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## GARAWA PHONOLOGY

## CHRISTINE E. FURBY

## 0 . Introduction

1. Consonants
2. Vowels
3. Distribution of Phonemes
4. Syllables
5. Word Stress

## O. INTRODUCTION

The purpose of this paper is to present a phonemic analysis of the western dialect of the Garawa language. ${ }^{1}$ A description is given of the phoneme, syllable and word levels.

Garawa is spoken by about 300 people living in the northeast of the Northern Territory of Australia, from Borroloola to Doomadgee in Queensland. There are two dialects of Garawa, eastern Garawa spoken in the area of Wollogorang cattle station and western Garawa spoken in the area of Robinson River cattle station.

## 1. CONSONANTS

There are nineteen consonantal phonemes in Garawa: the voiceless stops /p, t, t, tj, jk, k/ and the voiced nasals /m, n, n, nj, jo, o/ contrasting at the bilabial, apico-alveolar, apico-domal, laminoalveolar, lamino-velar and velar points of articulation; the voiced laterals /l, l, lj/ contrasting at the apico-alveolar, apico-domal and lamino-alveolar points of articulation; a voiced apico-alveolar vibrant /y/; and the voiced semi-consonants /w, y. r/ occurring at the bilabial, lamino-palatal and apico-domal points of articulation.

### 1.1 CONSONANT CONTRASTS

The stops contrast in word initial position:

| /pulal | they (dual) |
| :--- | :--- |
| /tulala/ | tree (species) |
| /tjulaki/ | bird (generic) |
| /kulal | south |

word medial position:
/wapa/
/matamata/
/waţapa/
/watja/
/wajka/
/waka/
bark
opossum fur
goanna (species)
quickly
down
call out

The nasals contrast in word initial position:
/mulu/ nose
/nuřu/ we (plural excl)
/njulu/
/ouluř/
he
backbone
word medial position:
/nanama/ that (non-specific)
/muranal at night
/paṇanal father's oldest brother
/puwanja/ older brother
/laŋinajoal north across something
/munaŋa/
white man
The laterals, the flap /r/, and the semi-consonant/r/ contrast in word medial position:

| /kaŋala/ | skin grouping |
| :--- | :--- |
| /tjuwala/ | lying face down |
| /waljal | mammal (species) |
| /nakařa/ | horse |
| /nał̧ara/ | sun |

The apico-alveolar stop /t/ and flap /y/ contrast in word medial position:

| /matamata/ | opossum fur |
| :--- | :--- |
| /gařawal | salt |

The apico-domal stop /f/ and semi-consonant /r/ contrast in word medial position:
/waţapal goanna (species)
/oarapa/ drink

The bilabial stop /p/ and semi-consonant /w/ contrast in word initial position:

| /patja/ | play |
| :--- | :--- |
| /watja/ | quickly |

word medial position:

| /gupunu/ | boomerang (generic) |
| :--- | :--- |
| /guwu/ | water |

The lamino-alveolar stop /tj/ and lamino-palatal semi-consonant /y/ contrast in word initial position:

| /tjunku/ | sit |
| :--- | :--- |
| /yundu/ | on top of |

word medial position:

| /yatji/ | country |
| :--- | :--- |
| /mayi/ | tooth |

### 1.2 CONSONANT VARIANTS

Both the apico-domal and thelamino-alveolar stops /t/ and /tj/ have an unreleased allophone [ t ] and [ tj ]:
$\begin{array}{lll}/ k u t j p a / & {\left[k u^{i t} j_{p \Lambda^{v}}\right]} & \text { search } \\ / p a t p a t ̧ t i / & {\left[p a^{t} p \Lambda^{\vee} f_{t j}\right]} & \text { tree (species) }\end{array}$
A voiceless aspirated velar stop [kh] occasionally occurs in word initial position as an allophone of the velar stop /k/:

| /kayuwa/ | [kařuwav ~ khařuwnv ] | name of language |
| :---: | :---: | :---: |
| /kayi/ | [kay̌e ~ khaye] | $e a s t$ |

The bilabial stop /p/ has a voiced allophone [b] in word initial position preceding semi-consonant /r/:
/pratji/
[braitil]
tail
/praki/ [brakı] ant (species)

Each of the lamino-alveolar consonants /tj, $n \mathbf{j}, \mathbf{l} /$ has an allophone
 with it preceding a vowel:
/tjalu/
[tjalu~ $t{ }^{\prime} y_{a l u}$ ]
arm
/patja/

play
/njulu/
[njulu ~ nj yulu]
he
/punji/
[poinju $\sim p_{i}^{i n j} y_{l}$ ]
grass (species)
/kulja/
$\left[k u^{i} 1 j_{\wedge}{ }^{v} \sim k u^{i} l_{j} y_{\wedge}{ }^{v}\right]$
raw

The apico-alveolar vibrant /Y/ fluctuates freely with a voiceless flap allophone [K] in word final position; in emphasized speech the voiceless trill allophone [ $\tilde{R}]$ tends to occur in word final position:

| /kaři/ | [kaře] | east |
| :---: | :---: | :---: |
| /liYka/ | [leyknv ] | first born |
| /waympa/ | [warmpav ${ }^{\text {c }}$ | blow |
| /yilay/ | [yęl $\wedge^{v}$ y $\sim$ yęl $\wedge^{v} \mathrm{~K}$ ] | poison |
| /pitjpawař/ | $\left[p i^{t}{ }_{p \wedge}{ }^{v} w \Lambda^{v} \tilde{R}\right]$ | fierce |

## 2. VOWELS

There are three vowel phonemes /i, a, u/. These contrast at front, central and back points of articulation.

### 2.1 VOWEL CONTRASTS

| /mili/ | more |
| :--- | :--- |
| /mali/ | flood waters |
| /mulu/ | nose |
| /oali/ | we (dual excl) |
| /oala/ | while |
| /galu/ | cloud |

### 2.2 VOWEL VARIANTS

Each vowel has a retroflexed allophone preceding apico-domal consonants:

| /yilay/ | [ye! $\wedge^{\vee v}$ ] | poison |
| :---: | :---: | :---: |
| /karila/ | [karel^ ${ }^{\text {v }}$ ] | hip |
| /kuṇay/ | [kụñ ${ }^{\text {v }} \mathrm{r}$ ] | smoke |

For each vowel there is a range of allophones which vary considerably; however the following distributions of the allophones tend to occur.

The front vowel/i/has the allophones [i], [ı], [e], [ $\left[\right.$ ], $\left[e^{i}\right]$, $\left[e^{i} \cdot\right]$.

The allophone [i] occurs between non-velar and lamino-alveolar or lamino-palatal consonants:

| /pitjal/ | $\left[\right.$ pitj $\left.\wedge^{\vee} 1\right]$ | partly |
| :--- | :--- | :--- |
| $/$ miyal | $\left[\right.$ miy $\left.\wedge^{\vee}\right]$ | snake (generic) |

The glide $\left[e^{i}\right]$ occurs between velar and lamino－alveolar or lamino－ palatal consonants：

| ／kinjpal | $\left[k^{i} n j p \wedge^{\vee}\right]$ | caught in something |
| :--- | :--- | :--- |
| $/ m i k u k i y i /$ | $\left[m \varepsilon k u k e^{i} y t\right]$ | don＇t！ |

The lengthened glide［ $\left.e^{i} \cdot\right]$ occurs preceding lamino－velar consonants： ／kijojki／［kei．jojkt］flying fox（species）

The allophone［e］tends to occur contiguous to laterals and vibrants：
／karilal［ką̧el＾$\left.{ }^{\vee}\right]$ hip
／liykal［leykA${ }^{\text {r }}$ ］first born
The allophone［ $\varepsilon$ ］tends to occur following bilabials：
／piwali／［pewale］opossum（species）
／miku／［meku］no
The allophone［l］tends to occur in other environments：
／nitiol［nitjı］name
／tioutji／［tıou $\left.{ }^{i} t j \iota\right]$ tree（species）
The central vowel／a／has the allophones $\left[\Lambda^{\vee}\right],[a],\left[a^{>}\right],\left[a^{i}\right]$ ， ［ $\left.a^{i} \cdot\right]$ ．

The glide $\left[a^{i}\right]$ occurs preceding lamino－alveolar and lamino－palatal consonants：

| ／mayi／ | $\left[\right.$ ma $\left.^{i} y t\right]$ | tooth |
| :--- | :--- | :--- |
| $/ y a t j p a /$ | $\left[y a i_{p \wedge}{ }^{v}\right]$ | burn |

The lengthened glide［ $\left.a^{i} \cdot\right]$ occurs preceding lamino－velar consonants：
／majkařa／［mai．jk＾vy＾v］husband and wife
／kulanajoal［kUl＾＾nai．jıヘv］south across something
The low back allophone $\left[a^{>}\right]$tends to occur between $/ w /$ and $/ w /$ ：
／wawařa／［wa＇w＾vyィv］baby boy
／wawi／［wa＇we］horse
The low allophone［a］tends to occur in other stressed syllables：
／tjalu／［tjalu］Zower arm
／gařawal［gařィ＂ws＂］salt
The lower mid allophone $\left[\Lambda^{\vee}\right]$ tends to occur in other unstressed syllables：

| ／nanamaņa／ |  | same one |
| :---: | :---: | :---: |
| ／wukařa／ | ［wokヘv̌ヘ＊＊ | tree（species） |

The back unrounded vowel／u／has the allophones［u］，［o］，［ul］， $\left[u^{i} \cdot\right],\left[o^{i}\right],\left[o^{i} \cdot\right]$ ．

The glide [ $u^{i}$ ] occurs between non-bilabial and lamino-alveolar or lamino-palatal consonants:

$$
\begin{array}{lll}
\text { /yuyu/ } & {\left[y u^{i} y u\right]} & \text { yes } \\
/ t \text { junjtjutupu/ } & {\left[t j u^{i} n j t j u t u p o\right]} & \text { bird (species) }
\end{array}
$$

The lengthened glide [ $\left.u^{i} \cdot\right]$ occurs between non-bilabial and laminovelar consonants:

| /watjujkanji/ | [wa ${ }^{\mathbf{i}} \mathrm{tju}{ }^{\text {i }} \cdot \mathrm{jka}{ }^{\mathbf{i}} \mathrm{nj} \mathrm{j} \downarrow$ ] | swatting |
| :---: | :---: | :---: |
| /bunujkanji/ | [bopu $\left.{ }^{i} \cdot j k a^{i} n j ı\right]$ | coming closer |

The glide [ $o^{i}$ ] occurs between bilabial and lamino-alveolar or laminopalatal consonants:

| /ma]buyuři/ | [malbo'yuřı] | munjtji/ |
| :--- | :--- | :--- |

The lengthened glide [ $\left.o^{i} \cdot\right]$ occurs between bilabial and lamino-velar consonants:
/wujkutjpa/ [woi.jkuitjpav] rub
The high allophone [U] tends to occur between non-bilabial and bilabial or apico-alveolar or velar consonants:
/lukuluku/ [lukuluku] around
/tjuntuy/ [tjuntuř] sand
The mid allophone [o] tends to occur word finally following bilabial consonants or between bilabial and bilabial or apico-alveolar or velar consonants:

| /buntal/ | $\left[\right.$ bont $\left.\Lambda^{v} 1\right]$ | river |
| :--- | :--- | :--- |
| $/$ kumu/ | $[$ kumo $]$ | flood waters |

### 2.3 ALTERNATIVE ANALYSIS OF LAMINO-VELAR STOP AND NASAL PHONEMES

It would have been equally possible to analyse the lengthened vowel glides as separate phonemes $/ e^{i /, ~ / a^{i} /, / u^{i} / \text { in contrast with the simple }}$ vowels /i/, /a/, /u/:

| /weiku/ | goanna (species) |
| :--- | :--- |
| /miku/ | no |
| /kulanaiga/ | south across something |
| /munaya/ | white man |
| /wulkutjpa/ | rub |
| /wukułupa/ | sweZZ |

