WORK PAPERS OF SIL – AAB

Series A Volume 2

PAPERS ON IWAIĐJA PHONOLOGY AND GRAMMAR

Noreen Pym (with Bonnie Larrimore)

Summer Institute of Linguistics
Australian Aborigines Branch
Darwin
April 1979
PREFACE

These Work Papers are being produced in two series by the Summer Institute of Linguistics, Australian Aborigines Branch, Inc. in order to make results of SIL research in Australia more widely available. Series A includes technical papers on linguistic or anthropological analysis and description, or on literacy research. Series B contains material suitable for a broader audience, including the lay audience for which it is often designed, such as language learning lessons and dictionaries.

Both series include both reports on current research and on past research projects. Some papers by other than SIL members are included, although most are by SIL field workers. The majority of material concerns linguistic matters, although related fields such as anthropology and education are also included.

Because of the preliminary nature of most of the material to appear in the Work Papers, these volumes are being circulated on a limited basis. It is hoped that their contents will prove of interest to those concerned with linguistics in Australia, and that comment on their contents will be forthcoming from the readers. Papers should not be reproduced without the authors' consent, nor cited without due reference to their preliminary status.

Views expressed by the authors are not necessarily those of SIL.

The publication of this book was facilitated by a grant from the Australian Aborigines Branch Research Fund of the Summer Institute of Linguistics.

To order individual volumes of the Work Papers, or to place a standing order for either series, write:

SIL
P.O. Berrimah
Darwin, N.T. 5700
Australia

G. L. Hutter
Series Editor
INTRODUCTION TO
SERIES A VOLUME 2

The papers in this volume are descriptions of aspects of the Iwaidja language. Part I contains papers on the phonology and Part II papers on the grammar.

The language is classified by Wurm (1972:113), following O'Grady, Voegelin and Voegelin (1966:29) as constituting the Wargbi Subgroup of the Iwaidjic Group of the Iwaidjan Family. Iwaidja is spoken by about 120 people on Croker Island and by about a further 50 at Coome Point and Merganella on the adjacent mainland, and at Snake Bay on Melville Island, all in the Northern Territory.

Language data used in these papers was collected under the auspices of the Summer Institute of Linguistics during 1973-75 and 1977. Various Iwaidja people served as teachers in providing this data. Grateful acknowledgment is given to Elsie Indibu, Ada Magurulu, Rae Girribug, Hazel Mamiya, Joy Malwagga and Illyjilly.

Thanks are also due to Kenneth L. Pike, Marvin M. Mayers, Robert E. Longacre and George L. Huttar for their consultant help.

Noreen Pym
Bonnie M. Larrimore
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
<td>iii</td>
</tr>
<tr>
<td>Introduction to Series A Volume 2</td>
<td>v</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>xiii</td>
</tr>
</tbody>
</table>

PART I: PHONOLOGY

THE PHONEMES OF IWAIĐJA

1. The Phoneme
   1.1 Consonants
       Stops and Fricative
       Nasals
       Laterals
       Rhotics and Semi-Consonants
   1.2 Vowels

2. Distribution
   2.1 The Syllable
   2.2 The Phoneme
       In the Word
       In the Syllable
       Across Syllable Boundaries

AN ANALYSIS OF DISCOURSE PHONOLOGY

0. Introduction
1. Purpose
2. Detailed Analysis
   2.1 Discussion of Levels
PART II: GRAMMAR

Orthographic Symbols Used

IWAIĐJA WORDS

0. Introduction
1. Pronouns
2. Conjunctions
3. Demonstratives
4. Temporals and Locationals
5. Adverbs
6. Pre- and Post- Positions
7. Interrogatives
8. Exclamations
9. Nouns
   9.1 Noun Types
   9.2 'to be' or not 'to be'?
   9.3 Reduplicated Forms
   9.4 Nouns With Irregular Plurals
10. Adjectives
   10.1 Adjective Types
   10.2 Adjectives With Irregular Plurals
11. Negatives
12. Verbs
3.2 First Order Prefixes
   3.2.1 The Future Tense Morpheme mana-
   3.2.2 The Imperative Prefix ana-

4. Combinations of Prefixes and Suffixes
   4.1 The Imperative Mood
      4.1.1 Positive Imperatives
      4.1.2 Negative Imperatives

