	Х			x			X	X		X	X	X				X		fish caught in salt water pools
thantalkan				X	X							X					х	turtle, oysters
t ingkilmi	х			X	Х		X	X	X			X	X			X		fish,turtle,dugong at pekru
tiralkan				X									X	X				Big Barney's camp in Feb. Mar.
tukuse	Х			X	X							X		X				turtle, oyster, cuinul fish in Sep.
tulkanan	Х										X					X		••••
Walanhkerii	X							X	X	X		X		X		X		
walpakuntiyan	Х		Х												X			oysters,turtle.(Raft making
ya:ripakan				Х							-		X	X			X	white othre at mantawa
y awala	X	(X	X				X		pentja from larrikriya
(B)				x								X	X			X		(This camp has not been visited by the investigator)
kunslthatpa Minhtange				X	X								X					accessible to an initiation grad.
muntalkan				X									X				X	mudshells, crabs abundant
njilnjilkuru	;	ς .		X									X			X		watat fruit
palantere	;	(X			X			X			X	X		X		oysters
parartkiya	2	K						X			X	X				X		oysters, abundant vege.resources
patalpan				X	X							X					X	
thalala				X									X				X	- '
thapapus lang			X	X	X		X	X				X			X	X	X	
thult ja	73 .			X									X				X	
tjitaltu		X	x	Х										X				
tulkathapa			••	X									X				X	net fishing
w anant ji		X		X						X			X				X	
wanant ji wathatetan		X		X			x	X	`			X	X			X	X	pandanus
wurukura		X	X				X	•				-	X			X		river fishing, water fruit
yalpungu		X	••	X			X						X				X	reminings manage reals
Ama banda			١.		l ca	ZONE		acc	ess	to	ma i	rran			OVE			lalen enjoy a dist of

Note: 1. All camps having access to marran (mangrove fruit) also enjoy a diet of crabs, mudshells and at times flying fox.

2. All coastal camps are fishing camps and most of them have access to pandanus nuts.

way was during the first south-east wind cycles after the conclusion of the wet season, when young water lillies could be found, a favoured food item.

Interior camps were unpopular in the wet season due to the boggy nature of the ground and the accompanying difficulties of travel, but some individuals did go there at this time in search of 'sugar bag' and freshwater turtles, commodities not normally obtainable on the coast.

Tulnul camps

The tulnul fish exhibit unique seasonal behaviour. According to Lardil informants ¹ they breed in Elizabeth Creek and annually depart from this place in large schools during a lunar month corresponding approximately to September. They travel south and south-west skirting around the outside of Sydney Island. Several major tulnul camps were situated near the mouth of Elizabeth Creek another one at mekiyan Point in Victor Barney's country, and a smaller camp was located at yentjika on Sydney Island. The tulnul then split into two schools, one passing through the Appel Channel, the other passing close to Andrew Island. Large tulnul camps occurred at both of these places. The fish then travel north-west dispersing into the Gulf of Carpentaria. A few may be caught on the north-west side of Mornington Island, but the tjirrkarampen and lilumpen people usually travelled to the camps at Appel Channel and Elizabeth Creek respectively. Tulnul camps were very large feasting camps lasting for up to four weeks. It was customary for the fish to be handled, cooked and eaten in a specially prescribed manner. Cooking fires were made from the twigs and branches of a particular tree (pos. Melaleuca leucodendron). The fish had to be eaten without breaking their bones. To do so would cause them to stop running according to popular belief (K.B., in A.D.A.:F50). Seasonal movements between camps in F.J.'s and K.B.'s countries

The availability of seasonal food and water and other resources from camps in F.J.'s and K.B.'s countries is indicated in table 4. Table 5 shows the relation of climate to seasonal resources and shelter and settlement forms. Some common seasonal movements in and beyond F.J.'s and K.B.'s countries are now reconstructed. However, it must be remembered that social factors commonly interrupted these patterns from time to time.

The geography of F.J.'s country is illustrated in figure 7. In c.1913 F.J.'s father, *Tjaurt* was tulmata of the country. F.J. 1. Henry Peters, and K.B. in A.D.A. (F4).

January February March	April 200	144	September October	November December
Tropical depressions, thunderstorms, north-west monsoons, tropical cyclones rain falls heavily in a series of short periods of a few days duration, mostly at night with intermittent breaks of hund calm weather streams flow, erosion occurs.	HOT-WEI-DKA TRANSITION TRANSITION OUT STORMS and MONSOON WANE - VARIABLE WINDS - NOT	- south east winds strength varies in cyclic patterns - wind strength varies in cyclic patterns - wind strength varies in cyclic patterns - lumar cycles intensify in June, July - diurnal cycles at strongest from early morning to midday, cold and uncomfortable, but calm in evenings - little (if any) rain.	which subside and breezes s blow away, dust ms and whithwinds erature rises and groundwater evapor-	calms and variable winds - scattered afternoon thunderstorms increasing in intensity - high humidity and temperature (32°C.)
- the first monsoonal rain, kurpurka (K.B. in ADA:F4) (K.B. in ADA:F4) cyclonic rain (G.P.,D.R.in ADA:F3,F20) - morth-vest winds - tjirrkarampen wartingal and intermittent north-east winds - Lilumpen warnigal - rain wepressions mutha mangar (Dig rains) waterspouts sighted, thantaman	4) Frual Fr20) Jilalke (C.M.in ADA:F27) aius)	- south-east wind time, larumpen warringal or nayelukar. (C.M.,F27) - cold wind time, kurtha warringal - first south-east wind is yelmiyal (K.B., F50) - at times the east wind also blows, liyalin (K.B., F50)	activ, time of the ish': tuinul and ribening of the snut - kuriyal kuriyal .W.1537 kuriyal kuri, time of hot eather cloud weel by associated with lish.	'first rain' time. Lurricar wheata (C.M.,F.27) - the time when the country is warm, nackon nuerman; and when the ground is hot kiyawirmaarka; and when people perspire, tarathalon; time of the lightning, pinpon.
vallabies (fat on new grass shoots) turtle hunting, fish schools and prawns netted frogs wild bee homey ('sugarbag') goamas (fat due to plenitude of grasshoppers) water fruit consumed after processing (mud crabs less plentiful) many vegetable harvests begin including the mangrove fruit marrin, the wild plum tree fruit marripen, the nuts of the pilkurr tree, the wuldn fruit and the thailar seeds the nyulars, the crow fruit, tongakurr, the fruit of the pampularr	awns netted sshoppers) ing the mangrove it marryen, the fruit and the fruit and the	- best dugong hunting (in evenings) - freshwater turtle and fish from interior water- holes - water lilies harvested - the nyungar root is obtained in the interior, plus taltiir roots and - turtle hunting wild potatoe, yarrpa (K.B pertia corms of the in A.D.A.:F50) swamp rush kurka dog-ball' fruit termingury	- tulnul fish caught - tjirtal fruit and wild fig kirrir - pandanus nut, kuriyal	- wild bee honey - frogs - frogs - frogs - frogs - frogs - frogs - wild grape - snakes - which - chase - frogs at - night - wild grape - snakes - snake
large wet weather camps on high sand ridges use of mosquito camps at times construction of wet weather shelters reduced movement. plentiful water resources	- mosquito camps on beach or high dunes - wer weather shelters transformed into shades.	- use of wind breaks - use of interior camps when winds are strongest, and associated food gathering in interior country - dugong camps on the beach. - water lily camps on coast and interior Interior dingo pups obtained wells dug in some camps	- windbreaks on beach - use of shades frequent - tulnul camps on coast - pandanus camps on coast - wells dug out for use	- use of shades in day - first mosquito camps - shades transformed into wet weather shelters - use of wells and rock holes as water sources

TABLE 5. THE SEASONAL FACTOR IN TRADITIONAL LARDIL LIFE

clearly remembers travelling between camps on the south-east side of Mornington Island in all of the *larumpenta* land (in A.D.A.:F5).

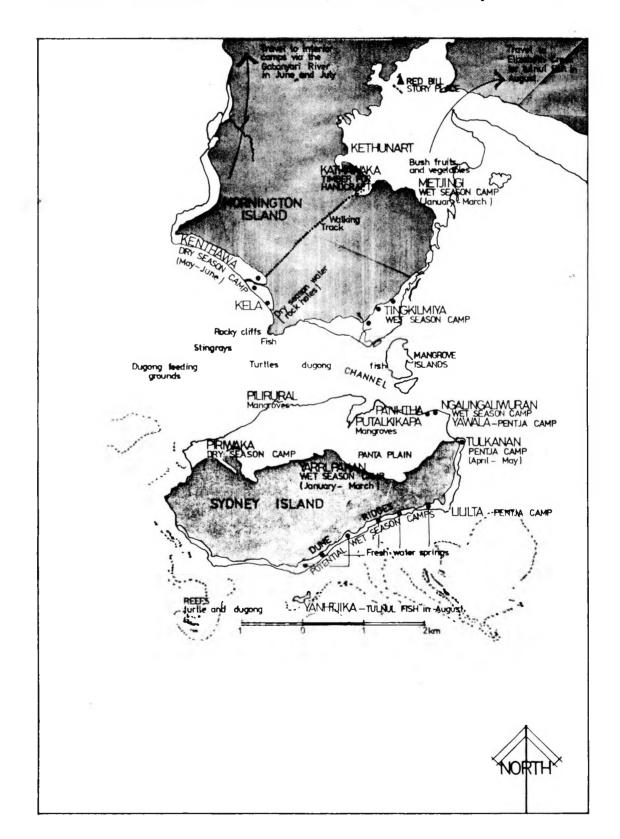
During the wet season the most popular camping place was <code>tingkilmi</code> (Roughsey, D. 1971C:64). F.J. remembers this well (in A.D.A.:F34): "Wet season camp [on] mainland side. My father tell everybody, well, we go over there. [It will] rain tomorrow. All Sydney Island people in one big camp till rain over. All <code>larumpenta</code> people together. All build humpies." This camp was likely to have some residents in it for the entire wet season. Dancing occurred during intervals of fine weather. Groups had the option of shifting camp for a time to other places.

The entire length of the high sand dune on the south-east side of Sydney Island (langungantji) provided potential wet weather camps. The elevation of these sites precludes the threat of tidal surges associated with cyclones, and reduces the likelihood of mosquito attacks. Beach springs issue out all along the base of the dunes on the seaward side. Big Barney was the tulmata of half of Sydney Island, and of all the land from kuraliya and kupare right back up the Gabanyari River to the north east. He enjoyed hunting turtle and dugong over the reefs off the southern side of Sydney Island. He was often found camping in the area with Kiwalpitja, the father of the contemporary Roughsey brothers.

A wet season camp was located at yarrlpakan in the interior of Sydney Island on an ancient sand remnant. This camp had no perennial well; water resources were only plentiful during the wet season. The nearby mangrove land systems of pilirural and putalkikapa yielded mudcrabs, mud shells, flying fox, maran fruit and fish caught with nets in the estuaries. Similar resources were obtainable from metjingi to the north of tingkilmi on nearby Mornington Island, a camp also lacking a dry season water source. Vegetable harvests were made from the rich and established flora in this sand-based land unit.

Yet another wet season option was to camp at ngalingaliwuran on Sydney Island (again, no perennial water source). Mangroves were nearby at panta where there was a secondary camp location. The channel between the mangrove islands of tumanhu and pekru was equally accessible from both ngalingaliwuran and tingkilmi. This was a favoured resource place. Nets and traps constructed of grass and foliage were erected at high tide to capture dugong, turtle and fish at low tide. From the base camp at tingkilmi parties could forage into the interior during finer weather, particularly to seek 'sugarbag'

SEASONAL CAMPS AND RESOURCES, Fred Jaurth's country



(wild bee honey), goannas, and vegetable resources. As the wet waned, some wet weather shelters were converted to shades and mosquito camp layouts were employed. Vegetable harvests continued and people looked forward to setting up pentja camps. Rain softened the mud in the swamps in which this plant grew, and it was easily dug up and the corms detached and cleaned. Tjaurt presided over the largest pentja swamp on Sydney Island at larrikriya on the tjilikan plain. Camps from which to harvest this resource may have been at either yawala, lilita or tulkanan on the nearby coast, as all of these camps had access to wells. A smaller pentja harvest was made at ngalpre behind piriwaka in Big Barney's sector of Sydney Island.

When the south-east winds commenced, mosquitoes became less troublesome. The spatial arrangement of camps transformed as domiciliary groups built windbreaks for night use. Waterlily camps were formed when this plant ripened. Tiaurt presided over the water lilies in the tinkilmi swamp, Big Barney presided over them at lelaka, walanhkerri and karra karra where Kupalathaltin (Dick Rough sey) was born. These beach camps at kenthawu were popular throughout the dry season. There are permanent water sources in the locale as well as a dancing ground, and they are all dugong and handcraft camps. There is a plentiful supply of kurrpara timber from kathawaka in the interior country behind. The sea to the south of kenthawu has extensive areas of muddy substrat where dugong feed on sea grass. At low tide they could be chased by hunters on rafts into a narrow channel near the coast, and netted. Stingrays can be easily speared on the extensive tidal flats in this area at low tide. The rocky base of the nearby kupare cliffs yield a reliable supply of large fish.

Across the channel on Sydney Island, a popular base camp and dugong camp was at piriwaka which also had a dancing ground. Relations with Big Barney's patriclan had to be well maintained by rjaurt, kiwalpitja and their families. The only dancing ground on Sydney Island was at piriwaka. These groups shared the resources of Sydney Island as well as the only crossing place between it and Mornington Island, from njilnjilkan to ngalingaliwuran. In June and July when the south-east winds intensified to disrupt sea hunting and fishing, all groups retreated up the Gabanyari River to meet the Lardil from around the entire island at the interior camps. The staple diet changed to freshwater fish, turtle, wallaby as well as vegetable roots and goannas. Dancing was regular. An initiation may have been held

as there was a ground in the area. (There was no initiation ground in F.J.'s country.)

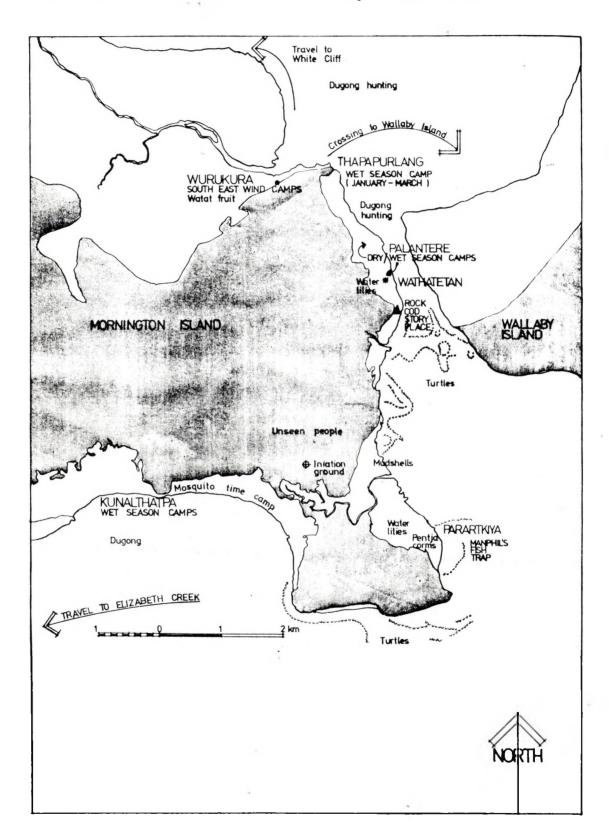
There were a number of coastal camps between Sydney Island and the Gabanyari River whose local resources were exploited during travel to and fro. K.B. (in A.D.A.:F2) describes his father's family returning from the interior camps via kenthawu: "Start from corner. Tarrankan, that's one corner. kanyantui, that's the other camp. ngampalkan, another camp. All belongs to fish time now, kalthat time, water lily, sugarbag. Move around that side of corner, yuwa. Get fish night time, rock cod. From there shift around kenthawu side, daytime fish, big fish, dugong..."

A second common direction of travel from F.J.'s country was along the coast northwards. Tjaurt's two brothers were tulmata over the adjacent country. Both were named Terry by the first missionary. They each had several wives and a number of grown sons with families, Billy Barmboo, Archie, Bad Peter, Shilling. F.J. recalls that his father often met his brothers at the Redbill story place on the kethunart plain near the boundary of their countries to decide on hunting and camping procedures for the immediate future. The combined groups may have then travelled to camp on Sydney Island, e.g. for the pentja harvest from larrlkriya. With Big Barney and his family in attendance, the total size of such a camp would have been in the order of 19 married adults, three single men and 16 children. On other occasions Tjaurt took his clan north into his brother's country, commonly called kanpa.

At about August, it was tjilkaralin, time of the 'month fish', the tulnul. Many groups moved north to Elizabeth Creek to prepare for the running of these schools of fish, including Tjaurt's family. This large tulnul camp contained all the lilumpenta division of the Lardil as well as good representation from the larumpenta and tjirrkarampenta. A few larumpen individuals may have preferred to remain on Sydney Island if relations with the lilumpen were not good at the time. Some tulnul schools pass close to yanhtjika. This is a small rocky islet connected by a sandbank and rock platform to Sydney Island at tukure where there is a freshwater lagoon at the mouth of Semen Creek (providing it had not been polluted by a tidal surge associated with a late cyclone in the wet season).

In September and October, people moved around many of their camps consuming ripe pandanus nuts and other seasonal fruits such as the wild fig kirrir and the tjirtal berries. F.J. recalls (in A.D.A.:F34)

SEASONAL CAMPS AND RESOURCES, Kelly Bunbujee's country



travelling south-west down to Jacko Jacob's country for feasts at pandanus camps during this time of the year. The oncoming hot weather was marked by increasing use of daytime shades. Freshwater had to be obtained by digging out wells in many camps, and some were eliminated from use if they lacked wells or lagoons. It was not until December that storms began to replenish surface water. Rock holes were exploited in the low cliff behind kela at this time. An important resource that ripened at this time of the year was the watat fruit of the Macrozamia palm. None of this species is to be found in F.J.'s country, and so Tjaurt had to rely on the generosity of his neighbours. The occupants of K.B.'s country were more fortunate as there were a number of these trees at Wurukuru and nyilnyilkuru (see figure 16).

In K.B.'s country, there were similar patterns of movement, exploitation of seasonal foods and use of shelters and settlement, Rather than reiterate this detail, discussion is here confined to mentioning the properties of the most important camps. The geography of this country is illustrated on the map in figure 8. Data on geographic properties to the west of his country is not accurate on this map, being the subject of ongoing fieldwork. Until the first missionary arrived in 1914, K.B. travelled with his family (including elder brother C.M.) no further south-west than the Sandalwood River on the north-west coast and Elizabeth Creek on the south-east coast (C.M. in A.D.A,:F18). In c.1913 the tulmata of K.B.'s country was his grandfather Tipriti (rock cod) who was soon to be succeeded by K.B.'s father, Panpatii. Regular social interaction and joint exploitation of resources occurred in K.B.'s country with all the lilumpen patriclan groups, especially with (a) the group to the south-west headed by kungkamiro, a famous song man; (b) the group to north-west led by kupankul, and (c) those occupying Wallaby Island (lingungantji) led by Gussy.

The highest camp, suitable for evading tidal surges associated with cyclones was at thapapurlang. This camp had perennial water sources as well as a dancing ground. The beach here was well known as a fighting place (K.B. in A.D.A.:F19), and from it one could proceed to cross the channel to Wallaby Island. Dugongs were caught with nets in this channel and people slept out on sandbars with fires of pandanus wood (allegedly for good luck in hunting).

