

PACIFIC LINGUISTICS

Series D - No. 18

THE LANGUAGE OF THE RAO PEOPLE, GRENGABU,  
MADANG PROVINCE, PAPUA NEW GUINEA

by

John M. Stanhope



Department of Linguistics  
Research School of Pacific Studies  
THE AUSTRALIAN NATIONAL UNIVERSITY

PACIFIC LINGUISTICS is issued through the *Linguistic Circle of Canberra* and consists of four series:

- SERIES A - OCCASIONAL PAPERS
- SERIES B - MONOGRAPHS
- SERIES C - BOOKS
- SERIES D - SPECIAL PUBLICATIONS

EDITOR: S.A. Wurm.

ASSOCIATE EDITORS: D.C. Laycock, C.L. Voorhoeve, D.T. Tryon, T.E. Dutton.

EDITORIAL ADVISERS:

- |  |  |
|--|--|
| B. Bender, University of Hawaii              | J. Lynch, University of Papua New Guinea                         |
| D. Bradley, University of Melbourne          | K.A. McElhanon, University of Texas                              |
| A. Capell, University of Sydney              | H. McKaughan, University of Hawaii                               |
| S. Elbert, University of Hawaii              | P. Mühlhäusler, Linacre College, Oxford                          |
| K. Franklin, Summer Institute of Linguistics | G.N. O'Grady, University of Victoria, B.C.                       |
| W.W. Glover, Summer Institute of Linguistics | A.K. Pawley, University of Hawaii                                |
| G. Grace, University of Hawaii               | K. Pike, University of Michigan; Summer Institute of Linguistics |
| M.A.K. Halliday, University of Sydney        | E.C. Polomé, University of Texas                                 |
| A. Healey, Summer Institute of Linguistics   | G. Sankoff, Université de Montréal                               |
| L. Hercus, Australian National University    | W.A.L. Stokhof, Jakarta  |
| N.D. Liem, University of Hawaii              | E. Uhlenbeck, University of Leiden                               |
|  | J.W.M. Verhaar, University of Indonesia, Jakarta                 |

ALL CORRESPONDENCE concerning PACIFIC LINGUISTICS, including orders and subscriptions, should be addressed to:

The Secretary,  
PACIFIC LINGUISTICS,  
Department of Linguistics,  
School of Pacific Studies,  
The Australian National University,  
Box 4, P.O.,  
Canberra, A.C.T. 2600.  
Australia.

Copyright © J.M. Stanhope.  
First published 1980.

The editors are indebted to the Australian National University for help in the production of this series.

This publication was made possible by an initial grant from the Hunter Douglas Fund.

National Library of Australia Card Number and ISBN 0 85883 222 4

## TABLE OF CONTENTS

|                                      | <i>Page</i> |
|--------------------------------------|-------------|
| EDITOR'S INTRODUCTION                | v           |
| ACKNOWLEDGEMENTS                     | vii         |
| 0. INTRODUCTION                      | 1           |
| 1. LANGUAGE RELATIONSHIPS            | 3           |
| 2. SOUNDS (PHONEMES)                 | 4           |
| 2.1. Vowels                          | 4           |
| 2.2. Consonants                      | 5           |
| 2.3. Orthography                     | 8           |
| 3. GRAMMAR                           | 9           |
| 3.1. Pronouns                        | 9           |
| 3.2. Nouns                           | 9           |
| 3.3. Adjectives                      | 9           |
| 3.4. Postpositions                   | 10          |
| 3.5. Adverbs                         | 10          |
| 3.6. Verbs                           | 10          |
| 3.7. Word Order                      | 11          |
| 4. RAO WORDLIST                      | 13          |
| 4.1. Nouns                           | 13          |
| 4.2. Adjectives                      | 16          |
| 4.3. Adverbs, etc.                   | 16          |
| 4.4. Verbs                           | 17          |
| BIBLIOGRAPHY                         | 18          |
| Map 1: New Guinea                    | 20          |
| Map 2: Ramu-Keram Region             | 21          |
| Map 3: Seven Villages Round Grengabu | 22          |

|   | <i>Page</i> |
|---|-------------|
| Figure 1: A Rao Woman Entering her House at Urinebu | 24          |
| Figure 2: A Rao Grave at Urinebu                    | 25          |
| Figure 3: The Grave of Rev. Henry Herget S.V.D.     | 26          |
| Figure 4: Chungrebu Village in the Flood Season     | 27          |
| Figure 5: Sacred Flutes at Pakingibu                | 28          |

## EDITOR'S INTRODUCTION

The author of this description of the Rao language is a medical doctor, not a linguist. However, the work of doctors in Papua New Guinea often brings them into closer contact with the languages of the people than can be achieved by linguists undertaking surveys, or even spending a normal fieldwork period of perhaps a year with a particular language. This work is the product of ten years' work in a Rao-speaking area, and is published here because of the virtual lack of previously published data on the language.

It is clear that the work is not that of a professional linguist. In general, the data tallies with the survey list I recorded in 1971 with informants Wagumali, from Bumbera, and Njobar, from Nongito - essentially the same dialect as here described - but there are some discrepancies. The phonology, in particular, is over-differentiated. My data do not show glottalised consonants, and suggest that there is only slight evidence of contrast between b and ɸ (Stanhope's h). Prenasalisation - or perhaps rather sequences with nasal first element - also extends to the alveopalatal and continuant series, with ns, nj, nz and nr [ndr] being common. Phonemes s and z are pronounced affricated in initial position: [ts], [dz].

For the pronouns, my data shows ŋu/ŋga and ni/no for the first singular and second plural basic forms, rather than Stanhope's gu/ga and nyi/nyo; this may reflect dialectal differences. Basic word order, like that of almost all Papuan languages, is NA and SOV. In terms of relationships, there is no doubt that Rao is a member of the Sepik-Ramu Phylum, and that its closest relatives are Anor and Aiome. It is ultimately related to Akrukay, Banaro, and Breri, but, as these are in different stocks, the relationship is not very close.

In preparing Dr Stanhope's manuscript for publication, the author's text has been altered only where misunderstanding could arise, or where

other information suggested adding a word or two of explanation. The professional linguist will therefore find some of the terminology a little strange, but the general outlines of the language appear clear in the author's treatment, and the wordlist of several hundred items provides a useful basis for comparison of Rao with other Papuan languages of the area.

*Don Laycock*  
*Canberra, June 1980*

#### ACKNOWLEDGEMENTS

The author is grateful to the people of the seven villages who patiently provided the data, and to missionaries at Tsumbar, Chungrebu and Annaberg who helped in various ways over the years 1962-1972. His Honour the Administrator kindly permitted access to government patrol reports.





## 0. INTRODUCTION

The Rao people inhabit an area of north eastern New Guinea along the Ramu and Keram Rivers, 80-100 kilometres inland from Hansa Bay. The population numbers about 4000. Their tribal territory includes several mission stations, notably Annaberg founded by SVD missionaries in 1934 (Stanhope 1968). Swamps and small lakes are interspersed with forests over most of the terrain, merging into low wooded hills to the south, along the edge of the Schrader Range.

The Rao were traditional traders. Stones for implements came in from the mountains in exchange for clay pots, while pots, stones and sago were traded to neighbouring swamp-dwelling tribes to the north for fish, taro, skirts, bows, arrows and baskets.

First contact was made by the German botanists Lauterbach and Tappenbeck in 1896-1898 (Stanhope 1968; Henderson 1962; *New Guinea Handbook* 1937 and 1943).

The Rao describe how a party of Germans came downstream and landed at Chungrebu, seizing pigs and planted coconuts. The people drove them off. An old man, Jidu, who died in 1968, told me this happened in his childhood.

