

## Kemtuik grammar sketch

### 1 Introduction

Language and speakers, where spoken, **affiliation**, some cultural information, plus info about data on which this grammar is based (time and work with Kemtuik).

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## 1. Introduction

**1.1 Location.** The Kemtuik language area is located in the northeastern corner of the province of Papua, Indonesia, some 80 kilometers southwest of the provincial capital of Jayapura (see maps below). The language is spoken by approximately 5,000 speakers who live in 23 villages. Quite a few Kemtuik people live in the provincial capital and the surrounding townships.

**1.2 Dialects.** Three dialect areas can be distinguished for the Kemtuik language. The leading dialect, 'Kemtuik proper', is spoken in the villages of Merem and Yanim. The second dialect is spoken alongside the road to Genyem in the villages of Sabron, Samon, Mamda and Meikari. The third dialect is located south of lake Sentani and called Damoy Blo. The differences between these three dialects are in fact minor and the 'Kemtuik proper' variant is considered the model for the whole area. There is some confusion about the use of the language name ['Kɛm.tük, 'Kam.tuk, 'Kem.tuk]. This is probably due to the non-occurrence of [ü] in Indonesian and the pronunciation of the language name via adjacent areas. Kemtuik 'proper' uses ['Kɛm.tük]

**1.3 Affiliation.** Traditionally the small Nimboran language family (Nimboran (7,500; Kemtuik/ Kemtuk 5,000; Klesi/Gresi 4,000 ; Mekwey/Moi 2,500 and Kuansu Mlap 500 was classified as a subgroup of the large Trans-New Guinea family. However, recent research by Malcolm Ross shows that these families are not affiliated (Malcolm D. Ross, 2005, 'Pronouns as a preliminary diagnostic for grouping Papuan languages' In: Andrew Pawley, Robert Attenborough, Jack Golson and Robin Hide, eds, *Papuan Pasts. Cultural, linguistic and biological histories of Papuan-speaking peoples*, 15-66. Canberra: Pacific Linguistics). Because of its small size and the differences with surrounding non-related languages such as Sentani, Tanamerah, Uria and Elseng, the Nimboran family is of special interest. Culturally the unity between all these language groups is more pervasive than their differences in language and dialect would suggest.

**1.4 Papuan Malay / Indonesian.** Papuan Malay is an offshoot of Ambonese Malay, mixed with Papuan linguistic features, which has been in use since approximately 1850 with the arrival of bird hunters and missionaries in the area. Because of the mixing of structures, quite a few variations of Papua Malay can be considered. The national language, Bahasa Indonesia, was introduced in the province in 1962, and has a growing influence, but the different forms of Papuan Malay are still popular.

**1.5 Historical and cultural.** In 1925 the missionaries Bijkerk en Schneider started to do mission work amongst the Nimboran, Gresi, Mlap, Kemtuik language groups. In a number of years most of them were adapted to the Christian religion, although many firmly hold on to the old beliefs as well. Churches and Christian schools were built in almost all villages. The government established three Districts in the area: Kemtuk, Kemtuk/Gresi and Nimboran.

Since 1990 government school (primary and middle schools) are replacing the old schoolsystem. But education itself is still poor. Only a slow growing number of children reach higher education levels. Transmigrant settlements, established in the area since 1975 have not flourished. In fact, many of the original settlements are (verlaten) and the inhabitants have moved to coastal areas and town. Economic development is going reasonable well. The traditional focus on pigs is being replaced by raising cows and goats. Cocoa crop is a major export product. Legal and illegal woodcutting impoverished the jungle in the area.

**1.6 History of language research.** Since Kemtuik had never been written, analysis of the sound system had to be done first, the results of which were published in 1975 (see bibliography). Research was carried out mainly in the Kemtuik area at the village of Merem, which is considered by the people to be the cultural centre of the Kemtuik, from 1985 onwards Sabron-Samon at the other side of the area, became the major center for research. From 1975-1981 the research was done under the auspices of the Summer Institute of Linguistics (now SIL International), in cooperation with the Cenderawasih University in Abepura, Papua (then Irian Jaya), Indonesia. On the basis of this analysis a preliminary orthography was established in 1975. From that time onwards, words and phrases were continually added to a lexical database, also from other parts of the Kemtuik area. From 1985 until 1992 further research was done by Mr. Michael Werner, a field linguist also working with SIL. From 2005 onwards, some fieldwork was done, not only by expatriate field linguists of SIL, but also by students from the University of Jayapura (especially in relation to Gresi). An official orthography for the Kemtuik language was established in 2007. In 2008 a Kemtuik vocabulary in triglot (Kemtuik, Indonesian and English) was published, containing some 2,400 entries.