Palantere and wathatetan were another two adjacent wet season camps. The residents of these camps subsisted on mangrove fruits,

oysters, crabs, fish, dugong, honey, roots, and other vegetables (K.B. in A.D.A.:F30). K.B. once drew a map of a wet season camp at wathatetan that shows 28 wet weather shelters containing 38 married adults, two widows, ten single men and 27 children. Of these humpies, 15 were occupied by <code>lilumpenta</code>, five by <code>larumpenta</code>, four by <code>tjirrkarampenta</code>. (The investigator failed to obtain the geographic identity of the occupants of the other four shelters.) These two camps also had perennial water supplies. At <code>wathatetin</code> there are large water lily swamps surrounded by <code>Melaleuca</code> trees whose trunk diameters were up to half a metre. These provided plentiful sheeting for shelters.

The most important base camp in K.B.'s country is at parartkiya where people were commonly found for much of the year. It was renowned as a popular dancing centre amongst the lilumpenta(K.B., C.M. in A.D.A.:F19, F27). This camp is rich in resources with pentja, water lilies and many other vegetable resources available from the low open forest well established on the sand platform behind (see figure 6). There is a large rock reef off the coasts which informants say is a turtle, fish and dugong trap constructed by their ancient ancestor Manhpil.

Because of the location of K.B.'s country, well to the east of most Lardil lands, travel by other groups to his country was less frequent than travel by his own group to the more central meeting camps such as on the Sandalwood river, and at White Cliff on the north-west coast where Quack was initiated at about this time (C.M. in A.D.A.:F27). Elizabeth Creek in Gammon's country was another venue for initiations especially during August and September when many Lardil gathered at the tulnul camp for feasting (F.J. in A.D.A.:F5), There was no regularly used initiation ground in K.B.'s country at the time (only disused ones). Nor was there any significant stand of kurrpara trees. Handcraft camps were located at other places in lilumpen land, including Elizabeth Creek. Informants recall Yangkal people being at this tulnul camp and C.M. (in A.D.A.:F18) remembers several Yangkal taking lilumpen wives.

The sociogeographic units discussed at the beginning of this chapter can now be re-examined in the light of the models constructed of population movement, as well as other data.

The sociogeographic units of the Lardil re-examined

The social cohesion of the Lardil as a tribe was maintained through economic solidarity, a common social structure and language,

173.

a food-sharing ethic, familiarity with their lands and fear of other lands and strangers, although interaction with the Yangkal was acceptable and necessary. It will be demonstrated in the next chapter that shared ethno-scientific knowledge and religion, and typical Aboriginal ethnocentrism concerning such knowledge, were additional factors contributing to social cohesion. These factors have been well noted by Peterson (1976B:4, 8, 10) in his examination of the concept of 'tribe'.

Lardil people had pedestrian access to all of their land. The channels separating Wallaby and Sydney Islands from Mornington Island could be traversed on foot at low tide. In contrast, the channel between Denham and Mornington Islands is too wide and deep to cross by foot. The Appel Channel was suited for defense, its natural properties permitting good boundary maintenance. I Its width is approximately 750 metres at the narrowest part and its length some six kilometres. This permitted ease of observation from high vantage points (such as titjinkiya), of people crossing by raft, except when nights were moon-less and dark. Relations with the Yangkal were normally friendly so as to permit exchange of objects, wives, dances and knowledge. Rafts were used to effect boundary permeability. The Appel Channel was an important source of marine food and it is probable that bands consisting of members from both tribes hunted and feasted together in peaceful conditions. C.M., on recalling his initiation (in A.D.A.:F18), said that he and Lardil man Big Barney underwent the ceremony with three Yangkal men, including Barney Charles, at kunana, a place on the Appel Channel. (This was several years prior to 1920).

Although Mornington Island could be easily crossed on foot (the most athletic men could travel its length in a day), there was a tendency for people to stay on the coast for reasons discussed. In this sense the population was geographically extroverted, oriented to the sea from the island perimeter. This was expressed in settlement use as well as geographic naming. The entire island could be described as a 'sociofugal space'. This term was originated by Osmond (1969) to describe spaces which cause people to move to their periphery. Social interaction was more often in a circumjacent direction. This behaviour may lie at the origin of the three or four sociogeographic groups defined by direction (larumpenta, lilumpenta,

^{1.} Although the channel is a physical boundary there are no exact boundary points or lines on the water surface or sea bottom that informants can point to. In this sense it is similar to boundaries between the islands of the Tiwi as reported by Pilling (in Lee and DeVore 1972:156, 157).

etc.). The ethnocentrism of these groups was expressed through fighting and in ceremony, as described. In the next chapter mention is made of how these groups were likely to transform cosmological knowledge to suit their own geographical perspective. This social ethnocentrism and outward spatial orientation was countered by other factors causing social networks to cross, and so reinforce tribal identity; factors such as use of interior camps in winter, joint seasonal exploitation of rich resource centres, large feasts, exchange of wives, large dances and initiation ceremonies. An individual was able to identify with resource centres and story places other than those in his own country through cognatic and agnatic ties and through the multiple totemic system operating amongst the group. 1

The sociogeographic unit of the patriclan country was well defined demographically with most individual patrilines being able to trace their claims back at least three or four generations. Its geographic definition however was well-defined only in part. Specific boundaries separated coastal land systems. Claims were made on isolated economic resources, magico-religious sites, and settlement locations with proximate resources and places for social activities. Boundaries in the interior land systems and marine systems were ambiguous. ² However the sociogeographic constructs of the Lardil are sufficiently established to refute Tuan's claim (1977:157) that "Aborigines have no rules of land ownership and no strict ideas of territorial boundaries."

On a large time scale, some of these sociogeographic units were undergoing change due to demographic fluctuations. One man may see several countries undergo fission or fusion in his lifetime. In such cases strongly individualistic Lardil men forced their claims by carrying out necessary square-up fights with challengers. Individuals were probably more interested in acquiring land to gain politico-magical powers rather than economic rights. At least this is the case today. Traditionalists make claims in the belief that power comes from being intimately associated with story places. Mention of this also occurs in the next chapter,

The boundary properties of patriclan countries can be seen to be similar to those of named places on the coast. Definition is

l. Lardil totems will be discussed in the next chapter. One method of identifying closely with land outside of one's patriclan country is through one's birth country rights.

^{2.} The absence of hard territorial boundaries is not uncommon amongst other Australian Aboriginal groups (Hiatt, Pilling, in Lee and deVore 1972:157).

provided across coastal land systems but is ambiguous towards the sea and the interior. Fixed boundaries coincide with natural features in many cases. The concentration of place names in the coastal land systems appear as a form of adaptive cultural behaviour in support of the socioeconomic and religious importance of these areas.

Debate on the validity of the concepts of 'clan' and 'band' or 'horde' is common in the Australian Aboriginal literature, especially by Hiatt (1962), Stanner (1965) and Peterson (1976A). It is argued here that both of these units existed amongst the Lardil. The Lardil bands were population units of variable size and distribution. They might range from a single family to almost the whole tribe and did not necessarily correlate with the unit of patriclan. The band was most commonly two or three families according to Dick Roughsey (1971A:95). Individuals might temporarily join a band in any patriclan country in which friendship and/or kinship ties were adequate. An individual could employ such bonds to take advantage of a rich food resource that might become available for exploiting at a particular place. Alternatively an individual might decline to participate in such a large scale activity and choose to operate within a small band context.

There was often the option of choosing between a number of combinations of economic activities. A band would normally contain a nucleus of members of the local patriclan country. Its range was from the camp locale but this was never limited by patriclan country boundaries. In this context the Lardil can be regarded as a "unitary resource holding corporation", a term used by Basehart (1967) to describe the Mescalero Apache of south-west United States and Mexico.

The changing structure of the band was partly controlled by principles of hunter-gatherer ecology such as conservation of effort, seasonality and scheduling, division of labour, imminence of diminishing returns, desire for mixed diet and the sharing ethnic (after Peterson 1976C:8-12). Social factors such as internal conflicts, joining together for dance, etc., also caused the transformation of band structures.

Local movement between places as the basis for remembering geographic knowledge

Informant F.J. prepared as a gift for the investigator ten carved sticks, and in a structured interview situation, provided an explanation of the meanings of the marks that he carved on the sticks (in A.D.A.:F26). Most of them were maps of areas visited by F.J., the investigator and others whilst recording local geography.

"Stick show where you me walk and go in dinghy" (F.J. in A.D.A.:F20). One stick however depicted features of all the North Wellesley Islands. An example of one of these sticks is illustrated in figure 29, together with the names of places that F.J. said were depicted on it. It shows places in and near F.J.'s country, featuring the flood making story place at pitjinatji off the east coast of Sydney Island. The series of seven rectangles represent the underwater rock caves or openings to which white ochre is taken to induce a flood.

- F.J.'s descriptions of his sticks contained many references to the following units of place:-
- (i) He referred to natural features such as sandbank, river, plain, island, etc. Many of these units were portrayed as having an active role in the environment, e.g., by the use of phrases such as "land go round that way", "place got em well", such and such a place meets another place, one place "cuts off" another place. This was particularly the case with the sea: "sea make sandbank", "sea put mark on sandbank", "sea get low water", "sea come this way", "sea stands on end" (or "on side").
- (ii) Many special place types were mentioned such as wells, dancing grounds, story places, resource places, camps and associated shelters.
- (iii) Numerous Lardil place-names were elicited as well as some larger geographic units. F.J. consistently presented place-names as if he was taking the listener for an imaginary walk through the environment along traditional bush roads. He used phrases such as "you me go, go, go", "come back", "finish here", "cross here", "you come, come, go round", "from here you go", "go right up long here", "little bit of a ridge you go along". He took great care to name the places in proper sequential order according to traditional movement practice, i.e. predominantly along the coast or along large rivers. The following citation represents a typical example of F.J. expressing his geographic knowledge (in A.D.A.:F20). The places he is describing are in Yangkal tribal country, around Denham and Andrew Islands. "Mm. Start from this point, walkiyan point near Andrew Island. This one walkiyan, then kunkuntji. Then from there tjiliruul. Then tapara. Then from there, kitjiki. Then from kitjiki, pupu. Then from pupu, kununkuru. Then from kununkuru, malkake. Then from malkake, wanhankan. wanhankan round that side. wanhankan.

Then, unapun landing...where that aeroplane. then come. This way now, come back this way again. Little river here, tjilinkran. Then come kurkan. Then from kurkan, from kurkan, murukakurathe. Then from murukakurathe, kunyilka. Then from kunyilka, pitjakan. Then from pitjakan, wutjakakalka..." and so on.

At times the investigator asked F.J. to change his attention to a different part of the stick under examination, but he always insisted on continuing to name places in their correct geographical sequence as expressed by the traditional local movement routes, i.e. bush roads. F.J. demonstrated the same recall procedure whilst eliciting places in the contemporary mission (in A.D.A.:Fl), as did E.R. and Kirk Jacob when making their maps of the mission also. Similarly K.B., when he made a map of the geography of his country. (Some examples of these 'cognitive maps' are in Appendix 3). This evidence suggests that for F.J. and some of the other Lardil informants, geographic knowledge is decoded from memory in a sequential operation as if one is going for an imaginary walk through the environment along traditional bush roads, and naming each place as one comes to it. ²

F.J.'s sticks display some further interesting properties of Lardil thought. Whilst F.J. was eliciting place names it appeared that each mark on each stick was the symbol for a specific place. Suspicion that this was not the case was aroused when describing one stick, F.J. said "you want to put pekru?", as if he was specially composing sequences of names suited to the investigators' knowledge and travel experience. Again at another mark he said "you want to go up the river, aye?", and "which way you follow now?" {in A.D.A.:F37). The investigator tested this situation by getting F.J. to rename some places on several sticks after a period of a few weeks had elapsed. F.J. was able to easily remember the general theme of each stick. He would point to a visually outstanding mark that was definitely a permanent symbol of a place in his mind, e.g. the series of rectangles on the flood story place stick, or a long wavy line as representing the Gabanyari River. However, F.J. could not name the same sequences of places that he had done before. ³ He either needed prompting or simply

^{1.} Phoenetics may not be accurate for all place names.

^{2.} This is not dissimilar to research done with Western subjects, e.g. Canter (1977:78) reports that when people are asked to draw a sketch map of their neighbourhood their sketches are likely to emphasize routes between places rather than their absolute location.

^{3.} The same occurred when F.J. was asked to recall the places on his map of the mission settlement.

178.

began to follow an alternative imaginary path commencing from a visually dominant symbol that he specifically recalled. When other informants were shown the sticks (e.g. K.B. in A.D.A.:F17), they chose particular marks and imposed definite meanings on them, but they were seldom the same as F.J.'s interpretations. It became evident that whilst some marks did symbolize something specific or at least suggest a number of possible interpretations, most marks could represent anything. They displayed a high degree of polysemy as did the sets of marks used on traditional message sticks discussed previously.

Since multiple interpretations of the stick's marks are possible both by the manufacturer and other individuals, the sticks appear to be merely an artifactual medium for the expression of conceptual systems and as such, play a minor role in determining the nature of such expression. They can hardly be said to signify a symbolic system of geography. F.J.'s sticks play no role in the culture other than as gifts to the investigator in the form of decoratively carved sticks inspired by geographic experiences.

The nature of these sticks reinforces the point that the Lardil were entirely dependent on memory to store their geographic knowledge - formal cartography had no special role. ² The cognitive emphasis on coastal movement systems in Lardil geography was reinforced by another concept commonly used by informants, and characterized by the Aboriginal English terms 'outside/inside country'.

The spatial dialectic of 'inside' and 'outside' in Lardil thought

A spatial concept that has an important role in the definition of Lardil place is that of 'inside-outside'. The distinction between the interior land systems and those of the coast is expressed in Aboriginal English by the terms 'inside country' and 'outside country'. Outside country was the main focus of socioeconomic life, but the interior played a vital part in balancing food needs. Outside country was clearly divided amongst patriclans in contiguous segments in a band of land concentric to the island. Inside country was jointly shared, except for isolated resource places claimed by individual

2. This is supported by the difficulties informants experienced in reading maps and aerial photographs. Nevertheless contemporary informants well understood the concept of a map and the need for orienting maps.

^{1.} Another incident occurred to support this claim. One day K.B. examined a geological map of the North Wellesley Islands and the nearby coastline of the Gulf of Carpentaria. Upon being told that it was a map of his country, he agreed, but decided it was a map of his patriclan country rather than all of the Lardil lands. He began to point out specific features and named sequences of places. Not only did he impose the local geographic properties of his patriclan country all over the North Wellesley Islands but on to map symbols in the margins of the map as well.

tulmata; it can be regarded as 'company land'. In Lardil, the inside country was called wirtawampal, and the outside country kela (sandbeach, beachside) (K.B., F.J.:F30, F37 in A.D.A.). The sea (mela) and reefs were outside again from the land.

Another example of the usage of inside/outside occurred when F.J. (in A.D.A.:F20) described the stone formations of the redbill story place in his country. The large central stones are the 'inside stones' whilst the surrounding pebbles and small stones are the 'outside stones' (see figure 32).

The terms 'inside' and 'outside' are used commonly to describe the spatial nature of shelters. The concept of inside-outside is well recognized as the spatial basis of shelter by some architectural philosophers, e.g. Aldo van Eyck and Charles Moore, and is an important place-making device. Biernoff (1974:8) has recognized the same for the Nunggubuyu at Numbulwar: "...aboriginal society appears to make a crucial distinction between enclosed and unenclosed space. It is observed in the differences of function between structures which enclose and those which do not... "He defines an enclosing structure as one with a roof and two or more walls. As is the case for the Lardil, enclosing structures amongst the Nunggubuyu are for storage and sleeping, whilst social interaction and family activity is externally orientated. "The distinction is physically related to the degree of visibility of those in the structure, and their field of vision out from the structure. In most situations, it is desirable that the vision not be limited either way". The distinction between inside space and outside space carries important psychological connotations that few ethnographers have noted. Biernoff, however, perceives them well (1974:8):-

"Part of the explanation for this behaviour is that secrecy is feared. Behaviour which is hidden is secret and enclosures effectively hide behaviour. A more positive way to look at it is that public behaviour is encouraged. It shows that one has nothing to hide or to be ashamed of. Therefore, positive social value is placed on visibility and negative on invisibility. Just as one's behaviour should be visible one also desires to be able to see all one's surrounding and to observe, if so desired, what others in the community might be doing. This satisfies the emotional needs to know one's surrounding to be aware of the presence of the community, and the requirements of

^{1.} Rapoport (1972:1) makes reference to their ideas.

of basic curiosity and, perhaps, safety, to know where everyone else is, what they are doing, and who they are with."

The dialectic of inside and outside is a powerful generator of spatial propositions in many cultures (Bachelard 1964:212, 215). To be inside one's house is associated with privacy in the West. But unlike Western cultures, the concept of privacy was not associated with security amongst the Lardil. To be inside a wet weather shelter during fine weather during the day and without good reason, was to be open to suspicion, and thus to be insecure as Biernoff observed. Whilst outside, one's behaviour was exposed, portraying an absence of shame. On the other hand to be inside a humpy at night was to be secure whilst outside was rain, cold, dark and unknown. When people were in their 'outside country', they were in their own patriclan country by the sea on the beach or dunes, exploiting the staple resources of the coastal zone. Camps were sited in exposed places with good visibility to the sea and along the coast, a frequently used bush road. These were secure places. On the other hand, inside country meant to be in the bush with a limited visual field, visually hidden from the coast, and on company land, a not necessarily secure place, especially from the perception of the child. The spatial dialectic of inside/outside conferred spatiality on conceptual oppositions of a far more profound nature in Lardil cosmology. This subject is pursued in the next chapter. Conclusion

In the first part of this thesis an initial examination was made of the nature of place. Important methods by which properties were imposed on the environment to differentiate place included (1) enactments of behaviour in a space; (2) the association of concepts with a space; (3) through the physical alteration of the environment in a space. The data discussed in this chapter clearly support the role of these three sets of properties in defining places in Lardil culture, and as well, shows that there exist other factors generating or helping to generate places in the Lardil world. The findings in this chapter on these forms of structural associations between phenomena are now summarized.

In the first part of the chapter it has been demonstrated that social units play a significant role in the definition of place. The term 'sociogeographic' has been used to refer to the class of associations between social groups and territories. There are three examples viz. at the level of tribe, the four social divisions by

direction, and patriclan countries. Boundaries to the last two unit types coincide with boundaries between various pairs of named places, and therefore have the same boundary definition characteristics as named places. The examination of the geography of named places also revealed that their highest concentration occurs in the coastal land systems. Coastal places were most extensively used by the Lardil people, and they contained the majority of special place types such as camps, water and food resources, story places, as well as a concentration of boundary properties. It can be argued that there was a more intense perception of place on all of the coast, than in most of the interior.

Most named places consist of segments of coastal land systems whose boundaries are at approximately right angles to the coast.

One might expect to find the circumscription of each of these coastal places to be made complete by a boundary off the seashore, and one in the interior land systems. But this is not the case. Such boundaries parallel to the coast seldom exist or are loosely fixed.

Channels were at times used as clear boundaries between island units. Such is the case with the Appel Channel. However in F.J.'s and Big Barney's countries this natural feature is not used, and the boundary between these two patriclan countries is also at right angles to the sea channel. Sydney Island was divided into two (with only one pedestrian crossing). Such was the economic importance of coastal resources and places to the Lardil.