In 1921 the geologist Evan Stanley sailed 200 miles up the river to Atemble and found traces of gold. On his way back he informed Mr E. Wauchope of Awar plantation, who went prospecting round Atemble but did not stay long (Moyne 1936). There is a Rao tradition that an Australian party travelling upstream was repulsed at Rota'bi, a hamlet of Urinebu village, subsequently eroded by the river. A boy Ngewi was taken by the party, and returned in 1946, a middle-aged man, having worked at Wau, Bulolo and Rabaul during the intervening years.

In 1936, Lord Moyne found that "except for two Catholic missions [Atemble and Annaberg - JMS] no white man lived there" on the Ramu River. One of his two launches was holed on a reef, presumably at Bangapela, a Banaro village on the river bank. The second launch was holed not far above the junction of the Ramu and the "Ramuta", which is

the Sogeram River, called Dramnu-'ba by the Rao. He stayed for some time at a village which he named "Grengapoo" (Grengabu), and eventually reached Annaberg (Moynes 1936). This paper is based on data collected in the villages Wotabu, Dubu, Grengabu, Urinebu, Chungrebu, Monjibu and Pakingibu, all within two hours' walk of Moynes's "Grengapoo" locality.

The area was under minimal outside influence until the Japanese advanced up the Keram from Angoram to occupy Annaberg and Atembre in October 1943 (McCarthy 1959). Eight men in the Grengabu villages were appointed headmen by the Japanese - Mago and Dubai (Pakingibu), Yanggori and Nengai (Chungrebu), Kanimba (Urinebu), Nyonai (Grengabu), Burukai (Dubu) and Ikuwun (Wotabu). One Pakingibu man, Grengan, was beheaded by Banaro men allegedly acting on Japanese orders, but there were no other casualties. The Japanese patrolled the Ramu above the Sogeram junction, and hid boats in Kurara creek. They used Dandaj lake south of Wotabu as a float-plane anchorage.

The Japanese left Annaberg in May 1944, ahead of Allied patrols. Some Sepik men marching with the Allies married Rao women, and have been influential figures in the present period (e.g. Kawari, refer Stanhope 1968). Australian government influence was initiated by a patrol in October 1946 (Jones 1946) and Catholic missionaries soon returned to Annaberg (District Annual Report 1946-47). Official censuses of Wotabu, Dubu, Grengabu and Chungrebu were made in August 1948.

Cahill (1950) recommended that the Sepik-Madang district border, which was then the Ramu River, be moved westwards so that all Rao and Breri villages be covered by the same officers. To administer the new Rao-Breri census division, Sirinibu was made a patrol post. This station was the site of a wartime airstrip, a few miles south of Annaberg mission. It had an aid-post, evidently of superior construction, which Cahill described as "a costly failure". The first resident officer, G.P. Taylor, found Sirinibu unsuitable and moved to Annaberg in July 1951 (Taylor 1951). In 1953 the patrol post was moved again, to Aiome at the foot of the Schrader Range (District Annual Report 1952-53). The Grengabu villages now experienced a period of social regression, due possibly to their distance from the Aiome station. Sick people were hidden from patrols. Flood made the maintenance of latrines and garbage pits impossible. Male absenteeism increased with more labour recruiting (Battersby 1958).

The Catholic mission by 1960 had a priest (Father Materne), a saw-miller, a nurse and another lay woman worker. Several of the Grengabu villages had catechist schools, but there was rising dissatisfaction with both mission and government, and the Grengabu villages made overtures to two Protestant missions seeking better schools (Moyle 1960a).

Kawari, a Sepik immigrant, started a trade store and bought an outboard motor, becoming an influential leader in Grengabu (Moyle 1960b). A Protestant mission station was opened at Chungrebu in 1960.

During the decade 1962-1972, elected local and national governments have come into being. Limited employment opportunities in the lower Ramu valley now provide an alternative to plantation labour outside the district. Schooling to grade 6 level is now available and a few boys have begun secondary education at distant boarding schools.

## 1. LANGUAGE RELATIONSHIPS

The inhabitants of the seven Grengabu villages speak the Rao language. Capell gives a brief description of this language under the name "Anaberg" (Capell 1951-52), naming Tjigurubu village as the source of his data. My informants could not identify this place [but almost certainly Chungrebu].

The five riverside villages Chungrebu, Urinebu, Grengabu, Dubu and Wotabu call themselves Dram<sup>+</sup>, which is also their name for the Ramu River. They claim that the early explorers' "Ramu" is a mispronunciation of Dram<sup>+</sup>. The two villages away from the river, Pakingibu and Monjibu, are included under the name Wutangrø. The seven villages class the rest of the Rao into groups which they say have differing ways of speaking the language, but all are mutually intelligible. The subdivisions of the Rao which result are:

- 1) Dram<sup>+</sup>/Wutangrø, the seven Grengabu villages.
- 2) Wu-nø-ndu-ri occupying the Ramu banks from above Wotabu upstream to Jitibu. This area surrounds the Catholic Mission station Annaberg and the local government council chambers at Nodabu. Wu appears to be a name for the Ramu River round Annaberg, nø-ndu-ri means '*children of*', hence "Wu's children".
- 3) Ndrevr<sup>+</sup>, occupying the Keram area from Guasingi near Annaberg down to Bumbera, with an offshoot across to the Ramu at Tsumbar.
- 4) Upper Keram, round the headwaters of the Keram River and on the lowest slopes of the Schrader Range. The Dram<sup>+</sup> Rao do not distinguish these people from the upper Schrader Mountain people, Wrawru, though they recognise them as Rao speakers.
- 5) Munanga River, an isolated group inhabiting the villages on a small tributary of the Keram. This group is several miles west of the Ndrevr<sup>+</sup>, and until recently was not known to the Dram<sup>+</sup> Rao.

Z'graggen (1970) assigns Rao, Anor (Anora) and Aiome to a common stock within a Ramu language phylum. Akrukay (Diton), Banaro (Ve'o) and Breri do not appear to be related, unless very distantly. Map 2 depicts the languages, under the names now commonly used by the Rao, together with Z'graggen's numbers, for easy comparison with his linguistic map of the western Madang region. Map 2 also includes languages mentioned in my earlier paper (Stanhope 1972), again labelled with Z'graggen's numbers.

The small letters within Rao area 66 refer to the five subdivisions listed above.

## 2. SOUNDS (PHONEMES)

### 2.1. VOWELS

There are seven distinct vowels.

- a as in *father*, sometimes shorter. May occur anywhere in a word, initial, medial or final.
- e as in *egg*. May occur anywhere in a word.
- i intermediate between the vowels of *ink* and *steep*.
- o as *aw* in *awful*, sometimes shorter.
- u as in *full*.
- ə as *e* in French *de*.
- ɨ an unrounded u.

All these vowels can occur medially or finally. I have not found u, or ɨ, initially. The following wordlist contains many minimal pairs which establish the separate identity of these seven vowels:

|                    |               |              |                       |
|--------------------|---------------|--------------|-----------------------|
| bədo 'derris root' | do 'creek'    | dri 'mayfly' | fɨ 'butterfly'        |
| bədə 'tree'        | di 'head'     | dro 'cough'  | fə 'drum'             |
|                    | de 'ache'     |              | fi 'face'             |
| grə 'flower'       | kro 'bird'    | ku 'blood'   | məmə 'brother-in-law' |
| grɨ 'bamboo'       | kru 'moon'    | kə 'brother' | məmə 'food'           |
| gro 'egret'        | kre 'wallaby' |              | mumu 'granddaughter'  |
| gra 'sun'          |               |              | mɨmɨ 'owl'            |
|                    |               |              | muma 'lily'           |
| me 'fish'          | mbərə 'house' | no 'axe'     | pə 'sister-in-law'    |
| mi 'finger, eat'   | mbra 'sago'   | nu 'egg'     | pe 'daughter-in-law'  |
| mo 'skin'          | mbri 'hair'   | ne 'hawk'    |                       |
| mu 'red'           |               | ni 'get'     |                       |
| mə 'eat!'          |               |              |                       |

|                |                |               |
|----------------|----------------|---------------|
| ri 'small'     | rəto 'cheek'   | mvrɪ 'basket' |
| re 'betel nut' | roto 'inquest' | mvra 'enemy'  |
| ru 'lime'      |                |               |
| rə 'rain'      |                |               |

|                     |                  |                |
|---------------------|------------------|----------------|
| mvo 'froth'         | we 'breadfruit'  | nda 'you(sg.)' |
| mvɪ 'firewood'      | wo 'catfish'     | nde 'you(pl.)' |
| mvə 'father-in-law' | wa future marker | ndo 'father'   |
| mve 'girl'          | wi 'vine'        | ndu 'child'    |
|                     |                  | ndi 'tree'     |

A final ə occurs on the end of most words that do not end in another vowel. In this situation ə is probably not significant, but supplied for euphony.