**Hier moeten twee kaarten ingevoegd worden:**

- a) overzicht taalgroepen in Noord-Oost Papua
- b) overzichtskaartje van het Kemtuik gebied

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## 2 Phonology

contains charts of consonants and vowels.

**Lists of contrasting pairs + allophonic variations. Prenasalized stops?**

Important: what is the status of the schwa; this is probably related to stress patterns. I see contrastive stress in 1975 article: on final or on penultimate syllable. **Really contrastive or predictable by some rule.**

Syllable structure?

What are the vowel sequences? Is /ui/ always realized as rounded high front vowel [ü]?

**Consonant clusters?** only with liquid, i.e. /l/ or /r/, as second element?

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## 2. Phonology

### 2.1 Kemtuik consonant chart

|                            | <i>bilabial</i> | <i>dental-alveolar</i> | <i>palatal</i> | <i>velar</i> |
|----------------------------|-----------------|------------------------|----------------|--------------|
| <i>voiceless plosive</i>   | π               | τ                      |                | κ            |
| <i>voiced πλοσιπε</i>      | β               | δ                      |                | γ            |
| <i>voiceless fricative</i> |                 | σ                      |                |              |
| <i>nasal</i>               | μ               | ν                      |                | Ν            |
| <i>lateral</i>             |                 | λ                      |                |              |
| <i>approximant</i>         | ω               |                        | ψ              |              |

#### 2.1.1 Δισχυσσιον

##### /p/ **Bilabial voiceless unaspirated plosive**

Occurs syllable initially and finally

(The final release of plosives goes through the nose.)

|       |       |            |
|-------|-------|------------|
| /puk/ | [puk] | ‘to break’ |
| /pu/  | [pu]  | ‘to tell’  |
| /yap/ | [yap] | ‘house’    |

##### /b/ **Bilabial voiced plosive**

Occurs syllable initially only

|         |            |         |
|---------|------------|---------|
| /bu/    | [bu]       | ‘water’ |
| /nebut/ | [nəm.'but] | ‘story’ |

##### /m/ **Bilabial nasal**

Occurs syllable initially and finally

|         |            |           |
|---------|------------|-----------|
| /miam/  | [μι.'ʃoðμ] | ‘many’    |
| /mo/    | [m□]       | ‘already’ |
| /sruom/ | [sru.'□m]  | ‘fork’    |

**/w/ Bilabial approximant**

Occurs syllable initially, finally.

|         |           |                   |
|---------|-----------|-------------------|
| /woy/   | [wɔ̃ψ]    | ‘φιρεα            |
| /wew/   | [wew]     | ‘to make asleep’  |
| /kebew/ | [kə.'bew] | ‘name of village’ |

**/t/ Dental alveolar voiceless plosive**

Occurs syllable initially and finally.

(The final release of plosives goes through the nose.)

|        |          |          |
|--------|----------|----------|
| /ten/  | [tɛn]    | ‘food’   |
| /tuet/ | [tũ.'ɛt] | ‘to dig’ |
| /tet/  | [tɛt]    | ‘worm’   |

**/d/ Dental alveolar plosive**

[d] Voiced alveolar flap

Occurs only following /s/ (In some dialects: variation /l/ [r])

|         |            |            |
|---------|------------|------------|
| /usede/ | [u.sə.'de] | ‘to dance’ |
| /sedue/ | [sə'dö]    | ‘man’      |
| /sedek/ | [se.'dek]  | ‘to sleep’ |

Compare:

|        |          |            |
|--------|----------|------------|
| /usle/ | [u.'sre] | ‘to dance’ |
| /slue/ | [srö]    | ‘man’      |
| /slek/ | [srek]   | ‘to sleep’ |