The coastline itself acted as a natural boundary, but its definition was complex because of tidal rise and fall. Littoral zones, although transitional in their natural land/sea properties, were considered to be within the realm of entities living in the sea. These are examined in the next chapter,

The transition between sand based systems and the Mornington plateau is usually fairly abrupt. It is an easily identifiable natural boundary. A cognitive mechanism, used at times to distinguish these coastal land systems from the Mornington plateau is the spatial construct of 'inside-outside',

Natural features of the landscape provided other place properties in addition to boundary definition. Resource places such as water sources, ochre and stone deposits, the habitats of useful fauna and flora were fundamental to the hunter-gatherer lifestyle, as were movement corridors, comprised of land systems that were relatively easy to travel through. The environment contained a wealth of places,

distributed, named and with properties, significant to the Lardil. Because of the absence of physical man-made properties, they may mean little to the Western observer. (Rapoport makes a similar conclusion (1972:10).)

Although artifacts in the traditional Lardil culture did not have the same important place-defining role as they do in Western society, nevertheless they contributed important properties to place. This is particularly the case for the campsite - the domestic domain of Aboriginal life, the store for domestic things, partly defined by the presence of shelters and/or fires. Here some specialization of storage of artifacts in places was to be found.

The use of sacred and symbolic artifacts was largely confined to the dancing and initiation grounds. Symbolism was not attached to camp layouts other than through social groups occupying particular areas of domiciliary space. Nor did temporary things such as shelters and fires have any elaborate system of symbols attached to them.

Each Lardil patriclan country contained multiple campsites (e.g. about nine in F.J.'s country, and 17 in K.B.'s). At any given time most Lardil campsites were unoccupied with minimal physical structures or markers to indicate their function. In this way physical things did not contribute to continuity of property at place. However because of the consistent pattern of usage of camps, each one was likely to remind an adult of his or her individual experiences there - a wealth of memories, daydreams, nostalgia extending back in time through the many seasonal cycles of land movements.

Camps were complex units of place. Size and length of occupation varied. They ranged from small camps occupied by one or several domiciliary groups for a few days to large camps of a specialized nature containing several or more sociogeographic groups for up to six weeks when concentrated food supplies were avilable. Such options of camping style were made within seasonal parameters. Seasonally available foods together with prevailing and local climatic changes were factors influencing variables such as size and spatial structure of camps, shelter types, hunter/gatherer methods, use of certain artifacts, diet, and movement patterns. Such seasonal camps were

^{1.} The investigator's data on the Lardil in 1914 are not sufficiently detailed to estimate the exact range of size and composition of camp occupants. It would appear to be comparable to the Nunggubuyu for whom Biernoff reports (1974:10) that family size varied from 2-15, lineage clusters from 1-5 families, clan groups from 1-4 lineages and that overall population rose to two or three hundred.

often economically specialized, e.g. the dugong camps, handcraft camps, water-lily camps. Thomson (1939, 1949B) reported the same for the Wik-Munkan on the east of the Gulf of Carpentaria and for the tribes around Blue Mud Bay on the west of the Gulf. However he did not identify the social motive as influencing movement of people. For the Lardil, both seasonal and social factors affected the allocation of an individual's time at each camp in Lardil lands. Most time was spent based in coastal camps. Sociogeographic divisions did not restrict movement right around the island's perimeter.

Such movements and activities conferred time properties on places, e.g. when one might expect to find people at a particular camp at a particular time of the seasonal year. These transformations in population distribution tend to form a cyclic structure roughly correlating with the seasons. Another important factor influencing hunter/gatherer behaviour was the tide. This also tended to impose regular time properties on place in terms of when adults exploited littoral and marine resources as against when they would most likely stay in camp.

Characteristic episodes of molar behaviour are important components in the definition of many Lardil places. Typical sequences of behaviour are increase activities at story places, preparatory activities for dance at make-up grounds, establishing and breaking camps, patterns of exploiting resource places, digging out wells, forms of square-up behaviour, etc. The behavioural structures at dancing grounds and initiation grounds are sufficiently complex to result in the generation of repetitive forms of behaviour that can be described as behavioural settings (after Barker and Wright 1955, Barker 1968). Such institutionalized forms carry attached systems of rewards and punishments to enable maintenance of their properties.

Punishments for illegal access to, or use of places implied that such places were dangerous in certain ways. Most restrictions were imposed on women and children. They were usually not given access to Lardil initiation grounds and dance practice grounds. Violation resulted in punishment by force in many cases. As noted before, it was believed that a woman, pregnant with a son, would bear her son circumcised if she approached too closely to an initiation ground without a firestick. Restriction on access to initiation grounds were partial only, with some fixed times of admissable attendance during the ceremony.

Unruly behaviour at story places was forbidden and the juxta-

^{1. &#}x27;dangerous' in the sense used by Maddock (1972) in discussion on the Gidjingali of Arnhem Land.

position of certain classes of things in the marine and littoral systems was considered dangerous. The perpetrator was likely to be inflicted with sickness, a punishment from the creature/s of the sea. Such restrictions were functions of beliefs concerning supernatural entities in the environment. These are discussed in the next chapter. Access to some seasonal plant resources was forbidden for much of the time, and violation punishable by force. This form of restriction was largely a function of Lardil sociogeographic organisation.

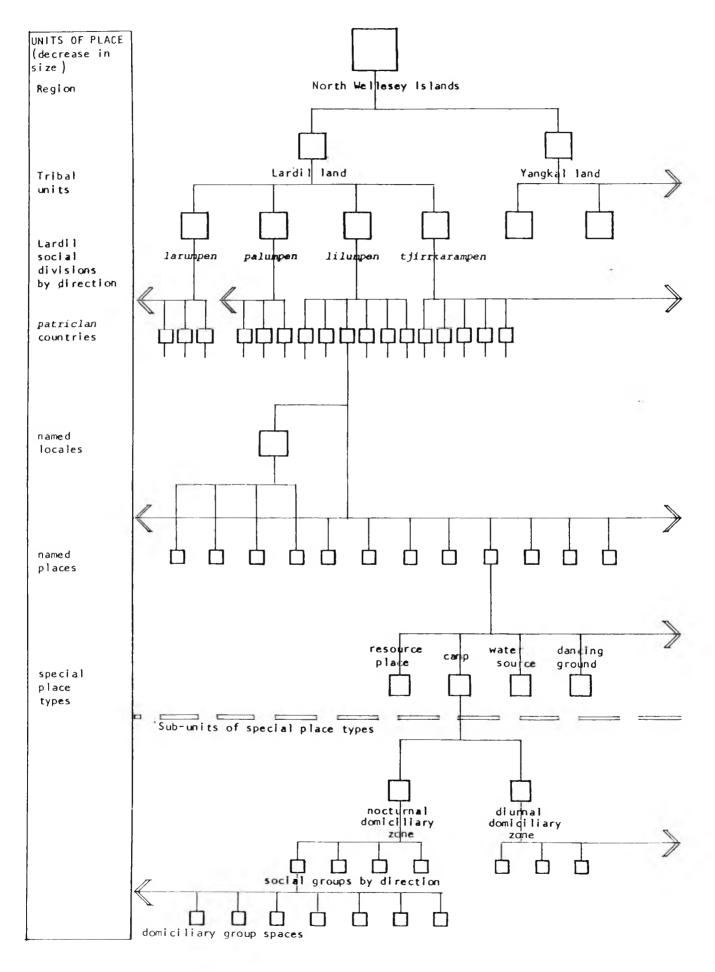
The consistency of these behavioural customs at places is supported by the psychological emphasis on 'correctness of way' or method. This is the Aboriginal trait of insisting that an activity be performed in the correct socially prescribed manner. It was rigidly observed in magico-religious activity and ceremonial behaviour. Such practice indicates how places can display permanency of behavioural properties over long periods of historical time, although there are no permanent physical structures to mark them.

Important time properties were conferred on place inside large camps (i.e. on subplaces of camps). Behaviour tended to be focussed in particular zones during the day and at others during the night. Subunits of place within camps were also defined by the social identity of residential groups. There was a spatial definition, or underlying spatial structure, associated with the units of the domiciliary group (nuclear family, single men, widows), the patriclan, and the social groups by direction (larumpenta, lilumpenta, etc.).

The identity of social groups with resource places was reinforced by social customs concerning resource access, inheritance of rights of resource control, and division of resources. Totemism is discussed in the next chapter, and is another factor linking social groups to places. The spatial behaviour of the Lardil is qualitatively different from Western behavioural norms. Lardil concepts of privacy, crowding, possession, extent of personal space, attitude to land and resources, social identity, all generate unique behavioural patterns such as use of enclosures, rules of access to places, population density, spacing and orientating in small groups, territorial division and ownership, and use of territorial resources. Such behavioural traits thus provide unique cultural properties at Lardil places.

The older Lardil adults had experienced the properties of most places in their spatially limited lands, and communication of geographic knowledge presented no difficulty between such individuals. However explaining geography to younger adults who had not travelled

A SPATIAL TAXONOMY OF TRADITIONAL SECULAR LARDIL PLACES; Classification by size and place type.



to all places throughout the North Wellesley Islands required the teaching and acquisition of a repertoire of geographic constructs. How then did the Lardil measure distance and thus quantify space and extent of place in communication? Elkin has said (1969:94) with respect to Australian Aborigines that "Abstract concepts of distance, measurement and number are irrelevant." Like other Aboriginal groups the Lardil distinguished only a few numerals (four). There was no refined quantitative measurement of space but qualitative means were employed. Distance was measured in terms of how far one could travel in a day or a subunit of a day. The day could be divided into time segments using criteria such as intensity of light, position of sun and behaviour of daily wind cycles. Direction was communicated by pointing; and described by reference to prevailing wind directions, coastline orientations, sun positions, and known place locations. Spatial location was determined by reference to known physical features, place names and other place properties.

"Aborigines individualize: they do not enumerate and produce totals. They do, however, often draw a stroke on the ground as they refer to each individual person or animal, but they do not count the strokes." (Elkin 1969:95). This was seen to be the same method used by the Lardil for recording a quantity of information on message sticks, and by some Lardil informants whilst drawing maps of named places.

Cognitive maps of named places are operatively stored as sequences of place names corresponding to travel experiences. Regular coastal movement provided the operational basis for memorizing the extensive system of coastal geography. Similarly historical knowledge is stored sequentially in its correct time order but without any system of quantitative time measurement. The cognitive operations used by the Lardil in spatial measurement and mapping are not always those emphasized in Western culture (e.g. scale, planar geometry) although orientation is always considered important.

There occurs an obvious hierarchy of size amongst Lardil place types. It is possible to categorize the places that have been described in this chapter into a taxonomy or classification based on the two variables of (i) size and (ii) mutually exclusive Lardil categories of place. This is depicted in figure 30. A large place can be broken down into a number of spatial subunits that are definable places in themselves, members of a different category in the hierarchy. Thus a named place may contain a number of place types within itself such

as a water source, a campsite and a dancing ground. A camp may then be divided into nocturnal and diurnal domiciliary areas, and thence into domiciliary group areas. A dancing ground may be divided into places for songmen, dancers, audience. The boundary properties of the categories in the classification may or may not be similar, e.g. the boundaries of named places also serve as boundaries to patriclan countries and the social divisions by direction, but not for the nocturnal domiciliary zone of a camp, nor for a story place. Some boundaries display a higher degree of permanency than others. The boundaries between coastal named places tend to be fixed, as does that between the Lardil and Yangkal tribal lands. On the other hand the boundaries between the four social divisions may have experienced relocation in a period spanning one or several generations of people, The social and physical reasons for such dynamics have been mentioned. Many named places and special place types are within a single visual field whilst the larger units cannot be perceived in a single sensory experience and in this context were abstract units whose collective physical properties had to be stored in a cognitive map.

What were the origins of Lardil place knowledge? The answer to this question is beyond the scope of this study, for to build such a model is to enter into the dimensions of phylegeny, and the emergence of language and cognitive style,

At the elementary level traditional Lardil places were (and still are) named pieces of environment, but a detailed examination of the subject reveals that individual places consist of compound properties and inter-relationships. Important properties that helped to define secular places include the regular enactment of behavioural units, temporary articulation with artifacts and shelters, natural landscape units (flora, soils, rocks, fauna habitat), association with social groups of people, natural time properties (seasonal, daily,lunar), place names and other conceptual associations such as memories, historical significance, location in one's cognitive map, etc.

Discussion on these properties will be resumed in the last chapter.

Some comparisons of aspects of man environment relations have been made between the Lardil and other Aboriginal groups. For example it has been seen that close comparisons can be made with Biernoff's data on the Nunggubuyu (which he says (1974:273) is typical for eastern Arnhem Land), at the levels of settlement organization, use of structures, relation of structures to camp, features and patterns of social space and habitation. Contrasts between the two ethnographies

are seen to occur in shelter types and land usage patterns. Such dissimilarities may quite easily lead to different qualities and types of places. This suggests that it is premature to generalize across the continent concerning the nature of Aboriginal place.

The Lardil cosmological viewpoint provides a conceptual framework for imposing even further unique properties on Lardil places.

CHAPTER 5 THE VISIBLE AND THE INVISIBLE - LARDIL COSMOLOGY
AND COSMOGONY

Introduction to sacred Aboriginal beliefs

Although the information contained in this chapter is not strictly secret, it represents important aspects of the religious beliefs of a contemporary cultural group, and should be treated with respect and discretion.

"The adaptation of man, Homo sapiens, to his environment is mental as well as physical. The world has to be lived in with the mind as well as in body. Man sees the world, and indeed needs to see it, as an intelligible phenomenon.... Man everywhere and at all times evolves a philosophy of his universe in which "he lives, and moves and has his being". Earth and sky, light and darkness, life in its manifold forms including man himself, and the phenomena of growth, decay and death! These are none of his making. They have preceded and precede every generation. But they challenge thought and action because inherent in them are the problems of continuity and change, regularity and contingency." (Elkin 1969:85)

Despite the cultural diversity of Australian Aboriginal groups the literature suggests that many of them shared a common belief in a concept called the 'dreamtime' (Elkin 1969, Berndt 1974). This concept provided the basis for explanation of much of the behavioural and intellectual fabric of everyday life, referred to generally as 'the law' - all customary and socially sanctioned behaviour patterns. The underlying concept of the dreamtime was fundamental to national religious and philosophic beliefs. However there is also much that was unique in the beliefs of individual groups. In the case of the Lardil it will be demonstrated that much of their belief system was a direct consequence of their relation with their environment. A dependence on exploiting marine resources from an island base, provided a set of cultural experiences and perceptions of experience that, in turn, yielded an individual ethnic model of reality.

First it must be asked what is or what was the Dreamtime? A superficial interpretation of this term is that it refers to the mythical past, a time at least 20,000 years ago (Gill 1963) and probably much longer, during which Aboriginal man and other fauna and flora were adapting and evolving in a continent of changing environmental conditions. Aboriginal history is concerned with this time and contains accounts of the doings of ancestral beings, some of whom seem to have been animal, some human, but in most cases a combination of both (Elkin 1969:86, Munn 1970:143). According to Lardil history, all the animals had human qualities at that time (Roughsey, D. 1971C:57). Individuals were a synthesis of a human and an animal or plant species, or some other natural phenomenon, e.g. dog man, barracuda man, yam woman, tree man, moon man, etc. Herein lies the basis of the Aborigine's belief that he is bound to nature with a common life force, not separate from it (Berndt 1974:10). These ancestral beings originated the moiety and semi-moiety system (L.R. in A.D.A.:F43), travelled about the country, interacting with each other and with the environment, experiencing adventures, making places, leaving signs of their presence, even parts of their bodies, and eventually dying and/or going into the ground or sky. These activities of the ancestors are said to have left traces of their energies in the environment. Generally speaking every unit of tribal land in Australia contains a set of travel paths crisscrossing the landscape, in which focal places occur that were created by these ancestors. They "had power to transform the landscape, and even to be transformed themselves into natural phenomena, such as rocks and trees, which then became and remained the sacramental repository of pre-existent spirits and "life-cells" associated with the particular heroic figures." (Elkin 1969:87). That is to say the ancestors seemed to have unlimited sources of energies which were reproduced and deposited at places they made, even touched. Energies were also left in the environment in parts of themselves, such as faeces, sperm, broken bones or limbs, etc.

This introduces a more complex definition of the Dreamtime. Certain properties of energy from a distant historical time continue to exist into the present at these sacred sites. Such energies may be transmitted to contemporary humans through their associations

with such sites, either through birth or through ceremony and ritual at them.

Many groups believe that the energies for human reproduction were derived from special sites in the landscape and remain in the conceived individual forming a permanent link with that particular site as well as with their ancestral origin. This modern manifestation of ancestral energy is what Strehlow (1970:132) refers to when he says "....the great and specifically Australian contribution to religious thought has been the unquestioning Aboriginal conviction that there was no division between Time and Since every person carried within himself, through reincarnation, an immortal spark of life derived from the original supernatural personages, men and the totemic ancestors were believed to be interlinked inseparably "and further, what Elkin (1969:93) meant when discussing Aboriginal time: "The past....is the immediate condition and context of his [Aboriginal man's] behaviour, and this is an aspect of the present and of the immediate future." (Similarly Berndt 1974:7).

The question which does not seem to be clearly addressed in the literature, and therefore possibly not in Aboriginal thought either, is how did animals and humans become separated as Why are there no animal-human biological entities personages? existing today? One may speculate as some have done, that there was a split in time which was accompanied by a transformation in fundamental biology. Kangaroo-men thus became kangaroos and men, although such men have retained something of kangaroo essence and Although this question seems to remain unanswered, vice versa. a diachronic examination of the state of the present and the state of the ancestral past does show many contrasts. The Lardil ethnography indicates that they in fact believe in not just energy manifestations of the Dreamtime in the contemporary environment, but in a second contemporary universe, coexisting in time but inaccessible to normal human perception. Their Dreamtime is a contemporary 'unseen' world that contains contemporary 'unseen people'.

From the Lardil cosmological viewpoint, these two universes are in constant interaction and balance. Men (of this universe) play an active role in this cosmic balance. Interactions are made by man into the Dreamtime world by a number of important methods.

One method occurs at the sacred sites made by the ancestors, the 'story places'. Here many Aboriginal groups performed increase "Natural cycles were replenished from inexhaustible ceremonies. dreamings" (Elkin 1969:94), i.e. from ancestral energies. It was man's responsibility to maintain the ecological balance of his world: "The perpetual well-being of the universe, and the whole welfare of the material world, hence depended on the continued singing of the original creative words and the continued repetition of the original creative acts of the original supernatural beings by their human reincarnations from generation to generation. These things, however, had to be done at the original geographical sites if they were to be fully effective." (Strehlow 1970:132). In the last chapter it was noted that the Lardil did not utilize complex ceremonial programmes like those of the central Australian groups in their increase activities. This does not detract from the cosmological significance of their story places which acted as sources of personal (or totemic) energies. In this respect there is a need to return to Sharp's findings on Lardil totemism.

Lardil totemism

Sharp (1935:164, 1939:456) reported that the members of each Lardil semi-moiety commonly possess as a group, a number of totems, and that the members of a moiety also have some totems although no totems are shared between members of opposite moieties. He lists these totems associated with the moieties and semi-moieties, but unfortunately gives no account of his informants or data collection methods. For some semi-moieties he lists as many as 18 totems whilst for one he collected only four.

Sharp argues (1935:172) that the Lardil received and adapted the semi-moiety totems, together with the eight sub-section social class system, from the mainland tribes. He lists the corresponding mainland totems next to the Lardil ones to illustrate some degree of correlation. He claims (1939:457) that natural phenomena of the rainy season are associated with (his) Moiety 1, and those of the dry season with Moiety 2, in spite of his inclusion of whirlwind and grassfire in 1, and rain, north-west wind, wet season

hawk in Moiety 2. He classifies rainbow separately from water spout and whirlwind, although it is explained elsewhere in this chapter that the Lardil believe there to be a close causal connection between these things. He makes no mention of two totems that are stressed by some informants (e.g. L.R., J.J.) viz. south-east wind, and morning glory cloud.