## 2.2. CONSONANTS

The labial stops are p, b, mb and 'b.

p is as in English and may occur initially or medially. I have not found it to follow m.

b is as in English and may occur initially or medially. It is rare.

mb is much commoner than b, and may occur initially or medially.

'b is a preglottalised voiced stop. It is rare. The following vocabulary serves to distinguish some of this group

|                  |             |                    |             |
|------------------|-------------|--------------------|-------------|
| papə 'rat'       | 'bɪ 'house' | mbə 'bud'          | mbra 'sago' |
| babə 'fan'       | mbɪ 'spear' | pə 'sister-in-law' | pra 'canoe' |
| mbapə 'ancestor' |             |                    |             |

|             |                     |
|-------------|---------------------|
| 'ba 'water' | mbərə 'house'       |
|             | brə 'landing place' |

p, b and mb are clearly distinguished but 'b could be a variant of p or b. Appearances in similar environments make it unlikely that 'b is a variant of p.

w is as in English after stops. When initial or between vowels it tends to be a fricative ʋ. It is never final. It is distinguished from mb, p and 'b, but only tentatively from b.

|                          |                             |
|--------------------------|-----------------------------|
| mbo 'wife's grandfather' | 'ba 'water'                 |
| wo 'catfish'             | wa (ʋa) future tense marker |

|            |                     |
|------------|---------------------|
| babə 'fan' | wawa (ʋaba) 'uncle' |
|------------|---------------------|

I found no minimal pairs to differentiate w from labialisation of other consonants (especially p, t, k, b, d, g and r) alone and in combination, and accordingly labialisation can be represented by w following the

consonants affected. I found also no minimal pair to differentiate consonant *w* from vowel *u*, but to use the same symbol for both would produce some puzzling words:

wawa'u 'frilled lizard' would then be written uaua'u  
wuwawu 'sand' would be uuuauu.

*m* as in English. This may be initial or medial. When at the end of a word, some speakers attach *ə*, while others pronounce *m* final. It is distinguished from *mb*:

mo 'skin'                      mu 'red'                      me 'fish'  
mbo 'wife's grandfather'    mbu 'nephew'                mbe 'they'

Probably also kam 'brother-in-law'    kəmbə 'stone'.

There are two labiodentals, *f* and *v*.

*f* was only observed in initial position. As in English.

*v* may be initial or medial, and is pronounced as in English.

These two consonants are distinguished from *p*, *b* and *w*.

fi 'face'                      vo 'coconut'                      fə 'drum'  
vi 'sago'                      wo 'catfish'                      pə 'sister-in-law'  
wi (bi) 'vine'                mbo 'wife's grandfather'  
mvo 'froth'

A labiodental nasal *ŋ* can precede *v*. This cannot be differentiated from *m*, and only occurs in this environment. It is probably a variant of *m* and does not require a separate symbol.

The alveolar stops form a series corresponding to the labials, and are *t*, *d*, *nd* and 'd.

*t* is as in English and may occur initially or medially. I have not found it to follow *n*.

*d* is as in English and may occur initially or medially.

*nd* may occur initially and medially.

'd is a preglottalised stop. It is rare, and occurs initially and medially.

The following groups of words distinguish the four stops:

do 'creek'                      'di 'net'  
ndo 'father'                    ndi 'tree'  
to 'brother'                    di 'head'

*t*, *d* and *nd* are clearly distinguished. 'd is separated from *d* and *nd*, but not from *t*, although occurrence in similar environments makes it unlikely that they are variants of one phoneme.

*s* as in English, always voiceless. May be initial, medial or final.

z as in English. May be initial or medial. Both these sibilants are distinguished from the corresponding stops.

zi 'husband's parent'    nzo 'swamp': compare with lists above  
 sim 'grandfather'        sra 'shell money'  
 tim "'bigmaus" fish'    tra 'pandanus'

They are also distinguished from each other.

ŋiso 'grass skirt'    nsu 'banana'  
 ŋizo 'headache'      nzu 'wasp'

n as in English, may be initial or medial. It is distinguished from nd and m.

nu 'egg'            no 'axe'            nam 'mother'  
 mu 'red'            mo 'skin'           ndam 'sister'  
 ndu 'child'        ndo 'father'

r is trilled, as in Scottish English. It may occur initially or medially. l occurs as a free fluctuant, and Rao speakers learning English have great difficulty distinguishing it. r may be preglottalised.

'ru 'pig'    ru 'lime'

There are two alveopalatals, č and j.

č as *ch* in English. May be initial or medial.

j as in English. May be initial or medial.

These two consonants are distinguished from t, d, s and z.

či 'now'            ji 'sand'            di 'head'        zi 'husband's parent'  
 sa 'mussel'        ča 'faeces'        ču 'milk'        tu 'pig meat'  
 vitu 'ash'        viču 'spinning top'

y may occur initially or medially. It is distinguished from j and z.

nyi 'tinea'            nyo 'you(pl.)'  
 nji 'wife's uncle'    nzo 'swamp'

It is not clearly distinguished from vowel i, but yeyeto 'coleus' would be confusingly written ieieto, if y were not used as the consonant symbol.

The velar stops are k, g and ŋg. Presumably the preglottalised velar stop that we would expect to correspond to 'b and 'd is represented by the glottal stop '.

k as in English. It may be initial or medial.

g as in English, always hard. It may be initial or medial.

ŋg as *ng* in *angry*. It may be initial or medial. The following vocabulary serves to differentiate the three stops:





### 3. GRAMMAR

The Rao language is of non-Melanesian (Papuan) type (Capell 1933), having complex verb conjugation, scanty number system, Latin-type word order and postpositions. There is typically no provision for separate inclusive and exclusive forms of the first person plural pronoun. But Rao lacks declension of nouns and noun classes, unlike many other non-Melanesian (Papuan) languages.

#### 3.1. PRONOUNS

|                 | First person    | Second person  | Third person |
|-----------------|-----------------|----------------|--------------|
| Singular        |                 |                |              |
| nominative      | gu              | nə, nəve, nəku | mə           |
| accusative      | ga              | nda            | ma, mba      |
| possessive      | ŋa              | na             | ma           |
| Plural          |                 |                |              |
| nominative      | nyi             | nyo            | me           |
| accusative      | nya             | nyo            | menə         |
| possessive      | nyane           | nyone          | menə         |
| Dual            |                 |                |              |
| nominative only | ŋgwakə, nyimakə | nəmakə         | makə         |

In the nominative, the pronoun given begins the sentence unless the object requires the emphasis, in which case the nominative pronoun is put back, to precede the verb at the end of the sentence. If the sense is sufficiently clear, a nominative may be omitted altogether. The accusative pronoun follows the subject of the sentence. The possessive pronoun precedes the object of possession.

The interrogative pronoun 'what?' is kuwə. The demonstrative 'this' is ke.