[d] Voiced dental alveolar plosive

|        |        |          |
|--------|--------|----------|
| /don/  | [dɔ̃v] | επθoωεpə |
| /deng/ | [dɛŋ]  | ‘dry’    |
| /dok/  | [dɔ̃k] | ετο τιεε |
| /di/   | [di]   | ‘tree’   |
| /da/   | [da]   | ‘times’  |
| /duk/  | [duk]  | ‘obey’   |

**/s/ Dental-alveolar fricative**

Occurs syllable initial

|         |          |         |
|---------|----------|---------|
| /sa/    | [sa]     | ‘rain’  |
| /sua/   | [su.'a]  | ‘leave’ |
| /iseng/ | [i.'sɛŋ] | ‘pain’  |
| /suk/   | [suk]    | ‘skin’  |
| /sik/   | [sik]    | ‘from’  |
| /sak/   | [s ɤ̃k]  | ‘dry’   |

**/n/ Dental-alveolar nasal**

Occurs syllable initial and final

[n]

|         |           |             |
|---------|-----------|-------------|
| /nan/   | [nan]     | ‘soil’      |
| /namon/ | [‘na.m□v] | ἄνωμα       |
| /nu/    | [nu]      | ‘stomach’   |
| /nim/   | [ni m]    | ‘calm down’ |

[n] syllabic dental alveolar nasal

|          |           |            |
|----------|-----------|------------|
| /ndop/   | [n.‘d□p]  | ‘smoke’    |
| /ntrui/  | [n.‘trü]  | ‘to brush’ |
| /ndruim/ | [n.‘drüm] | ‘wrist’    |

## /l/ **Dental-alveolar lateral**

[ɾ] Trilled syllabic vibrant

Occurs preceding retroflexed lateral

|         |            |             |
|---------|------------|-------------|
| /lelam/ | [ɾ.‘l □ m] | ‘to play’   |
| /lelu/  | [ɾ.‘lu]    | ‘to insist’ |
| /lelui/ | [ɾ.‘lui]   | ‘to stir’   |
| /lelo/  | [ɾ.‘l □]   | ἄτο μὀπῃ    |

[r] Flapped vibrant

Occurs following dental alveolar plosives and fricatives /t,d,s/

|        |          |                      |
|--------|----------|----------------------|
| /dlop/ | [dr □ π] | ἄτο δριγκῃ           |
| /tla/  | [tra]    | ‘to suffer/ to call’ |
| /sлом/ | [sr □ μ] | ἄσσολλῃ              |

[ɭ] Retroflexed lateral

Occurs following labial and velar plosives

|         |         |       |
|---------|---------|-------|
| /klaya/ | [klæya] | ‘one’ |
| /blo/   | [bl □]  | ἄβ῀πῃ |
| /ple/   | [ple]   | ‘bow’ |

[l] Flapped retroflexed voiced continuant

Occurs syllable initial

|          |              |               |
|----------|--------------|---------------|
| /luagit/ | [lu.‘a.git]  | ‘leech’       |
| /isuali/ | [i.su.‘a.li] | ‘cassowary’   |
| /lo/     | [l □]        | ‘through’     |
| /lek/    | [lek]        | ‘washed away’ |
| /la/     | [la]         | ‘relief’      |

## /y/ **Palatal approximant**

Occurs syllable initially and finally

|       |         |         |
|-------|---------|---------|
| /yap/ | [yap]   | ‘house’ |
| /woy/ | [w □ ψ] | ἄσυνῃ   |

## /k/ **Velar voiceless plosive**

Occurs syllable initially and finally.

The final release of plosives goes through the nose.

|        |          |            |
|--------|----------|------------|
| /ku/   | [ku]     | ‘time/day’ |
| /klak/ | [kl □ k] | ‘to raise’ |

|          |           |                               |
|----------|-----------|-------------------------------|
| /koy/    | [kɔψ]     | əφtɾɛə                        |
| /ke.bui/ | ['ke.bü]  | ‘something that brings peace’ |
| /king/   | [ki ŋ]    | ‘to follow’                   |
| /kebong/ | [kə.'bɔŋ] | ‘to die’                      |

### /g/ **Palatal voice plosive**

Occurs syllable initial

|          |           |                    |
|----------|-----------|--------------------|
| /guon/   | [gũ.'ɔv]  | ‘name of tree’     |
| /gemang/ | [gə'm ɸŋ] | ‘to exist there’   |
| /gum/    | [gum]     | ‘fog’              |
| /gamung/ | ['ga.muŋ] | ‘to call together’ |
| /git/    | [git]     | ‘to sharpen’       |