Sharp's system of totems is independent of places in the landscape. He says that "There is no association between totemic objects and other social groupings than those shown...". It is argued here that this last claim is incorrect, and that there is a number of ways in which individuals and/or groups can obtain totems.

Besides totems received through semi-moiety membership, the Lardil claim as totems the inhabitants of the story places in their individual patriclan countries. For example K.B., who is *kamarangi* subsection identifies strongly with rock cod, the rock cod story place being in his country, but Sharp classifies this totem with the opposite moiety to that of K.B. In fact such totemic affiliations of a patriclan with the story places of its country continue perpetually through time, providing the patriline maintains its claim over its country. Such a claim is valid because of ancestral relations with the energies vested in the story places by the Dreamtime heroes. Thus the name of the resident of a story place may be passed along successive generations of a patriclan as a name for its individual members. In K.B's patriclan *tipriti* (rock cod) was a favourite name. (Sharp did succeed in detecting this custom amongst the Lardil.)

Totemic links are also formed if one is born at or close by to a story place. P.J. was born near the dog story place. He says (in A.D.A.:F32) that he "can howl like a dog and bring them dogs up" with songs "from the story" and if anyone hurts a dog, then he or one of his family becomes sick.

Informants maintain that a dreaming or totem may be obtained through the circumstances of one's conception. The Lardil believe that a woman is impregnated (at least partly) by a totemic spirit, and that at the time the totem gives a sign of its presence in the landscape. Thus one informant's mother fell pregnant to a turtle totem being. The sign of the conception was the tracks of a large turtle that had crawled undetected all around the camp at night.

Such conception beliefs are common amongst other Aboriginal groups (e.g. the Walpiri - see Munn 1970:144). Yet Sharp denied (1939: 459) that the circumstances of Lardil conception affect an individual's relation to land or totems. There is yet another source of totems according to informants - from one's 'dream country', the country of one's mother and mother's brothers.

MacKnight's data (as in A.I.A.S. 1967:4) confirm multiple systems of totemism: "individual, those of a skin, and regional". Sharp's initial categories require further qualification, and further research is required on this topic. There are definitely associations between natural categories and semi-moiety groups, between natural categories and patriclans, and between particular species and particular persons (to use Levi-Strauss's terms (1963:17)). The latter two forms of association not only involve natural species, but their story places as well. When an individual goes to a story place with which he has totemic affiliations, it is suggested that he sees it as a place of self-identity, an image of himself, yet something clearly separate at the same time. It represents the meeting of two thought systems - one concerning the classification of places, and one concerning the classification and distribution of the energies of living beings. are therefore very much connected with places. Further significances of story places are examined later in this chapter.

Dreams and the unseen people

The most important form of Lardil interaction with the unseen world and its occupants is through the media of dreams (K.B. in A.D.A.:F16). If the unseen people decide to communicate to a Lardil individual in a dream, the individual will have a vision of those people in the dream as well as of their environs. He is able to converse with them and use his senses as if in a separate reality. The most common communications from the unseen people are gifts of knowledge encoded in songs. It is thus commonplace to be sleeping in a camp and to be suddenly awoken by a man who shows all

^{1.} A somewhat comparable belief in the nature of dreams can be seen to be held by the Murngin (Warner 1937:511).

the indications of being asleep (stillness, snoring, slow rhythmic breathing), but who begins to repeatedly sing a song in a strange language. When this occurred traditionally it was the duty of the other adults in the domiciliary group to help memorize the song immediately - to sing it through until morning when the 'good news' could be prepared for presentation to the rest of the Lardil people. Today, however, this task of memorizing is more commonly achieved by keeping a tape recorder beside the bed. A few of the words of such a song may have a recognizable meaning in Lardil or in another tribal language, but in general the words were unintelligible to the Lardil. Nevertheless the meaning of the words was explained by the unseen people during conversation in the dream. In most cases a dance accompaniment to a song was also dreamt, including details of any special body paint or decoration, dancing artifacts, choreography, etc.

The type of knowledge that was transmitted varied, and included trivial and lighthearted stories about animal behaviour. The most important communications concerned cosmology and cosmogony - the creation and origin of the many parts of the universe, the processes of nature and the inter-relation of plants and animals, including man and his behaviour. An example of such an important dream would be the one concerning Thuwathu, the Rainbow Serpent, dreamt in c.1949 by Paddy Marmies. Although much of this knowledge was established in Lardil law, it was expanded and clarified. Paddy was told of the many places Thwathu made, and of the behavioural rules he imposed on humans, together with the consequences of breaking those rules. He was instructed in the detailed presentation of the dance symbolizing this knowledge. Thus, given particular affiliations with ancestral beings from birth, a Lardil man had the opportunity to dance, to express and celebrate knowledge about the nature of the Lardil universe, by playing the role of his own ancestral entity and enacting historical events.

Who then, are these unseen people? The evidence collected on the Lardil can be summarized by saying that they comprise deceased members of the Lardil tribe who live in a similar hunter/gatherer lifestyle to that of their this-world life, but who are now immortal in the Dreamtime dimension. "...they exactly do everything like we people, they hunt sea food, also land food, they have their dances, and fun also initiation..."(Roughsey, E. 1972:127). Although it is said they hunt largely on the coast, their preferred habitat is usually given as being in the inside country. They cannot be seen - they flee when

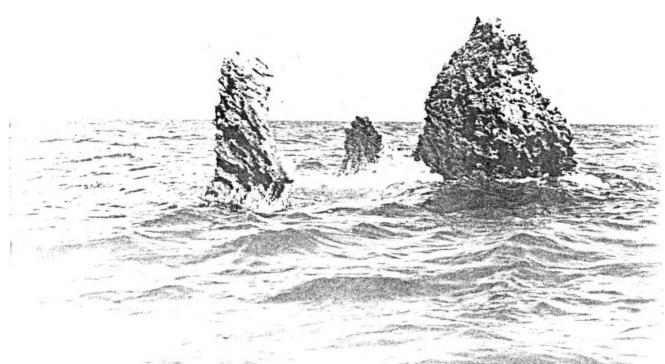
SACRED PLACES IN KELLY BUNBUJEE'S COUNTRY ON MORNINGTON ISLAND



A natural rock shelter at pululkiya is said to be frequented by the 'unseen people', the ghosts of deceased Lardil from the eastern end of Mornington Island. The mottled laterite cliff is located on the edge of a tidal flat. It was probably notched by the sea in some past goological era. The site was also used by Kelly's family as a wet weather shelter. A platform of saplings was laid on the uneven stone floor, and covered with foliage to make a sleeping place.



This place is called kangalan, and is a good example of a sacred place that displays no outstanding visual characteristics. It consists of some small anthed mounds covered by spinifex grass. It is said to be an ancient initiation ground. Pregnant women are required to carry a burning stick or torch if they wish to pass this place.



According to Lardil legend, these rocks are the bodies of some of the first Lardil people -Thin thin and possibly their child. Together with thin thin's uncle they need all of the Lardil lands and created many places around the coast of Mornington Island. It is said that a dust storm will be caused if anybody touches these rocks. The stones are called warth and are located off thalpakan.

approached because of their shyness, but they can be heard. One informant (K.B. in A.D.A.:Fl6, Fl9) says it is possible to see their shadows. Indices of their presence include the sounds of cutting 'sugar bag' honey out of hollow tree limbs, talking and singing at dances. For example "....the clapping of the boomerangs shouting and men singing, women calling out to their children to sit down and watch the dance....[our Lardil people] hear every sounds plainly so close about 30 feet away or half a mile, fires everywhere at the dancing ground but no sign of a real persons, but noises are everywhere with singing, talking and laughing." (Roughsey, E. 1972:124).

The unseen people are supposed to still live in groups in different parts of the Lardil lands, as did normal Lardil people in traditional times. Thus the deceased members of the *lilumpenta* division of the Lardil all live as unseen people in K.B's country, concentrated in the interior land system at *pilulkiya*. They are referred to as *pululkiyamenta* and are closely associated with a natural cave shelter there (illustrated in figure 31A) (K.B. in A.D.A.:F16). Note that this refutes Sharp's claim (1939:459) that a person is not "necessarily associated with his totems or his countries after death".

One hears amongst the Lardil reference to other groups of unseen people from different places, for example:- to the unseen people on Sydney Island; to those at Baldy Head Point in Robert's country; to the cave people - the witimenta or yungkulmenta; the hollow log people and the bush tree people, and others called the ngangkulmenta (or nhungkulmenta?) and the turmenta. A special class are the mermaids living in tidal estuaries and freshwater pools. They communicate more often with women and are associated with the water lily. Many of the properties of these strange beings are by no means consistent in the Lardil accounts, but it is believed that there are groups distributed all around Mornington Island; and so it is possible to have a dream communication anywhere on the island, although it is said to occur more frequently in the vicinity of story places.

Sometimes two men may dream the same song at separate places and/or times. For example once F.J. and Kenny Roughsey (now deceased) were travelling by dinghy from Sydney Island to the *lilumpen* end of Mornington Island. At one camp on the way Kenny Roughsey dreamt

a song about the walpa (raft). It was given to him in the dream by a famous Lardil ancestor, Warrenby, who had followed the dinghy. However Kenny forgot the song upon awakening. The next night at another camp Warrenby gave the song to F.J. in a dream, and he managed to recall it the next morning (F.J. in A.D.A.:F4).

Some men consistently dream dancing actions and body movement, but without accompanying songs, e.g. P.J. and Toby (now deceased). These are used to create dancing arrangements for songs which were dreamt without actions.

Not all songs used by the Lardil were associated with dances. In their universe of unseen beings and energies, special songs were used as magical agents of environmental control. Songs are power objects in Aboriginal culture. The Lardil have songs to stop bushfires, to keep away bad spirits, to obtain the love of a woman, to harness energy in kurparra artifacts, to make a shooting star enter the body of an enemy, to bring rain and to chase away such things as cyclones, waterspouts, hail, storms, lightening, mosquitoes, etc. Through songs and increase actions at story places, the Lardil believed themselves to be active agents in their environment, affecting the elements and the ecological balance of nature. This was part of their responsibility to their country and fellows.

Yet other things besides songs and dances are received in dreams. Pieces of knowledge may be communicated directly without the media of song, especially to people whom the unseen people know to observe the proper behavioural mores of the tribe (the law). Thus L.R. (in A.D.A.:F17) says "old men give you law back" (once they are dead), and Elsie Roughsey says (1972:61) it is "part of the gift from people who have died, are for ones like them, who care to do good to others." The unseen people may inform one in a dream of forthcoming luck in hunting (Roughsey, E. 1972:56,57) or send an omen of a relative's imminent bad luck so that they can be warned.

Some people are said to be presented knowledge in dreams that extends their healing powers. Such medical powers are generally applied using songs and other actions on the sick person, such as the application of underarm perspiration, the blowing of breath

^{1.} Reports of the Lardil making rain or stopping rain, whilst travelling through Australian towns, occasionally appear in the press e.g. in 'The Sunday Sun', Brisbane, 5/9/76.

(to "chuck wind"), touching the sick with the hands, and brushing with grass (Roughsey, E. 1972:63,67 in A.D.A.:F50). News of visitors arriving in the near future may be received in dreams as well. A coveted gift from the unseen people is a power stone which protects one from sickness and evil. "These stones were given to some of the people, who were lucky to grab at nights during their sleep, that's why we can say these are from dream land gift to a man to have power". (Roughsey, E. 1972:58).

Unseen people are not a simple reincarnation of deceased Lardil individuals. Informants' reports on the nature of death are not always congruent, but it is agreed that the corpse splits into a number of entities (often referred to as 'shadows'). The good spirit travels to a black hole in the Milky Way called Yule and emerges from another hole into the New Horizon Yilitjilinyi, the place of good spirits (Roughsey, D. 1971C:21, K.B. in A.D.A.: F29). At least one other ghost component remains on the island to become a member of the unseen people with an ongoing Lardil identity (Roughsey, E. 1972N.S:144, Sharp 1939:459). Thus a component of the dead transforms permanently into the country.

In general it is conceded that the unseen people have far more knowledge and foresight than the members of this world. In fact it seems that they have a total science, a complete system of knowledge and truth which encompasses the nature of the Lardil They also monitor everyday events in normal Lardil life. There is then asymmetry between the two dimensions so far as the distribution of knowledge is concerned. The Lardil strongly recognize that it is desirable and advantageous to receive as much knowledge as possible concerning the nature of the dual worlds and how they relate to it. Knowledge is not only sacred, but represents power. However dreams of knowledge are not received by everybody. A large proportion of contemporary Lardil have not dreamt anything, particularly the younger generations. This is said to be due to their lacking traditional cultural belief, failing to maintain traditional standards of behaviour and being absent from their patriclan countries (L.R. in A.D.A.:F17).

There are at least nine regular dreaming men in the contemporary community, all of them elderly, as well as a few women 2 who

^{2.} Old Ethel is one.

have the gift. These people are highly respected, being referred to as 'big men' or 'law men', i.e. men of knowledge. Nevertheless the abilities of this small group provide the entire Lardil community with an ethnocentric egotism and prestige about the status of their tribal culture. This they exert over some of the neighbouring mainland tribes whose members do not appear to dream dances, but seem to have to make them up by themselves (F.J.; C.M. in Fl, Fl8). These abilities of the Lardil lead to some informants (L.R., J.J) claiming that local culture is strong-stronger than that of local mainland groups, despite acute cultural change within the Lardil society.

When an old man who was a consistent dreamer dies, then it is possible that much knowledge will be lost with that person. It is considered important for an old man to pass on his knowledge to his sons before death. Knowledge obtained from one's father is held as being more reliable than if it is from an individual who is not closely related. The authenticity of knowledge received in dreams is unquestionable.

Pieces of knowledge may fail to be transmitted to the younger generation in a number of ways. One way is when a dance is not regularly enacted for a long time. Today this may be due to severe cultural change, but other causes were (and still are) changes in popularity and fashion of a dance, and the sudden death of a key song man (lead singer). If an important law man is absent on the mainland working for a lengthy period, perhaps on a cattle station, whilst other law men on Mornington Island are receiving and enacting new songs and dances, then it is possible that the absent member will be ill-informed about this new knowledge. This is another situation which may inhibit the transmission of knowledge. It is explained in the next chapter how the actions of the missionaries brought about the discontinuity of male initiation rites, and severely eroded Lardil women's knowledge. These are grievous concerns amongst the old people today.

Sharp (1939:458) says there was an initiation ceremony on the nearby mainland for girls but makes no mention of one on Mornington Island. According to L.R. (in A.D.A.:F43), important themes in Lardil women's law are plants, fruits, mudshells, mudcrabs, i.e. important economic commodities that women traditionally collected. L.R. also talks of bringing old Wanyi women from Doomadgee (e.g. Limerick) to instruct Lardil women in law.

<u>Personal attitudes to knowledge and the methodological</u> difficulties therein

The Lardil elders are very aware of the ebbs and flows of their pool of knowledge. Fragments are continually lost and gained. The question of accuracy of knowledge demands much attention Each time a dance is performed, or its meaning explained, it should be done exactly as it was seen or instructed in the original dream (L.R. in A.D.A.:F17). The investigator has witnessed lengthy discussions between Lardil elders and Wanyi tribesmen, debating the exact travel routes of events of a particular hero-ancestor (e.g. dingo, pelican, crane). The emphasis on 'correctness of method' is a trait displayed generally by traditional Aboriginal groups. "For the ceremonial acts were believed to be capable of producing their practical effects only if they were performed in their entirety, and without deviations from the exact patterns that had been instituted by the supernatural beings at the beginning of time." (Strehlow 1970: 111).

Here it is necessary to contrast between two types of personalities or characters possessed by Lardil law men. There are those men who can be termed conservative - they will not fully accept a piece of knowledge to be reliable unless it was either dreamt at a known place and under known circumstances, or if it was received from a trusted close lawman, especially one's father, father's father or father's brother. These men are very concerned with the preservation of knowledge, and the prevention of its perversion. (Such men include F.J. and G.P). On the other hand there are those men who can be termed 'creative'. Given an existing set of Lardil knowledge, they are continually curious, asking questions that are not explained, generating hypotheses about such problems, in the law, hypotheses which they may uphold to be true because of the logic of their arguments; in short, acting as ethno-scientists, constructing their own models to supplement and refine the known law. Some Western scientists may say that these latter individuals are manipulating deep subconscious themes concerning the nature of life. It is to be noted that the meanings of dreams are not always given clearly by the unseen people. The temptation to offer an explanation may be unavoidable. K.B. once said to the investigator (in A.D.A.:F29) that "it's very hard to think", meaning it is difficult to always fully understand the significance of a dream.

Furthermore the contents of a new dream may contradict existing knowledge. This may cause individuals to hypothesize solutions to reconcile such apparent anomalies.

Lardil men who belong to this creative class of law men include L.R. and J.J. Such men must have strong characters to stand up to the conservative constraints that many elders collectively impose on ceremonial or political contexts. There is often disagreement and conflict between men of such opposite characters. This is why it is important to qualify pieces of Lardil knowledge herein with the name/s of the informant/s.

As a simple example of such a conflict one can refer to the dance of <code>Tjuwan pilaa...</code> Most old Lardil men say this dance is the dance of the porpoise, its noise being represented by the sound of the didgeridoo. But L.R.'s explanation of this anomaly is that he re-dreamt the song and was given a corrected version of its meaning. <code>Tjuwan</code> means porpoise in Lardil, but L.R. says that in this song it means the track or the wake of something travelling at sea. And thus F.J. complains (e.g. in A.D.A.:FF21) to his confidants that L.R. is over-emphasizing the importance of the Rainbow Serpent in the law, and as well that he is introducing fictitious symbolism, and not properly balancing his song presentations as chief song man.

Another example of L.R's creativity is as follows:- Whilst journeying in Central Australia, he visited the Devil's Marbles an impressive rock formation, which he assumed was a sacred place. A particular tree species was dominant in the locale there, which he knew to grow in a clump on Mornington Island. He now claims that this latter place is also sacred, because of the association of the flora with the Devil's Marbles. Such a claim cannot be easily disproved unless someone dreams to the contrary.

At another level in the politics of law knowledge, there is ethnocentricity demonstrated between the song men and the law men from the different social groups by direction (lanumpenta, lilimpenta, etc.). A song man will claim the songs dreamt by past and present members of his social group, as being the contribution they have made to the tribal 'pool' of knowledge, the law. There are usually several songmen from each group. A lead song man may quite

^{1.} The leading contemporary song men consist of L.R. & F.J. - larumpenta, Henry Peter - tjirrkarampenta, and Ian James - lilumpenta. Ian James is married to Henry Peter's daughter and these two men tend to be in rivalry with L.R.

likely design a dance programme with the majority of songs dreamt by members of his own group, and say that this is because these songs are the most important in the Lardil law. At a large dance where there are a number of song men from different groups, rivalry and jealousy can occur. Severe political tensions may arise if the authority of one song man is not agreeably established over the others, thus allowing someone to be the lead song man and take the responsibilities of that role. song man in such a situation would ensure that the programme of songs and dances were derived from all groups, to provide a socially and intellectually balanced presentation. Such a balance implies contributions from the unseen people of all parts of the Lardil land, and the inherent systematic completeness of the knowledge represented therein. It can be noted here also, that a reliable informant, when asked a question about a particular place, or about an event that occurred at a particular place, will qualify his answer with the necessity to consult with the tulmata of the country in which that place is found.

It has been demonstrated here how links with places (especially story places) can provide various Lardil individuals with subjective differences in their perception of cosmological knowledge. The process of collecting data on this subject is one fraught with methodological difficulties. Nevertheless, if some of the constructs herein are those of only a single individual or single social group, they demonstrate how the Lardil mind can devise explanations of order, chaos and change in the cultural environment, and "provide a distinctive, positive basis for personal and cultural identity and pride." (Biernoff 1975:85).