#### 3.2. NOUNS

The Rao noun is indeclinable in number, and almost in case as well. The only inflection is the addition of -nə to a noun to express the possessive case in the singular. Singular nouns may also express possessive relation by having ma 'his, her, its' after them. Plural possessives are expressed by having menə 'their', after them.

#### 3.3. ADJECTIVES

These follow the noun they qualify and are indeclinable.

## 3.4. POSTPOSITIONS

Only one, pu 'in' was encountered. It followed the noun.

## 3.5. ADVERBS

All adverbs precede the verb except the negative. Some temporal adverbs (tense markers) are of very common occurrence. They are bia, we, wə 'now', present tense.

či 'now', immediate future, intention

wa remoter future, indefinite

či-wa not-so-remote future

There is also an imperative adverb ku 'right now', which may be compounded with wə to give wə-ku 'straight away'.

či duplicated to čiči conveys the sense of 'while' or 'during':

gu čiči tarai ... 'while I was going ...'

'I was going when ...'

but is not a conjunction, since the following clause stands alone. The verb čičiyi 'precede' could be related.

## 3.6. VERBS

As indicated above, various kinds of present and future tense can be expressed by the use of temporal adverbs. Two verbs only were noted to have inflected future forms, nau 'will see' and čou 'will throw'. The normal future form of most verbs is however wa followed by the simple form.

Some verbs, e.g. mi have several forms of past tense, but I am uncertain as to what distinctions they make in meaning.

The imperative always is preceded by a second person pronoun, but ku or wə-ku is optional.

The participles may act as adjectives, qualifying nouns. They are also used to express relative clauses, relating to the subject of the sentence. Like ordinary adjectives they follow their noun and are indeclinable.

Two verbs were found which had different stems for singular and plural subjects - sači, punači 'sit', and kumbači, kumvi 'sleep'.

Expression of negatives is complex. In the present tense, -ndə is added to the imperative form to give the indicative.

gu mi 'I am eating' mē! 'eat!' gu mēndə 'I am not eating'

But the negative imperative is expressed by kroga 'dislike'.

nə ma kroga! 'do not eat!'

In the future tense, -nde is added to the simple present indicative, with the proviso that verbs ending in -či take -si-nde.

-gu wa minde 'I will not eat'    gu ma wa basinde 'I will not get it'

In the past tense, an auxiliary verb kraï, kra'e, krare must accompany the present tense negative form.

gu kumbakəndə                    'I am not asleep'  
 gu wa kumbasinde                'I will not sleep'  
 gu ŋno kumbakəndə krare        'I did not sleep yesterday'  
 makə ŋno kumvəndə krare        'They two did not sleep yesterday'

### 3.7. WORD ORDER

- 1) Before the subject, there may be an adverb or adverbial phrase if requiring emphasis.
- 2) The subject which may be a noun, pronoun in nominative case, or a noun qualified by an adjective. If the context allows the subject to be understood, it may be omitted.
- 3) The object which may be a noun with or without adjectives or a pronoun in accusative case. If the object is to be emphasised, a pronoun subject is omitted.
- 4) The verbal pronoun, i.e. the subject of the verb. If the sentence is at all complex, or if there is a noun subject already in position 2, mə (sg.) or me (pl.) is obligatory. In a simple sentence with a pronoun subject, the verbal pronoun may be omitted. Thus in a short simple utterance, emphasis can be shifted from subject to object by changing nominative in position 2 to verbal pronoun in position 4:

1        2        3  
 santə   gu   ma   wa   wi   'tomorrow I will scold him'

1        3        4  
 santə   ma   ŋga   wa   wi   'tomorrow I will scold him'

Although having the same form as ŋga 'me' (accusative), in this example ŋga has a nominative meaning.

- 5) General adverbs if not already occupying position 1.
- 6) Temporal adverb or tense marker.
- 7) The verb.
- 8) The negative particle and auxiliary if required.

Some examples to show sentence construction:

'u'u ŋga yi

*'cold I am/I am cold'.*

zimbimbi ŋga yi

*'belly pain I am/I have a pain in the belly'.*

ŋoci nda mbarai

*'cough you spoke/Did you complain of cough?'*

nyi məngram čou

*'we hook will throw/we are going fishing'.*

dəzə 'u'u

*'(it is) very cold/it is very cold (weather)'.*

nə ku sakə

*'you! sit/sit down!'*

'ro nə ku či mba ni

*'oar you! now it bring/(get) the oar, then bring it!'*

ha tu kuku

*'dog pork killing/(that is) a good hunter'.*

təbə kumbakəkə

*'bench sleeping/(that is) a bed'.*

nə kuwə nə mra'ai

*'you what you ate/what were you eating?'*

nə gəzəhə, gu čičiyi

*'you go last! I am first/after me, please!'*

mvendə 'b†-pu ku va'e

*'woman house-in blood passed/the woman was at home menstruating'.*

nə ŋga ku či pokə gu ča vi

*'you me! now wait! I faeces pass/wait for me while I go to the toilet!'*

## 4. RAO WORDLIST

## 4.1. NOUNS

|  |                                 |
|--|---------------------------------|
| <i>afternoon</i> ɲəne                  | <i>cloud</i> gra-ča             |
| <i>ankle</i> ɲə                        | <i>cockatoo (white)</i> twai    |
| <i>arm</i> mi-tə                       | <i>cockatoo (black)</i> kwi     |
| <i>arrow</i> vra                       | <i>coconut</i> vo               |
| <i>ash</i> vitu                        | <i>coleus</i> yeyeto            |
| <i>axe</i> no                          | <i>cornice</i> sito             |
| <i>bamboo</i> grɪ ɲgemɪŋ               | <i>cough (moist)</i> ɲoči       |
| <i>banana</i> nsu                      | <i>cough (hacking)</i> dro      |
| <i>bandicoot</i> bendu                 | <i>cough (dry)</i> jora         |
| <i>basket (fish)</i> mvrɪ              | <i>crane</i> wunde              |
| <i>beach, landing place</i> brə        | <i>creek</i> do                 |
| <i>bean</i> zai-grə                    | <i>crocodile</i> 'i             |
| <i>belly</i> čado                      | <i>croton</i> wonzo             |
| <i>belly-ache</i> zimbimbi             | <i>cucumber</i> giru            |
| <i>bench</i> təbə                      | <i>cuscus</i> sr'u              |
| <i>betel nut</i> re                    | <i>daisy-like flower</i> mradru |
| <i>bird</i> kro                        | <i>death adder</i> ndopə        |
| <i>bird of paradise</i> krwamve, mində | <i>derris root</i> bədo         |
| <i>blood</i> ku                        | <i>dish (bark)</i> pəgadə       |
| <i>bone</i> grato                      | <i>dish (wood)</i> ɲgru         |
| <i>bow</i> mitagə                      | <i>dog</i> ha                   |
| <i>breadfruit</i> we                   | <i>dove</i> mbu-ri              |
| <i>butterfly</i> fɪ                    | <i>drum (hand)</i> ndu          |
| <i>buttock</i> zare                    | <i>drum (slit)</i> fə           |
| <i>buzzard</i> mɪmɪrɪ                  | <i>ear</i> rum                  |
| <i>calf (leg)</i> moča                 | <i>earth tremor</i> janju       |
| <i>cane (common)</i> kro               | <i>eel</i> maki, uni            |
| <i>cane (pitpit)</i> rigagə            | <i>egg</i> nu                   |
| <i>cane (sugar)</i> zəba'              | <i>elbow</i> mi-kədu            |
| <i>canoe</i> pra                       | <i>enemy</i> mvra               |
| <i>cassowary</i> kranɪ                 | <i>eye</i> piri                 |
| <i>catfish</i> wo zori                 | <i>eyebrow</i> pez              |
| <i>centipede</i> trwe                  | <i>face</i> fi                  |
| <i>cheek</i> rəto                      | <i>faeces</i> ča                |
| <i>child</i> ndu                       | <i>fan</i> babə                 |
| <i>chin</i> kaka-grə                   | <i>finch</i> keakam             |
| <i>cinnamon</i> zi                     | <i>finger</i> mi                |
| <i>clay</i> ɲɪŋgu                      | <i>fingernail</i> mi-vra        |