The lamino-velar stop and nasal would then be analysed as allophones of the velar stop and nasal conditioned by occurrence following the glide phonemes:

| $/ w e^{i} k u /$ | $\left[w e^{i} \cdot j k u\right]$ | goanna (species) |
| :--- | :--- | :--- |
| $/ w a^{i} k a /$ | $\left[w a^{i} \cdot j k \wedge^{v}\right]$ | down |
| $/ k u^{i} k u l a /$ | $\left[k u^{i} \cdot j k u l \wedge^{\vee}\right]$ | menstrual fluid |

The vowel glide [ $\mathrm{o}^{i \cdot]}$ would be the allophone of/ui/ occurring following bilabials:
/wu'kutjpa/ [woi.jkuitjp^v] rub

This interpretation would have resulted in a number of stems having allostems, and some suffixes having allomorphs. Some examples of these are:

$$
\begin{array}{ll}
\text { /puntu ~ puntui-/ } & \text { close } \\
\text { /walkuy̌a ~ walkư̌a'-/ } & \text { big } \\
\text { /mupanawa ~munanawa -/ } & \text { tomorrow } \\
\text { /-nkuya- ~-nkuyai-/ } & \text { dual } \\
\text { /-nmuku- ~-nmuku'-/ } & \text { plural }
\end{array}
$$

By setting up the lamino-velar stop and nasal phonemes only three suffix allomorphs result:

| /-okuy̌i | -jojkuy̌i/ | towards |
| :--- | :--- | :--- |
| /-kanji | -jkanji/ | for the purpose of |
| /-kuy̌i | -jkuy̌i/ | (verb suffix) |

## 3. DISTRIBUTION OF PHONEMES

### 3.1 CONSONANT DISTRIBUTION WITHIN THE PHONOLOGICAL WORD

A phonological word in Garawa is defined as a minimal utterance carrying one primary stress marking the nucleus and borders marked by such devices as potential pause and phonemic distribution.

All words begin with a consonant with the exception of one word /alakala/ bearers of burial platform.

Any single consonant except /jk, $\quad$, $j \boldsymbol{j}, \mathrm{l}, \mathrm{lj}, \mathrm{y} / \mathrm{may}$ occur in wordinitial position. In word-final position only /n, l, l, $k /$ occur.
/waţal/ kangaroo (species)
/yaka!/ moon
/tjuluř/ ash
Consonant clusters may comprise two or three segments.
In the data two di-clusters have been found to occur in word-initial position.

Homorganic cluster, stop + semi-consonant:
tr- /fraţraŋkal bush fire burning
Heterorganic cluster, stop + semi-consonant:
pr- /praki/ tail

In the data thirty－four di－clusters have been found to occur in word medial position within single morphemes．

Homorganic clusters，stop + semi－consonant：
－tr－／tratrankal bush fire burning
Nasal＋stop：

| －mp－ | ／tjampa／ | ground |
| :---: | :---: | :---: |
| －nt－ | ／puntu／ | close |
| －ก5－ | ／panta／ | camp |
| －njtj－ | ／tjanjtja／ | rain |
| －jojk－ | ／tajojka／ | burn |
| －ŋk－ | ／tjaŋkuř／ | word |

Heterorganic clusters，stop＋stop：

| －tjp－ | ／kulatjpi／ | pilてow |
| :---: | :---: | :---: |
| －5p－ | ／patpattil／ | tree（species） |
| － $5 \mathrm{t} \boldsymbol{j}$－ | ／patpaţtiol | tree（species） |

Nasal＋stop：

| $-n j)^{-}$ | ／kunjpa／ | good |
| :--- | :--- | :--- |
| $-n p^{-}$ | ／njinpu／ | animal（species） |
| $-n p_{-}$ | ／kanpa／ | grass（species） |
| $-n t j_{-}$ | ／minmintjal／ | eyebrow |
| $-n k-$ | ／munkul／ | white ash |
| $-n k-$ | ／yunkur／ | wind |

Nasal＋nasal：
－ṇm－／luṇmuř／
－njm－／kunjmampa／
－ṇnj－／tañji／
－nクー／talanga／
－ṇー／kuñoř／
fly（species）
make good
ankle
first time
smoke
Lateral＋stop：

| $-l p-$ | ／malpu／ | old man |
| :--- | :--- | :--- |
| $-l p-$ | ／tjulpi／ | fish（species） |
| $-l k-$ | ／palki／ | bad |
| $-!k-$ | ／wilku／ | run |

Lateral＋nasal：

| $-1 m-$ | $/$ talmuřa／ | bird（species） |
| :--- | :--- | :--- |
| -1 － | ／pulpuloitjpa／ | jump |

Lateral＋semi－consonant：

| $-l w-$ | $/ y i l w i l /$ | nail |
| :--- | :--- | :--- |
| $-l w-$ | $/ p u l w i t a y^{\prime} /$ | white ground |


| Flap /Y/ + stop: |  |  |
| :---: | :---: | :---: |
| - $Y_{p}$ - | /tjařpu/ | gorge |
| - $H_{k-}$ | /puřka/ | tail |
| Flap /Y/ + nasal: |  |  |
| - $\mathbf{Y m -}_{\text {m- }}$ | /kařmuy / | spear (species) |
| - $\mathrm{Y}_{\boldsymbol{g}}$ | /liřinti/ | insect (species) |
| Flap /Y/ + semi-consonant: |  |  |
| - Yw- | /ouřwa/ | thunder |

In addition five di-clusters occur across morpheme boundaries within the word. In the following examples the pertinent morpheme break is marked by a hyphen.

Homorganic clusters, lateral + nasal:

| $-1 n-$ | /puntal-nanji/ | from the river |
| :--- | :--- | :--- |
| $-!n_{-}$ | /yupal-nanji/ | from the track |

Flap /Y/ + nasal:
-Yn- /kungay-nanji/ from the smoke
Heterorganic clusters, lateral + lateral:
-!lj- /yupal-1juyi/ to the track
Flap /r/ + semi-consonant:
-řy- /yuṇkuř-yuři/ to the wind
In the data three tri-clusters have been found to occur across morpheme boundaries within the word.

Lateral + nasal + stop:

| -lmp- | /putjalm-pal | smash |
| :--- | :--- | :--- |
| $-1 m p-$ | /yuwalm-pal | travel by a direct route |

Flap /y/ + nasal + stop:

- Ymp- /waym-pa/ blow


### 3.2 VOWEL DISTRIBUTION WITHIN THE PHONOLOGICAL WORD

Only one word has been found to have a vowel word initial; /a/ occurs in /alakala/ bearers of burial platform. (This word may be a loan word, possibly from Yanyula.) Any vowel may occur preceding or following any consonant with the following exceptions: /u/ has not been found following /n/, /i/ has not been found following /jn/.

## 4. SYLLABLES

There are three syllable types each with a single vowel nucleus. The prenuclear margin may be filled with one or two consonants while the postnuclear margin is limited to one consonant.

| CV | ma.yi | tooth |
| :--- | :--- | :--- |
| CVC | tjal | flower (generic) |
| CCV | way.mpa | blow |

A closed variant of the CCV syllable type [CCVC] occurs as the second syllable of a word between a CCV syllable and a CV syllable.

```
tra.tran.ka bush fire burning
```

Words consist of from one to ten syllables. Words of six syllables or more are not frequently heard. Syllable types CV, CVC, and CCV may occur in any position in the word. However no more than three CVC syllables have been heard occurring contiguously.

```
ka.la.wujg.jku.yu
nam.pa.la.gin.ku.ya
```

ming.min.tjal eyebrow
kun.til.mpa make dry
pra.tii ant (species)
yuř.mpa.ka (he is) shifting

## 5. WORD STRESS

In Garawa primary stress (indicated in this section by ') is always on the first syllable of the phonological word. Primary stress is manifested by loudness, high pitch and length.

```
yámi eye
púnjala white
```

Secondary stress (indicated by ') occurs on the penultimate syllable of words with four or more syllables. Secondary stress is manifested by less length and loudness than primary stress, while pitch is usually no higher than that of contiguous syllables. In words of six or more syllables tertiary stress (indicated by ${ }^{-}$) occurs on every second syllable preceding the secondary stress but never on the second syllable.

```
wátjimpdou
armpit
```

kámalayínji
wrist
yákalākalàmpa
nánkiřikTy̌impàyi fought with boomerangs
námpalāpinmūkunjina at our many
náłininmūkunjTnamiła at your own many
nimpalāŋinmūkunānjimiła from your own two

1. Garawa has been classified by O'Grady, Voegelin and Voegelin in Anthropological Linguistics (1966:33) as being the only member of the Karawic Group of the Karawan Family of Australian languages.
The material for this paper was collected under the auspices of the Summer Institute of Linguistics during eighteen months residence at Borroloola between June 1968 and March 1970. Principal language helpers were Jerry Wollogorang, Edna Jack and Hilda Ross.
The author is grateful to Misses Barbara Sayers and Anne Cochran of the Summer Institute of Linguistics for their valuable help in the final analysis and preparation of this paper. The author is also grateful to the University of Queensland (English Department) for the use of their spectrograph, and to Charles Peck of the Summer Institute of Linguistics for reading the spectrograms.
The description presented here is based on the phonological procedure and approach developed by Pike, "Phonemics" (1947).

## TEXTS IN VICTORIAN LANGUAGES

## LUISE A. HERCUS

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Photographs

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Photograph 1. "Guardians of Victorian Traditions": a group of Kulin speakers at Moonacullah in the 1890's (by courtesy of Hubert Day).


Photograph 2. Mrs. Jackson Stuart


Photograph 3. Mr. Jack Long

## 1.a Introduction

Very little text material is available in the now practically extinct Victorian languages, and the meagre stories that were collected by R. Brough Smyth (1878) have been severely criticised by R.H. Mathews (1903:75):
'Some of Mr. R.B. Smyth's correspondents ventured to send him stories purporting to be told in certain native dialects. I have looked over all these stories, and can pronounce them to be mere ungrammatical jargon, written by men who knew nothing of the structure of the languages they were dealing with'.

This judgement is harsh, but to some extent justified. Nevertheless, in the light of what has been learnt from the last speakers of Victorian languages (Hercus, 1969) some linguistic information can be gained from these old stories and the grammatical errors are usually transparent : wrong word divisions are most common. One old Wergaia text written down by the Rev. Hagenauer (Smyth 1878:53) has therefore been re-edited here. This has been done with the help of all available information, we have used the first hand evidence of the surviving descendants of the Wergaia as well as the works of R.B. Smyth and of R.H. Mathews (1902).