5. Other Affixation
   5.1 Repetition
   5.2 Duals

6. Compounding

7. Verbalization of Adjectives

8. Morphophonemic Changes

9. An Alternative Analysis of Transitive Person-Number
   Prefixation
      9.1 Transitive Subject and Object Prefixes
      9.2 Order of Prefixes
      9.3 Morphophonemic Changes
      9.4 Comparison Prefixes
      9.5 Transitive Direction Prefixes

10. Conclusion

11. Appendices
   11.1 Paradigms of Intransitive Verbs
      11.1.1 Verb Stems Beginning With a Vowel
      11.1.2 Verb Stems Beginning With 1d
      11.1.3 Verb Stems Beginning With m
      11.1.4 Verb Stems Beginning With ng
      11.1.5 Verb Stems Beginning With w
      11.1.6 Verb Stems Beginning With y
      11.1.7 Future Tense of Verbs With Stems Beginning
         With m, ng, w or y
   11.2 Paradigms of Transitive Verbs
      11.2.1 Verb Stems Beginning With a Vowel
      11.2.2 Verb Stems Beginning With 1d
      11.2.3 Verb Stems Beginning With m
      11.2.4 Verb Stems Beginning With ng
      11.2.5 Verb Stems Beginning With w
      11.2.6 Verb Stems Beginning With y
      11.2.7 Future Tense of Verbs With Stems Beginning
         With m, ng, w, y or a Vowel
      11.2.8 Future Tense of Verbs With Stems Beginning
         With 1d
11.3 Paradigms of mam- Verbs
   11.3.1 Verb Stems Beginning With a Vowel
   11.3.2 Verb Stems Beginning With m
11.4 Paradigms of ang- Verbs
   11.4.1 Verb Stems Beginning With a Vowel
   11.4.2 Verb Stems Beginning With ld
   11.4.3 The Verb Idarnagan 'prod, stab'
   11.4.4 Verb Stems Beginning With m
   11.4.5 Verb Stems Beginning With ng
   11.4.6 Verb Stems Beginning With w
   11.4.7 Verb Stems Beginning With y
11.5 The irregular Verb nigi 'carry on head'

INWAIDJA PHRASES

Preface

0. Introduction
1. Noun Phrases
   1.1 Head-Modifier Phrases
   1.2 Possessive Phrases
   1.3 Semantically Determined Phrases
   1.4 Phrases Requiring Context Clues
2. Verb Phrases
3. Relator-Axis Phrases
4. Series of Phrases
   4.1 Lists
   4.2 Phrases Joined by lda 'and'
   4.3 Juxtaposed Phrases
   4.4 Series Containing Both Co-ordination and Apposition
5. Discontinuous Phrases
6. Conclusion

AN INWAIDJA NARRATIVE DISCOURSE

0. Introduction
1. Method
2. Description of Narrative Structure
### 2. Participants
- 2.1 Participants
- 2.2 Sequence of Events
- 2.3 Grammatical Markers
- 2.4 Other Features Noted
- 2.5 Intonational Features
- 2.6 Simultaneous Events
- 2.7 Outline of Narrative
- 2.8 Changes in Word Order

### 3. Conclusions

### 4. Text of Narrative
- 4.1 Text With Morpheme by Morpheme Gloss
- 4.2 Text With Hypothesised Sentence and Paragraph Breaks

### PROCEDURAL DISCOURSE IN IWAIJDA

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Introduction</td>
<td>189</td>
</tr>
<tr>
<td>1. Procedural Discourse</td>
<td>189</td>
</tr>
<tr>
<td>1.1 Aboriginal Procedural Discourse</td>
<td>189</td>
</tr>
<tr>
<td>1.2 Iwaidja Procedural Discourse</td>
<td>191</td>
</tr>
<tr>
<td>2. Outline of Texts</td>
<td>192</td>
</tr>
<tr>
<td>2.0 Introduction</td>
<td>192</td>
</tr>
<tr>
<td>2.1 Text Outlines</td>
<td>193</td>
</tr>
<tr>
<td>2.2 Discussion of Outlines</td>
<td>207</td>
</tr>
<tr>
<td>3. Paragraphs and Sentences</td>
<td>207</td>
</tr>
<tr>
<td>4. Particles</td>
<td>209</td>
</tr>
<tr>
<td>5. Conclusions</td>
<td>211</td>
</tr>
<tr>
<td>6. Corpus of Texts</td>
<td>212</td>
</tr>
<tr>
<td>Text no. 1</td>
<td>212</td>
</tr>
<tr>
<td>Text no. 2</td>
<td>219</td>
</tr>
<tr>
<td>Text no. 3</td>
<td>229</td>
</tr>
<tr>
<td>Text no. 4</td>
<td>235</td>
</tr>
<tr>
<td>Text no. 5</td>
<td>241</td>
</tr>
<tr>
<td>Text no. 6</td>
<td>242</td>
</tr>
<tr>
<td>Text no. 7</td>
<td>244</td>
</tr>
<tr>
<td>Text no. 8</td>
<td>245</td>
</tr>
<tr>
<td>Text no. 9</td>
<td>247</td>
</tr>
<tr>
<td>Text no. 10</td>
<td>255</td>
</tr>
</tbody>
</table>