|  |   |
|--|---|
| <i>fire</i> mviðə                      | <i>knee</i> mbudu                                   |
| <i>firewood</i> mvi                    | <i>knife (stone, metal)</i> grasi                   |
| <i>fish</i> yawu                       | <i>knife (bamboo)</i> diyo                          |
| <i>fishline</i> brədə                  | " <i>kum</i> " ( <i>spinach</i> ) nyinum, ŋrimu     |
| <i>flooring</i> mia                    | <i>ladder</i> təs                                   |
| <i>flower, pod</i> grə                 | " <i>laulau</i> " nyawara                           |
| <i>fly</i> wiwenzə                     | <i>leg</i> mətəgrə                                  |
| <i>fly swat</i> gwigwi                 | <i>lily (gorgor)</i> orwi, muma, ʒuŋgwat,<br>yərə'  |
| <i>food</i> məmə                       | <i>lime</i> ru                                      |
| <i>forearm</i> prakuto                 | <i>lip</i> kaka, domo                               |
| <i>friend</i> sisito, nvo              | <i>lizard (gen.)</i> gwevə                          |
| <i>frog</i> zungwa'                    | <i>lizard (frilled)</i> wawa'u                      |
| <i>frogmouth</i> yavndo                | <i>lizard (green)</i> misrə                         |
| <i>froth</i> mvo                       | <i>loincloth</i> jim                                |
| <i>fungus</i> wodo                     | <i>man</i> frendə                                   |
| <i>garden</i> 'ri                      | <i>mango</i> wri                                    |
| <i>ginger</i> wewə                     | <i>mayfly</i> dri                                   |
| <i>goanna</i> kwavra                   | <i>medicine man (traditional)</i> titi-dudu         |
| <i>gourd</i> 'u'wa                     | <i>medicine man (western)</i> ŋgričičo              |
| <i>grass</i> wranyi, zəŋzəŋ, wo-zinzaŋ | <i>milk</i> ʒu                                      |
| <i>grass (kunai)</i> nogorə            | <i>millipede</i> wengwam                            |
| <i>grass skirt</i> ŋiso                | <i>moon</i> kru                                     |
| <i>ground (gen.)</i> ŋə                | <i>mosquito</i> ha                                  |
| <i>ground (hard)</i> ŋinjar            | <i>moth (sago)</i> kuwi                             |
| <i>grub (sago)</i> mɪnzi               | <i>mountain</i> topu                                |
| <i>hair</i> mbri                       | <i>mouth</i> dotomo                                 |
| <i>hammer</i> məndə                    | <i>mud (on path)</i> ničagwi                        |
| <i>hand</i> mi-grə                     | <i>mud (on river bank)</i> wu-nə-ji                 |
| <i>hawk</i> ne, nečo, rumbre           | <i>mussel</i> sa                                    |
| <i>head</i> di                         | <i>name</i> ji                                      |
| <i>headache</i> ŋizo                   | <i>nasal discharge</i> ra-suba                      |
| <i>heel</i> ʒadu                       | <i>neck</i> bəgrə                                   |
| <i>hibiscus</i> ŋwo                    | <i>net (fish)</i> 'di                               |
| <i>hook</i> məŋgram                    | <i>net bag (small)</i> keso                         |
| <i>hornbill</i> ŋarmbai                | <i>net bag (large)</i> yəŋga                        |
| <i>house (main)</i> 'bɪ                | <i>nettle</i> mrea                                  |
| <i>house-annex</i> 'mbərə              | <i>nose</i> ra-tə                                   |
| <i>image</i> mro-fi                    | <i>oar</i> 'ro                                      |
| <i>inquest</i> roto                    | <i>ochre</i> gwonyeme                               |
| <i>island</i> rwi                      | <i>owl</i> mɪmɪ, ŋgavi                              |
| <i>jacana bird</i> mənɟip              | <i>palm "limbom"</i> brepu-tə, sru-tə,<br>mrezra-tə |
| <i>kapok tree</i> yoro-tə              |   |

|                                      |                 |                              |                |
|--------------------------------------|-----------------|------------------------------|----------------|
| <i>pandanus</i>                      | tra-tə, muyu-tə | <i>sorcery (personal)</i>    | vri            |
| <i>parrot (green)</i>                | ra              | <i>sorcery (community)</i>   | mrataji        |
| <i>parrot (red female)</i>           | rwi             | <i>sore (small)</i>          | ngri           |
| <i>parrot (small red)</i>            | zingran         | <i>sore (ulcer, yaws)</i>    | metə           |
| <i>parrot (small green)</i>          | zanzə           | <i>spear</i>                 | mbi            |
| <i>pelican</i>                       | zaga-gro        | <i>spider</i>                | bumugrə        |
| <i>pepper</i>                        | nɪmbi           | <i>spirit (gen.)</i>         | mro            |
| <i>perfume</i>                       | banəne          | <i>spirit (tree)</i>         | riđu           |
| <i>pig</i>                           | 'ru             | <i>spirit (evil)</i>         | ronɪndrim      |
| <i>pig meat</i>                      | tu              | <i>star</i>                  | sunyi          |
| <i>pigeon (goura)</i>                | krovri          | <i>stone (large)</i>         | kambə          |
| <i>pigeon (common)</i>               | gwake           | <i>stone (gravel)</i>        | ji-vam         |
| <i>plover</i>                        | tretre          | <i>sun</i>                   | gra            |
| <i>possum (flying)</i>               | ngawi           | <i>swamp</i>                 | nzo            |
| <i>post</i>                          | go              | <i>sweet potato</i>          | nzerivi        |
| <i>prawn</i>                         | mase            | <i>sweet potato (yellow)</i> | nggo-vranak    |
| <i>pumice</i>                        | gra-tu          | <i>tadpole</i>               | rwəmvi         |
| <i>quail</i>                         | njerə           | <i>taro</i>                  | naḡəne, ngriwe |
| <i>rain</i>                          | rə              | <i>thatch</i>                | brea-kri       |
| <i>rat (bush)</i>                    | ponugum         | <i>thatched roof</i>         | brea           |
| <i>rat (house)</i>                   | papə            | <i>thigh</i>                 | dətə           |
| <i>ridge pole</i>                    | vate            | <i>thunder</i>               | gra-mvuvre     |
| <i>road, path</i>                    | riđu            | <i>tinea</i>                 | tinea          |
| <i>sago (raw)</i>                    | mbra            | <i>tobacco</i>               | čukwai         |
| <i>sago (cooked)</i>                 | vi              | <i>toe</i>                   | moraku         |
| <i>sago basket</i>                   | wuso            | <i>toe (big)</i>             | minzo          |
| <i>sand</i>                          | ji, wuwawu      | <i>tongue</i>                | jito           |
| <i>sandpiper</i>                     | krwekrwe        | <i>tooth</i>                 | trage          |
| <i>saucepan, pot (deep)</i>          | ngi             | <i>top (toy)</i>             | viču           |
| <i>saucepan, pot (shallow)</i>       | mes             | <i>tortoise</i>              | wem            |
| <i>saucepan, pot (broken pieces)</i> | ngi-saku        | <i>tortoise shell</i>        | wem-do         |
| <i>sawfish</i>                       | mrakro, nsare   | <i>tree (gen.)</i>           | bədə           |
| <i>shark</i>                         | bambur          | "taun"                       | njapu-tə       |
| <i>shell money</i>                   | sra             | <i>red dye</i>               | nimimi-tə      |
| <i>shell pendant</i>                 | ware            | "talise"                     | gadum-tə       |
| <i>shoot, bud</i>                    | mbə             | "kwila"                      | ndawa-tə       |
| <i>skin</i>                          | mo              | "garamut"                    | hindi-tə       |
| <i>sky</i>                           | wenak           | <i>figus</i>                 | a-tə, wrinəde  |
| <i>smoke</i>                         | mvɪ-'i          | "tu-lip"                     | jo             |
| <i>snake (gen.)</i>                  | kenam           | <i>kapok</i>                 | inari          |
| <i>snake (grass)</i>                 | muge            | "lima"                       | twawu-tə       |
|                                      |                 | <i>wild breadfruit</i>       | pabo           |