Some elements of Lardil history - a methodological note

The model of Lardil law presented so far has described the relation of individuals to their belief system and how such relationships involve properties of place, including:-

the history of the creation of places,

(i) (ii) the contemporary presence of supernatural energies in places

^{1.} Canter (1977:164) has noted similarly for Western groups. Although there may be a common range of criteria for evaluating places, there may be a wide range of values concerning such places amongst a group, because of bias in individuals' perceptions of places that tend to favour their home town, suburb or street.

- (iii) the availability of knowledge from story places (as dreams)
- (iv) the presence of 'unseen people' at a variety of places

An individual's perception of 'the law' is coloured by his social relation to story places.

Some elements of Lardil history are now examined to elucidate further the nature of some of these properties. The historic events concern the ancestors of the Dreamtime, but not all Lardil legends, stories, myths, are dealt with, for there is not space. As Berndt has put it (1974:13), in "Australian Aboriginal societies, large repertoires were the rule". Rather, the emphasis will be on how the Lardil belief system is intricately structured around systems of man-environment relations. These constructs confer sacred properties on places that are not visible to the outsider.

In the beginning Aborigines took "the world, including the earth beneath, and its counterpart - the sky above - as given. They have no myths recording its ultimate origin. It existed, but 'without form and void', that is, without its present geographical form of hills and plains, rivers and springs, and void of living creatures." (Elkin 1969:87). These last geographical features were made by the hero-ancestors. Each successive traveller created places, adding to the symbolic content of the landscape.

It has been argued by some that it is plausible to assume some sort of correlation between Aboriginal legends and actual historical events, e.g. by Strehlow (1970:95,95). Also Campbell (1967:480, 481):- "The most likely explanation of the correspondence between the legends and past events is that the legends have been based upon fact and convey a useful record of the experience of the progenitors of the modern Aborigines. If this is accepted as correct, it follows that the Aboriginal tribes have retained by oral passage various correct observations for thousands of years."

Geology provides one means of making such correlations.

"The evidence of legends cannot be accepted as proof of geological events. But it can be argued in reverse that geology might produce evidence of events that could have inspired the legends." (Fairbridge 1960:70). The Lardil history contains a number of accounts of

^{1.} For example, the investigator has collected a large portion of material on Warrenby, the Lardil warrior and *Makura* the wallaby. There is not space to discuss this saga.

land being inundated by sea, and of channels and islands being formed. In Chapter 3 it was seen that data on the changing sea level of the southern Gulf of Carpentaria is available and it can be roughly correlated with some of these events. The Lardil history begins when the North Wellesley Islands were part of a peninsula (the Mornington Peninsula) - over 6,500 years ago. This is how the first people, Manhpil, Tuiwal Tuiwal and Tjin tjin were said to have found it. This continuity of oral Lardil history provides an indication of the length of undisturbed tribal occupation of the Lardil lands not precluding cultural diffusions from neighbouring groups (Campbell 1967:476,481).

Lardil informants place much emphasis on knowing the correct order of events in their historical repertoire. References to geological events provide the best assistance in dating legends. Nevertheless there are often disagreements between informants, and no claims are made herein for accuracy of chronological order.

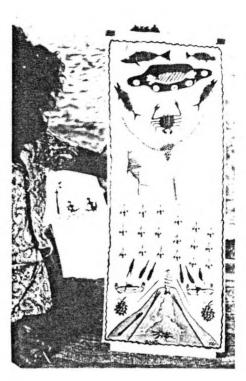
The pre-human era

Before the arrival of the first contemporary humans, the Mornington Peninsula was inhabited by animals, but as pointed out, these animals had human qualities. "...fish were like human beings - they used to shake-a-leg" i.e. dance (P.J. in A.D.A.:F32). Lardil history contains an account of the first initiation of these animal beings from pre-human times. A reference to this is made elsewhere in this chapter. It was much later that they changed form and went to live in different parts of the country at their own story places (Roughsey, D. 1971C:57).

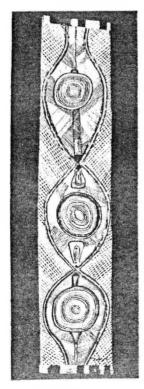
The Lardil have many stories about the behaviour of these animal beings. The content and form of many of these legends can be structurally analysed in the manner devised by Radcliffe Brown in his Huxley Memorial Lecture in 1951, which was summarized by Levi-Strauss (1963:86-88):- "....the resemblances and differences of animal species are translated into terms of friendship and conflict, solidarity and opposition. In other words the world of animal life is represented in terms of social relations similar to those of human society." In each tale there is to be found at least one pair of animals who are protagonists and whose conflicts are the principal theme of the story. However they display at least one characteristic in common which permits them to be compared.

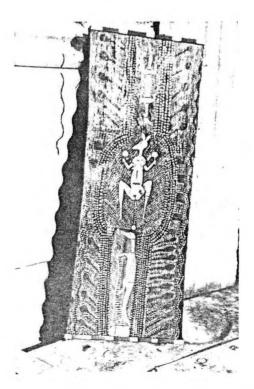
SOME BARK PAINTINGS OF LARDIL LEGENDS





Each of the above two paintings depicts the Lardil story explaining why there is no sugarbag (wild bee's honey) on Sydney Island. The painting on the left is by Lindsay Roughsey, and the one on the right is by Arnold Watt. As the bees attempted to cross from kupare on Mornington Island, the stingray palipal leapt from the channel to splash their wings and drive them back. The sea eagle yerra kerra watches from the cliff after a meal of tit tit fish.





Each of the above two paintings is by Lindsay Roughsey, and depicts the story of the lementary Lardil varrior Warrenby and the wallaby woman theorem. The legend is complex - the elements depicted above include:- (a) the rock holes at the Wallaby story place (concentric circles) in which the wallabies are said to mate and procreate: (b) the totomic association of Warrenby with the goanna; (c) the power of Warrenby's method of obtaining "Phone's love (symbolised by the vaginal and penile elements).

N.B. Bark painting was not a traditional art form of the Lardil. It is a recent innovation. However, the themes of the paintings pertain to

The structural principle involved consists of the union of opposites.

For example the Lardil story concerning the Emu and the Turkey (told by Cora Peter in A.D.A.F40), portrays these two birds in conflict, and explains how one of them comes to be flightless. In the story of the Rat and the Squid (as told by L.R., J.P. in A.D.A.:F42, F32), one helps the other to cross the sea - the rat cannot swim. But a fight develops and a firestick is stuck up Squid's anus causing him to release a black fluid. Rat is then struck with the firestick which adheres to his posterior, leaving him with a black tail.

The dissimilar habitats of two animals is a common principle of opposition expressed in such stories. A popular Lardil story dealing with this theme is that of the saltwater turtle and the freshwater turtle, one of which has flippers and the other legs (told by L.L., in A.D.A.:F42). Yet another one concerning animal habitats involved the black diamond stingray, the sea-eagle and the bee. This story is set on the boundary between F.J's and Big Barney's countries at *kupure*. A summary is given here of this story taken from Roughsey, D. (1971C:54-56) and Trezise (1966).

Eagle and Stingray went fishing one day, then took their catch on top of the cliffs of kupure point. Here they cooked and consumed their fish, but ate too much. They felt sick and miserable and argued. Suddenly a swarm of bees arrived and became entangled in their hair and beards. The bees told them they were going to Sydney Island to get honey from the ti-tree blossoms. got angry and told them that it was too far, and they would fall and drown in the channel. Stingray and Eagle went hunting again and caught a red-nosed garfish (tjit tjit). They noticed the bees trying to cross the channel. This made Stingray very angry, and so he jumped up and down in the channel splashing water on the bees' wings and causing some of them to fall and drown. The remainder returned to kupure where Eagle warned them that the same thing would happen if they tried again. The bees did try and they were repelled once again. They never returned. Today the sea eagle is still to be seen sitting on the cliff at kupure, and the stingray still jumps high out of the channel there. The bees remain at kumuna (Mornington Island), and Sydney Island has no sugarbag.

Passing over the majority of these tales from pre-human history the focus now turns to some of the major events concerning man.

Discussion will commence with the arrival of the first people, and then will be followed by:- (i) the travels of the dingoes; (ii) the relation of the *kalthat* fish to the subincision ceremony; (iii) the cutting of the channels and the separation of the islands; (iv) the mysterious and powerful being *Thuwathu*; and (v) the nature of the sky world.

The coming of the first Lardil people: Manhpil, Tuiwal tuiwal and Tjin tjin.

This account is drawn from Roughsey (1971C:20-23), Trezise (1966), Cawte (1972;36,37), and informants interviews in A.D.A.:K.B. (F6, F17, F29(, L.R. (F38, F43), F.J. (F4, F40). The first humans to step forth on to the Mornington Peninsula were led by Manhpil. He came from the south-west, and L.R. (in A.D.A.:F38) says that he met his wife Tjin tjin in the vicinity of what is now Point Bayley. The couple were accompanied by Tuiwal tuiwal who was Tjin tjin's The beginnings of the Lardil moiety system with its uncle. accompanying behavioural rules were brought to the Mornington Tuiwal tuiwal and Manhpil, being 'in-laws' Peninsula by this trio. could not speak directly to each other, but had to pass messages via Tjin tjin. Dick Roughsey (1971C:22) explains that men were immortal at this time. Manhpil and Tuiwal tuiwal were further unlike normal human beings in that they had the skills to create places in the environment.

Since the Mornington Peninsula seemed a favourable hunting ground and place to live, they set about making resource places. They constructed rock traps for fish, turtle, and dugong at offshore sites. K.B. (in A.D.A.:F17) has described two basic forms of these traps: (i) Two straight converging rock walls to make a v-shape which could be blocked with nets at one end. Fish and animals could be chased in using rafts. This trap type was called paltjan. (ii) Roughly circular or elliptical rock walls into which animals swam on a high tide but were caught inside on the receding tide, and then speared. This trap type is called tertanin. Informants can point out these traps today throughout all of the North Wellesley Islands.

Manhpil and Tuiwal tuiwal began making these traps in the locale of what is now Point Bayley, Robert, Francis and Forsythe

^{1.} The name of this man is spelt differently in different sources, e.g. tewal-tewal, twelawel, tuwaliwal.

Islands. They also created the following places (Roughsey 1971C: 20; Trezise 1966):- (a) sand ridges, dunes, and platforms behind the beaches, on which to camp; (b) wells in swales, and at the foot of sand ridges; (c) good fishing places, marked with rocks; (d) sand banks from which to spear fish; (e) story places - they gave each living thing a sacred place. "They made ceremonies for each of these totem creatures so that the people who followed after would know what to do to keep up the numbers of these things." (Roughsey, D. 1971C:20).

Lardil man Kirk Jacob claims *Manhpil* and *Tuiwal tuiwal* also planted fruit and berry trees in the sand based land systems they created.

L.R. (in A.D.A.:F38) says that *Tjin tjin* named different species of mudshells, sandshells and oysters. Cawte (1972:36, 37) reports that one of the tasks of this first group of travellers was to taste all the land and sea foods so as they could instruct people after them in the correct methods of cooking and consuming them.

Manhpil and Tuiwal tuiwal introduced the moiety system to the plants and animals, and gave them totemic names (Roughsey, D. 1971C:21, and L.R). Thus the first marriage rules were introduced to the Mornington Peninsula.

Upon reaching the site of the contemporary mission at kununa, they dug three wells, then rested. Manhpil decided to send Tuiwal tuiwal along the north-west side of the peninsula whilst he and Tjin tjin continued up the south-east coast. They split up and proceeded in a north-easterly direction carrying out their creative tasks. They were aware of each other's progress by the location of campfire smoke on the opposite side of the peninsula. Whilst travelling through the country Manhpil left a number of footprints which the Lardil allege survive today on the surface of lithified rock platforms. There is one of these footprints on Sydney Island at the stone fish story place, another on Wallaby Island, and Trezise (1966) mentions the location of a third one. (Note that some of the Kaiadilt pointed out to Tindale (1962A:281) footprints of their ancestors in lithified rock slabs on Bentinck Island).

Dick Roughsey described how *Manhpil*, upon reaching Sydney Island made the floodmaking story place, and performed the first flood making and flood abatement ceremonies. *Manhpil's* aim was

to provide his ancestors with a means of punishing their enemies. These ceremonies are summarized here from Roughsey, D. (1971C:64-68). His account is identical to that of Trezise (1966) and further data are derived from F.J. and K.B. in A.D.A.:F4, F17:-

The first preparatory task is to build wet weather shelters on the tinkilmi sand ridges which are relatively high, and to store supplies of food, water and firewood. The floodmakers begin by obtaining white ochre from mantawa, a sand-based land unit in the centre of Sydney Island. This is carried in bark containers to lilita point at the eastern end of the island. Here the special flood making sticks called tulmitjal were manufactured. The clay was packed in an oval mass around the end of one or two sticks about a metre long, and then decorated with feathers. Each tulmitjal was wrapped with paperbark and tied with matat string.

At low tide there are exposed a line of reefs extending to sea in an easterly direction from lilita (refer map in figure 7). Two men with horizontal white ochre stripes painted on their bodies carry the tulmitjal from wununje reef, swimming across channels, past kwarukan, a sand cay, to a reef called pitjinatji, or 'bad smell country', "a place where evil things are done." (Roughsey, D. 1971C: Here there are a series of underwater archways or cavities. One man takes some of the white clay from a tulmitjal, and dives down into the archway rubbing the clay between his hands to dissolve it into the water. The second man stands waist deep in the water yelling 'wah, wah, wah...'. The size of the flood is said to be proportional to the number of archways used. Informants debate whether there are five, six or seven of these archways or cavities. When the men return to Sydney Island they emerge from the sea and move up the beach with outstretched arms, chanting noises to imitate sea waves encroaching the shore. It is said that the flood may come in the form of a tidal surge associated with a cyclone, a tidal wave or a series of successively higher tides.

After Manhpil enacted this ceremony for the first time he performed the flood abatement ceremony to restore the sea to its normal behaviour. He took stones from the high sand ridge on the south-east side of Sydney Island, heated them in a fire, picked them up with bark and then to the accompaniment of special songs threw

^{1.} A photograph of one of these sticks is contained in the A.I.A.S. film A50 made by D. MacKnight.

the hot stones into the sea creating clouds of steam. Much more could be said about the Lardil flood making practices including those made by the legendry warrior Warrenby (see Roughsey, D. 1971C: 68-72). However the story of *Manhpil* and *Tuiwal tuiwal* is by no means complete.

The three of them met up again near the north-east end of the peninsula, and camped somewhere near thultja. One day Manhpil went right to the end of the peninsula to the places which are now Bountiful and Pisonia Islands. Here he made more rock traps. Tjin tjin had remained in camp to break up pandanus nuts. Tuiwal tuiwal seduced Tjin tjin. Manhpil returned and unobtrusively observed them having intercourse. After they finished, he approached, and informed Tjin tjin that he was very thirsty and that she should ask her uncle to help them dig a well. The well had to be dug very deep before water freely flowed. Manhpil told Tuiwal tuiwal to taste the water. To reach down with his mouth he had to spread his legs wide apart. Manhpil speared him in the anus, and then fled with Tjin tjin.

Tuiwal tuiwal writhed around in pain, then rose into the sky placing the curse of death on Manhpil and Tjin tjin, and on all humans to follow. From the sky he chanted the different ways in which people would die: (i) by spear; (ii) by boomerang; (iii) by blows on the head with the fighting stick; (iv) by rope, (v) by being sung with an evil magical song; (vi) by taking a fit; (vii) by choking on food; (viii) by eating poisonous foods; (ix) through sorcery with hot stones; (x) by the use of emu feathers ("they brush your camp"); (vi) at the hands of a big 'mob', (xii) by travelling stones; (xiii) through sorcery involving removal of kidney fat; (xiv) by sorcery involving application of hot ant bed to the body (after K.B.

^{1.} In 1974, whilst on a field trip with the investigator, K.B. decided to remove some of these special stones and take them to the mission settlement in order to turn back floods that may occur there. On returning in dinghies to the campsite at kela on the nearby coast of Mornington Island, a pitched tent was observed to burst into flames without any apparent cause. The Lardil men left the stones, struck camp, and departed in a state of fear.

Dick Roughsey (1971C:21) says they camped at bangubella bay, but local tulmata K.B. and C.M. do not recognize this placename.
 The contemporary Lardil call this island 'Turtle Island'.

^{4.} Strehlow (1970:133) has noted that Central Australian Aboriginal groups believed that ancestors imposed death and sickness as forms of punishments for sacrilege of 'the law'.

in A.D.A.: F29; and Trezise 1966). Cawte (1973:91, 92) has described some of these forms of sorcery in detail.

Manhpil and Tjin tjin could hear these curses coming out of the sky. According to L.R. (in A.D.A.:F38) Tuiwal tuiwal's curse caused the land to break up and Manhpil and Tjin tjin were caught by the advancing sea and drowned. Consequently a large bay was formed in the area. However Dick Roughsey (1971C:23) says they escaped to have a daughter called Yegi. All accounts agree that when they died they turned into tall vertical stones in this bay off thalkapa in K.B.'s country. A photograph of these stones protruding from the sea is in figure 31A and the placename is ngawalan. (There are actually three of these stones. Some informants claim the small one is Tjin tjin's daughter).

K.B. claims that *Tuiwal tuiwal's* body was eventually buried at the wildgrape story place on the nearby coastline at *kunalthatpa*. (He also observed that this account of *Manhpil* and *Tuiwal tuiwal* is similar to the story of Adam and Eve.). He said that today a red rain cloud in the early morning contains the blood of *Tuiwal tuiwal*.

The travels of the dingoes

The first two dingoes (Lardil: watum, Aboriginal English: dog) to travel along the Mornington Peninsula, came from Central Australia. L.R. says that one reached the southern Gulf near where Borroloola is now located whilst the other came up the Georgina and Gregory Rivers, reaching the Gulf at about the site of Burketown. At Point Parker they met, and made a large saltpan for a camp called ngarwin, according to Dick Roughsey (1971C:53). (At this point they must have had intercourse.) They travelled out on to the peninsula. At a place where Forsythe Island is now situated, the male dog stopped and looked back. This action caused him to metamorphose into stone, although informants could not convincingly explain the reason.

The female dog travelled on to Charlie Bush Bay where she made another large salt pan or tidal flat, also called *ngarwin* according to Dick Roughsey. This is the site of the dog story place, which today is the country of P.J. and Dan Bush. Here she gave birth to pups.

^{1.} Today this bay is separated from an island tidal flat called pitipurawan, by a series of high sand ridges. K.B. (in A.D.A.:F29) says these ridges and the adjacent bay were made by Manhpil who pushed the sand inland to make a grave for Tjin tjin and himself. Hence the bay can also be referred to as purawan.

The female dog then returned to the interior accompanied by the emu.

The visit of the two dingoes to the Mornington peninsula is of special significance to the Lardil, as they believe that the dingoes were distributing knowledge over the continent concerning the The dog that reached Lardil lands introduced initiation ceremony. the practice of circumcision and the cycle of songs used in its The dog also brought subincision and the execution (katkuka). eight subsection class system. The latter restricted the number and class of women from amongst whom one chould choose a wife. At the same time the dingo provided opportunities for free sex. The free mating behaviour of dogs was institutionalized in the Lardil initiation ceremony as a session of wife exchange for intercourse prior to circumcision on the morning after. Cawte (1972:32) has noted "Wife exchange represents the mating of the dingoes, the boy's circumcized penis being thought to resemble that of a dingo." L.R. (in A.D.A.:F25) says that wife exchange was also practised after dances held to celebrate good hunting.