### /ŋ/ **Velar nasal**

Occurs syllable initially and finally

|            |            |                    |
|------------|------------|--------------------|
| /ŋoy/      | [ŋɔψ]      | ‘brideprice beads’ |
| /ŋe. ŋam / | ['ŋɛ.ŋ ɸm] | ‘to live in peace’ |
| /ŋuok/     | [ŋũ. 'ɔκ]  | ‘to teach’         |
| /ŋap/      | [ŋ ɸp]     | ‘to shine’         |
| /ŋit/      | [ŋit]      | ‘dizzy’            |
| /keŋ/      | [keŋ]      | ‘to follow’        |
| /kiŋ/      | [kiŋ]      | ‘to fill’          |

## 2.2 Vowel chart

|      | front | central | back |
|------|-------|---------|------|
| high | ɪ     |         | ʊ    |
| mid  | ɛ     |         | o    |
| low  |       | α       |      |

### 2.2.1 Discussion

#### /i/ **Front high vowel**

[ü] High front rounded vowel

Occurs syllable nucleus following a rounded vowel.

|         |          |                     |
|---------|----------|---------------------|
| /udui/  | [ʊ.'dü]  | ‘banana’            |
| /ului/  | [u.'lü]  | ‘to prepare pepeda’ |
| /unuik/ | [u.'nük] | ‘to fold’           |
| /unuim/ | [u.'nüm] | ‘spirit/zest’       |

Compare [üi] syllable initial:

|        |          |            |
|--------|----------|------------|
| /wisi/ | [üi.'si] | ‘to stand’ |
| /dewi/ | ['dɛ.wi] | ‘prayer’   |

Compare also [üi] with [u] :

|        |          |                |
|--------|----------|----------------|
| /usi/  | [ü'si]   | ‘to call, ask’ |
| /wisi/ | [üi.'si] | ‘to stand’     |

|         |          |                     |
|---------|----------|---------------------|
| /imuik/ | [i.'mük] | ‘raspberry’         |
| /ibui/  | [i.'bü]  | ‘to stiffen/ blind’ |
| /alui/  | [‘a.lü]  | ‘wave’              |
| /suiŋ/  | [süŋ]    | ‘to sit’            |

Compare:

|       |       |                        |
|-------|-------|------------------------|
| /siŋ/ | [siŋ] | ‘seedling/to take out’ |
| /suŋ/ | [suŋ] | ‘ashes, trash’         |

|        |       |                    |
|--------|-------|--------------------|
| /puit/ | [püt] | ‘to burn’          |
| /buit/ | [büt] | ‘pain’             |
| /nuik/ | [nük] | ‘tree trunk’       |
| /kui/  | [kü]  | ‘animal droppings’ |

[ɪ] High front lower rounded vowel

Occurs in unstressed closed syllables.

|           |               |       |
|-----------|---------------|-------|
| /banim/   | [‘ba.nɪ m]    | ‘old’ |
| /demeniŋ/ | [ðɛ'mɛ.n‘ɪ ŋ] | ‘new’ |

[i] High front upper unrounded vowel

Occurs in all other context

|         |           |                   |
|---------|-----------|-------------------|
| /besik/ | [be.'sik] | ‘drooping’        |
| /ip/    | [ip]      | ‘to stand’        |
| /iti/   | [i.'ti]   | ‘to take, to get’ |

### /e/ **Front mid vowel**

Occurs only rarely, word finally following /l/ .

|         |           |                    |
|---------|-----------|--------------------|
| /ple/   | [ple]     | ‘bow’              |
| /damle/ | [‘dam.le] | ‘name of tree’     |
| /daley/ | [‘da.ley] | ‘rank of soldiers’ |
| /ikle/  | [i.'kle]  | ‘gossip’           |

Consider also:

|       |         |         |
|-------|---------|---------|
| /ide/ | [i.'de] | ‘heavy’ |
|-------|---------|---------|

[ɛ] Lower mid front vowel (see the main discussion on stress pattern)

Occurs occasionally in word finally, unstressed syllables, with [a] or [ɛ] in the preceding stressed syllable.