*tree kangaroo* krevu  
*twine, string* wari  
*urine* nzabə  
*vine* (d'Albertis) mrerado  
*wagtail* ikwera, večo  
*wallaby* kre  
*wasp* nzu  
*water* 'ba  
*wild fowl* ŋwanwap  
*wind* guri  
*woman* mvendə  
*yam* mu, dro-mbudu  
*yam ("mami")* yangomangə  
 Unidentified species  
*birds* wetke, prweprwe, krogo,  
 inčogore, 'ina, nodadu, gukam,  
 mində-bam

## 4.2. ADJECTIVES

*big* rove  
*long* suri-rove  
*small* ri  
*short* watə-ri  
*one* jandakro  
*two* kawuku  
*three* karuku  
*four* srakru  
*first* čičina  
*last* gəzənə  
*intermediate* kumanə  
*very last* gəzənə-pamanə  
*tame, planted* ŋambi

## 4.3. ADVERBS, ETC.

*no!* aye  
*yes!* ara  
*yesterday* ŋno, ŋro  
*where?* embe  
*now* či

*bananas* rwab-tə, apə, je-tə, je-nsu,  
 ravak, kitti, dərəmbə, mīnzi-nsu,  
 gu-ŋambi, kakambra, wiŋgə,  
 jakundi, kwas

*diseases*

*fever* mo-wiwi  
*rash* bombe  
*chickenpox* bombe-ri  
*smallpox* janam  
*epilepsy* mo-manji, mo-madasī  
*madness* 'u'rowu

*fish* bwore, nzri, rengro, me, mra,  
 nwapu  
 "bigmaus" time

*trees* sīndi-tə, drogo-tə, mor-tə,  
 kurwi, ŋo-tə, nda-tə, ŋru-tə,  
 rokro, wrangə-tə, pundu-tə

*vines* wi, kutar, tiwə, mre'da,  
 jambra-pra, makinku, grabə, gə-pra,  
 ndroguto, papugu

*blue, green* moku  
*black* ŋəŋə  
*red* mu  
*white* dəkwas  
*yellow* ŋgo  
*many* zupunde  
*several, some* sisi  
*bad* nambəči  
*disobedient* dənə'i  
*good* dəga'də  
*cold* 'u'u  
*hot* gi

*soon* či-wa  
*today* masi  
*quickly* kwanga  
*very* dəzə  
*tomorrow* santə



## 4.4. VERBS

| English             |    | Present   | Past                           | Future | Imperative     | Participle |
|---------------------|----|---|--------------------------------|--------|----------------|------------|
| <i>be present</i>   |    | yi  |                                |        | ya             |            |
| <i>be able</i>      |    |   |                                |        | mworkə         |            |
| <i>be cold</i>      |    |   | 'urai                          |        |                | 'u'u       |
| <i>beat, kill</i>   |    | kwi   |                                |        | kwə            | kuku       |
| <i>cry</i>          |    | ji  | je                             |        |                |            |
| <i>cut</i>          |    | granse  | gransai                        |        |                |            |
| <i>dislike</i>      |    | krogai  | krogare                        |        | kroga          |            |
| <i>dig up</i>       |    |   | rora'ai                        |        |                |            |
| <i>eat</i>          |    | mi  | mre<br>mrai<br>mra'e<br>mra'ai |        | mə             | məmə       |
| <i>follow</i>       |    | gəzəni  |                                |        | gəzəhə         | gəzənə     |
| <i>grow</i>         |    | dwe<br>dwači  |                                |        | dwa            |            |
| <i>go</i>           |    | tare  | tarai                          |        | tara           |            |
| <i>have, get</i>    |    | bai<br>bači   | bakrai                         |        | bakə           |            |
| <i>like</i>         |    | 'i  | 'rare                          |        |                |            |
| <i>prepare sago</i> |    | we  | woi                            |        |                |            |
| <i>precede</i>      |    | čičiyl  |                                |        |                | čičine     |
| <i>play</i>         |    | gwe   | gware                          |        | gwakə          |            |
| <i>pull out</i>     |    | jwi   | jwe                            |        |                |            |
| <i>see</i>          |    | nai   |                                | nau    | na             |            |
| <i>scold</i>        |    | wi  |                                |        | wə             |            |
| <i>sit</i>          | S. | sači  | sakrai                         |        | sakə           |            |
|                     | P. | punači  | punakrai                       |        | punakə         |            |
| <i>speak</i>        |    | mbare   | mbarai<br>mbara'ai             |        | mbara          |            |
| <i>stand</i>        |    | dači  |                                |        | dakə           |            |
| <i>sleep</i>        | S. | kumbači   | kumbakrai                      |        | kumbakə        | kumbakəkə  |
|                     | P. | kumvi   | kumve                          |        | kumvə          |            |
| <i>take, bring</i>  |    | ni  | nyi'e                          |        |                | nənə       |
| <i>throw</i>        |    |   |                                | čou    |                |            |
| <i>urinate</i>      | }  | vi  | va'e                           |        | və             |            |
| <i>defecate</i>     |    | with appropriate noun nzabə 'urine', ča 'faeces' or |                                |        |                |            |
| <i>menstruate</i>   |    | ku 'blood'  |                                |        |                |            |
| <i>walk</i>         |    | ayi   | agarai                         |        |                |            |
| <i>wait</i>         |    |   |                                |        | poiakə<br>pokə |            |

## BIBLIOGRAPHY

### AUSTRALIA: Prime Minister's Department

- 1937,      *Official Handbook of the Territory of New Guinea ...*  
1943      Canberra: Government Printer.

### BATTERSBY, J.B.

- 1958      Alome Patrol Report No.1 of 1958-59.

### CAHILL, J.

- 1950      Angoram Patrol Report No.9 of 1949-50.

### CAPELL, A.

- 1933      The Structure of the Oceanic Languages. *Oceania* 3:418-434.

- 1951-52   Languages of Bogia District, New Guinea. *Oceania* 22/2:130-147; 22/3:178-207; 22/4:317.

### HENDERSON, W.O.

- 1962      *Studies in German Colonial History*. London: F. Cass.

### JONES, F.D.

- 1946      Bogia Patrol Report No.2 of 1946-47.

### MCCARTHY, Dudley

- 1959      *South-west Pacific Area - First Year: Kokoda to Wau*.  
Australia in the War of 1939-1945, Series 1, vol.5.  
Canberra: Australian War Memorial.

## MOYLE, J.B.

- 1960a Aiome Patrol Report No.1 of 1960-61.
- 1960b Aiome Patrol Report No.3 of 1960-61.

## MOYNE, Lord

- 1936 *Walkabout: A Journey in Lands between the Pacific & Indian Oceans.* With an Introduction by Dr A.C. Haddon ... London: Heinemann.

## STANHOPE, J.M.

- 1968 Competing Systems of Medicine among the Rao-Breri, Lower Ramu River, New Guinea. *Oceania* 39:137-145.
- 1970 Clan and Totem in Rao Society. *Oceania* 41:114-135.
- 1972 The Language of the Kire People, Bogia, Madang District, New Guinea. *Anthropos* 67:49-71.