Informants believe that the dog who died on Forsyth Island, was responsible for taking the knowledge concerning the circumcision ceremony further eastward, but was unable to do so because of its death. This point was confirmed as far as L.R., K.B. and J.J. were concerned, when the investigator showed then Tindale's map of "Tribal Boundaries in Australia" (contained in Tindale 1974). This shows a line indicating the eastern extent of circumcision, as occurring on the Leichhardt River in the southern Gulf of Carpentaria. Because of the role of this dingo, the Lardil see themselves as having a political significance in Aboriginal Australia, in that they were the last Aboriginal group for this animal being to visit - a geographical terminal point in the dissemination of a category of important knowledge. Today the association between the Lardil and the Yangkal is reinforced through there being a dog story place in both of their countries, providing them with a common historical link.

The Lardil speak of this pair of ancestral dingoes as if they were physically dingoes, but at the same time, possessing human-like qualities allowing them to communicate with other beings, and to introduce sophisticated social and ceremonial knowledge. John Dymock is one contemporary ethnologist amongst others, who has suggested that

^{1.} Personal communication, Mornington Island, 16.5.78.

such accounts probably refer to the travels of particular Aborigines who identified totemically with the dingo, and who brought cultural innovations to different Aboriginal tribal groups.

Today the dog story places are commonly associated with love magic. The dingoes allegedly deposited stones and red ochre at these places. These substances are said to have the power to be used for the seduction of a sexual partner. However some who have attempted to remove stones from the Forsythe Island dog story place in mission times, are said to have mysteriously lost all memory of their actions, and to have returned to their companions without their clothes.

The kalthat fish and the subincision ceremony

In Chapter 4, it was mentioned that the Lardil have two stages or degrees to their initiation - the first is the *luruka* or circumcision, whilst the second is the *lingka* or subincision ceremony. The subincision ceremony, like that of the circumcision, is associated with the ancestral animal beings and with a place at which they first performed this event. For historical reasons that will be explained in the next chapter, this second degree ceremony has been discontinued, and objective data concerning its nature and meaning is hard to find.

It is clear that subincision is associated with the white travally or white fish, the *kalthat*. *Kalthat* was the first animal to be circumcised in the North Wellesley Islands under the supervision of the visiting dingoes. According to L.R. (in A.D.A.:F25), he then became a key elder of the animal tribe, and was in charge of subincision. Cawte (1972:32) observed an association between *lingka* and the *kalthat*: "The "white fish" must be slit in the midline ventrally; a man may tell his wife to *linga* the white fish".

Part of the second degree ceremony involves the learning of the secret language of the Lardil, *temin* which consists of lateral clicks, palatal clicks, nasal ingressives and whistles (Roughsey, D. 1971C:61). It is said *kalthat* brought his language to Mornington Island. "First one learns small fish way of talking, then the large fish way of talking." (Roughsey, D. 1971C:62).

^{1.} Red ochre is of religious significance amongst most Aboriginal groups, e.g. the Gidjingali of Arnhem Land (see Maddock 1972: 6,7).

THE REDBILL STORY PLACE; MORNINGTON ISLAND

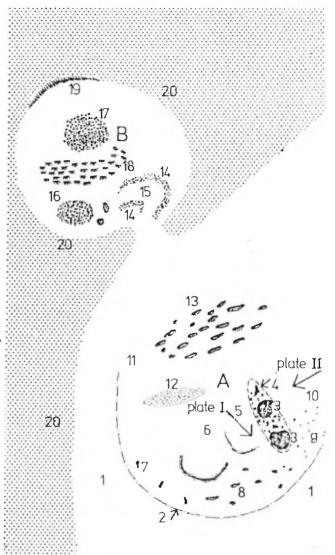
LOCATED AT THE KETHUNART TIDAL FLAT IN FRED JAURTH'S COUNTRY

SKETCH PLAN SHOWING NATURAL FEATURES AND SOME LARDIL PROPERTIES OF THE REDBILL "STORY PLACE", MORNINGTON ISLAND. (Drawn p.m., July 1975).



SECONDARY STORY PLACE (no intense religious properties expressed by informants)

- Surrounding salt pan (white salt and yellow ochre silt).
- 2. Line indicates boundary of story place inside the surface changes to dark coloured ironstone gravel and rocks.
- 3. Two large rock outcrops (about 2 m high), pinkish-white in colour, described as windbreaks.
- 4. Tidal line of debris.
- 5. Zone contains campsite of second degree initiate inhabitants.
- 6. Zone contains campsite of single men.
- 7. Large stones up to 2 m long and up to .3 m high described as windbreaks.
- 8. Numerous outcrops of rocks representing family camps.
- 9. Larger stones of approx. .2 m diameter described as redbill eggs.
- 10. Area referred to as windward campsite.
- 11. Area referred to as leeward campsite.
- 12. Dense zone of black aggregate pebbles.
- 13. Large rock outcrops up to 2 m long, described as family camps.
- 14. Two bands of coarse black aggregate pebbles
- forming a natural path in between 15.
 16.17. Dense zone of reddish black aggregate pebbles.
- 18. Spinifex grass knoll.
- 19. Natural quarry face of pinkish-white rock (similar to 3).
- 20. Ridge above tidal level covered with ti-tree flora.



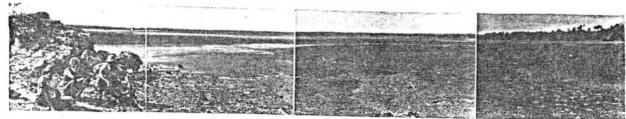
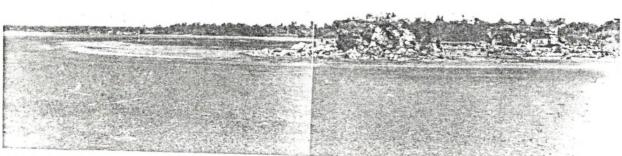


Plate I.



late II

In the subincision ceremony the initiate is presented with a grass string waist belt (as in contrast to the hairstring waist belt that a man receives before circumcision). This belt is smeared with the fat of the *kalthat* fish and the owner is supposed to keep it greasy at all times for powers of self strength. F.J. (in A.D.A.:F33) says that the belt was brought by *kalthat*.

The subincision ceremonies of the animals occurred at a story place in F.J.'s country belonging to both the *kalthat* and the redbill. It is more commonly referred to as the Redbill story place. Here there is a formation of rocks on a tidal flat which is said to be the animals' camp where they prepare for the ceremony. There are individual rocks symbolising windbreaks and the camps of patriclans and the social groups by direction, i.e. the animals are said to have had a similar social structure to the human Lardil. This configuration of rocks is illustrated in figure 32.

The cutting of the channels

Lardil history tells us that the Mornington Peninsula was cut by the sea to isolate the various North Wellesley Islands, soon after the departure of the female dingo and the emu. Informants explain that since the emu had no offspring whilst there, it can be seen why no emus are to be found on Mornington Island today. There is a Lardil story that explains how the channels between Forsyth and Francis Islands were made by seagull woman, kankurr, who dragged a large raft back and forth to isolate her brother Crane as punishment for not looking after her child. An accompanying legend tells of the creation of the channel between Forsyth. Island and Andrew Island. is called *purikal* and was made by Sweet Potato woman, *Puri*, who was fleeing from Crane on Francis Island (Roughsey, D. 1971C:20; Trezise 1966). Geological evidence tells us the islands were isolated about 6,000 years ago. Changes in sea level and severe flooding are reported by many cultures of this era.... "this was the deluge that drowned the houses and troubled the legends of the ancients." (Fairbridge 1960:75).

The Appel Channel between Mornington and Denham Islands had been made previously after an initiation event of the animals. Accounts differ as to whether it was their first initiation ceremony (Roughsey, D. 1971C:58), or merely a practice for the first ceremony (L.R., J.J.). At any rate the circumcision event took place on the

northern end of what is now Denham Island. The ceremony was for the yellow travally fish, kalthat, and it was presided over by the dingo as well as Redbill and the Moon man, Gidegal (Kitikir). Moon decided that all the animals had to practice their shake-a-leg dancing. Each took a turn - Barracuda, Butter Fish, Queen Fish, Rock Cod, Sail Fish, etc. Moon found fault in the dancing technique of each one of them. Eventually he asked the lightening Pinpan to dance. Lightening was so fast and bright, he frightened everybody and all dispersed in great haste. Shark fled so quickly he cut out the Appel Channel. Other animals jumped across his path to create many places in the vicinity of the contemporary mission settlement, e.g. Barracuda and Mudshell made a gorge and a small creek Moon fled northwards, and as he rolled along, respectively. flattened a wide plain on which is found today the tidal estuary of the yarrlparrlkan creek.

The activities of Thuwathu, the Rainbow Serpent.

Before commencing this account of Thuwathu and his metamorphisis into the Rainbow Serpent, it must be pointed out that informants believe that much knowledge concerning his nature has been lost. This occurred when the two patriclans presiding over the country of his original camping place on Mornington Island died out. The patriclans, led by Terin and Punch were regarded as his human descendants, and the keepers of this body of sacred knowledge in pre-mission times. subsequently, in c.1939, Paddy Marmies (now deceased) dreamt an important dance about Thuwathu and received an extensive amount of accompanying knowledge. L.R. was one of the songmen who participated in this dance, and he has passed on his account to the investigator (in A.D.A.:F17, F24, F26). In addition, there are a number of other descriptions and discussions from which the data is drawn:- Roughsey, D. (1971°C:23-26), Cawte (1972:37, 38; 1973:119). Keen (1970; Tape 39) and informants' interviews in A.D.A.:F.J. (F32), L.R. (F38), L.R. and J.J. (F17), K.B. (F19). The following is only a summary of the major historical events concerning Thuwathu.

Thrwathu came as a human of the puralangi skin from the southwest. According to L.R. (in A.D.A.:F25) he came via the Georgina and Nicholsen Rivers along which he made many waterholes containing

mermaids and waterlilies. He was a subincised law man with many power songs for his self strength. His origins are vaguely associated with snake dreaming. On different occasions L.R. has mentioned the windsnake, the carpet snake, and the brown snake as his totems. He brought with him a group of people (Roughsey, D. 1971C:23) and camped at a place where there is today a bay at the mouth of the Dugong River (minyantakarr river). He built a large wet weather shelter. inside which he stored his sacred objects: hooked boomerang, spear, hairbelt, headband, bullroarer, emu feathers....indeed, all of the 'regalia' of a contemporary Lardil lawman. One evening there was heavy rain. Thuwathu's sister Pulthuku had a young baby daughter Kintitpu (or Kintiku), Willy Wagtail, who was getting wet since she had no shelter. *Pulthuku* asked *Thuwathu* if she could put her child in his 'humpy', but he was tired and sleeping and did not answer. She made a fire to warm her. She successively observed a number of spaces inside Thuwathu's shelter, but each time Thuwathu replied to her requests by saying that a particular space was for his big knee or his elbows, his ears, spine, feet, etc.

L.R. observed (in A.D.A.:F38) at this point that *Pulthuku* was breaking the law by talking to her brother. This was behavioural taboo amongst the Lardil. Also *Thuwathu* could not allow *Pulthuku* to enter his shelter for fear of her seeing his sacred objects which were not all accessible to women.

Eventually the baby died of exposure and <code>Pulthuku</code> mourned and cut herself. She made a bark torch and set fire to <code>Thuwathu's</code> shelter all around it. He was trapped inside and badly burnt before he came rolling out suffering. He cursed his sister with the words: "wakatha yarra tjalpaka yarra ngatja pirri ngatja pirri" (K.B. in A.D.A.:F19). K.B. says wakatha means sister and tjalpaka means vagina and that the meaning of the other words is unknown. However L.R. (in A.D.A.:F38) says that the curse meant "you have a vagina red like fire" and his brother Dick (1971C:24) says it meant "you have a big vagina that stinks". These appear to be individual interpretations.

^{1.} Spencer and Gillen (1904:631) observed an association between the rainbow and a water snake amongst the Warramunga; and between the rainbow, rain, snake and dollar bird amongst the Mara and Janjula. Mathews (1901:81) reported that the Jaroinga (or Yarrawinga) on the upper Georgina River, and the inhabitants of the Field River (possibly Jaroinga as Mathew says, but more probably Andakerebina,) believed that an enormous serpent ancestral being made the local watercourses, and that large waterholes were its camps.

Thuwathu crawled away singing whilst undergoing a biological metamorphisis. He was transforming from human form into that of a serpent. As he moved writhing in pain, he physically altered the landscape. He dug up all the ground in the vicinity of his camp that by now was all on fire the area became submerged and was extinguished by the sea. He travelled inland leaving a deep groove in his wake which is today the Dugong River. His back-andforth movements made all its tributaries and deep water holes were left at the many places where he rested. In other places, his rib bones broke off, going into the ground to become kurparra trees Dick Roughsey (1971C:25) says that Thuwathu's (Acacia alleniana). blood turned into red ochre on the surrounding tidal flats, and that he vomited up many animals. K.B. (in A.D.A.:F29) asserts that "every place Rainbow [Serpent] travel he leaves a young Rainbow [Serpent],... he leaves his seed."

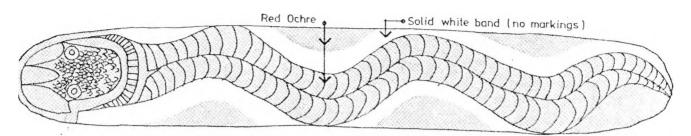
In the dance of *Thuwathu* dreamt by Paddy Marmies, high windbreaks are constructed on either side of the dancing ground. These are said to represent the mangroves on the banks of the Dugong River that *Thuwathu* created in his movements. This is the only example known to the investigator of a shelter taking on an explicit symbolic role.

Eventually *Thwathu* reached the leeward (north-west) side of the island. P.J. and K.B. (in A.D.A.:F32, F19) say that *Thwathu* was attempting to cut the island into two parts, but it is unclear why. On the leeward side he met a group of countrymen who, upon hearing of his fate, commenced mourning behaviour. They broke up the surface of a deposit of hard rock, quartz porphry, making many small sharp stones which they used to cut themselves. This place was *wirratjerra* and it became a major source of stone for cutting and pounding implements for the Lardil, from that time on.

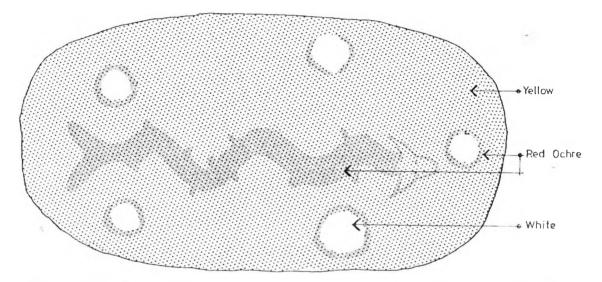
Thrwathu rested and then decided to return to his country on the windward side of the island. He did not complete this journey, dying at a place named pukakan on a ridge of the 'Mornington plateau'. Here there is a pandanus tree and a waterlily in a spring through which he entered the ground. K.B. claims (in A.D.A.:F19) that if the spring or well is dug out, one can hear a noise which is the sound of Thrwathu's babies coming out.

It is to be noted here that various extinct animals were still living in Australia during the Pleistocene and probably in the early Holocene (Gill 1963).

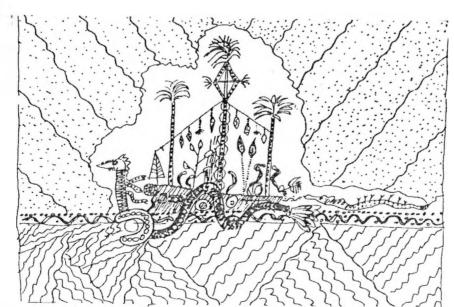
LARDIL PAINTINGS OF THE RAINBOW SERPENT



This image of Thuwathu is painted with red, yellow and white other on a shield made in c.1939. It is now housed in the Anthropology Museum, University of Queensland, having been sent to Brisbane by the mission superintendent, the Rev. McCarthy.



The Rainbow Serpent, *Thiwathu*, is here depicted on a 'coolaman' (a timber carrying device), made by Peggy Lorraine daughter of important Lardil elder, Kenny Roughsey (now deceased). The image is said to be painted in the same style as that used by her father.



The above sketch is of a painting by Lardil man Jackson Jacob. It shows an animistic interpretation by the artist's ancestors of a 19th century sailing vessel, seen as the Rainbow Servent stealing a dancing ground from Mornington Island.

Today his energies are not only in all the places that he made, the Dugong River, its tributaries, waterholes, springs, etc. but extend throughout the marine and littoral systems of the Wellesley Islands. To revenge his suffering it is said he makes people suffer with a sickness (called malkri) which he inflicts on individuals who do not observe certain eating and washing traits. This is further described in the next section. In addition a behavioural model became established for the Lardil, concerning respect in the relationship between a man and his sister and sister's daughter.

Thuwathu's contemporary form is allegedly a sea serpent, the Rainbow Serpent, who has its regular habitat in the channel between Forsyth and Andrew Islands, in Yangkal waters. He only emerges on a high tide according to Elsie Roughsey (1972:113). Informants claim that he is occasionally sighted. Three illustrations of him are contained in figure 33. A Wanyi man, Wilmer Evans described seeing Thuwathu at night as a line of bushfires at sea. Many contemporary incidences of dinghies being bumped, moved, and outboard motors failing are attributed to Thuwathu. The reason is said to be his revenge on the occupants for improper conduct of 'the law'.

As mentioned, Thrwathu's bones grew into kurparra trees and his energies are said to be still inside these trees. It was seen in the last chapter that this tree is a most important raw material of the Lardil used for boomerangs, spear prongs, fighting and digging sticks, etc. J.J. (in A.D.A.:Fl4) says that when obtaining kurparra for making boomerangs, one must weep next to the tree and be sad at hurting it, as well as singing special songs. Boomerangs are 'sung' to be powerful for fighting and hunting, and also take on an important role in the male tjarata ceremony (obtaining the love of a woman). These special songs aim to harnass the energies inside the boomerang to aid the owner. J.J. also says "they say that the old spirit, the spirit of the tree he always come and see whether you are doing the right thing or not, according to our law."

Malkri sickness and story places re-examined

When Lardil people became sick with a particular class of symptoms, their illness was diagnosed as malkri. It is said to be caused by breaking certain behavioural rules, thereby angering Thuwathu who invades the victim's stomach. Cawte has reported in detail on this phenomenon (1968A, 1968B, 1973, 1975), although he has only published four case studies, three of which are from

informants' accounts. He claims it to be a culture-specific syndrome, peculiar to the Wellesley Islands (1973:107).

According to Cawte (1968A:29, 1973:108, 1975:423) the range of symptoms are: (a) sudden severe abdominal pain, constant rather than colicky; (b) constipation; (c) tiredness and drowsiness followed by headache and distention of the abdomen; (d) possibly vomiting, groaning and writhing in pain. Informants report that sores, blisters and paralysis are also common symptoms (Roughsey, E., 1972: 110).