|         |           |                     |
|---------|-----------|---------------------|
| /gabe/  | [‘ga.bɛ]  | ‘exist here’        |
| /yense/ | [‘yɛn.sɛ] | ‘kind of vegetable’ |
| /nase/  | [‘na.sɛ]  | ‘must’              |

Occurs also occasionally, word initial in stressed position.

|         |           |                            |
|---------|-----------|----------------------------|
| /yense/ | [‘yɛn.sɛ] | ‘kind of vegetable’        |
| /keli/  | [‘kɛ.li]  | ‘kind of fruit/rose apple’ |
| /kelui/ | [‘kɛ.lui] | ‘juicy’                    |
| /mekui/ | [‘mɛ.kü]  | ‘to fold’                  |
| /belui/ | [‘bɛ.lü]  | ‘panick’                   |

[ö] Mid front rounded vowel

Occurs following a rounded high back vowel

|         |          |                 |
|---------|----------|-----------------|
| /blue/  | [blö]    | ‘magic’         |
| /nue/   | [nö]     | ‘leave it’      |
| /pluep/ | [plöp]   | ‘gather’        |
| /pue/   | [pö]     | ‘untie’         |
| /ulue/  | [u.'lö]  | ‘to empty’      |
| /tuep/  | [tũ.'ɛp] | ‘stump of tree’ |
| /tuen/  | [tũ.'ɛn] | ‘to slant’      |
| /tuet/  | [tũ.'ɛt] | ‘to dig’        |

Compare contrast with [e] [u] and [ui] in same positions:

|        |        |                 |
|--------|--------|-----------------|
| /ble/  | [ble]  | ‘name of woman’ |
| /plet/ | [plet] | ‘to dislocate’  |
| /pu/   | [pu]   | ‘to talk’       |
| /pui/  | [pü]   | ‘to fall’       |
| /tup/  | [tup]  | ‘to hear’       |

### /a/ Central low vowel

[ɤ] Upper low short central vowel

Occurs in closed syllables

|        |            |                    |
|--------|------------|--------------------|
| /mlap/ | [ml ɤ p]   | ‘name of language’ |
| /sat/  | [s ɤ t]    | ‘tail’             |
| /sak/  | [s ɤ k]    | ‘dry’              |
| /nan/  | [n ɤ n]    | ‘earth’            |
| /kay/  | [k ɤ y]    | ‘to forget’        |
| /kuat/ | [kü.' ɤ t] | ‘frog’             |

Compare:

|         |             |         |
|---------|-------------|---------|
| /yatap/ | ['ya.t ɤ p] | ‘door’  |
| /bauk/  | ['ba.uk]    | ‘porch’ |

[æ] Front low long vowel

Occurs following [l] and preceding [y] or following [ũ] [i] and [e].

|          |            |             |
|----------|------------|-------------|
| /naklay/ | [na.kl'æy] | ‘all’       |
| /klaya/  | ['klæ.ya]  | ‘one’       |
| /blay/   | [blæy]     | ‘diarroeae’ |
| /mlay/   | [mlæy]     | ‘oil’       |
| /piam/   | [pi.'æm]   | ‘wrong’     |
| /teguan/ | [tə'güæn]  | ‘stomach’   |

Compare:

|          |           |                      |
|----------|-----------|----------------------|
| /dlang/  | [dr ɤ ŋ]  | ‘wealth/bride price’ |
| /bla/    | [bla]     | ‘hut/cottage’        |
| /semlea/ | [sə'mlæa] | ‘pepeda’             |
| /mea/    | [mæa]     | ‘will’               |

[a] Lower long vowel

Occurs in stressed syllables



|         |            |          |
|---------|------------|----------|
| /mla/   | [mla]      | ‘rest’   |
| /banom/ | [ˈba.nɔ̃m] | ‘self’   |
| /kadiŋ/ | [ˈka.dɪ ŋ] | ‘behind’ |

### /u/ Back high vowel

[ũ] High centralized and compressed rounded vowel

|        |          |                 |
|--------|----------|-----------------|
| /tuep/ | [tũ.ˈɛp] | ‘stump of tree’ |
| /tuen/ | [tũ.ˈɛn] | ‘slant’         |
| /tuet/ | [tũ.ˈɛt] | ‘dig’           |
| /utep/ | [ũ.ˈtɛp] | ‘tomorrow’      |
| /usi/  | [ũ.ˈsi]  | ‘ask’           |