## TAYLOR, G.P.

- 1951 Madang Patrol Report No.5 of 1951-52.

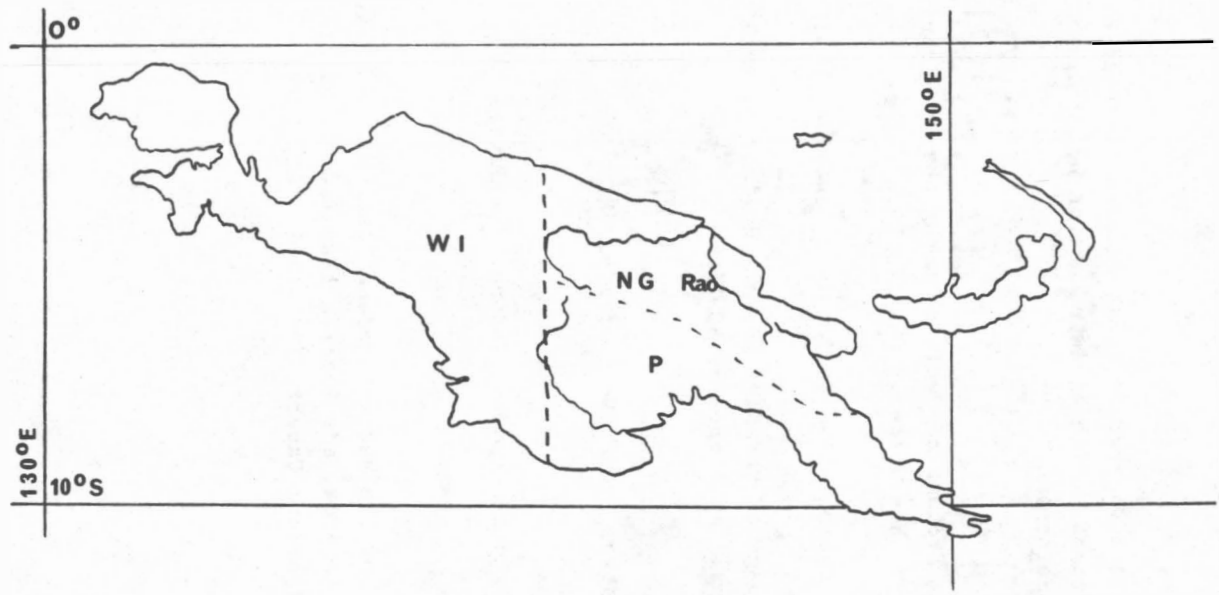
## TERRITORY OF NEW GUINEA

- 1946-47, District Annual Reports, Madang, New Guinea.  
1952-53

## Z'GRAGGEN, J.A.

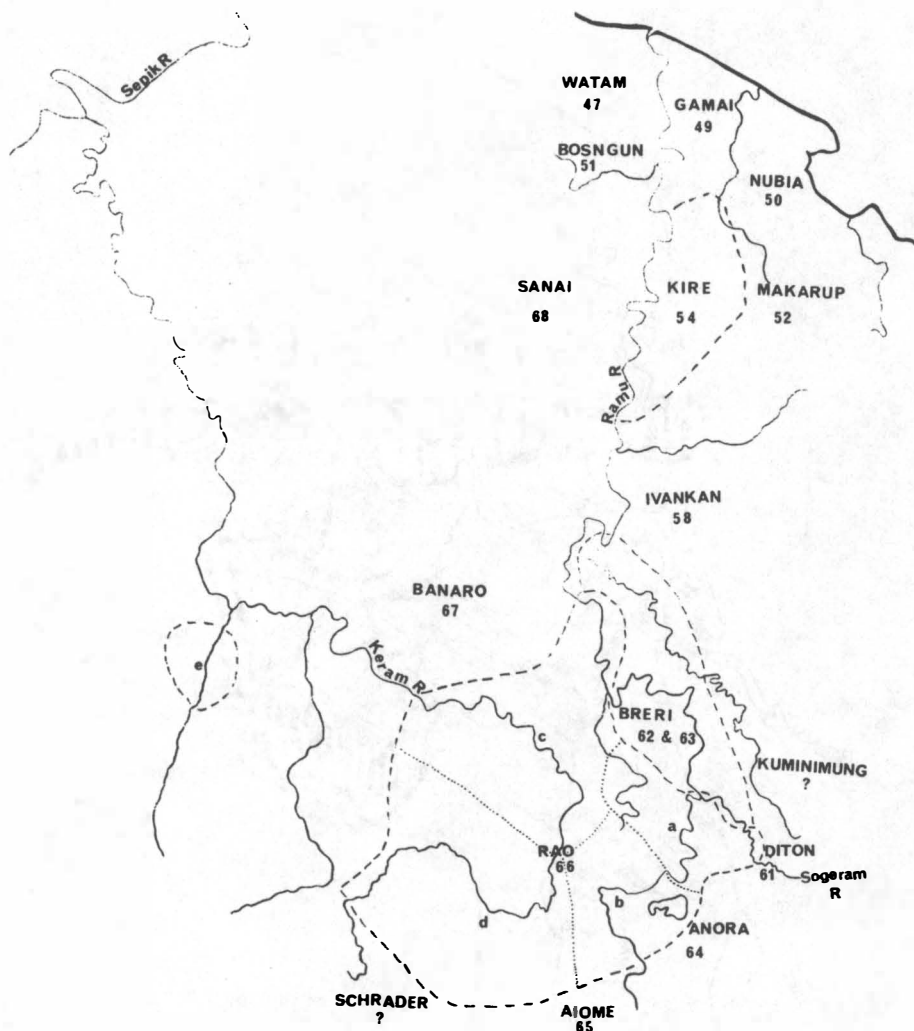
- 1970 Languages of the Western Madang District. In S.A. Wurm and D.C. Laycock, eds *Pacific Linguistic Studies in Honour of Arthur Capell*, 1271-1292. PL, C-13.