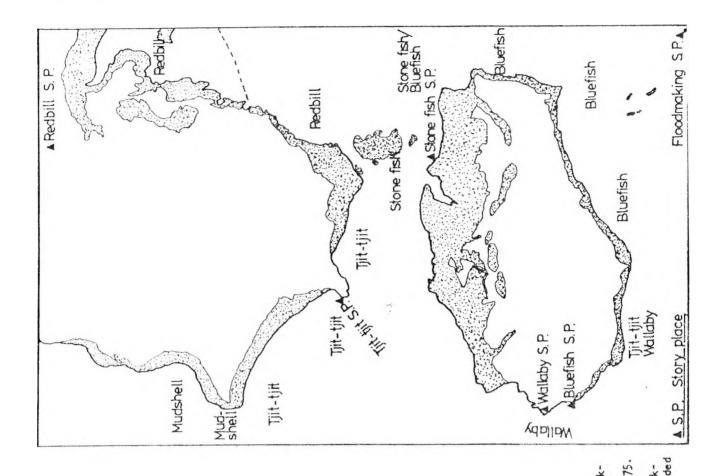
The Lardil say that the most common way to incur this sickness is to go into the littoral zone or the sea, after eating land derived food, without having first washed one's hands, face and mouth and allowing the food to digest. It is said that the smell of land food, especially greasy meat such as snake, goanna, or freshwater turtle, angers Thuwathu. He can sense the presence of such entities through his energies pervading throughout the coastal and marine systems. The energies are further controlled and directed by the inhabitants of story places and their offspring. For example, informants will say that if one suffers malkri near the wallaby story place, then one will malkri from wallaby, as well as Thuwathu. are careful to point out that land systems receiving only occasional contact with saltwater, such as tidal flats and saltpans are particularly dangerous, since the extent of the littoral influence may not be clearly defined. When one receives malkri the totem spirit that is guardian of that particular littoral is believed to invade the belly "like a bullet"." (Cawte 1973:108). In fact the victim's stomach is invaded by a synthesis of energies belonging to both The evidence for this statement becomes Thuwathu and the local totem. clear as this discussion proceeds.

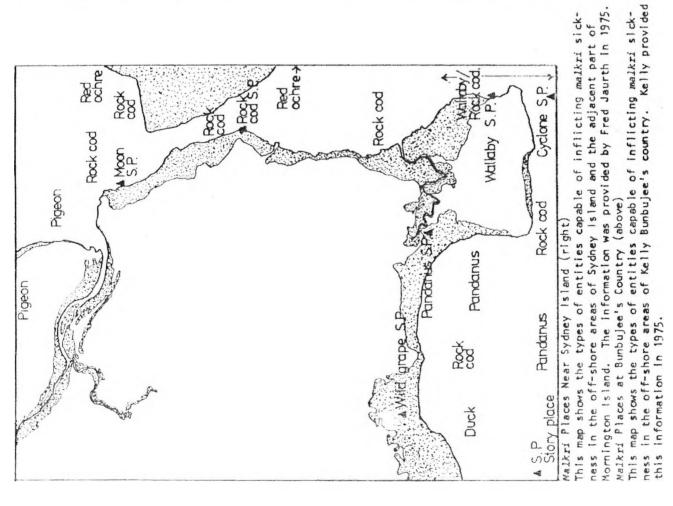
Once a detailed geographic study of the magico-religious properties of a locale is made, and the accompanying knowledge of story place is acquired, it becomes obvious that Cawte was suffering under a misnomer when preparing his map of littorals guarded by totems.²

^{1.} Today the cause is more commonly blamed on tinned meat, butter or bullock meat.

^{2.} Yet other anomalies occur in Cawte's map. A check with K.B. and F.J. revealed that two totems are incorrectly sited (Cawte's nos. 15, 32); some entities are associated with places created by ancestral beings, rather than with story places as he shows (nos. 1, 5); one species is associated with a locale as an important resource but is not a totem (no. 28, lancewood); and the entity he refers to as 'nail print' (no. 9) should be 'nail fruit' (lardil pena).

'MALKRI' PLACES IN FRED JAURTH'S COUNTRY AND KELLY BUNBUJEE'S COUNTRY





Totemic entities certainly guard the littoral and off-shore areas, but there are no fixed boundaries breaking up the littoral zone into segments each of which is presided over by a single totem, as Cawte indicates on his map (1973:108, 109, see figure 9). What can be said is fixed, is the centre of local totemic energy, viz, the story place site. It is argued here that there is not always a clear correlation between (a) a story place resident or totem, and (b) the identity of the malkri spirit which may enter a person off-shore from that story place. F.J. and K.B. named the malkri intruder which would be incurred by a victim, for various places around the coastlines of their respective countries. The data are illustrated on maps in figure 34. It can be seen that in most cases, but not all cases, there is a correlation between story place resident and local offshore *malkri* intruder. An exceptional case for example is in F.J.'s country in the sea near the blue fish story place at walpakuntiyan. Here F.J. says one would incur tjit tjit malkri, but the tjit tjit story place is several kilometres away. Other examples are evident on the There is thus no precise structure of contiguous littoral segments each presided over by an individual totem as Cawte suggests. The territories of these subterranean and submarine entities is more loosely defined according to the Lardil.

There are also other related ways by which one may malkri:-

- (1) By wearing into the littoral zone or sea, ochre, blood and/or grease used in body decoration for dance. If there was no freshwater available for washing after a dance, people continued to wear their body paint while they slept, rather than wash in the sea (C.M. in A.D.A.:Fl). Alternately they rubbed their bodies with dry sand to remove the paint. It is seen elsewhere in this chapter that the justaposition of white ochre with the sea to anger Thwathu is the key behind a number of 'ceremonies' to create floods and cyclones.
- (2) According to some informants (e.g. Roughsey, E. 1972:79, 70, 77, 104) malkri can be induced in an inverse manner by entering freshwater holes without first removing the smell of seafoods. Cawte reports this also (1973:432). However it is unclear if informants are referring specifically to waterholes on the tributaries of the Dugong River which were created by Thwathu and are said to contain his energies. As was seen in the last chapter the waterholes on this network of streams, together with those on the Gabanyari River are major perennial water sources

of the Lardil.

- (3) Malkri may occur if land and sea foods are cooked on the same fire. To ensure immunity one should cook these foods on separate fires (Roughsey, D. 1971C:44, 79).
- (4) A woman and/or her baby can malkri if her breasts are with milk. If, whilst in the littoral zone or sea, she spills milk, suckles her child or fails to clean milk off her child, the illness may occur. Babies were therefore not carried over tidal estuaries when groups were moving along the coast. (Roughsey, E. 1972:103, 116; Cawte 1973:101).
- (5) A woman can receive *malkri* if she enters the sea whilst menstruating (Roughsey, E. 1972:103, Cawte 1973:101). Furthermore if a man had intercourse with his wife during her menstrual period, and then he went hunting in the sea, he too would incur *malkri* (Cawte 1973:101).

It has been speculated (e.g. by L.R. and J.J.) that if *Thwathu's* curse on his sister *Pulthuku* included the words 'vagina' and 'red like fire', then he may have been placing the curse of menstruation on women, and hence his anger when smelling menstrual blood.

The cure of malkri sickness has been described by Cawte (1973:110) as follows:

"From the throng emerges a native practitioner or other elder with knowledge. Kneeling, he massages his axillary sweat into the victim's body. A grass or hair belt is unravelled to provide a long cord, which is tied by one end to the victim's foot while the other is run down to the water in order to point the way home for the intruding spirit. The healer commences the song of exorcism; its innumerable verses are sung through the night, while the assembled people scan the sky for a shooting star. The shooting star is the incarnation of malkri's eye, at last diving from the sky to indicate malkri's dispossession and banishment. The string is then snapped. The victim recovers."

Besides rubbing underarm perspiration on the victim, there are accompanying forms of treatment: placing the mouth on the victim and blowing hard², and blowing breath at the victim from a distance

2. L.R. used this technique whilst allegedly curing a baby of malkri in the investigator's presence.

^{1.} Cawte (1973:100, 101) gives a brief account of a story concerning the origin of menstruation that involves a Dugong woman, but he continues to say it is connected with the *Thuwathu* legend.

(Roughsey, E. 1972:61, 62). The verses sung by the attendant elders on the victim are meant to systematically sing parts of *Thuwathu's* anatomy out of the victim. The men sing the teeth to stop biting and unloosen, they sing the jaws to unloosen, they sing the head out, the backbone, the tail etc. (K.B. in A.D.A.:F31). Once *Thuwathu* has been sung out, the man must not look back at the sea but go inland (Roughsey, D. 1971C:80). If the cure is not successful the victim is likely to die.

Cawte's description of this malkri song (1973:110) gives the impression that each local story place or malkri totem has its own special song to be used as the cure. This is not the case. There is only one song for all victims, no matter what local totem species has been the agent in the sickness (F.J. in A.D.A.:F5). It is clear then that it is Thuwathu inside the victim, or at least his energies that have been used by the local story place being.

Cawte (1973:92) claims that the Moon is a more potent agent of malkri than Thuwathu. This is an error in the light of the above model - Thuwathu is responsible for all malkri. Nevertheless some local story place totems are feared more than others, especially animals with sharp claws, teeth or fins that may damage one's internal organs whilst inside one, e.g. the barracuda (tangka) is said to cut one's stomach or poke one's eye (Roughsey, E. 1972:114, 115). Thus some informants will elicit characteristic types of wounds incurred from particular story place entities.

Although the above description of complaint, cause and cure outlines the main properties of the malkri phenomenon, accounts of actual experiences by informants contain some individual details which are additional to this model. The following experience befalling Adam sometime in the 1920's or 1930's, as described by Elsie Roughsey (1972:111, 112) is such an example.

"....Birri waters, where the Sea Hawk lives there, they is a big reef out there, that's the home of the Sea Hawk....well my daddy speared the turtle....one of the men jumped in the water to hold the turtle at the side of the dugout. He held the turtle whilst the others in the dugout pulled the turtle into the boat. Then Adam lifted himself out of the water but he found out he was held down by the master of the place, so my daddy and others pulled from the canoe, and Sea Hawk held fast on his side with its claws. So the

men finally pulled harder and soon got him in the canoe, on his left side of the tummy he had an open scratch from the claws of the Sea Hawk, all of a sudden there was huge waves come from the sea, it was now rough, the huge waves almost swamped the canoe, everytime the waves come in a huge roll, the old men paddled faster and faster to get away from the waves, the poor old man was bleeding fast the canoe was almost swamped in blood, the man kept paddling, and when they turned to see the rolls coming behind the canoe, they saw the head of the Sea Serpent chasing them too, to take the turtle back, because the tribes believe he guides the turtle and dugong around that part of that The old men got very frightened, so they chanted to drive the evil spirit away.....still the Sea Serpent followed them. They were nearing the beach when one two last big waves landed the canoe on the beach, the men looked back and there he was not very far away from them, the men hurriedly to shore dragged the boat up to the shore and lifted out the man who was hurt, by now the canoe was just mass of blood. They took Adam up the camp, chanted over him to give him back the strength that he already lost of blood they warmed him beside the fire. They chanted the would on his side and closed it up, without be stitched as the tribes chanted the cut on his side, it finally closed up, than Adam felt for a motion, what happened to the people surprised his motion was the birds feathers of the Sea Hawk, soon after he was well again....."

If Adam's bowels passed sea hawk's feathers, then it was a sure index that the creature had been inside his stomach. In another account Elsie Roughsey (1972:114, 115) tells of a small boy who passed a "stinking motion" caused by the presence of the barracuda inside him. Thus we see in Lardil accounts, that there is evidence that both *Thuwathu* and the local totem somehow synthesize their being and/or energies in a *malkri* attack.

Despite Cawte's limited data, he provides a variety of hypotheses as to the explanation of the *malkri* phenomenon. "Small wonder that exotic culture-bound syndromes provide a happy hunting ground for speculative interpretation!" (Cawte 1973:113). His

hypotheses range from diagnoses such as gastrointestional infection with a psychogenic culturally determined superstructure (1973:116, 1968A:31) and diaphragmatic fixation coupled with air swallowing (1973:108), to psycho-analytic explanations such as displacement of family antipathy (1973:113, 114) and symbolization of certain repressed childhood urges (1968A:31, 1973:115). He says a purpose of the syndrome may be to encourage the biological advantages of handwashing (1968A:31, 1973:116), but elsewhere says the handwashing may symbolize the washing of blood after killing a land animal (1968A:31, 1973:114).

Of more interest here are his analyses of a socioeconomic and ecological nature. He claims (1973:114) malkri to be the most specific incidence in medicine of an illness associated with the concept of territoriality. Despite the anachronism in his description of the territorial properties of the phenomenon, there is an obvious underlying territorial principle of Thuwathu presiding over the sea and over those parts of coast influenced by salt water. Cawte stresses a different territorial aspect. He claims that malkri "keeps people from trespassing or poaching on other clan's territories" (1975:423); it induces "fear of leaving one's own territory and of the danger inherent in breaking rules on foreign ground" (1973:114); and further, that malkri "safeguards cooperative relationships between families"(1975:423) and maintains territorial boundaries in the light of the limited resources of the island (1973:118). he claims that "some littorals are better fishing sites and therefore need stronger policing" (by more potent malkri totems) (1973:118). With respect to this latter point Cawte cites G.P. (1975:29, 30, 1973:108, 109). Gully explains that long-resident members of a local patriclan who are regular users of the environment possess a degree of immunity because of the familiarity of the local story place beings with those individuals' smells. That strangers are more prone to malkri is supported by other informants (e.g. P.J. in A.D.A.:F32). it is argued here that this does not provide sufficient grounds to believe that malkri was a mechanism discouraging lateral coastal movement and exploitation of neighbours' countries. The evidence in the last chapter concerning (a) the islands' plentiful supply of food, (b) freedom to hunt fish in any patriclan country and (c) regular movement by people right around the island, clearly does not support Cawte's claims.

It is felt that Cawte misemphasized one aspect of territoriality concerning socio-geographic organization, and failed to grasp the full significance of the physical division between land The sea was not only the source of staple meat diet, but a constant source of death as well. He did however recognize the potential hazards of the marine systems. Elsewhere (1972:19) he elicits dangerous marine creatures such as the shark, stingray, stonefish, coneshells and the sea wasp Chironex fleckeri. (Tindale (1962A:279) also noted that during the occasional winter with some fog or rain, the sea fogs sometimes trapped people on reefs or rafts, causing loss of orientation and eventual death through cold and The aim here is to demonstrate that the full exposure). significance of the malkri syndrome and the land/sea division, is revealed only by making deeper inquiry into Thuwathu, his nature and his powers as modelled by the Lardil.

Despite the problems of Cawte's analysis, he concedes that no single causative factory is likely to apply (1968A:32). He sees that the Lardil had "a need to propitiate the sea, the main food giving element, whose behaviour cannot be controlled." (1973:115). Cawte recognized that the malkri phenomenon must be looked at as "part of the total belief structure maintaining social institutions and organizations and ultimately adaptation..." (1973:113). However it seems he failed to carry this analysis through.

Although informants recognise that <code>Manhpil</code> and <code>Tuiwal tuiwal</code> created the story places as sites of fertility and reproduction, it is clear that these sites have taken on a new environmental significance to the Lardil following the metamorphisis of <code>Thuwathu</code>, and his taking up residence in the sea. Informants cannot provide information as to how the story places became associated with <code>Thuwathu</code>, but all of the story place entities are recognized as the agents of <code>Thuwathu</code>. J.J. has referred to them as <code>Thuwathu's 'angels'</code>. "All animals got that rainbow spirit — the water rat's the rainbow" (K.B.). "The rock cod's shadow — that's the rainbow spirit" (K.B. in A.D.A.:F3). "All the story places in the sea". "All the story places join in on the <code>[Thuwathu]</code> story." (F.J.).

It is not without significance then that the story places are all located in the coastal land systems (except for the $m\alpha li$ story place), and many of them are below the regular high tide level. F.J. (in A.D.A.:F4) refers to "dreamings in the sea", and to

"dreamwater" implying story place locales off the coast. *Thawathu's* energies extend into every coastal story place, and into their inhabitants and their offspring. This is an important concept underlying the Lardil theory of *malkri*. "*Malkri* must live under the ground, near the water, cause they smell you when you got something" (F.J. in A.D.A.:F5). L.R. and J.J. (in A.D.A.:F17) go so far as to claim that *Thuwathu* can metamorphose into any story place animal.

Although the Lardil do not believe that humans originate from story places, there is a definite link between human origins and the coast. "Our old people believe that baby spirits live in the small bubbling holes that can be seen along the seashore at low tide. If a man is out hunting for fish or turtles and has good luck, such as the easy capture of a big fish, turtle or stingray, he knows that a baby spirit has entered into that fish or turtle and is looking for a mother. The man takes the fish or turtle home and gives some to his wife to eat, so that the baby spirit enters the woman. The woman already has an egg like a turtle-egg inside her; it is made up of semen and menstrual blood. The baby spirit breaks into this egg and so grows inside the mother until it is born." (Roughsey, D. 1971C:17). Cawte (1972:98) reports the same: "The goamanda (literally bubble people) or spirit children were thought to dwell in the worm holes found in sand at low tide." Thus the spirits of the unborn children dwell inside a similar land system unit to that in which many story place sites occur, but unlike the latter the place of residence lacks specific focal sites.

An examination of F.J.'s map of malkri creatures (figure 34) reveals that there is one story place that apparently does not cause malkri, the flood making story place. What then is the relation of Thuwathu to this place? According to Dick Roughsey (1971C:21) it was Manhpil and Tuiwal tuiwal who also created the flood making ceremony off Sydney Island. Nevertheless Thuwathu is contemporarily associated with this place and ceremony. The primary agent in making a flood is white ochre - its juxtaposition with the sea is said to anger Thuwathu who retaliates by raising the sea level. But it is not only flood that Thuwathu can create. He is in fact in control of many meteorological phenomena. In K.B.'s country there is a cyclone story place which can also be 'stirred up'

with white clay, as can several other similar sites on the leeward side of the island. Trezise (1966) tells of a rain making ritual which involves the placing of yellow clay and yellow taltjit flowers (Cochlospermum sp.) into the sea at a particular place. Rainbows are said to be Thawathu's shadow, as K.B. points out (in A.D.A.:F19). "You ever see Rainbow turn himself and drink that rain water? Well that's where he show his colours ta cloud."

The Lardil allegedly achieved control over most climatic elements with songs. There were songs to turn back hail, to stop waterspouts and dissipate cyclones, to induce rain and to stop rain, etc. None of these songs are said to be Lardil, nor do they contain Lardil words (K.B. in A.D.A.:Fl6), but like Thwathu himself, come from the mainland - pieces of knowledge used to combat Thwathu's environmental aggression and to harness his energies to the advantage of the land occupants (K.B. in A.D.A.:F31). The Lardil elders see themselves as eternally indebted to the mainland people from whom they received these songs - gifts of environmental power.

A family of three or four waterspouts is explained as the manifestation of baby Rainbow Serpents, - Thuwathu's offspring originating from his own personal story place at the mouth of the Dugong River, the submerged site of his burnt shelter. It is not without reason that one might fear a waterspout as a magico-religious Lane (1966:62) has described the effect of luminous organisms inside waterspouts:.... "the glow was caused by a multitude of tiny luminous organisms which the spout sucked up. To see such a waterspout coursing over the ocean at night, its whole length outlined in phosphorescent light against the darkness, must be a magnificent spectacle." Note that such organisms commonly occur in the Gulf waters. "Various waterspout noises have been reported. Sighings, hissings, and sucking sounds, as well as roarings and crashings have been heard." (Lane 1966:62).

Story places have yet another dimension of importance to the Lardil. Because many of their occupants are partly responsible for malkri does not mean to say that these creatures are not closely affiliated with the land humans. Local totemism was mentioned previously. But in addition the Lardil believe that these sites are physical links into the dreamtime dimension. As such it is considered more likely that communication by a human into the dreamtime would occur at one of these sites. If a man wishes to

obtain knowledge by dreaming songs, then the most potential place at or near which to sleep, was a story place. The knowledge that might be obtained in a dream there is likely to deal with the nature of the local story place inhabitants. As L.R. emphasizes (in A.D.A.:F17) "You gotta be there at that [story] place and show respect to place. You gotta talk to certain place too. You gotta talk to that certain ground....if you go to a certain [story] place, it always gotta come back in dream."