**Bibliography**

xii
ABBREVIATIONS

accomp  acompaniment
adj  adjective
adv  adverb
b.  brother
Ben  Benefactive
C  any Consonant
Cl  Clause
Cl, C2, ...  Clause 1, Clause 2, ...
comp  completed action
con  continuity
du  dual
emph/(emph)  emphasis
exc/ex  exclusive
fem  female
fut  future
H  Head
(IF)  Indefinite Future
imper  Imperative
inc/in  Inclusive
interrog  Interrogative
(io)/(1o)/Ind Obj  Indirect Object
IV  Intransitive Verb
lit  literally
M  Modifier
m.  mother
N  any Nasal
n/\(n)\  noun
neg  negative
(NIF)  Negated Indefinite Future
NP    Noun Phrase
num   numeral
p     past tense
p=cont/p cont continuous or habitual past tense
p=habit habitual past tense
pl    plural
Poss  Possessor
poss  possessive
PP    Possessive Phrase
quest question
RAP   Relator Axis Phrase
R#    break between rhythmic groups when not at word break
recip reciprocal
rep   repetitive
S1, S2, ... Sentence 1, Sentence 2, ...
s/sing singular
(SP) / Seq of part Sequence of Participant
subj  subject
TV    Transitive Verb
V     any Vowel
veg   vegetable
1s    1st person singular
1p    1st person plural
2s    2nd person singular
2p    2nd person plural
3s    3rd person singular
3p    3rd person plural
3=pers 3rd person, singular or plural
/     or
//    intonational pause
-     break between morphemes in Iwaidja
break between word in English but one morpheme in lwalida
which is (i.e. H:Cl the head which is a clause)

\( \text{paragraph} \)

\( \text{phonological phrase, rhythmic group} \)

\( \text{phonological word} \)

\( \text{pauses (shortest to longest)} \)

\( \text{heaviest stress} \)

\( \text{next heaviest stress} \)

\( \text{third degree of stress} \)

\( \text{syllable break} \)

\( \text{the phoneme} \ b \)

\( \text{the phone} \ b \)

\( \rightarrow \)

\( \text{is interpreted as} / \text{is realised as} \)

\( \text{end of text} \)
AN ANALYSIS OF DISCOURSE PHONOLOGY

0. INTRODUCTION

The discourses discussed in this paper were collected from two speakers in September 1974, specifically for the purpose of discovering why word stress appeared to vary. The texts are coded AB1 - 4, and RK1 - 7. Other texts, coded EY2 - 5, collected in September 1972, from a third speaker, were added to the corpus.

The results of the study showed that the way in which syllables were grouped together was of greater significance than the placement of stress. Tests showed that wrong grouping of syllables produced unintelligible utterances, while variations in stress placement did not affect intelligibility to nearly the same extent. The study was confined to the consideration of grammatical words and phrases. Apart from this general statement, no other conclusions were drawn.

1. PURPOSE

The purpose of this paper is to present the results obtained by analysing a corpus of texts by the method outlined in Mayers, Marvin K. Discourse Phonology. 1976. Basically this method is to peel layers of phonological features off a discourse like skins off an onion, each peeling revealing more clearly the layer (or level) below. Once a feature is assigned to a level it cannot be considered a feature of a lower level.

From the above mentioned corpus the texts AB1 - 4 were chosen for intensive analysis and the results obtained were checked against the other texts. The checking was not exhaustive.