In this edition the first two lines represent an exact replica of Hagenauer's text and translation respectively. The third line is a corrected phonemic rendering of the text, while the fourth line is the corresponding corrected English translation. When no new material was available to elucidate the text and when there was any doubt, the tentative corrected version has been enclosed in square brackets.
1.b Re-edition of an old Wergaia text

| Duan | gapm | menjun | gumbarran |
| :--- | :--- | :--- | :--- |
| (Name meaning squirrel) tracked (a) kangaroo | (and was) sleeping |  |  |
| duan | gabin | mindjun | gumberan |
| Duan | followed PRET grey-male- sleeping-about |  |  |
|  |  | kangaroo | FR-PART |


| mellan | kitya | buroin. | Weenbulain-yo | wapcullen |
| :--- | :--- | :--- | :--- | :--- |
| out | many (a) night. | (name meaning spider) found out |  |  |
| malan | gedjal | burunj. | wirimbulinju | [wabgulin] |
| there-from ABL | many | night. | Wirimbulinj-by AG | found PRET |



| ba | bàrpin | ba | wràiwin | galk-a. |
| :--- | :--- | :--- | :--- | :--- |
| and (made him) | run | and climb | atree. |  |
| ba | birbin | ba wirwin | galga. |  |
| and | jumped PRET | and climbed PRET | tree-to ALL. |  |







## 1.c Translation

Duan, the squirrel (Phascocagle tapoatafa) was foZZowing a male grey kangaroo and was sleeping out, away from that place, for many nights. Wirimbulinj, the spider, found Duan and saw him coming. Wiṛimbulinj came close and that Duan was frightened and jumped up and climbed into a tree and stayed up there. Wiṛimbulinj came and bit that tree containing Duan, and it fell to the ground. Duan jumped out and onto another tree, going on (like this) and round and round, Duan was utterly exhausted. Then going round from that place Wirimbulinj bit (alZ) the trees, and there was just one big one left containing Duan. Wiṛimbulinj came and bit the tree on which Duan was, and that tree felZ. And Wirrimbulinj bit that Duan hard (bit him to death). Duan had two nephews, sister's sons, the Brambimbul brothers. They waited: 'he is returning from his (Zast) camp', but he did not come to this place. Then they rose and searched for him, and they found their uncle's track. They both followed it right to this place where Wiṛimbulinj had bitten him. They found his decaying corpse: he had been bitten to death by Wiṛimbulinj. They buried him. From that place they then went for Wirrimbulinj, they followed him a long way. Wiṛimbulinj had two daughters. The two Brambimbuls saw the place and the fires he had lit.. and they drew near to him sitting there. Then they discussed: 'How can we two kill him?' The younger brother, who had been reared by his uncle, went on the windward side, so that Wiṛimbulinj could smell him. Wiṛimbulinj smelt him and came out of his camp and bared his big teeth. The older of the two young fellows sat down to hide, so that he might hit old Wirimbulinj directly he came out. The Brambimbuls saw the teeth of all of them, including the fresh teeth of his two daughters. Then directly he came rushing out with his teeth bared all the time. The older of the two young fellows hit him hard, he hit his head and his teeth, and his younger brother jumped over to help and they both struck Wiṛimbulinj to kill him, and they smashed his head to pieces and burnt him.

## 1.d Linguistic Notes

1. gedja This word was previously recorded only in the compound form gedja-wil a lot, literally many having.
2. dumar coming: probably connected with doomi, near, 1.e. come IMP, (Brough Smyth:157).
3. bindin This verb is not attested with certainty: it appears to be a derivative verb from biṇa to come out.
biṇ̣inaŋ Like bundinaŋ was biting, biṇinaŋ can be analysed in the following manner:
bund-
biŋ̣
$+-\mathrm{in}$
$+-a \eta$
verbal stem marker of the participial suffix past tense

These forms are a clear indication that in Wergaia participles could be based on the preterite as well as on the present tense. The participles can be used to indicate relative clauses, and they therefore show an important similarity to the - $\quad u \quad$ participles of Arabana-Wangaŋuru and to the widespread Australian relative clause formation (Dixon 1969).
4. giga This is an illustration of a basic characteristic of many eastern Australian languages: the casemarkers need not be repeated with every member of a noun phrase, thus giga galg this-to ALL tree
is just as acceptable as

$$
\begin{array}{cc}
\text { giga } & \text { galga } \\
\text { this-to ALL } & \text { tree-to ALL. }
\end{array}
$$

5. njanjugi This word is not certain for Wergaia, but it is attested in Wembawemba, njanjug-njanjug-min different.
6. baraŋguin killed, dead was the normal meaning of this word in Wembawemba but it is common in Australian languages that killed should represent an emphatic way of saying tired, completely knocked out, (cf. Mathews 1902:102).
7. Danindjaug his nephew, janindjain your niece or nephew was attested in Wembawemba and the present form is also supported - with variations in spelling - by Stone (1911).
8. djedawin This word is probably connected with Wembawemba djeda to stop, to be stationary.

| 9. bulangug | The form bulafgug, as opposed to the simple third person dual marker bulan they-two shows incorporation of the third person singular object (similar to the possessive -ug). Incorporation of the pronoun object is an important characteristic of the Kulin languages, but in Wembawemba it existed only in the first and second person pronouns. The present text indicates that in Wergaia this system probably applied to all persons. |
| :---: | :---: |
| 10. wanjug | This form, as well as wanal we two, confirms the existence of a pronominal base wa- in Wergaia, as in the more easterly Kulin languages: wa- is attested for Jajawurun (Brough Smyth:l63) and Wergaia (J. Mathew:1899:181). R.H. Mathews however gives a longer form 'yurwa-' for the Djadjala dialect of Wergaia. |
| 11. laṇọ | lar camp is complex in declension, the ablative is usually lanan which has been heard frequently and is attested below with the third person possessive suffix (laŋangug), cf. also Mathews (1902:79) 'lahrnung' from camp. There is however evidence that -d- could be infixed in this word, and Mathews noted 'lahrndal', to a camp. The function of this infix is not clear. |
| 12. djinangi | This form indicates that nouns in -a followed the more common pattern of -n- nouns in Wergaia before the particularising suffix -i. This suffix was evidently connected with the class 2 noun-marker -i, - $\boldsymbol{\eta}$ of Madimadi. |
| 13. djarmbab | This word had previously only been attested with the first person singular possessive marker, djarmbeg my uncle. The present form is interesting as it clearly shows the connection between djarmbab mother's brother and bab mother. This connection is wellknown in other Australian languages and elsewhere, e.g. In Adnjamadana (Flinders Ranges) nami mother, namana mother's brother. |
| 14. gioga | here; this form had hitherto been found only in Wembawemba. |


1.e Another story of the Brambimbul

The legendary activities of the two brothers Bram, the Buledji Brambimbul, are well known, particularly from the work of R.H. Mathews (1905). Our main Wergaia informant further related a story which is of interest as it links the Buledji Brambimbul with the Eaglehawk and Crow myths, and it is also closely connected with a legend related by A.C. Stone (1911). The myth, as related by Mrs. Stuart is as follows:
"...These two men, they call them Buledj1 Brambimbul that came there (to Lake Boga), they are heavenly men. They saw this woman lying there crying at the bottom of the tree. She was crying her heart out for her baby who was up in the tree, stolen by the Eaglehawk. The woman was crying because she thought her baby was going to be eaten by the Eaglehawk. These men flew down from the sky, they must have been heavenly men, and asked her what she was crying for, and she told them: 'My baby is up there and the Eaglehawk is going to eat it'. One of them (the Brambimbul brothers) climbed up the tree, and with the help of his mate, made steps in the tree so that he could climb down the tree with the baby. They used a badjig (stone axe).. The Brambimbul saw that the Eagle had built his nest in the fork of the tree. The Brambimbul climbed up, told the Eagle that he wanted to take the baby, and when the Eagle didn't agree ... he killed the Eagle.. The Brambimbul put the baby in the bag. The Brambimbul climbed down the tree with the baby, while the other fellow climbed up the tree to help him. They gave her the baby and cut down the tree and gathered the chips, put them into bags and said that there would never be any gum-trees growing there again, by Lake Boga, and so there weren't..."
2. THE STORY OF ORION: A MADIMADI VERSION

## 2.a Introduction

Madimadi is a Victorian-type language belonging to the 'Kulin' group. It was once spoken just north of the Murray in the Balranald district of New South Wales. The last speaker of the language, Mr.


0 GUJA-WIL

Jack Long (Hercus and White l971) has gradually recalled more and more of the language and he has been able to give us a number of fragmentary texts of mythological and linguistic interest (Hercus 1970 and 1972). To these can now be added a few further texts which are edited here.

The story of Orion as told by Jack Long and edited below is of particular interest as it illustrates the strong links in traditions along the Murray River: a very similar legend is known from Jaralde speakers near the Murray mouth (Meyer 1846; Laurie 1917), and this tradition has been studied by Tindale (1935) 'The Legend of Waijungari'. The Jaralde Waijungari is the equivalent of the Madimadi Guja-wil. Jack Long, in his youth, could also speak Daḑidaḑi, a Murray River language related to Jaralde, but the legend related by him about Orion is Madimadi. The names of the main characters are distinctly Madimadi, i.e. 'Kulin', but the substance of the legend belongs to the Murray River tradition. It is significant that there is another 'Kulin' version from Western Victoria (Brough Smyth 1878:433), but in this 'Tatyarguil' (the Madimadi Dadag-wil) and his two wives are quite unconnected with Orion, and form the constellation Aquila: Orion is represented by legends of boys dancing. This tradition has counterparts in southern Central Australia where Bangała informants have described Orion as 'the boys with the tired feet'.

Jack Long's version of the story of Orion thus represents an important link in the network of traditions of Orion which can be summarised as follows:

1. The Orion myth of Waijungari and Nepele (Jaralde), called Guja-wil and Dadag-wil in Madimadi.
(Murray River tradition)
2. 'Tatyarguil' (corresponding to the Madimadi Dadag-wil) with his two wives forms Aquila, and Orion has a separate myth connected with 'boys dancing' before the Seven Sisters.
('Kulin' tradition, Western Victoria)
3. Orion 'the boys with the tired feet' is linked more closely with the Seven Sisters: the boys are tired from chasing the Seven Sisters.
(Southern Central Australia)
4. The important and wide-spread myth of Orion as one very erotic man who pursues the Seven Sisters.
(Western Desert and Central Australia)

The identity of the stars that figure in the Madimadi story is fairly clear from Jack Long's description: Dadag-wil (in the middle) and his two wives form the stars of Orion's belt, while Guja-wil, the red star, is probably Betelgeuse: they all come up together, not far from those Seven Sisters. Ganan-ganan, has no stationary place, and is a planet.

## 2.b Madimadi text




## 2.c Translation

Ganan-ganan came in the night, while men were asleep he took them away up into the sky. People down here said in their language: 'This Ganan-ganan lives in the sky. He changes his position, he does not stay in one place.' Many men disappeared. They stayed there (in the sky).

Dadag-wil came here long ago, he only had one arm, he was born like that. He stole two women, and 80 he had two wives. He dwells in the middle (between them in the sky).


#### Abstract

They captured a man named Guja-wil. (The two wives said to one another): 'Come on, come on, let us sapture him and take him up into the sky; we will do it by pretending to be emus.' The two women made a noise like an emu. Guja-wil heard it and took his spear and he wanted to sneak up and kill the emus. The two women caught him and took him away into the sky. He disappeared. People searched for him, (saying) 'get up, pick up your spear and let us look for him. When will he return?'

Then they saw him up in the sky. (They recognised him): he was a red star because he was a man with red flesh and red skin. The two women had abducted him. He remained as a star in the sky. 2.d Notes 1. Ganan-ganan Perhaps under the influence of Christian terminology, Jack Long described this star also as a 'heavenly overseer'. The name Ganan-ganan is probably derived from the verb 'to take away', 'to steal', Madimadi ganandada, cf. Wembawemba ganindja. 2. manu belonging to that one over there. This is a previously unattested third person possessive of mani, the demonstrative pronoun of distance; it is exactly parallel to the Wergaia manjug over there and is used adverbially. 3. giaga dayi one place. One would expect a locative, and this may be a mistake. 4. Guja-wil This name probably means tree-stump-having cf. Wergaia gujawug its stump, 1.e. a dead tree. 5. nunapu This form has not been heard previously, but it is exactly parallel to the 'ablative' of the personal pronouns jinapu from me and ninapu from you, and its use here illustrates the link between the goal and the subject matter or cause of an action (Hercus 1969:171). 6. mandadin The verb mandada to take away is probably based on mangada to take away by means of the suffix -ndaof uncertain meaning. There is a very similar form jaundada to disappear which has been heard as a variant for jauimada to disappear (for the completive suffix -m- see Hercus 1969:178).


7. duḍi-m The emphatic enclitic particle -m had previously been recorded only after adverbs and particles, e.g. nuwi-m then and madi-m no more. From a comparison of all the cases where it occurs, the particle -m appears to have a temporal as well as an emphatic meaning, and the phrase might therefore more accurately be translated by a star for ever.
8. SHORT MADIMADI TEXTS
3.a Making a canoe

The various methods used in the making of bark-canoes in the south-east of Australia are well known (Brough Smyth 1878:408 ff.; Berndt and Berndt 1964:101-102). As Jack Long is probably the last man from the Murray area to be familiar with canoes of this kind, this short text has been included.