Compare: [ũ'e] and [ö]

|        |         |         |
|--------|---------|---------|
| /suey/ | [sũˈey] | ‘good’  |
| /ulue/ | [u.ˈlœ] | ‘empty’ |

[u] Back high rounded vowel  
Occurs elsewhere

|         |           |                               |
|---------|-----------|-------------------------------|
| /babu/  | [ˈba.bu]  | ‘grandfather/mother/ swollen’ |
| /napu/  | [ˈna.pu]  | ‘day after tomorrow’          |
| /banu/  | [ˈba.nu]  | ‘moon/month’                  |
| /yangu/ | [ˈya.ŋu]  | ‘yellow’                      |
| /wosu/  | [ˈwɔ̃.σv] | ἄρρε κανγαροοῦ                |
| /su/    | [su]      | ‘worm’                        |
| /mu/    | [mu]      | ‘hole’                        |
| /ku/    | [ku]      | ‘day/time/earth’              |
| /ulue/  | [u.ˈlœ]   | ‘empty’                       |
| /u/     | [u]       | ‘to sing’                     |
| /kabuŋ/ | [ˈka.buŋ] | ‘woman’                       |

### /o/ Back mid vowel

[o] Upper mid rounded vowel

Occurs very rarely and only in an open syllable, following [r] and [ɾ.l]

|           |            |                     |
|-----------|------------|---------------------|
| /kaysruo/ | [ˈkay.srœ] | ‘eel’               |
| /sruo/    | [srœ]      | ‘earthenware crock’ |
| /boglui/  | [bo.ɡlœ]   | ‘to unset’          |
| /rlo/     | [ɾ.lœ]     | ‘to move’           |

[ɔ̃] Lower mid rounded vowel

Occurs in all other positions.

|        |           |                       |
|--------|-----------|-----------------------|
| /so/   | [sɔ̃]     | ‘intention/situation’ |
| /sok/  | [σɔ̃κ]    | ‘take off’            |
| /klong | [κλɔ̃ŋ]   | ‘to go’               |
| /koy   | [kɔ̃ψ]    | ‘fire’                |
| /wosu/ | [ˈwɔ̃.σv] | ‘tree kangaroo’       |

|            |               |                 |
|------------|---------------|-----------------|
| /blo/      | [bl□]         | 'above'         |
| /sluakuon/ | [sru.'a.kũ□v] | 'name of tribe' |

### 2.3 Word structure and stress

The phonological word (PW) provides a useful construction for specifying underlying stress and syllable patterns. PW's are of two general constrative classes: ultimate stress and penultimate stress and are basically constructed of 1 to 3 syllables. As follows:

|                        |             |
|------------------------|-------------|
| Ultimate stress PW >   | CVC . 'CCVC |
| Penultimate stress PW> | 'CCVC . CVC |

### 2.4 The Syllable

The syllable (S) functions in the PW in accordance with the existing stress patterns as described above. A vowel (V) functions as obligatory nucleus of the syllable, preceded by one or more non-obligatory consonants (C). Syllables in Kemtuik have the *basic* shape:

CVC . 'CVC. CVC

The underlined CV combination is obligatory. The following words are illustrative:

|             |                |              |
|-------------|----------------|--------------|
| 1 syllable  | [bu]           | 'water'      |
|             | [tɛn]          | 'food'       |
| 2 syllables | [mə.'n□]       | 'other'      |
|             | ['wa.l□p]      | 'feast'      |
|             | ['da.bü]       | 'heart'      |
|             | [i.'ti]        | 'give, take' |
| 3 syllables | [t ɤ n.'da.li] | 'again'      |
|             | [kə'ba.li]     | 'to work'    |
|             | [wɛŋ.'ka.bü]   | 'head'       |
|             | [w ɤ . 'la.ka] | 'lobster'    |
|             | [ku.'na.la]    | 'thinking'   |

### 2.5 Consonant distribution

The following numbering of the basic CV- string will help us to specify the set of consonant members in a numbered class, as follows:

C V C . 'C V C. C V C (underlined CV pattern is obligatory)  
1 2 3 4 5 6

C1 > Includes all consonants

C2 > Includes all nasal consonants

C3 > Includes all consonants

C4 > Includes only /l/

C5 > Includes voiceless plosives, nasals, and semivowels

C6 > Includes all consonants

C7 > Includes voiceless plosives, nasals, and semivowels

The co-occurrence may be stated in the following set of conditions:

Condition 1: Only one consonant cluster can be formed: C + /l/

Condition 2: In the case of C1 being a nasal, and C3 is a voiced plosive, there will be assimilation to the point of articulation of the following C3.