2. DETAILED ANALYSIS

The levels discussed below represent the total discourse (Level 1), the phonological paragraph (Level 2), the phonological sentence (Level 3), the phonological clause (Level 4), the phonological phrase or rhythm group (Level 5), the phonological word (Level 6), and the syllable (Level 7).

2.1 DISCUSSION OF LEVELS

2.1.1 LEVEL 1 - THE DISCOURSE

In this data there are two types of discourse. The most common contains phonological paragraphs and is marked by greatest falling pitch, an overall decline in intensity and a final slow phrase which fades to voicelessness.
The second type is one in which there is no overall decline in intensity and the final phrase is not slower than the rest of the discourse. This is EY3, an hortatory discourse.

2.1.2 LEVEL 2 - THE PHONOLOGICAL PARAGRAPH

Two paragraph types have been noticed. Both contain sentences and are marked by the second greatest falling pitch. Type 1, the commonest, is also marked by having its highest pitch in the paragraph on the first syllable.

buqbiθ /// amnap an wafanuna / paθarkaθ ///
he-fear'd he-them-fear'd white-women he-cried

'He was afraid. He was afraid of the white women. He cried.'
AB1, 11 (see also EY3, 11 and RK6, 12)

Type 2 begins with an adverb or conjunction, baθa, mana, or bajuwa at the same pitch as the end of the preceding paragraph, and the highest pitch in the paragraph occurs on the syllable immediately following the adverb. baθa and mana are both fast when they are paragraph initial.

baθa naraθ / galaθuyθ gunak ///-
intens l-came kinship-term place

'And so I came to Ngalaθuy's place.'
RK3, 13 (see also AB2, 14; RO2, 12 and RK5, 13)

Here the grammatical and phonological levels do not match. The adverb or conjunction splits the two criteria for a phonological paragraph: the pause precedes but the highest pitch follows, and the adverb or conjunction is itself part of the rhythm group which follows. It seems better to make the paragraph break at the pause rather than immediately preceding the highest pitch.

The position of pajuwa (completive) varies. It may occur at the end of a paragraph and have falling pitch:

pajuwa ///
finish

'That's all.'
RK7n

Or it may occur following pause and having the same pitch as the preceding word.
\[ \text{na\text{-}r\text{-}un\text{-}anda} /// \text{pa\text{-}gu\text{-}wa} \text{ y\text{-}aq\text{-}\text{i\text{\text{-}}ta} /// \] 

\text{we-2-drink} \quad \text{finish} \quad \text{she-goes-back}

'The two of us drink. After that she goes back.'

AB2, §4

In both cases its meaning is the same: 'completion of the previous action'.

In AB1, S4 and S8 are not considered to be paragraph initial as the highest pitch does not occur on the syllable immediately following the adverb.

2.1.3 LEVEL 3 - THE PHONOLOGICAL SENTENCE

Length of pause does not seem to be consistent. There are two paragraphs which end with pause /, AB4, §1 and RK6, §2, and many clauses which end in pause ////. There is even an example of a verb and its appositional subject being separated by pause ////:

\[ \text{gupu\text{"}ru\text{"}pu\text{"} r\text{\text{-}a\text{-}d\text{-}n\text{-}a\text{-}kan} /// u\text{\text{-}ju\text{\text{-}l} ///} \] 

\text{morning} \quad \text{we-2-went} \quad \text{man's name}

'In the morning Urlurl and I went.'

RK3, C2, 3

But there does seem to be a level between clause and paragraph - clauses seem to go together to form a unit smaller than a paragraph. Further analysis may prove this untenable, but, at present, I am postulating a sentence level in which sentences contain clauses and are marked by pauses of lengths //, /// or ////:

\[ \text{ya\text{-}w\text{-}a\text{-}q\text{-}an} \text{ ba} \quad \text{wa\text{-}r\text{-}pl} / \text{ra\text{-}ya\text{\text{-}\text{-}n} \quad \text{a} \text{\text{-}b\text{-}l\text{-}t\text{\text{-}h} / \text{a} \text{\text{-}r\text{-}i\text{-}m\text{-}a\text{-}n} ///} \] 

\text{he-went} \quad \text{that man} \quad \text{he-saw-it} \quad \text{snake} \quad \text{he-got-it}

'The man went out, saw a snake and got it.'