Text:


(They put that fire in the middle and burn it to warm the canoe up properly to set it).
'We will sit (and wait). Now it is ready. I will get hold of this lignum and these ashes and hot coals (and tip them out from the inside of the canoe). We will leave now and go to our camp, we will go and come back later.'
(They had to have it pliable and they pegged it in to have it set and have the right shape, then when it was ready, they took the pegs out).
'This canoe can float. Let us put it down into the water. It's very good.'

## 3.b The Seven Sisters



Translation:
Long ago the Seven Sisters used to follow their throwing stick. They came to this place and played with their throwing stick. The sun set in the west, behold, it was night, and the Seven Sisters came from the east and played. These young women threw their throwing stick so that it would leap along the ground, they followed it and disappeared altogether in the west.

This text remains very fragmentary as Jack Long could not recall the main events of the story. The Possum had done 'something wrong connected with the morning' and was therefore condemned to be nocturnal. Only the beginning of the story could be recorded:

| giabus | wilesi | babu |  | па | wadaibu |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| One-other | $r$ possum | mother-his | POS-3 | and | son-her | POS-3 |
| bandioi | neगgada | gaiu | bialan, |  | beni ${ }^{6}$. |  |
| Zittle | sit PRES | there | red-gum-in | LOC, | hozzow. |  |
| midagi b | buigadin, | damu | buigadin | buleda | na | giaga |
| Rain f | fell PRET, | greatly | feZl PRET | $t w o$ | and | one |
| buindi, | nauigi | baburu |  | gal | aiadin | gili |
| nights, | days. | Mother-b | $y-h i s$ AG-PO | OS-3 ask | ed PRET | this |


| baiggu: | 'jingadin | nagiladin |
| :--- | :--- | :--- |$\quad$| namu |
| :--- |
| chizd-her POS-3: |$\quad$ 'go-wizl FUT $\quad$ Zook-wizZ FUT $\quad$ how


bugaiada 7 mengi lendanan gima dirili.'

Translation:
The mother Possum and her small son were sitting up in the redgum tree. It was a hollow tree. Rain fell, rain poured down for three days and three nights. The mother asked her child: 'Go and look what the day and the place (outside) are like. Is it good or bad?' (The child answered): 'The day is good, the weather is breaking up, the dark clouds are being driven away, the sky is shining.' (But later the Possum stopped the sun coming before there was night and day, and there was argument about that. That is why he only gets up at night now).

## 3.d Mussels

Despite its brevity, the story of the Mussels is interesting in that it shows the importance attached to the moiety system. One pair of mussels was Gilpara, while the other was Makwara, and it was similar throughout the world of living beings 'when one was Gilpara, there was always a Makwara very similar to $1 t$, so the red kangaroo, buraŋi was Gilpara, while the grey kangaroo bugumanama was Makwara.' The two pairs of mussel men were therefore on opposite sides in the quarrel between the Eaglehawk and the Crow, and in revenge each pair was made into a single mussel.



Translation:
A long time ago they went about as men, the two Big Mussel men and the two Little Mussel men.

The Crow said: 'You Little Mussels are not two any more. You will remain as one for ever.'

The Eaglehawk acted (Zikewise): 'You Big Mussels shall sit in
the river for ever as one.'
So the big mussels stay in the river water, and the little mussels in the water of Zagoons.

| 1. bialaga midu | Madimadi, like the other Kulin languages, has a double possessive construction: <br> a. a noun designating the thing owned is followed by a possessive suffix indicating the person and number of the owner. <br> b. 1. a noun designating the owner is marked by a genitive suffix. <br> 11.1f the owner is indicated by a pronoun, a possessive adjective is formed from the pronoun e.g. gigana belonging to this one from gini this one. <br> bialana belonging to a red-gum is the first indication that such a possessive adjective could have been formed from nouns in Madimadi, though this is not uncommon in other Australian languages. This phrase is therefore of some importance from the comparative point of view. |
| :---: | :---: |
| 2. giabug | This has been heard occasionally as an alternative form for giabu other. |
| 3. jidi na nindi | The exclusive-inclusive distinction existed in Madimadi, but so far it has been noted only in the object form of the first person pronouns. But even languages which do not have such a formal distinction between exclusive and inclusive show a tendency to be specific on this point and expressions very similar to the Madimadi jidi na nindi are not uncommon in Australian languages, e.g. Andigirinja (Western Desert) njundu ŋali you we-two, 1.e. we-two, you and $I$. |
| 4. lejala | Contrary to the general ordering of affixes in Madimadi, the first person dual possessive - ŋal here precedes the allative case-marker -a (for a similar exception see Hercus 1969:169). |
| 5. wubabu | This apparently was a stick with a slight knob on one end, made from a sapling. It was half-way between a widj-widj (Brough Smyth I, 1878:302) and a berbin spear-point waddy. It bounced like a widj-widj. |

6. beni
7. bugaiada
8. jumin

This is more in agreement with the corresponding Wembawemba ben holzow tree than the previously recorded form begi (Hercus 1969:480), which is probably analogical to the numerous nouns ending in -пi in Madimadi.

This verb is connected with bugada to strip. It is similar in formation to the stative and inceptive verbs derived from adjectives, e.g., delgaiada to be good.

The verb juma to be which is known from other Kulin languages (Wergaia, Wembawemba) had not previously been heard in Madimadi, and its occurrence here is not absolutely certain.
3.f Additional Madimadi Vocabulary

The following list represents new material, recorded in 1971-2, too late for inclusion in earlier publications (Hercus 1969, 1970). This additional vocabulary occured not only in the texts published here, but was also taken from separate sentences and phrases on other topics.

The name of the language has been corrected to Madimadi (from Madimadi). Despite certain difficulties I am now convinced that the d is dental, not alveolar.

| Barindji | name of a tribe: they were not far from the Madimadi. Barindji that's really 'ground-language', from their ground (i.e. country). Barindji actually means Those belonging to the scrub country. The present evidence confirms Tindale (1940:188). |
| :---: | :---: |
| bawada | to give birth |
| biaga | tobacco (borrowed word) |
| $b i l i d i n$ | (your) entrails. This word was considered to be distinct from bilinin your belly. |
| bigou | kangaroo-rat: 'Zives in holes and caves'. This is probably the now extinct Lagorchestes leporides. |
| bugaiada | to cast away |
| burari | red kangaroo |


| dibada | to float (cf. Wembawemba and Wergaia djiba to float) |
| :---: | :---: |
| dulba-dulba | to break up, to change completely. This word was only |
| or dulburada | recorded in connection with the weather. |
| didada | to move, to change places: didada giabuna daga he shifts |
|  | to another place. |
| gaḍadja | to bend |
| galani | weather, atmosphere |
| ganimada | to hide |
| gawai | come on! Apart from jagai this is probably the most |
|  | wide-spread exlamation: identical or similar forms |
|  | occur in the majority of eastern and central Australian |
|  | languages, e.g. Wanganuru gawai, Maljagaba gabá come on! |
| gibada | to pluck: gibadin widinu he plucked out his wing- |
|  | feathers. |
| gigiwalada | to itch: gigiwalada bubunai itches head-by AG-mine |
|  | POS-1, my head itches. |
| guman ${ }^{\text {i }}$ | raw (cf. Wembawemba and Wergaia guma). |
| jinaga | this way |
| and jigada | thus. These are allative and locative forms |
|  | respectively of a demonstrative base ji(n)- which is |
|  | attested also in Wembawemba jina this way. |
| juņal |  |
| lawani | mallee hen, lowan |
| lendanan | shining |
| madada | to chop |
| maramada | to curse, to pronounce a powerful spell. |
| maramin | cursed, forbidden: madawa gindi dagadia gini waranu |
|  | maramin do not eat this large long-necked turtle, it |
|  | is forbidden. |
| mari-mari | little mussels, found in lagoons and swamps. |
| muda | to pick up, to find (Wergaia mudja) |
| mudada | to get down, to Zift down |


| munuri | Zouse (Wergaia, Wembawemba munja). This indicated the head-louse, as opposed to duni-duni body-Zouse. |
| :---: | :---: |
| nalan | a small tree with inedible fruit which splits open: probably Pittosporum phillyreoides. |
| nanu | when? (from the interrogative base na-). |
| Па | and: the general Kulin co-ordinating particle ba has been recorded previously in Madimadi, but only in the fixed locution maṇ̣ara (ba) duluwiba thunder and |
|  | lightning. In the present texts the co-ordinating particle na occurred a number of times. |
| gabunin | (your) maternal grandfather. This is a reciprocal term meaning also grandchild: cognate with Wembawemba, Werggaia gaba and Woiwuru gabuṇi. |
| nuli | like: this particle precedes the term of comparison. |
| waburu | (its) west |
| wadaiu | (her) son (cf. Wembawemba wadibug). |
| waragi | stick used as canoe paddle (Wergaia waragug). |
| wariwulada | to run round, to play: this is a continuative verb formed from wariwa to go. |
| wubabu | throwing stick |

## 4.a Abbreviations

The following terminology corresponds with the analysis presented in The Languages of Victoria. One exception is 'agentive', previously called 'operative'.