Thus today, in times when people are living in a concentrated settlement, men often criticize one another for failing to obtain and provide an adequate contribution of cosmological knowledge for the communal store of knowledge. This is because individuals are absent from their dreaming sites in their patriclan countries. It is believed that a contribution of knowledge is required from dreams received in the vicinity of each and every story place to provide a balanced system of communal knowledge. The foundation of knowledge and subsequent social authority, can be seen to be with social geography, - the association of patriclan groups with story places.

It is certainly the investigator's experience that when old men return to their countries, they regularly dream songs. On one visit the investigator made to K.B.'s country, F.J. had a dream near the rock cod story place, in which the unseen people of the locale told him they were happy to see people in that part of the country once more. It is understandable then that informants express concern about the welfare of story places. J.J. (in A.D.A.: F17) has said that if a story place is dug up, then destruction of the local environmental order and balance will prevail, i.e. cosmic destruction from the Lardil viewpoint. If the story places are the environmental source of cosmological knowledge, then they are fundamental and prerequisite to a sense of Lardil cultural identity.

Another aspect of *Thawathu* can be mentioned here - the nature of shooting stars which the Lardil say are the incarnation of *Thawathu's* eye. But the night sky contains far more properties of place than just the abode of *Thawathu's* optic energies.

The night sky, shooting stars and the moon

It was stated previously that for the Aborigine, the sky is given, enduring since eternity, but its individual features are animistic beings or the results of their activities. The stories

and beliefs concerning the inhabitants of the Lardil skies are so extensive that they're beyond the scope of this study. Description will be confined to a brief summary of properties.

All the stars are people or animals or artifacts (L.R. in A.D.A.:143). L.R. also says they are Lardil ancestors. Their movements through the skies, their relative size and groupings are interpreted by the Lardil as a socio-economic world in itself containing individuals who carry out hunter-gatherer activities. For example, "Buldingu, (Venus) the woman star, is first to go down in the evening. She goes to make a fire to cook fish which men stars will bring home later." (Roughsey, D. 1971C:42). Many properties of the Lardil earthly world are thus mirrored in the night sky world. The heavenly domain is divided into segments by direction each of which is associated with a Lardil patriclan. Some stars are absent from their country because they are travelling to other countries visiting or hunting, as do their earthly Lardil counterparts (L.R. in A.D.A.:F43). Milky Way, Yule is said to be a path for hunters to travel on at night. It contains a large camp, inside which are found all of the common Lardil artifacts in the form of stars.

Since Lardil hunting was largely oriented about tide, and thus often occurred at night, the stars took on important functional roles for the Lardil. Their relative positions provided a measure of time. Movements and positions also indicated seasonal changes, e.g. the weather girls Pleiades could be used to tell when the intensest south-east windcycles were imminent. At appropriate seasonal times appeals were made to the stars with songs to provide good hunting (Cawte 1972:38, L.R. in A.D.A.:F39). The Lardil have a different relation to shooting stars.

Shooting stars are said to be the eye of *Thuwathu* travelling (Roughsey, D. 1971C:26). They are associated with the *malkri* sickness as Cawte described (1973:110): a shooting star is "the incarnation of *malgri's* eye - diving from the sky to indicate *malgri's* dispossession and banishment." Elsie Roughsey gives a more

^{1.} Peter Hamilton has pointed out (personal communication, 25/8/78) a contrast here with his findings on Victorian Desert Aborigines. He says they pay little attention to the night sky, and also notes that they do not engage in nocturnal hunting. The hypothesis follows that economic relation with the environment is closely linked with social behaviour and the cosmological concepts of a cultural group.

elaborate description of this eye's behaviour (1972:107):

"....how the tribes knows someone is sick in the camp there goes a big bright star runs across the sky and that lets the people know somebody here will be sick, so as the star falls across the dark night, there is a howl of pain from a woman or man may be suffering tone of a painful cry from a baby. So the old tribes get bushes in a bunch, the main tree leaf is a wattle leaf. here they warm the wattle leaf over the fire and warm the poisons tunmy, and repeat the warming also chanting at the same everything is over, than another big star with blue and red colours drifts across the sky, then firesticks are grabbed from the camp fires and thrown the same direction as the star went, to our belief the evil spirit of the Serpent is gone out of the person, back to the Spirit that lives in the sea."

Shooting stars also mean other things. They are a sign of a birth or of a death (Roughsey, E. 1972:133). E.R. gives one eye-witness account of a glowing stone entering into a person and then flying out of the body after being sung(1972:59, 60). L.R. (in A.D.A.:F25) explains that *Thwathu* can send a shooting star to any point on his travel paths, e.g. down the Nicholsen River.

The most significant nocturnal entity for the Lardil, was the moon Gidegal (kitikir). The events of the first initiation of the animals were mentioned before, and it was noted that Moon departed north across the island, creating a stream bed as he rolled. Upon reaching the north-west coast he arrived at a place now called Spring Point (lingala). One night he attended a dance there. There is a popular Lardil legend telling how he ate all the food prepared for the dancers, and in some versions how he seduced a number of women during the dance (e.g. See Roughsey, D. 1971C: 86, 87).

One version of the story says that he got so full with food, he floated into the sky (P.J. in A.D.A.:F32). Another (Roughsey, E.

^{1.} Dick Roughsey (1971C:75) reports that star totem people of the ngaripilangi and pangaranyi skins are best equipped to sing the shooting star.

1972:119(relates how he was chased, killed, chopped into many pieces and thrown into the sky. Many parts fell to earth, but three pieces came to life in the sky. They undergo relentless cycles of dying, being reborn thin, getting fatter until full, then fading away like an old man, until dying again. When the moon is red during an eclipse it is said to be the blood from his earthly death. changing size is associated with changing hunting returns from the sea. When there is no moon or a thin moon, Gidegal has an empty belly and takes all the fish for himself. Songs were sung by the Lardil at this time to make him round again. Once Moon is round, his belly is full, and the fishing and sea hunting is successful once more (L.R. in A.D.A.:F39). Because of his greed he spoils the hunting for others. Besides holding back the good fishing tides and changing the weather, he sometimes shines in the day, and the wild bees (wangkapil) do not emerge from their nests, and thus cannot be detected by those seeking honey (Roughsey, D. 1971C:90). Moon's sexual lust led him to create secret male ceremonies called tjarata to seduce women. These have been passed on to humans. One is described in Roughsey, D. (1971:82).

Today the site of that sinful dance is the moon story place. It is marked by a freshwater spring on a littoral rock shore platform. The water is said to be the moon's urine. "Anyone getting water from the spring must see that their shadow does not lie across it, as this will cause great circles to appear around the moon, meaning that a big storm or cyclone is soon to come." (Roughsey, D. 1971C:87). On a nearby cliff face grows a large tuft of grass which is said to be Gidegal's beard (see figure 22).

Mention was made before of the Lardil belief that part of one's spirit travels to a black hole in the Milky Way after death to emerge from another hole in the New Horizon (yilitjilinye), the place of good spirits. The evil spirit of Gidegal lives in this black entrance tunnel called 'Winjara-bullat-nyea', with his two wives. It is said that he verbally abuses male spirits as they pass by, hurrying them along, but provides female spirits with food and intercourse (Roughsey, D. 1971C:87-90).

^{1.} There are a number of tjarata ceremonies and methods. Some are used to destroy an existing love between a couple. Many have been acculturated from the mainland tribal groups.

This tunnel is also the house of devils or malkan, which come to earth at night with big nets to capture people. The Lardil have a story and dance about two boys chased by malkan (Roughsey, D. 1971C:91), and there is an account of a Lardil man, Jimmy Dugong, being captured by them in mission times (Roughsey, D. 1971C:92, Roughsey, E. 1972:138-140).

Throughout this chapter it has been seen that Lardil belief (or 'ethnoscience') contains many causal links between individual's actions and environmental happenings, links that might seem supernatural or imaginary to the Western observer. Thus songs are used to change the weather, or to obtain the love of a woman, or to rid people of sickness. Before concluding this chapter, a brief examination will be made of some aspects of causality in Lardil cosmology.

Rainbows, shadows and footprints

In the Lardil cognitive style there are often found indexical relations between things and ideas. The Webster's Third International Dictionary defines an index as "a sign whose specific character is causally dependent on the object to which it refers but independent of an interpretant (a bullet hole in a fence is an ~ that a shot has been fired)." Pierce (1932:170) defines index as "a sign which would, at once, lose the character which makes it a sign if its object were removed, but would not lose that character if there were no interpretant. Such, for instance, is a mould with a bullet hole in it as a sign of a shot, for without the shot there would have been no hole; but there is a hole there, whether anybody has the sense to attribute it to a shot or not." An index is thus functionally or mechanically linked with the something that made it. A footprint is a good example of an index. It is an index of someone having walked past a particular place. Its physical shape does not visually resemble somebody walking (as in an iconic relation) nor is there required a cultural rule to interpret its signified meaning (as is the case with a symbol).

A depression in a lithified rock platform is an index of Manhpil's presence according to Lardil historical belief. But such an association, although indexical, is still culture-bound being inaccessible to the uniformed observer. The normal definition of index does not provide for cultural interpretation of this class of signs. The reason for this feature of Lardil thinking is that they have a different set of concepts concerning causation, compared to Western science. Thus a stain on a rock might be classified as sperm and regarded as an index of the presence of the dreamtime wallaby being and her story place. (Similarly at the

rock cod story place). A rainbow is an index of Thuwathu's presence and it is called his shadow. The concept of a shadow is again used by K.B. (in A.D.A.:F16, F24) as an index of the presence of unseen people at a place. Waterspouts, cyclones, storms, etc. are indices of Thuwathu's angry presence. When ancestral heroes made places, or left their marks at places, or their sperm, urine, faeces, or parts of their bodies, or dropped objects, then such marks and things became indexical signs of the travels and experiences of these individuals at those places. Thus Thuwathu's rib bones grew into kurparra trees. It is common for such indices to contain energies imparted by these makers, e.g. today the dingo story place on Forsyth Island contains strange sexual energies. Such causal associations are a common feature of the belief systems of many Aboriginal groups. For example Maddock (1972:6) says of the Gidijingali of Arnhem Land: "Trees growing by the banks of waterholes are believed to be the transformed bodies, or parts thereof, of powers of the kind who made the waterhole." Munn makes detailed observations of the Walpiri!: "In general, any object created in any way by an ancestor is thought to contain something of himself within it....[and]....any sort of visible form resulting from....[his] presence....can be regarded as his 'mark'..." $(1970:142)^{2}$

Thus the idea of 'the totemic landscape' can be defined as a system of places that are indexically associated with ancestral beings, each place containing subjective energies derived from those beings. Munn (1970:143) describes 'the totemic landscape' as the "fundamental object system external to the conscious subject within which....consciousness and identity are anchored...." For the Lardil, story places are the most important components of this environmental perception. They are the focus of totemic affiliations and increase activity as well as forms of descent group inheritance for the members of a patriclan.

^{1.} She uses her semiological terms in a different sense to that of Pierce.

^{2.} This transformation of energy from an ancestral being into a place, thing or person, whereby the place, thing or person retains a subjective energy from the hero in some sort of ongoing relation, Munn calls a 'bi-directional structure' (1970:144).

^{3.} Strehlow (1970) discusses further the theme of the totemic landscape in the case of the Aranda. However the Aranda system of totemic relation to place contains some important differences to that of the Lardil.

Belief in the ongoing energy relation between a person and his footprints, buttock prints, urine, faeces, etc. takes on special significance in the realm of Lardil sorcery. Cawte (1973: 91-92) and Roughsey, D. (1971C:75-78) describe Lardil sorcery practices which include jabbing an enemy's footprints with a poison dart or spear or stingray barb, jabbing ground on which an enemy has urinated; cooking a victim's excrement. Such practices allegedly induce pain in the victim.

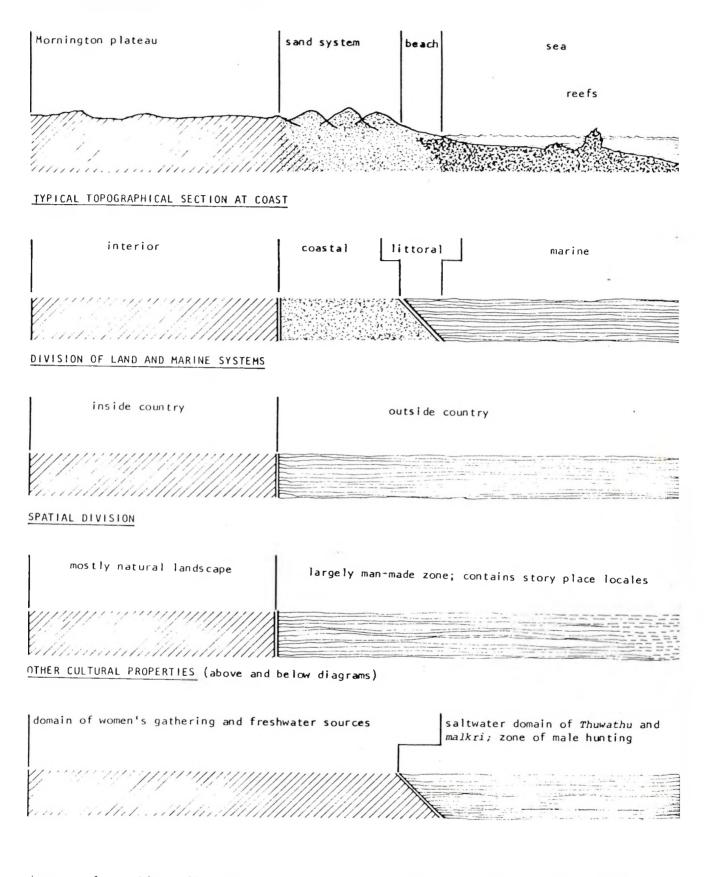
It is relevant to note that a hunter/gatherer lifestyle demands regular attention on indexical signs in the environment, in order to ensure success in obtaining food; such indices as the tracks and fresh faeces of animals, animal noises, flowering plants, the feeding paths of dugongs in sea grass (observable at low tide) and signs of changing climate (e.g. the Lardil believe the katjpal cloud in the south is an index of imminent strong south-easterly winds). Such causal links conform to the Western definition of index. It is in the realm of Lardil cosmological thought that causality becomes culture-bound. Complexes of environmental sign become attached to invisible forces and beings, and places contain invisible properties known only to the indigines.

Conclusion

There is a wealth of invisible properties distributed at places in the Lardil lands. Many places include complete land systems and complexes of land systems provide the habitats for invisible entities according to Lardil belief. Many of these places were created by the ancestral heroes. Their activities comprise pieces of historical knowledge associated with those places, even if such a place has subsequently been buried by sand or submerged by the sea (e.g. the *Thawathu* story place). This is particularly the case where important events occurred such as those establishing a new behavioural trait or law of behaviour e.g. death, sexual mores. The nocturnal sky provides another environmental dimension containing places occupied by invisible animistic beings and objects.

^{1.} K.B. (in A.D.A.:F50) claims that the katjpal is also a sign of death.

THE PROPERTIES OF INSIDE AND OUTSIDE COUNTRY ON MORNINGTON ISLAND



known, safe, stable, solid, variable, form, confined, finite

mysterious, dangerous, flat, liquid, extendable, infinite, undergoes vertical movement

Land systems take on specific properties of place in themselves. They are well recognized as the habitats occupied by associations of particular plant and animal species, these being of personal and emotional significance to the Lardil people through their totemic beliefs. They have invisible properties too. Of particular significance is the contrast between the marine and the interior land systems and their transition zones. There are two overlapping transition zones that emerge as important in Lardil law - the coastal land units and the littoral zone. concentric to and between the marine and interior systems (see figure 35). Lardil history indicates that the coastal systems and some off-shore features were all made by Manhpil and Tuiwal tuiwal, and contain a wealth of geography, resource places, camps, story places, etc. The perimeter of the island, although consisting of natural components, and with a minimum of artifactual articulation, is seen from the Lardil viewpoint to be artificial. This is in contrast to most of the interior which contains a far less wealth of place properties, but nevertheless is the camping habitat for the unseen people.

The domain of the invisible energies of Thuwathu and his agents is in the marine and littoral systems. Changes in the health of humans, and in environmental activity are believed to be caused by activating energies in this saltwater environment. This is done through the juxtaposition of certain substances in this domain (land animal fat, menstrual blood, white ochre, etc.). changes that originate from the sea include numerous meteorological phenomena such as cyclones, storms, lightning, waterspouts and strong winds. It is in the marine and littoral systems that one is most susceptible to malkri and to this extent these places are dangerous and carry restrictions on offensive behaviour. Professor G. McBride has provided the investigator with an interesting hypothesis concerning dangerous places (personal communication, February 1979), viz. that people (and animals) have more detailed geographic knowledge about such places. It follows that the reason for there being a more extensive system of naming along the Mornington Island coast is because it contains the areas

^{1.} Professor McBride is an ethologist in the Department of Psychology, University of Queensland.

where humans are most likely to be inflicted with malkri. Another key feature of the littoral system and marine systems is the presence of story places. Only one story place lies outside these zones.

Of the different Lardil place types, story places emerge as having the most complex set of properties. They are marked neither by artifacts nor structures, and even their natural characteristics are not necessarily outstanding visually, yet their invisible properties are intense according to Lardil belief. Manhpil and Tuiwal tuiwal were their original creators but further properties have been added by subsequent supernatural beings. Each story place is inhabited by an individual entity who yields energies from its particular site. The entity reproduces there, under or inside the ground or sea, and simple actions performed by Aboriginal people can catalyse the reproduction or fertility Some of these places generate plant or animal species, whilst others yield meteorological phenomena. The energies of the story place occupant are supplemented with those of Thuwathu, for whom they act as agents monitoring the actions of humans and inflicting malkri sickness upon persons if they do not observe particular behavioural rules.

Energies are also transmitted from story places to humans who are born or conceived near a story place, or who preside over and regularly occupy the locale (e.g. the tulmata). These humans then possess a close identity with their story place and its occupants. The totem entities provide personal subjective links into a co-existing religious world, making everyday life experience both profound and personalized.

By frequenting a story place locale, individuals may receive gifts of knowledge via dreams from unseen people in the dreamtime dimension. Such pieces of knowledge appear to be qualitatively different at each particular story place. Together, this class of places comprises the geographic source of Lardil sacred knowledge. Although story places can be classified together having the above

^{1.} This is another meaning of the term 'inside' commonly used in Aboriginal cognition. Munn (1970) has noted the contrast between being 'outside' or on top of the ground, and going 'inside' the country - when an ancestral hero goes under the ground into a dreamtime dimension.

properties in common, they may also possess different ones. For example, the Sydney Island flood story place has its elaborate increase rite; the redbill story place has its camp formation of stones; the rock cod story place has semen stains; some contain the remains of a dead ancestor (Manhpil story place, dog story place on Forsyth Island), whilst others have an individual history of behavioural events that have occurred there (Moon). There are story places which have a unique story or body of connected knowledge, and those that do not. Many places are important as the sites of sacred and/or historical events, but they may not necessarily be story places.

In this chapter it has been demonstrated that invisible properties of place can be examined as a class of properties aside from those detected in an ethnographic analysis of everyday socio-economic behaviour, but nevertheless interdependent in many ways. The Lardil conception of their environment is intense with both passive and active forces that differentiate place in a culturally unique manner. Although such forces may be invisible their presence is inferred through culture-bound indexical and symbolic associations. "In the largest sense the making of place is the ordering of the world, the clarification of differences between places, some of which are more significant than others. It is making visible of a special space - in the case of.... [Aboriginal] people sacred space which constitutes a break in the homogeneity of undifferentiated space....and hence a place." (Rapoport 1972:10). The invisible places of the traditional Lardil world present a culturally unique set of man-environment relations. As P.J. said (in A.D.A.:F3): "If we didn't have those stories we would just be like a white man".