EY2A, S1 (see also AB4, S2 and AB1, S2)

2.1.4 LEVEL 4 - THE PHONOLOGICAL CLAUSE

Phonological clauses contain phrases (rhythm groups) and are marked by pause / and greatest stress. The highest pitch and loudest intensity in the clause usually occur on the syllable with the greatest stress. This syllable is normally in the verb:
'It'll be open this afternoon.'
RK5, C1

Where the greatest stress occurs on another word this word is being given particular emphasis in the clause:

abani bu ni 'Daddy stays away.'
he-stays-away Daddy
RK2, C1 (see also AB4, C2)

Where two heaviest stresses occur in one clause they have the same high pitch.

i: riwulafu wugbarfa 'Yes, he finished it and went to sleep.'
yes he-it-finished he-slept
AB1, C14 (see also RK7d and RK2e)

exceptions:

wiqalmu 'a big mob'
big-mob-
AB3, C5

gudbanawanl 'stay!'
stay(imper. pl.)
EY3, C5

baguwa 'that's all'
finish
EY5, C7
(This is the only occurrence of a rise in pitch at the end of a discourse.)

ari gama n riqulul alanu puwal. 'He's there making a good road.'
he-stands he-works he-made road good
RK4, C3
(This is two clauses without an intervening pause, the second an appositional amplification of the first.)
I'll go to the shop.

Clauses which amplify the previous statement are much faster than the statement they amplify.

'1 came here and found you.'

You two had arrived.

But there are other instances of speed which are not amplification. One is the only question in the data:

What will I get?

The other could be considered a statement and its amplification:

'Jumbo's waiting for it, maybe they'll bring it back.'

Some clauses have a final rise in pitch which marks a close tie between them and the clauses following.

He saw the snake and he got it.

A clause may consist of one, two, three or four phrases. But these either balance so that the first part of the clause is equal in timing to the second part or they break evenly into three. The single phrases making a clause conform to this pattern of either two or three. There is no clause of just one phonological word.

Of the clauses containing four phrases, two of these are emphatic and tense, and the rhythmic grouping adds to the emphasis.
The third, RK7, C8, is a puzzle. It is an amplification (without the normal amplification feature) of RK7, C3 so it is semantically a flashback.

'Not a lot, just one.'

The fourth, RK2, C5, breaks into two halves and is unexpected in that there is no pause between the two parts. Except for pause, the second part has all the phonological and grammatical features of a new paragraph.

'Jumbo's waiting for it. Maybe they'll bring it back.'

2.1.5 LEVEL 5 - THE PHONOLOGICAL PHRASE

The phonological phrase is the rhythm group. It contains words (smaller rhythm groups) and is marked by second heaviest stress and shortest pause.

To form a rhythm group it is quite common to join grammatical words but unusual to split them. Many rhythm groups match grammatical words.
paraŋkaŋ
he-cried

'aiyunyan nagi
i-them-see dog

'I see the dogs.'
AB3, C2

the flash-

< (to)

-rom

that second
bra-

//

ave-it

da'ara ba'ara
1-go-away intens

'I'm going'
AB2, C2

indirect object:

anbudbulan qumun
she-it-poured for-him

'she poured it for him.'
AB1, C8

location:

aiy̱in ukh amangu
they-lie there shade

'they're lying there in the shade.'
AB3, C3

a noun and its adjuncts

adjective:

palanda maŋan
white-man small

'the small white man'
AB2, C4

two verbs with the same subject

war angyumaraʃpa
he-goes he-walks

'he's walking'
AB4, C4
a preceding subject and verb (subjects normally follow verbs)

ka:ma' ya'war
mother she-goes

'mother's going'
AB2, C5

a co-ordinate noun phrase

Clara Ya Victor
Clara and Victor

'Clara and Victor'
AB4, C3

The only question in the data is a single phrase consisting of 'what?', an adverb and a verb.

pi'ukunaf man abanaman
what? maybe ill-get

'What'll I probably get?'
RK4, C4

There are two cases of grammatical words broken into two phonological phrases. In both cases the break appears to be required by the balancing criterion of the clause.

anagaiangadagba
she-them-teaches

'she teaches them'
AB2, C6

a'wanina:n ba'ka
they-sit-past-cont intens

'they were sitting'
EY5, C1

2.1.6 LEVEL 6 - THE PHONOLOGICAL WORD

Phonological words contain syllables which are grouped together rhythmically and carry at least a third degree of stress. Phrase or clause stress may also occur on the same syllable obscuring the word stress. Words are of three types:

type 1: single syllable  -'bli:
AB1, C1.