| ABL | ablative |
| :--- | :--- |
| AG | agentive |
| ALL | allative |
| CL | clitic |
| CT | continuative verb $(-1 a)$ |
| DL | dual |
| EM | emphatic enclitic particle (-min, $-m)$ |
| FR | frequentative verb $(-e-r a)$ |
| FUT | future |
| GEN | genitive |
| IMP | imperative |

```
INT Intensive verb
IT iterative-intensive verb
LOC locative
OB general oblique (in Madimadi)
OBJ object
OP optative
PART (continuative) participle
POS possessive (followed by number to indicate
    person)
POS ADJ possessive adjective
PR
PR-AG
PRES
PRET preterite
PT particularising suffix
PURP purposive
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# COMPOUND WORDS AND CLOSE-KNIT PHRASES IN WIK-MUNKAN ${ }^{1}$ 

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## 0. Introduction

1. Role of Body Parts
2. Semantic Relationships
3. Criteria for Differentiating Compounds and Close-Knit Phrases
4. Criteria Applied to Data

## 0. INTRODUCTION

Compound words and close-knit phrases ${ }^{2}$ in Wik-Munkan express a number of semantic relationships. These are described in this paper. Also described is the search for criteria to distinguish words, compounds ${ }^{3}$ and close-knit phrases, the application of these criteria to the data, and consequent orthographic decisions.

## 1. ROLE OF BODY PARTS

The role of body parts is vital to the understanding of these constructions. Most of the major body parts are used in both their literal and extended meanings in the formation of both compounds and close-knit phrases, many of which are idiomatic.

### 1.1 THE RANGE OF USAGE illustrated by ma?

The body part which has the greatest variety of uses is ma? 'hand'. It can be used in its literal sense of 'hand' as the initial item of Generic-Specific Phrases.
ma? ${ }^{\circ}$ ?ek (hand, sheZ乙) 'fingernaiz'
ma? ${ }^{\text {Puk (hand, chizd) 'finger' }}$
It is also used in verbs where the hand is usually the instrument of the action.

| má?-ydlam.at (hand, coil.Tr) ${ }^{4}$ | 'surround, hold, support, gather things' |
| :---: | :---: |
| má?-yèntJ.at (hand, wait long. Tr) | 'save something up' |
| má?-ṫùt (hand, break) | 'shake hands' |
| má?-min.at (hand, good.tr) | 'fix up, correct, look after someone welて' |
| má?-?à: t (hand, offer) | 'help' |

Sometimes ma? is used in conjunction with other body parts in verbal and adverbial constructions.
$O_{m a}$ me:? yump (hand, eye, make) 'know how to do something' ma? ka:? $0_{m} \mathrm{~m}$ (hand, nose, good) 'well (as in doing things)'

Some adjectival compounds and close-knit phrases formed with ma? similarly refer to actions normally performed with the hand.
má?-kùntJ (hand, own)
ma? ka:? ' way/ $\circ_{m a ? ~ k a: ? ~ w a y ~ ' c l u m s y ' ~}^{\text {' }}$
(hand, nose, bad)
má?-tayan (hand, firm) 'trustworthy with things'
ma? ${ }^{\circ}$ no:k (hand, ?) 'a person who likes to hit others'

There are however both verbal and adjectival compounds where the use of ma? describes an action or state of mind beyond (but not excluding) an action performed with the hands, or involving the hands.
$O_{m a ? ~ p i l ~ w a y . a t ~(h a n d, ~ t h i g h, ~ ' c o m e ~ u p o n ~ s o m e o n e ~ u n p r e p a r e d ' ~}^{\text {' }}$ bad.Tr)
má?-pit (hand, dream) 'suspect' (Vb)
$O_{m a ? ~ p l k ~ t a y a n ~(h a n d, ~ ?, ~ f i r m) ~ '(a ~ p e r s o n ~ w h o) ~ d o e s ~ n o t ~ f e e l ~}^{\text {lat }}$ like work or anything'
má?-mdym (hand, ?) 'ready, handy'
ma? used with possessive, accompaniment and indirect object pronouns has the sense of 'individual right, control, or authority'.
ma? 'patay̆am wey ?utaman 'He died while in my charge.'
hand lPS-Poss Com die-Ps
jay ?l:y.in, ma? 'natařan work 'I should go because it's my I go.IPS-Suj hand lPS-Acc work job.'
ma? ${ }^{\circ}$ nun (hand, lPS-Ind) 'his/her way of doing things'
There is also a metaphorical use of ma?, where the item with which it is identified is simply juxtaposed.
ma? ${ }^{\circ} \mathrm{pu}: \mathrm{y}$ (hand, crab) 'handcuffs'
min ${ }^{\circ}$ má?-wint (Pro, hand, wind) 'prawns, crayfish'
tal $0_{m a}$-wint (centipede, hand, 'scorpion'
wind)
Again, ma? is used with the sense of 'the state of, or major characteristic.' The second word in some of these examples is never heard apart from ma?

| má?-mànkiy (hand, ?) | 'person with lots of possessions' |
| :--- | :--- |
| má?-?dmpanam (hand, ?) | 'single person' |
| má?-Ilp (hand, ?) | 'naked' |
| ma? oku:y (hand, rope) | 'sorcerer' |
| má?-tip (hand, clever) | 'clever hunter' |

ma? is also used as a link in specialised co-ordinate phrases, mostly involving kinship terms.
ma? ka: t ${ }^{\text {Opuk (hand, mother, child) 'mother and child' }}$
ma? wantJ ©pam (hand, woman, man) 'man and wife'
$O_{m a}$ pam.am (hand, man.Co) 'all the men'
ma? ${ }_{\text {mank.am (hand, back.Co) 'everyone' }}$
ma? is used in negative constructions also involving kinship terms.
ma? 'pam ke?anay (hand, man, 'single' without)
ma? is used also in phrases which describe the frequency of actions or occurrences.
má?-kd?alam (hand, three) 'three times'
ma? ${ }^{\text {De:n-ŋe:n (hand, what, what) 'how many times?' }}$
Needless to say, there are still a few examples of ma? in compounds and close-knit phrases which escape the above groupings.
ma? ${ }^{\circ}$ yl:kan (hand, shoot) 'shoots starting from first or second branch of tree'
$0_{m}$ \}-tda:mp (hand, paddle behind 'eldest in family' someone standing in canoel

### 1.2 BODY PARTS OTHER THAN ma?

The uses of other body parts in their extended meanings can to some extent be summarised, though there are no such things as watertight semantic divisions, and there is also some evidence of semantic overlap.
(i) kon The word for 'ear' kon is frequently used when realisation, perception, alertness and memory are involved.

```
kón-?à:t (ear, give) 'remind'
kón-tàyan (ear, firm) 'attentive'
kón-nd̀t (ear, shut) 'forget'
kón-njìn (ear, sit) 'to be alert, or listening for
    something'
kon \({ }^{\text {Out wun (ear, dead, Zie) 'not taking any notice' }}\)
```

(ii) kemp The word for 'flesh' kemp is used to describe the condition of the whole body.

| kemp ${ }^{\circ}$ mitj.am (flesh, soft. Emph) | 'energetic' |
| :--- | :--- |
| kemp wal Oway (flesh, partly, bad) 'Zazy, sick' |  |
| kemp ${ }^{\text {O wly? (flesh, Onom) }}$ |  |

(iii) kutjék The word for 'head' kutjék is used to describe mental powers, attitudes involving the will, and also mental illness.
kutjék wa:p ${ }^{\circ}$ min (head, brain, 'good brains' good)
kutjék-tàyan (head, firm) 'stubborn'
kutjék-wùnp (head, put) 'put trust in'
kutjék-wày.am (head, bad.Emph) 'not in right mind'
kutjék 'tonam (head, one) 'to be of one mind (as a group)'
There is one instance where kutjék overlaps with kon 'ear'.
Okutjék.an pi:?-pl:? (head.in, 'remember' keep, keep)
Okon.aŋ.am pi:?-pi:? (ear.in.Emph, 'remember'
keep, keep)
(iv) man Quite a number of compounds and close-knit phrases formed with man 'throat/neck' have an unpleasant connotation.

```
mán-?à:t (throat, give) 'tease'
mán-ŋè:y (throat, hear) 'disbelieve'
mán-kùtjam (throat, two) 'hypocritical'
mán-kè:? (throat, play) 'make fun of someone'
```

By contrast, however, there are a few examples which have a very good connotation.

```
mán-tdnam (throat, one) 'trustworthy'
mán-tdyan (throat, firm) 'reliable'
```

（v）me：？The word for＇eye＇me：？is used to describe actions or states where the eye is important as the instrument or object of the action，or where an action of seeing leads to a certain attitude．
mé：？－yèntj（eye，wait long）＇stare＇
mé：$-\mathrm{pl}:$ ？－pl：？（eye，mind，mind）＇keep someone awake＇
mé：？－tàyan（eye，firm）＇awake＇
mé：？－wùn（eye，Zie）＇jeaZous＇
mé：？－？ik（eye，split）＇be amazed＇
In some cases it is the visibility of the action which is in focus．
mé：？－？d：t（eye，give）＇show，introduce＇
mé：？－witJ（eye，drag）＇lead（someone）＇
mé：？－？ènkan（eye，clear）＇a clear place＇
mé：？－ṫ̀ntJ（eye，hide）＇trick，hide（something from someone）＇
Omé：？－yd：n ？i：y（eye，outside，go）＇go openly＇
$m e: ? ~ i s ~ a l s o ~ u s e d ~ t o ~ m e a n ~ t h e ~ p o i n t ~ o f ~ s o m e t h i n g, ~ o r ~ t h e ~ e x t r e m e . ~$
mé：？－pèpan（eye，sharp）＇sharp top＇
tu：t ${ }^{\text {Ome：？（breast，eye）＇nipple＇}}$
nak ${ }^{\text {me：？（water＇，eye）＇spring＇}}$
mé：？－ŋùtan（eye，night）＇very early morning＇
tum ${ }^{\text {me：？}}$（fire，eye）＇lighted firestick＇
me：？has also been heard used to describe intricate patterns where holes are involved．
wa：nk $\circ_{m e: ? ~(d i l l y b a g, ~ e y e) ~ ' a ~ d i l l y b a g ~ m a d e ~ w i t h ~ a ~ h o l e y ~}^{\text {a }}$ pattern＇
（vi）クaŋk The word for＇heart＇クaŋk is used where the emotions are deeply involved．
nánk－？ik（heart，split）＇to be deeply shocked＇
クánk－mùnk（heart，eat）＇to be consumed with passion for someone or something＇
jaŋk $O_{m i n}$（heart，good）＇happy＇
jaŋk ${ }^{\text {Owentj（heart，sore（noun））＇brokenhearted＇}}$
クaŋk Onal（heart，we two）＇close friends（we two）＇
It is also used to describe actions where breathing is involved， sometimes to the point where najk refers to＇life＇．
nánk－md：k（heart，tread）＇stop someone breathing＇

```
nánk-wày (heart, bad) 'out of breath'
    (Vs \etaa\etak Oway) ('sad')
ná\etak-mù:nt (heart, tie) 'hold breath'
\etaaŋk Oton tu:? (heart, another, 'sigh'
    throw)
nánk-?dtan (heart, short)
\etaá\etak-mà:y (heart, pick up) '(God) taking a person (at
    death)'
```

(vii) ta:? Many expressions where ta:? 'mouth' is a component describe actions or attitudes which are performed or achieved via the mouth as the main instrument.

```
tá:?-màm (mouth, hold) 'plead'
tá:?-?à:\underline{t (mouth, offer) 'teach'}
tá:?-रùlp (mouth, sweZZ) 'gossip'
tá:?-yùmp (mouth, make) 'mimic'
tá:?-mòtjan (mouth, quiet) 'shy person'
```

There is also expressed an idea of openness, or abandonment.
wentj ${ }^{\circ} \underline{t a}$ :? (sore, mouth) 'open sore'
yu:ntj ${ }^{\text {Ota:? (tree, mouth) 'stump' }}$
ta:? 'we?ar (mouth, wide) 'open wide'
ta:? 'yuk (mouth, wood) 'gate'
ta:? ${ }^{\circ} y 1: 1$ (mouth, ?) 'gills of fish'
'ta:? we:p.anan wun (mouth, 'to be left abandoned' (e.g. by
sleep. PP, lie) husband)
ta:? is also used with a sense of extremity or intensity of either action, number, or quality.

```
tá:?-kintj (mouth, sun)
tá:?-pin (mouth, ?) 'generous (especially concerning
    food)'
tá:?-wàntanam (mouth, ?) 'very very many'
tá:?-wàntj (mouth, woman) 'fond of women'
```

Again, like ma?, ta:? can be used as a connective for certain kinship terms.

Ota:? pi:p ke?anan (mouth, father, 'fatherless' without)
(viii) ?um The word for 'chest' ?um has the extended meaning of 'straight ahead', or the idea of 'facing' (Vb), when another person or force is involved.

```
?um Oka:w (chest, east) 'straight east'
O?um.an ?i:y (chest.with, go) 'go straight ahead'
```

```
}úm-tdamp (chest, bear) '(wind) against (someone)'
}úm-njl:n.pul (chest, sit.they two) 'sit facing each other'
?úm-tàt (chest, see) 'see (someone) coming towards
    (you)'
```

(ix) ka:? Semantically ka:? 'nose' seems to be the unmarked form.
It sometimes has the extended meaning of 'face' and even 'person'.
ká? ${ }^{-t} i p$ (nose, bruise) 'frown'
ka:? 'patJ (nose, white) 'white person'
ká:?-wdy (nose, bad) 'nasty person'
ká:?-kùl.am (nose, wizd.Emph) 'sad faced'
${ }^{\text {ka:? }}$ tonam wunp.an (nose, one, 'a man with one child'
put. Nom)

Apart from this, however, the range of expressions in which ka:? is used is wide. It does not seem possible to confine them within one or two semantic domains.

```
    ká:?-pl:tjanat (nose, rescue) 'save, rescue'
    ká?-ndk 'nose, water ?)
    ká:?-?èntJ (nose, become) 'tire'
```


### 1.3 CONTRASTIVE FUNCTIONS OF BODY PARTS ILLUSTRATED

In the following examples the verb or adjective is kept constant while the body part changes. The function of the different body parts is thereby seen more clearly.