MAP 1: NEW GUINEA



WI = West Irian      P = Papua  
Rao = The tribal territory of the Rao people

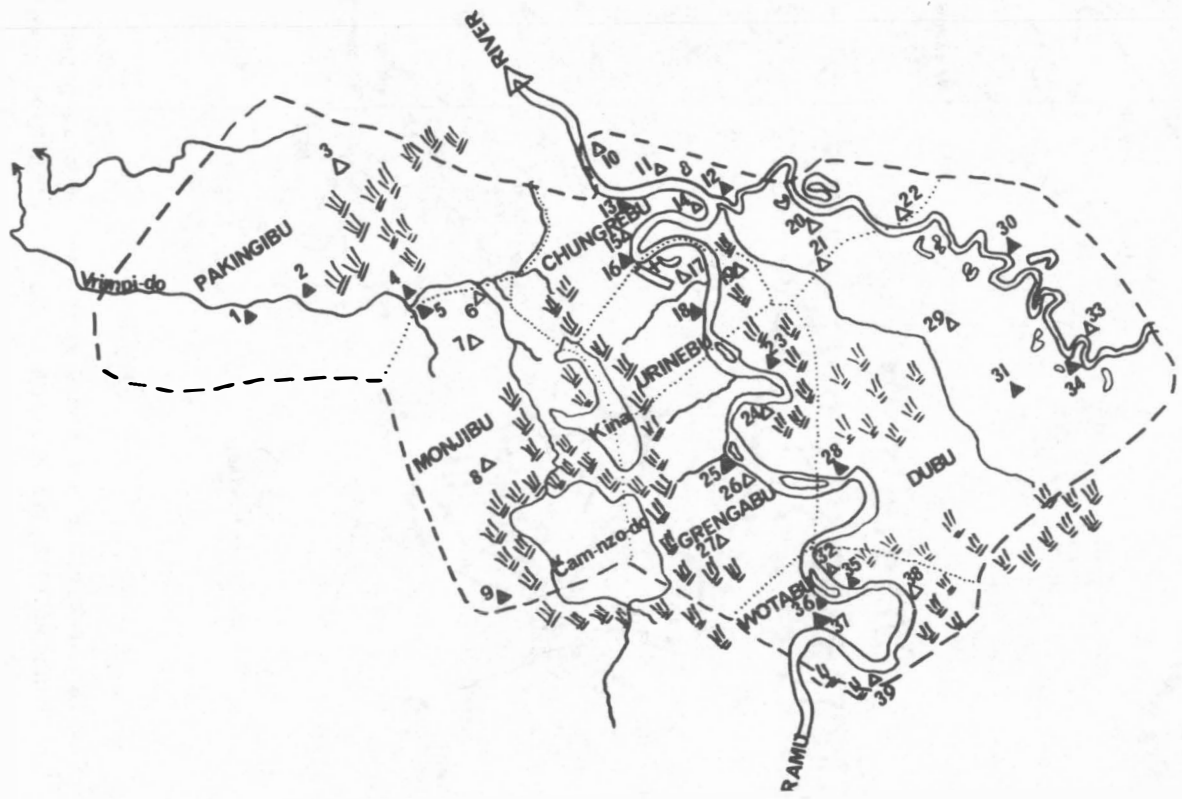
MAP 2: RAMU-KERAM REGION



The language names are those mentioned in this paper and in Stanhope 1972, identified by number with Z'graggen's list. Within Rao 66,

- a = Grogabu villages
- b = Ndrevrɛ
- c = Upper Keram group
- d = Munanga group

MAP 3: SEVEN VILLAGES ROUND GRENGABU



## LEGEND TO MAP 3

## Key:

▲ Hamlets currently occupied (1972)

△ Hamlets abandoned prior to 1972

≡ Swamp (sago forest).

## Hamlet names

|                   |                      |                 |
|-------------------|----------------------|-----------------|
| 1. Kavati-'b±     | 14. Nədu-'b±         | 26. Bunuguri    |
| 2. Čarendo-'b±    | 15. Old Yeto-'b±     | 27. Rambare-'b± |
| 3. Rihiri-'b±     | 16. New Yeto-'b±     | 28. Ndu-'b±     |
| 4. Pakiŋgə(-'b±)  | 17. Wito-'b±         | 29. Havare-'b±  |
| 5. New Manjei-'b± | 18. Rinei-'b±        | 30. Gemto-'b±   |
| 6. Yinəŋgə-'b±    | 19. Drato-'b±        | 31. Səmap       |
| 7. Damakwoi-'b±   | 20. Nzondum-'b±      | 32. Vri-'b±     |
| 8. Tago-'b±       | 21. Ndwe-'b±         | 33. Marti-'b±   |
| 9. Old Manjei-'b± | 22. Gungrum-'b±      | 34. Kobara      |
| 10. Ngora(-'b±)   | 23. Fimambe-'b±      | 35. Bəgiu-'b±   |
| 11. Worva-'b±     | 24. Čito-'b±         | 36. Vrito-'b±   |
| 12. Banam(-'b±)   | 25. lower Greŋgə-'b± | 37. Gwata-'b±   |
| 13. Čungrī-'b±    | upper Rwine-'b±      | 38. Ndrato-'b±  |
|                   |                      | 39. Jituri-'b±  |

FIGURE 1: A RAO WOMAN ENTERING HER HOUSE AT URINEBU



The sleeping area is at the rear, near the river bank. The ladder leads to a small eating and cooking area. The cat (left foreground) is a post-contact introduced animal. A long-handled spade and a bamboo water-carrying tube are leaning against the house.



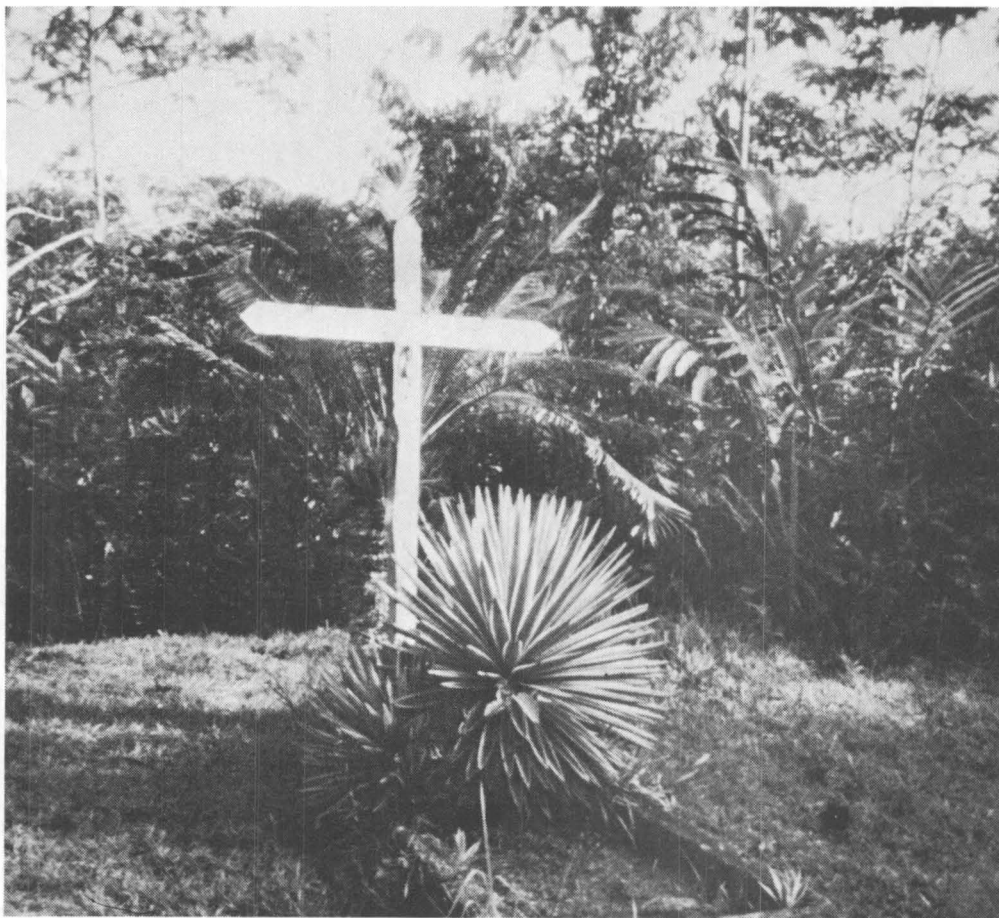
FIGURE 2: A RAO GRAVE AT URINEBU



The body is placed in a grave  $1\frac{1}{2}$ -2 metres deep, dressed in its best clothes, with the face painted with red and white pigments. It is wrapped in bark sheets, and covered with wooden planks to allow an air space above the corpse. The grave is then filled with earth. The top of the grave is protected from excessive rain water seepage with palm frond axils, to prevent premature collapse of the earth into the air space.

Graves were formerly situated under or close by the house of the deceased, but now due to government regulation are placed in cemeteries at the edge of the village.

FIGURE 3: THE GRAVE OF REV. HENRY HERGET S.V.D.



Died at Annaberg in 1934 soon after the Annaberg station was opened.

FIGURE 4: CHUNGREBU VILLAGE IN THE FLOOD SEASON



The annual rainy season results in frequent flooding, especially in the months January-March, when foot travel may become impossible.

FIGURE 5: SACRED FLUTES AT PAKINGIBU



The flutes are kept in the men's spirit house, where they cannot be seen by the women, and are used to simulate the voices of water spirits. Each flute plays two notes, and is combined with a fellow to provide music based on a pentatonic scale. A carved wooden face is attached to each flute. Each pair of flutes is known by the name of its associated divinity (Stanhope 1970).