type 2: two syllables with stress on the first syllable

'-san:
AB1, C2

'-pulang
AB1, C5

type 3: three syllables with stress on the first syllable

'-ariju:
AB2, C4
On phonological words as type 2 or 3 the stress will shift to the second syllable if that syllable marks the beginning of a grammatical word.

\[
\begin{align*}
\text{lin } \text{'u-} & \quad \text{AB3, C3} \\
\text{wam} \text{r } \text{angu-} & \quad \text{AB4, C4}
\end{align*}
\]

In this example, the final vowel a of wara 'he goes' is lost before the first vowel of the next word. The prefix an- always takes stress. So the resulting syllable ran is stressed.

Where a single consonant occurs at a word break, it seems to belong to both the preceding word and the following word. This is particularly noticeable with nasals, but the vowels before palatals and w also anticipate the following consonant.

\[
\begin{align*}
\text{gud} \text{banu} & \text{van} & \quad \text{EY3, C4} \\
\text{a} \text{lyunan} & \text{an} & \quad \text{RK1, C6}
\end{align*}
\]

2.1.7 LEVEL 7 - THE SYLLABLE

A syllable contains segments. There are three types of syllables.

Type 1 consists of CVC with an optional second consonant.

\[
\begin{align*}
\text{bud-} & \quad \text{AB1, C1} \\
\text{-walk-} & \quad \text{AB3, C4}
\end{align*}
\]

Type 2 consists of CV, and type 3 of V with an optional C.

\[
\begin{align*}
\text{type 2: pa-} & \quad \text{AB1, C4} \\
\text{type 3: a.pan ad.man} & \quad \text{AB2, C3}
\end{align*}
\]

But type three is found only word initially. There are no geminate clusters in laugh but some evidence for postulating that in a pattern of type CiV1C2V1C3, C2 belongs to both syllables and the word breaks into CVC(C)C. Further, there is alternation between uy- and uy-, and between yl- and yl- word initially. If a(C)-, word initially, is considered to be ?\text{a(C)}-\text{, then there is really only one syllable type:}

\[
\text{CV(C)(C)}
\]
2.1.8 LENGTHENED VOWELS

In Iwaidja, with one exception, length on a vowel is a feature of a level higher than the segment. The exception is that the vowel \text{I} is regularly lengthened to \text{i}: before \text{g, j, n} and \text{y} (see: The Phonemes of Iwaidja).

In this data, vowels which have been lengthened are serving either of two functions on the higher level:

either 1. to increase the timing of a phrase so as to balance the clause:

\underline{apa\text{n adman}i}  \hspace{1cm} AB2, C3
\underline{ka\text{m}a\text{i ya\text{wa}ra}}  \hspace{1cm} AB2, C5

or 2. for emphasis:

\underline{di\text{\text{n}an}} \hspace{1cm} RK1, C3
\underline{na\text{\text{g}l}} \hspace{1cm} RK6, C1

2.2 Summary of Levels

Level 1:

Discourse type 1 \hspace{1cm} paragraphs
\hspace{1cm} greatest falling pitch
\hspace{1cm} overall intensity decline
\hspace{1cm} final fading to voicelessness
\hspace{1cm} final slow phrase

\underline{type 2} \hspace{1cm} paragraphs
\hspace{1cm} greatest falling pitch
\hspace{1cm} final fading to voicelessness

Level 2:

Paragraph type 1 \hspace{1cm} sentences
\hspace{1cm} second greatest falling pitch
\hspace{1cm} initial pitch highest in paragraph

\underline{type 2} \hspace{1cm} sentences
\hspace{1cm} second greatest falling pitch
\hspace{1cm} initial adverb followed by syllable with highest pitch in paragraph
Level 3:
Sentence
```plaintext
[ clauses
  pause ///, ///, ///, /// ]
```

Level 4:
Clause
type 1
```plaintext
[ phrases
  pause /
  heaviest stress ]
```
type 2
```plaintext
[ phrases
  pause /
  heaviest stress
  fast speed ]
```
type 3
```plaintext
[ phrases
  pause /
  heaviest stress
  final rise in pitch ]
```

Level 5
Phrase
```plaintext
[ words
  second heaviest stress
  shortest pause ]
```