```
W1th ?a:t 'give/offer' (ditransitive verb)
má?-?d:t (hand, give) 'help'
tá:?-?d:t (mouth, give) 'teach'
mán-?d:t (throat, give) 'tease'
kon-?d:t (ear, give) 'remind'
mé?-?d:t (eye, give) 'show'
With ?ik 'split' (intransitive verb)
mé:?-?ik (eye, split) 'be amazed'
gák-?lk (heart, split) 'be shocked'
ta:?-?lk (mouth, split) 'yawn'
W1th tayan 'firm, strong' (adjective)
kón-tdyan (ear, firm) 'attentive'
mán-tadyan (throat, firm) 'reliable'
má?-tdyan (hand, firm) 'trustworthy with things'
```

```
kutjék-tdyan (head, firm) 'stubborn'
nánk-tdyan (heart, firm) 'brave'
mé:?-tàyan (eye, firm) 'awake'
With way 'bad' (adjective)
ká:?-wdy (nose, bad) 'nasty person'
kemp 'way (flesh, bad) 'tired, lazy'
\({ }^{\circ}\) kon tha:? way (ear, mouth, bad) '(a person) with little under-
    standing'
クaŋk \({ }^{\text {Oway (heart, bad) 'sad' }}\)
```


## 2. SEMANTIC RELATIONSHIPS

The semantic relationships and corresponding grammatical compositions of Wik-Munkan compounds and close-knit phrases will now be described. While it is true that body parts figure prominently in compound formation, there are several compounds in which they do not occur.

### 2.1 GENERIC-SPECIFIC

Up to date over five hundred close-knit phrases are recorded which express a generic-specific relationship, in that order. Thus, the first word gives the broader setting, and the second narrows the field. These phrases are juxtapositions of noun plus noun (distributing as single nouns), and are regarded as close-knit because of their frequent collocation. Also, in the majority of cases they are terms for such things as body parts, specific animal types, foods, spear types, geographical features, age brackets or social status.

```
kutjék \({ }^{\circ} \mathrm{ka}: n \mathrm{tJ}\) (head, bone) 'skuZZ'
min \({ }^{\circ}\) pank (Pro, wallaby) 'wallaby'
nak onew (water, breath) 'whirlpool'
puk \({ }^{\circ}\) wantJ (child, woman) 'female child'
```

The first nouns of some phrases have a narrow application, while others are very widely used (especially may 'carbohydrate food', min 'protein, edible animals' and yuk 'tree, thing') and almost amount to being noun classifiers. These words occur very frequently, but are not strictly obligatory.

In Generic-Specific Phrases the first noun almost invariably is used in its literal meaning. However the second noun of the phrase sometimes has extended meaning. Most of those with extended meaning are body parts, and as such they can be used either with other body parts, or with implements or geographical features. This extended meaning usually
relates to position or characteristic feature. The examples below 1llustrate that some words can occur as the generic member with literal meaning or as the specific member with extended meaning.
ka:? ${ }^{\circ}$ kon (nose, ear)
tul ${ }^{\text {ka:? (woomera, nose) 'hook on woomera (spear thrower)' }}$

There are a few examples where the specific item, which sometimes has extended meaning, precedes the generic. In these, the stress and pitch pattern is different from the phrases where the order is genericspecific.

```
mé:?-nùtan (eye, night) 'very early morning'
mé?-pùk.an (eye, child.with) 'half developed chicken in egg'
```


### 2.2 METAPHORIC

There are other juxtapositions of noun plus noun in which the second noun is metaphorical.

Metaphors are often used in the language for descriptive purposes.
man ${ }^{\text {to: }} \mathrm{k}$ (neck, stick) 'tall person'
me:? Ouk (eye, owl) 'owlish eyes'
kemp obull (flesh, buZZ) 'a body like that of a bulZ'
The above examples distribute grammatically as equative clauses. They can also be transformed to similes.

```
me:? ka? Oguk.ant leye, like, 'eyes like an owl'
        owz-to)
```

There are a few metaphors which have become names of things, and as such they distribute as nouns.
mln ${ }^{\circ} \mathrm{má}-$ wùnt (Pro, hand, wind) 'prawns, crayfish'
min ${ }^{\circ}$ ká:?-kàyuw (Pro, nose, ibis) 'curlew'
nlntan $O_{m a: n J ~(b a c k, ~ m e n t a l ~ i m a g e) ~ ' s p i r i t ~ o f ~ a ~ d e a d ~ p e r s o n ' ~}^{\text {' }}$

### 2.3 MODIFICATION VIA ADJECTIVE

Quite a number of compounds and close-knit phrases are composed of noun followed by adjective. This is the common structure of many noun phrases in Wik-Munkan, and in fact, when the adjective has the higher pitch there is no difference phonologically or in grammatical composition between close-knit noun phrases and other modified noun phrases.

Semantically, however, the close-knit combinations of noun plus adjective have more cohesion and are sometimes rather specialised.

```
wlk Okat (word, old)
ka:t OmanJ (mother, smaZZ) 'mother's younger sister'
ka:? 'patJ (nose, white) 'white person'
```

```
puk 'manj (chiZd, smaZZ) 'chizd'
lat OnentJ (paper, sacred) 'Scripture'
kutjék OmltJ (head, soft) 'fontaneZZe'
```

Some noun-adjective combinations are the names of animals and fish. The highest pitch is on the noun. In these compounds, the whole is identified by a part, namely by a prominent physical characteristic.
min $\left.{ }^{\circ} \mathrm{ká}: l\right\}-w e ̀ ? a r ้ ~(P r o, ~ e a r, ~ w i d e) ~ ' f r i z l y ~ n e c k e d ~ Z i z a r d ' ~$
tu:k ${ }_{m}$ mé?-kùlan (snake, eye, wizd) 'yellow snake'
min ${ }^{\circ} \mathrm{k}$ á?-? $\mathrm{O}_{\mathrm{ojk}}$ (Pro, nose, Zong) 'small thin fish'
Other noun-adjective combinations function as adjectives, and a few
as adverbs. Many of these are idiomatic.
ŋaŋk ${ }^{\circ} \mathrm{min}(? i: y)$ (heart, good, 'happy'
(go))
kon ${ }^{\circ}$ Put (wun) (ear, dead, (Zie)) 'ignore what is said or done'
Otá? ?-mitJ-mitJ.am (taw) (mouth, 'speak flatteringly'
soft, soft.Emph)
man ${ }^{\circ} \mathrm{kul}$ (neck, wizd) 'angry'
kutjék-?d力k (head, Zong) 'stupid'
má?-mitJ.am (hand, soft.Emph) 'clumsy'

### 2.4 OTHER MODIFICATION

There are several other items where one word in some way modifies the other. Some of these are locative, temporal, or directional compounds and close-knit phrases.

```
?úm-mèna\eta (chest, middle) 'right in the middle'
?um '0ku:w (chest, west) 'straight west'
klntj Okenj (sun, high) 'middle day'
?á:k-yà?.an (place/time, Neg.with) 'purposeless, for no good
reason'
```

There is also intensification expressed in some compounds where ta:? 'mouth' is a component. (Refer Section 1.2(vi1).)

### 2.5 ACTIUITY, PROCESS AND STATE

Many verb compounds and a few noun compounds are formed with a verb as the second constituent.

The noun compounds are names for certain kinship terms or for animals. A part identifies the whole, this time either by a characteristic action or role, or physical characteristic.

```
wantJ \({ }^{\circ}\) ?a:t.an
'mother-in-Zaw'
```

woman give.Nom

```
pl:p.iy '?em.at.an 'father's younger brother'
```

father.Emph grow.Tr.Nom
min ${ }^{\circ}$ wé:p-wè:nt 'sZeepy fish'
Pro sleep, loves
$m \mid n{ }^{\circ}$ ?á:k-mdt.In 'big grunter fish'
Pro place, climb.they Pst
$\mathrm{mln}{ }^{\circ}$ pémař-pat.an.an 'mangrove worm'
Pro mangroves, bite.Nom
min ${ }^{\circ}$ kék-kàl.an
'swordfish'
Pro spear, carry.Nom
(Semantically, the first words of the above compounds range from being subject, location, or object.)

There are several hundred verbal compounds in Wik-Munkan, which express an action, a process, or a state of being. These verbal compounds are idiomatic and are mainly composed of body part plus verb stem, although words other than body parts sometimes precede the verb. The unconjugated verbal form ka:ok 'Zike' also occurs in combination with a couple of verbs.

| ?á:k-nè:y (place, hear) | 'to be born' |
| :--- | :--- |
| notan-?èntJ (dark, become) | 'get mixed up in something bad' |
| kú:y-t̀̀:? (rope/vein, give/throw) | 'accompany' |
| ká: jk-wùn (Zike, Zie) | 'Zove, like' |

(Examples of body part plus verb may be seen in Section 1.)
The majority of these items appear as subject-verb, object-verb, or instrument-verb relationships, but the appropriate case endings do not occur, except in a rare example. Needless to say, there is no sense in which the morpheme which looks like a "subject" within the verbal compound, acts as a subject in the clause in which the compound occurs.

### 2.6 CO-ORDINATION

There are some compounds and close-knit phrases which are co-ordinate In the sense that neither morpheme appears to be the dominant one. Both together contribute to and equally achieve the meaning. Sometimes the two morphemes concerned are the same part of speech.
pal ${ }^{\text {pu:y (here, there) 'everywhere' }}$
(yuk) way ${ }^{\circ} \mathrm{min}$ ( (things) bad, good) 'things'
mal ${ }^{\text {tak (right, Zeft) 'awkward' }}$
?án-pall (far Dist, here) 'from over there, from then'

```
\imathép-pdtam (alright, really) 'really alright'
yå?-ŋùl (Neg, then) 'no more'
```


### 2.7 PERSONAL RELATIONSHIP

There is a large series of compound pronoun forms where an indirect object pronoun following a personal pronoun indicates a special relationship of friendship or blood relation between two or more people.
nil-nùgant (he, to him)
tán-ŋàtar (they, to me)
'he, in a special relationship to another person'
'they, in a special relationship to me'

### 2.8 BASIC STATE OR CHARACTERISTIC

(See Section 1.1 for discussion.)

### 2.9 LINKAGE (CONNECTIUES)

(See Section 1.1 and $1.2(v i 1)$ for discussion.)

### 2.10 RESIDUE: PURPOSE AND ASSOCIATION

There are a few examples of compounds and close-knit phrases which express the semantic relationships of purpose and association.

Some examples which express purpose are:
kutjek O?olk (head, tree type) 'headband of feathers'
kutjék Otankan (head, tree type) 'coil for head'
These examples may be transformed to clauses expressing purpose.
?an O?olk kutjék.ak 'That's a headband for the head.'
there headband head .for
?In wey Otankan, kutjék.ak 'Here's a coil for the head.'
here Com coil head .for
There are two examples where the second word of the phrase bears an associative relationship to the first.
kotJ ${ }^{\text {na: }}$ (Zizard, darkness) 'gecko'5 $n i g h t)$
pam ${ }^{\circ}$ tum (man, fire) 'husband'6
3. CRITERIA FOR DIFFERENTIATING COMPOUND WORDS AND CLOSE-KNIT PHRASES

So far compounds and close-knit phrases have been discussed without much attempt made to define the terms or differentiate between the two,
or to relate them to single words and regular phrases. Recent pressures to make final decisions about the orthographic symbolisation of the numerous forms somewhere between single words and phrases have forced the search for solid linguistic criteria.

In the past, the ways a given compound "suspect" was written, by both literate native speakers and the resident linguists, varied to some degree. Likewise the intuitions of informants as to whether a given form was one word, two words, or something in between, were not wholly consistent. And no doubt they never will be completely consistent, even if the attempted standardisation in graphic presentation is well accepted by the community; for new compounds are always being formed and therefore are in various historical stages.

### 3.1 QUESTIONS TOWARDS WORKABLE CRITERIA

A number of questions were asked of each form under consideration in an attempt to come up with workable criteria.
(1) Phonological

Is the stress pattern more like that of a word or a phrase?
Is there any evidence of phonological fusion, e.g. loss of phonemes at the border of two morphemes?
Do forms considered to be compounds have faster timing than phrases?

## (ii) Semantic

Are the forms in question idiomatic or specialised in meaning? Is the meaning of one or both morphemes hard to determine?

## (1ii) Grammatical

Is the distribution different from that of a phrase made up of the same grammatical constituents?
Can the two morphemes take separate modification or inflection, or only as a whole?
Is one part inseparable?
Can other words come in between the component morphemes?

### 3.2 STRESS PATTERNS OF MONOMORPHEMIC WORDS

Some background of the stress pattern of words and phrases is necessary to rightly judge where compounds and close-knit phrases fit into the total system. ${ }^{7}$ The stress patterns of Modified Noun Phrases, Locative Phrases, Adjectival Phrases and Verb Phrases are referred to elsewhere in the paper. (See Sections 2.3, 4.2(i), 4.2(1i), and 4.2(v) respectively.)

The common stress pattern of monomorphemic words is primary stress no stress - secondary stress - no stress.
népăn 'egg'
ná?ărd̀ 'mould'
wúnăllnam 'night fish'
If a vowel other than a occurs in what would normally be a no stress position, it will receive secondary stress.
yépèn 'unlucky hunter'
?ठ:ykòm 'spear type'
kikly 'creek'
(When a suffix is added following $i$ or $u$ in the no stress position, there is variation in the resultant form.)
kikly.ăn Vs kikiy.d力 (creek.in) 'in the creek'
There are also a few forms (no more than twenty have been recorded to date) $w^{`} \mathfrak{z}^{`} e$ the vowel a occurring in a no stress position receives secondary stress. It seems possible that these words were historically compounds, and in some cases there is enough of a hint of a morpheme break to feed this suspicion. However, the psychological reaction of native speakers is that they are one word, and suggestions of lexical breaks are considered ludicrous.

```
pátàm 'really'
winjàn 'frightened'
púntàman 'fishing net'
púřpàm 'high places'
```


## 4. CRITERIA APPLIED TO DATA

When the criteria listed in Section 3.1 were applied to the data, stress emerged as the most useful criterion. That is, where several criteria jostle together for recognition, the stress pattern has normally been the deciding factor. ${ }^{8}$ The decisions are here defined.

Compounds are those sequences of morphemes (under consideration) which have the stress pattern of primary stress followed by secondary stress, i.e. Stém Stèm. For practical orthographic purposes compounds are written hyphenated.

On the other hand, sequences of recognisable Stèm Stén (secondary stress followed by primary stress) are called close-knit phrases, and written as two words.

There is some correlation between stress pattern and degree of semantic fusion in that compounds tend to have a tighter degree of fusion and close-knit phrases a lesser degree. However, this correlation is not
complete as several semantic relationships are not restricted to only one stress pattern. (See Section 4.3.)

A further decision concerns items which have primary stress on the second syllable but where the morpheme boundary is not clear. These are called words and marked with primary stress.

Items with three components have also been called close-knit phrases, and written as separate words. This decision is partly determined by the fact that some such phrases have alternating stress patterns.

These four categories will now be described more fully, along with some further details of the reasons for decisions, both linguistic and orthographic.

### 4.1 WORDS WITH PRIMARY STRESS OCCURRING ON OTHER THAN THE FIRST SyLLABLE

To date about twenty such words have been recorded. Some of these are onomatopoeic words or exclamations, and so do not come under consideration here as compounds.

```
tJalúpam (mu:ntJ) (splash, swim) 'dive right in'
yakáy 'ouch! / help!'
```

Concerning the remaining dozen, some or all were likely historically compounds, as their stress pattern is similar to that of a noun phrase (the greater majority function as nouns). The timing is faster however. In some cases it is possible to isolate one morpheme, but the other is unrecognisable as to meaning. In addition to this, the morpheme boundary is often not clear, especially where there is only one medial consonant.
wantJint (wantJ 'woman', tJInt/Int ?) 'old woman'
kl:kalká: t (kl:kal ?, ka: t 'mother' ?) 'swordfish'
The word for 'head' kutJék is a good example of an unclear morpheme boundary. There is some evidence that one part -ek, can be isolated, as it is a recurring form in neighbouring dialects in the word for 'head'.
walék^ (Wik-Iyenya)
plnték^ (Gugu-Mumən)
?ok is isolatable in some Generic-Specific Phrases in Wik-Munkan.
ma? ${ }^{\circ}$ ?ek (hand, sheZて) 'fingernail'
ta? ${ }^{\circ}$ ?ek (foot, sheľ) 'toenail'
naŋk O?ek (heart, sheZて) 'shoulderblade'
(However, ?ek could have homophonous forms.)

Native speakers today do not react to kutJék as being in the same category as ma? ${ }^{\circ}$ ?ek, etc. and cannot give a meaning for any part. Rather, they react to it as one word, and when asked to make a syllable division, will give varying answers, such as ku.tJek, kutJ.tJek and kutJ.?ek. If ?ek is isolatable historically, the glottal stop which is the initial consonant of $30 k$ 'shell', does not occur, and we must assume that pronological fusion has taken place. ${ }^{9}$

In one other example, neither syllable is recognisable as to meaning, but there is a medial consonant cluster which does not occur in any other monomorphemic word. So it could be assumed that this word was once a compound.
tjekwé:w 'earthworm'

### 4.2 COMPOUNDS

The phonological pattern of these forms varies from monomorphemic words in several ways. Firstly, the second stem of the compound always receives secondary stress, whereas monomorphemic words generally receive no stress in this position (see Section 3.2). Secondly, at the boundary of the two morphemes, many consonant clusters occur which do not occur in monomorphemic words. Thirdly, the second stem may have a long vowel, and long vowels do not occur in the second syllable of monomorphemic words which have primary stress on the first syllable. In some cases, there is phonological fusion as well, where the initial glottal stop of the second stem does not occur. ${ }^{10}$

```
wúkaldok (wukal 'neck', ?onk 'Zong') 'wiclow'
pildok (pll 'thigh', Zoŋk 'Zong') 'mullet'
```

Further points concerning compounds will be considered under their resultant word classes.

## (1) Compound Demonstratives

Some ciemonstratives in Wik-Munkan must be considered compounds. These are formed from two locative stems.
?án-pàl(an) (far Dist, here) 'from over there, after that, from that reason'
yám-pàl(an) (somewhere, here) 'from somewhere'
?án-गùl(an) (far Dist, then) 'after that is completed, over there to stay'

There are, however, locative phrases which in grammatical composition are similar. These are not considered compounds. Firstly, they have variable stress-pitch pattern, and secondly, they have neither the tight collocation nor the possible extended meanings of the demonstratives.

In addition to that, the demonstratives occurring first in the phrases sometimes take their own inflection. It should be noted also that some of the compound demonstratives can themselves occur as the first word of locative phrases.

```
\({ }^{\circ}\) ?an pek/ ?an \({ }^{\circ}\) pek (far Dist, 'down there'
        down)
    \({ }^{\circ}\) ?aŋ.am pek (far Stat Dist. Emph, 'right down THERE (staying)'
        down)
    O?án-pàl kenJ (from there, high) 'from on high'
    \({ }^{\circ}\) ?an.am yo:n (far Dist.Emph, 'over THERE in the vizZage'
        outside)
```


## (11) Compound Adjectives

Grammatically, these are composed of a body part followed by either an adjective, nominalised verb or numeral. (Of the forty examples recorded, there are only two exceptions, where the first stem is an adjective rather than a body part.) In some cases, the grammatical class of the second morpheme is impossible to decide, as it does not occur alone, and has only been heard preceded by one body part.

```
mút-mànJ (taiZ, smaZZ) 'thin'
ká:?-wày (nose, bad) 'nasty person'
mán-pdt.an (throat, bite.Nom) 'sweet'
mán-tdnam (throat, one) 'reliable'
nintan-pdtalan (back, ?) 'stubborn'
wáy-pikan (bad, ?) 'unbalanced'
```

The great majority of compound adjectives are idiomatic. The body parts are used with their extended meanings as described earlier (Section l). The semantic concept behind the majority is modification, i.e. the body part is modified. Those with a nominalised verb as the second component have an apparent subject-verb or object-verb relationship.

It will perhaps be argued that since compound adjectives have the same stress pattern as adjectival phrases, there is therefore no justification for stress being a prominent criterion. The following example is an adjectival phrase, where the modifier of the adjective occurs first and has the strongest stress.

```
OtJII min (partly good) 'a bit good'
```

However, the body parts in adjectival compounds in no way act as modifiers, but rather are themselves modified by the following adjective, which is the second component of the compound. Also adjectival compounds as a unit can be modified by one of the regular modifiers occurring in adjectival phrases. In this case, the adjectival modifier
has the highest pitch and strong stress. This leads to the conclusion that the adjectival compound is acting as a single adjectival unit and not as a phrase.

```
Otjil kón-tdyan (partly, ear, firm) 'half attentive'
Otjil mán-pd!t.an (partly, throat, 'a bit sweet'
        bite.Nom)
```


## (111) Compound Nouns

Compound nouns vary considerably in their grammatical composition, e.g. noun plus noun, noun plus nominalised verb, noun plus adjective, noun plus a form whose meaning and grammatical class is hard to determine, and adjective plus we:nt 'Zoves' (unconjugated verb). A few have a fixed affix on the second stem. In addition to their grammatical composition, compound nouns also vary considerably in the semantic relationship of the two stems. In fact, an example of most semantic relationships described in Section 2 can be found among compound nouns. Not one compound noun so far recorded has a meaning which is the sum of 1ts parts.

| (Modification) | min ${ }^{\circ}$ ká: l?-wè?ař <br> Pro ear, wide | 'frilly necked lizard' |
| :---: | :---: | :---: |
| (Metaphor) | min ${ }^{\circ} \mathrm{má}$-wùnt | 'crayfish' |
|  | Pro hand, wind |  |
| (Activity) | min ${ }^{\text {Opémary-pdt.an }}$ | 'mangrove worm' |
|  | Pro mangrove,bite.Nom |  |
| (State of Being) | mIn ${ }^{\text {O }}$ wép-wè:nt | 'sleepy fish' |
|  | Pro sleep, loves |  |
| (Basic State) | má?-? d̀mpanam | 'single' |
|  | hand ? |  |

Some compound nouns are identical to examples of modified noun phrases in their grammatical composition and choice of lexical items; but compounds are clearly idiomatic, while most phrases are clearly literal.

| ?á:k-min (place, good) | 'funny person' |
| :--- | :--- |
| Vs ?a:k ómin (place, good) | 'a good place' |
| Vs ?a:k-wdy (place, bad) | 'a bad person' |
|  | wúkalònk (neck, long) |

Others are asyntactic in their grammatical composition. For example, an alternative term for 'sleepy fish' is mln ${ }^{\circ}$ way-we:nt (Pro, bad, loves). we:nt normally occurs only following nouns or noun phrases.

## (iv) Pronoun Compounds

These have previously been mentioned in Section 2.7. A wide variety of relationships can be expressed by pronoun compounds, in that potentially any subject pronoun can occur with any indirect object pronoun. Some pronouns of other cases have also been recorded with indirect object pronouns.

```
nil-pulant (he, to those two) 'he, in a special relationship
                                to those two'
nil-nd\underline{tar (he, to me) 'he, in a special relationship}
    to me'
núna\eta-\etaattar (him, to me) 'him, in a special relation-
    ship to me'
nip-ndtar (you two, to me) 'you two, in a special relation-
    ship to me'
```

Abbreviated forms also occur. Thus nil-ndtar is usually heard as nllař, and núnan-odtař as nunamař.
(v) Verb Compounds

All have stress on the body part or other morpheme which precedes the verb stem. It has been decided to write these forms as compounds, even though occasional examples of interruption have been recorded, i.e. a morpheme occurring between the two compound components. (This is not true of any of the compounds described to date.)

Ogayaŋ.an kon gul gat.an 'I forgot then.'
me . Emph ear then shut.he Hab
Ogan me:?.an wutanam.an 'We prayed.'
we eye.Emph shut .we Pst
nul ?a:k ${ }^{\text {Pas pat.an } \text { ?ey? 'You sang there, did you?' }}$
then place/song? there bite.you Pst Ques
As for adjectival compounds, it is true also for verb compounds that they have a similar stress pattern to verb phrases (when occurring in indicative clauses). Some examples of verb phrases (occurring in clauses) follow.
nll ${ }^{\circ}$ eřkam mo? 'He ran quickly.'
he quickly run he Pst
nil ${ }^{\circ}$ ya:m 'He lived a long time.'
he Zongtime live he Pst
It is also true that in an indicative clause the item which occurs preceding the verb takes clause stress.

## nil ${ }^{\circ}$ ?a:kanak $? 1: y$

'He went there.'
he there to go he Pst
Onilify 'He went.'
he go he Pst
nii ${ }^{\circ}$ nugant mo? 'He ran to him.'
he him to run he Pst
Elicited data has shown that in the majority of cases where an adverb or other part of speech immediately precedes a verbal compound, the adverb (or other word) will take clause stress. The verbal compound is therefore acting as a single verb unit rather than phrase. If it were not, we might expect that the first stem of the compound would take clause stress.