Level 6:
Word
```plaintext
[ syllables
  third degree of stress ]
```
type 1
```plaintext
[S]
```
type 2
```plaintext
[SS] or [S'S] (where grammatical word breaks occur after the first syllable)
```
type 3
```plaintext
[SSS] or [S'SS] (where grammatical word breaks occur after the first syllable)
```

Level 7:
Syllables
```plaintext
[ segments ]
```
type 1
```plaintext
[CVC(C)]
```
type 2
```plaintext
[CV]
```
type 3
```plaintext
[#V(C)]
```

21
3. CORPUS OF DATA

The following pages show the corpus of data in the order: AB1 - 4, EY2 - 5, RK1 - 7. On each the beginning of each paragraph is marked 1, the beginning of each sentence S, and the beginning of each clause C.
He was afraid. He was afraid of the white women. He cried. After that she poured out some milk for him. She poured it out, she gave him a drink. She put bread in it for him. She gave him bread (and) he drank it. After that, he finished it (and) went to sleep.
2 slow
morning

3 slow
1-go intens
l-him-hold we-sit
baby
white-man small

3 slow
mother
she goes
she them teaches book
l-him-hold intens
morning

2 slow
2 slow
2 slow
we drink hot
she comes
she arrives we-2 drink
finish she goes back
In the morning I go (there). I sit and hold the small white baby. His mother goes to teach from books. I hold him. During the morning we have a hot drink (when) she comes. She comes (and) the two of us drink (and) after that she goes back.

I watch I-them-see dog they-lie there shade they-hot hot

I'm looking. I can see the dogs. They're lying over there in the shade. They're very hot. There's a big mob lying together.
The two children, Clara and Victor, are playing. Clara's sitting and Victor's walking. They're playing.
'That man went out. He went out (and) saw a snake. He saw a snake. He got it and went home.'
"That man went out. He saw a snake (and) got it. He got it. He came home (and) he showed it. He showed the snake."
'Children, don't go far away. Stay at home. Stay at home. Stay (and) play. Don't do bad things. Don't say bad words. Just behave yourselves.'
The women were there and then they went out. They went out and arrived (over there). They cracked open oysters. They cracked them open (till) their (buckets were) full. That's all.
I came here and found that you two had come. I went back and told them. I said, "Ngaliwuyug's come with another new one (but) Ngaliwumud's stayed away."
'Daddy's staying in Darwin, waiting to get a car.' Jumbo's waiting for it. Maybe they'll both come back with it.'
"In the morning I took Uurlui and we went (there). He drank the medicine for his blood (and) we came back. 'When we get back I left him and came to Ngalawuyuq's place. Ngalawuyuq and I are (here)."
STORY PK4

1 slow 1 slow 1 slow 2 slow 2 slow
jumbo he-works that road poor-thing hot

2 slow 2 slow 1 slow 3 slow 1 fast 1 slow 1 slow
he-stand he-works he-made road good good road his car they-want

2 fast 2 fast 1 fast, 1 slow 2 slow 2 slow (each 3 even beats)
now good road not he-finish wait now maybe he-will-finish
'Jumbo's working on the road. Poor thing, it's hot. He's been making a good road. It's a good road. They went in his car. It's a good road now. He hasn't finished yet. Maybe he'll finish soon. He's working on the road. That's all.'
'It'll be open this afternoon. I'll go to the shop (and) look around. What'll I get? Tobacco maybe, (or) food (or) meat. Then I'll come back.'
The dogs are sitting together in the shade. There's a big mob. They're sitting together, (those) dogs. The dogs sit in the shade. They're not hot, they're in the shade. It is hot (but) they're in the shade.
2 slow 2 slow 2 slow 2 slow 2 slow 4 slow even 2 slow even
1-went turtle turtle 1-went digging-stick plain 1-prodded-it 1-stabbed-it

2 fast 2 slow 2 slow 1 med 1 med 1 med 1 med 2 slow 2 slow
1-found-it one turtle stick 1-brought here from home 1-went

2 med 2 med 2 slow 2 slow 2 slow 2 slow 2 slow 2 fast 2 fast
1-found-it turtle one turtle 1-found-it 1-got-it one truly
'I went for turtles. I went for turtles with a digging stick to the plain. I prodded around (and) I found one turtle. I brought the stick here from home. I went (and) found a turtle. I found one turtle (and) I got it. One indeed! Not a lot, just one. That's all.'