```
\({ }^{\circ}\) ?eřkam kón-?d:t 'He reminded (him) quickly.'
    quickly ear,give he Pst
nil ogayan ma?-?a:t 'He helped me.'
he me hand,give he Pst
Oma?-yot.am ká? ?-tip.an 'He frowns a lot.'
    hand, lots.Emph nose, bruise. he Hab
```

(vi) Compound Adverbs

Several of these begin with a body part used with its extended meaning.

```
mé? ?-ŋà:řp.an ?i:y
'go for company'
eye group.with go
ta:?-klntJ 'all at once, to do something
mouth, sun all in one go'
```

The semantic relationship of some adverb compounds is hard to determine. Some express co-ordination, and some modification.
?ép-pdtam (alright, really) 'really alright'
mál-min (te:?) (right side, good, 'to throw accurately'
(throw))
?á:k-yd?.an (place/time, Neg.with) 'purposeless'
Some are asyntactic. mál-min (above) for example is the combination of two adjectives, which do not normally occur contiguously in phrases,
unless separated by pause.
(vi1) Locative Compounds
There are a few examples of locative compounds. They too begin with a body part. In some cases the meaning of one part is hard to determine.
?úm-mènan (chest, middle) 'right in the middle' ?úm-pùt (chest, and/but?) 'front'
(vi11) Temporal Compounds
Body parts also begin some temporal compounds, though a time word may also occur initially. The following examples show semantic relationships of both modification and generic-specific (or vice-versa).

```
má?-tonam (hand, one) 'once'
```

mé: ?-kàt (eye, old) 'from always till now'
ná:?-mènan (day/darkness, middle) 'middle of the night'
mé:?-oùtan (eye, night) 'very early morning'
(1x) Negative and Auxiliary Compounds
These occur in combination with nul 'then', a verbal auxiliary.
yá?-מùl (Neg, then) 'no more, dead'
ké?-गùl (Vb Neg, then) 'never anymore'
kán-ŋùl (Punct, then) 'already completed'

### 4.3 CLOSE-KNIT PHRASES

(1) Close-Knit Phrases paralleling Compounds in Semantic Relationship

It was stated earlier that the semantic concepts underlying compounds and close-knit phrases do not necessarlly correlate with only one stress pattern. The following examples compare compounds and close-knit phrases, which have close semantic correlation, and similar grammatical composition, but differ in stress patterning.

## Nouns

| ma? | Owop | 'sorcerer' | Vs | má?-tip.an | 'coward' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| hand | sorcery |  |  | hand, bruise.Nom |  |
| ka:? | $0_{w i n t J}$ | 'stone axe' | Vs | min ${ }^{\text {O má?-wùnt }}$ | 'scorpion' |
| nose | boomeran |  |  | Pro hand,wind |  |

## Adjectives

| kutjék | Oway-plkat | 'not in | Vs | kutjék-tàyan | 'stubborn' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| head | bad, ? | right |  | head, firm |  |
| man | ${ }^{\text {kul }}$ 'ang |  | Vs | mán-t ${ }^{\text {a }}$ yan | 'reliable' |
| throat | wizd |  |  | throat, firm |  |
| गапk | way 'sad' |  | Vs | nánk-wdy | ut of breath' |
| heart | bad |  |  | heart, bad |  |

Adverbs

| ta:? | Otak.an | (taw) |
| :--- | :--- | :--- |
| mouth | Zeftside.with speak |  |

Vs Otá:?-mitj-mitJ.am (taw) 'speak favourably to, flatter' mouth, soft, soft. Emph speak
kon ${ }^{\circ}$ ?ut (?1:y) 'not take any notice'
ear dead go
Vs $O_{m e ́: ?-y d: n ~(? i: y) ~ '(g o) ~ p u b l i c l y ' ~}^{\text {( }}$ eye,outside go

## Locatives



Temporals

| kint J | ${ }^{\text {kenJ }}$ | 'midday' |  | Vs | ná: ?-mènan | 'midnight' |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| sun | high |  |  |  | dark,middle |  |
| me:? | kint J | ntJ.an | 'sun still | Vs | mé: ?-ŋùtan | 'very early |
| eye | sun, | sun.with | up' |  | eye, night | morning' |

Because some semantic relationships cut across stress patterns, it was decided to carry out a psycholinguistic test to see if orthographic distinctions made on the basis of stress were justified. Short stories were written which included a selection of close-knit phrases (Stem Stém). Two tests were prepared, each to test the same sixty close-knit phrases. The phrases were written alternatively as two separate words or as one word with primary stress marked. Test A was a converse of Test $B$ in that forms written separate in $A$ were joined in $B$ and vice
versa. Informants were asked to read the stories; half were given Test $A$ and half Test $B .^{l l}$ Any stumbling in reading, or any obvious lack of comprehension, or slow timing, was noted. Results showed that in general readers performed better when the forms were written as two words. It was decided therefore to leave forms with stress pattern ' ' as two words, except for words described earlier (Section 4.1) where the boundary between morphemes is not clear. It is possible that if a large number of Wik-Munkan people become really fluent readers of WikMunkan within the next two or three years, that a repetition of this test could have different results.

## (11) Generic-Specific Phrases

These have already been described in detail (Section 2.1). In the range between literal and idiomatic, Generic-Specific Phrases tend towards the more literal. Some are, in fact, quite literal.
ka:? ${ }^{\text {万o:tJ (nose, mucus) 'nasal mucus' }}$
For some others, the second word has extended meaning.
kek ${ }^{m e}$ :? (spear, eye) 'spear point'
In a few cases, the second word of the phrase is very restricted and occurs in only one or two or three such phrases, but does not occur freely elsewhere.

| man ${ }^{\circ}$ ?ol (neck, jowZs) | 'jowZs' |
| :--- | :--- |
| may ${ }^{\circ}$ kam (food, juice) | 'fruit juice' |
| me:? ${ }^{\circ}$ kam (eye, juice) | 'tears' |
| mln ${ }^{\circ}$ kam (meat, juice) | 'gravy' |

Generic-Specific Phrases are also heard with lesser collocations, where the nouns come together more incidentally, and are not an established term.

## (111) Close-Knit Noun Phrases

Close-Knit Noun Phrases which express a modifying relationship have also been described earlier, along with compounds expressing the same semantic relationship (2.3). These close-knit phrases do not differ stress-wise or structurally from Modified Noun Phrases where the words come together more incidentally. The close-knit phrases however show more specialisation in meaning.

```
wIk 'kat 'story' Vs may 'kat 'rotten food'
word old food old
puk 'Omanj 'chizd' Vs yay̌aman ' OmanJ 'small horse'
child small horse small
```



The close-knit phrases take another adjectival modifier which is not generally true of the Modified Noun Phrase.
wlk kat ${ }^{\circ} \mathrm{min}$ (word, old, good) 'a good story'
puk manj ${ }^{\circ} \mathrm{pl}:$ ?an (child, small, big) 'a big child'
(iv) Close-Knit Phrases with Three Components

Some close-knit phrases have up to three components. These include phrases where ma? 'hand' functions as a link.
ma? ku:t ${ }^{\text {mu:y (hand, cousin, 'cousins' }}$ cousin)
ma? ${ }^{\text {Otum }}$ ke?anan/ $O_{m a ? ~}$ tum ke?anan 'widow' (hand, fire, without)

There are generic-specific phrases with three components where two of the items are embedded generic-specific phrases or in co-ordinate relationship.

| wal mant ${ }^{\circ}$ ?entJ | 'cheekbone' |
| :--- | :--- |
| cheek jaw bone? |  |
| (Gen-Spec) |  |
| yuk way ${ }^{\circ}$ mIn |  |
| things bad good | 'things' |
|  | (Co-ord) |

There are also verbal and adjectival compounds where more than one body part occurs.

```
    Oma? ka:? nji:n (hand, nose, sit) 'make things well'
    \(O_{m a ? ~ k a: ? ~ w a y / ~ m a ? ~ k a: ? ~ ' w a y ~(h a n d, ~ ' c e l u m s y ' ~}^{\text {' }}\)
        nose, bad)
```


### 4.4 CONCLUSION

In conclusion, it should be said that decisions concerning the symbolisation of compounds and phrases are not merely dreaming up orthographic conventions, which after all do not matter much. The decisions made should rather reflect the way a native speaker perceives his language, which includes whether two stems should be joined into one chunk, partly merged in hyphenation, or left as two chunks. No doubt there will never be agreement about some words and phrases. English provides plenty of examples of variation. Nevertheless, whether the orthographic decisions made for Wik-Munkan are good, or good in part,
only time will tell. And if a sizeable number of readers and writers show in time that decisions are not good, then that will be time for a change.

## C. Kilham

## NOTES

1. Wik-Munkan is spoken by approximately 700 people (either as their first or second language) at Aurukun, Cape York Peninsula (Australia). Speakers of closely related dialects live at Edward River and Coen. Research has been carried out in Wik-Munkan by the author since 1967 under the auspices of the Summer Institute of Linguistics, and since 1971 under the auspices of the Australian. National University. Other areas of Wik-Munkan analysis have been done by both Barbara Sayers and Marie Godfrey of the Summer Institute of Linguistics. Their work has proved helpful in the writing of this paper. Some discussion with Dr Sarah Gudschinsky, of the Summer Institute of Linguistics, at the time this paper was being prepared, proved helpful and stimulating.
2. Some semantic relationships are expressed by both compounds and close-knit phrases. The distinction between the two is clarified as the paper progresses (see Section 4). However, the two are differentiated orthographically in language examples from the beginning of the paper, even before reasons for differentiating them are given. This allows the reader opportunity to observe a larger corpus of data symbolised in its final form, while noting semantic overlap. Compounds are hyphenated, and word stress (primary and secondary) marked. Close-knit phrases are written as separate words, with phrase stress marked.
3. Hereafter called compounds.
4. Abbreviations and symbols used throughout the paper are:

| lPS | first person singular |
| :--- | :--- |
| 3PS | third person singular |
|  | primary stress |
| O | secondary stress |
|  | phrase or clause stress |


| / | alternating with |
| :--- | :--- |
| boundary between stem and affix |  |
| Acc | boundary between stem and stem |
| Co | uncertainty about the meaning of a morpheme |
| Com | compassion |
| Dist | distance |
| Emph | emphasis |
| Gen | generic |
| Hab | habitual |
| Ind | indirect object |
| Neg | negative |
| Nom | nominaliser |
| Onom | onomatopoeic |
| PP | present participle |
| Pro | protein |
| Pst | past |
| Punct | punctiliar |
| Ques | question |
| Spec | specific |
| Stat | stationary |
| Suj | subjunctive |
| Tr | transitiviser |
| Vb | verb/verbal |
| Vs | versus |

5. The gecko is a small lizard who is mostly seen active at night.
6. tum 'fire' here refers to the traditional marriage ceremony, in which a girl was taken by her mother to a previously prepared campfire, where her husband-to-be awaited her.
7. A detailed description of stress in Wik-Munkan is given in a paper by B.J. Sayers (see Bibliography).
8. For practical purposes, one of the determining factors in considering stress pattern so important concerns the expectations of the reader. If two stems with stress ' ' are left separate, the tendency is for the reader to read the second stem with higher pitch. If the two stems are joined without hyphenation, however, the expectation of some is that
the second syllable will be an unstressed syllable rather than another stem which would have secondary stress.
9. Phonemically no vowel initial words occur in Wik-Munkan.
10. Because of the phonological fusion present, these two forms have been written as one word.
11. The tests were performed with eight people, six of whom were fluent readers, and two semi-fluent.
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