Consider these examples:

|          |            |            |
|----------|------------|------------|
| /nebut/  | [nəm.'but] | ‘story’    |
| /nebo/   | [nəm.'bɔ]  | ‘pig’      |
| /meduim/ | [mən.'düm] | ‘mountain’ |

Condition 3:

Syllabic consonants are interpreted as CV sequences. They consist of continuant consonants (r, s, m, n, ŋ) and occur in a pre-stressed syllable position. Consider the following examples:

Condition 4: If C2 is a syllabic nasal, the point of articulation of C2 will be predicted by the following C3.

Consider these examples:

|          |             |               |
|----------|-------------|---------------|
| /ndop/   | [n̥.'dɔp]   | ‘grasshopper’ |
| /nson/   | [n̥.'sɔn]   | ‘to cough’    |
| /ngga/   | [ŋ̥.'ga]    | ‘there’       |
| /rlam/   | [r̥.'lam]   | ‘play’        |
| /ntaton/ | [n̥.'taton] | ‘brother’     |
| /mtam/   | [m̥.'tam]   | ‘sago trail’  |

## 2.6 Vowel distribution

Two PW-types were described in 2.3 based on stress and contrast. Observing those PW-types, vowel occurrences are stated below in terms of monosyllabic, disyllabic and trisyllabic PW’s.

Monosyllabic PW Vowels : C C V C includes all vowels /i,e,a,o,u/

Dissyllabic PW Vowels: C V C . C C V C

1 2

**V1** > obligatory unstressed centralized vowel /e/ [ə]

**V2** > obligatory stressed vowel; includes all vowels /i,e,a,o,u/

## 2.7 Vowel centralization

2.7.1 There is an interesting contrast between HIGH centralized [ə] vocoid and the LOW vocoids [a]. (In a few cases also: [ɛ] and [ɔ]). They form two contrasting PW-classes.

For example: /damoy/ ['da.moy] “full” versus /demu/ [də.'mu] “stone”

In two and three syllable PW’s, a vocoid in stressed position is preceded by a neutralized vocoid: CV(C). 'CV(C). It is neutralized towards the vocoid [ə], with a slight ‘coloring’ of the vocoid in the following stressed syllable.

Consider the following examples:

|           |            |         |
|-----------|------------|---------|
| /ne.'but/ | [nəm.'but] | ‘story’ |
|-----------|------------|---------|

/ge.'mang/ [gə.'mang] 'being there'

If that syllable string (occasionally) occurs as: V. 'CV, the vocoid in unstressed position is not centralized.

Consider the following examples:

/i.'seng/ [i.'sɛŋ] 'pain'

LOW vocoids (mainly [a], sometimes [ɛ] or [ò]) in stressed position require NOT centralized vocoids in the following not stressed syllables.

Consider the following examples:

/'da.moy/ ['da.moy] 'full'

## 2.8 Stress

Stress is predictable and is not written. De 'schewa'[ə] is interpreted as /e/.

Consider the following examples:

| LOW VOCOID<br>[a] [ã] [ɛ] [ò]<br>Stressed penultimate<br>syllable<br>(CV). 'CV(C). CV(C)<br>No centralization | HIGH VOCOID<br>[i] [e] [u] [ó]<br>Stressed ultimate<br>syllable<br>CV(C).CV(C)<br>Centralization [ə] | English gloss      | HIGH VOCOID<br>Stressed ultimate<br>syllable<br>V.CVC<br>No centralization | English gloss |
|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------|----------------------------------------------------------------------------|---------------|
| /damoy/ ['dá.moy]                                                                                             |                                                                                                      | full               | /use/ [u.'se]                                                              | afternoon     |
| /banim/ ['bá.nim]                                                                                             |                                                                                                      | old                | /udui/ [u.'dü]                                                             | banana        |
| /gabe/ ['gá.be]                                                                                               |                                                                                                      | exist here         | /utep/ [u.'tep]                                                            | tomorrow      |
| /katui/ ['ká.tü]                                                                                              |                                                                                                      | axe                | /iseng/ [i.'sɛŋ]                                                           | pain          |
| /kama/ ['ká.ma]                                                                                               |                                                                                                      | ear                |                                                                            |               |
| /kemtuik/ ['kɛm.tük]                                                                                          |                                                                                                      | name of tribe      |                                                                            |               |
| /kebali/ [kə.'ba.li]                                                                                          |                                                                                                      | work               |                                                                            |               |
| /demening/ [de.'mɛ.ning]                                                                                      |                                                                                                      | new                |                                                                            |               |
| /betodop/ [be.'to.dop]                                                                                        |                                                                                                      | again              |                                                                            |               |
| /betedon/ [be.'tɛ.don]                                                                                        |                                                                                                      | younger<br>sibling |                                                                            |               |
| /demanon/ [de.'ma.non]                                                                                        |                                                                                                      | older sibling      |                                                                            |               |
|                                                                                                               | /meduim/ [mə.'dũm]                                                                                   | hill               |                                                                            |               |
|                                                                                                               | /nebo/ [nəm.'bò]                                                                                     | pig                |                                                                            |               |
|                                                                                                               | /nebut/ [nəm.'but]                                                                                   | story              |                                                                            |               |
|                                                                                                               | /gemang/ [gə.'mang]                                                                                  | exist there        |                                                                            |               |
|                                                                                                               | /nebit/ [nəm.'bit]                                                                                   | wind               |                                                                            |               |

|  |                   |        |  |  |
|--|-------------------|--------|--|--|
|  |                   |        |  |  |
|  | /kebet/ [kə.'bet] | finish |  |  |

### 3. Alphabet

#### 3.1 Symbols

The Kemtuik alphabet contains 19 symbols, 14 consonants and 5 vowels:

- Consonants: t, k, p, d, g, b, s, n, ng, m, l, r, w, y,
- Semi-consonants: y, w

The following pairs contrast an initial approximant with initial full vowels:

|     |        |      |           |
|-----|--------|------|-----------|
| yay | ‘care’ | iyay | ‘caring’  |
| wet | ‘seek’ | uwet | ‘seeking’ |

- Vowels: i, e, a, u, o
- In borrowed words: /c/ --- [tʃ]; /j/ --- [dʒ] ; /h/ --- [h]

Examples from the national language: coklat , baca , bayam, Jayapura, huruf

Dialectal influence from the Gresi (Klesi) language causes the use of [h] also in a few cases. E.g. Kemtuik sogo sogo so ‘why’ is also being expressed with a different stress pattern as: [s□g□.h□g□σ□]. There are a few other isolated examples where [h] is used in stead of /s/.

#### 3.2 Diphtongs.

|            |      |          |
|------------|------|----------|
| Diphtongs: | /ui/ | [ũi] [ü] |
|            | /ue/ | [ũe] [ö] |
|            | /uo/ | [ũo]     |
|            | /ua/ | [ũa]     |
|            | /ea/ | [ɛa]     |
|            | /ia/ | [ia]     |

|       | Example<br>(verb) | English<br>gloss |
|-------|-------------------|------------------|
| [ü]   | duing             | think            |
| [ũi]  | wim               | swell            |
| [ü]   | truik             | chase            |
| [ũe]  | suey              | good             |
| [syö] | sue               | swim             |
| [ũo]  | nguok             | teach            |
|       | bluot             | mix              |
| [ũ-ø] | suang             | long             |
|       | suali             | afraid           |
| [i-æ] | miam              | plenty           |
| [ɛ-æ] | mean              | chip             |
|       | meam              | disappear        |

#### 3.3 Reduplication

All word initial consonants and vowels can be reduplicated to indicate continuing action. As follows:

|                 |              |                  |
|-----------------|--------------|------------------|
| suang - susuang | [su.'sũ ʃɔŋ] | ‘long – longing’ |
| klong - koklong | [kɔŋ.'kɔŋɔŋ] | ‘go – going’     |
| iti - iiti      | [i.i.'ti]    | ‘give – giving’  |

#### 4. Syntax

4.1 The basic syntax structure in Kemtuik is:

- sentence types (build up of clauses)
- clause types (build up of phrases)
- phrase types (split up in noun phrases (NP) and verb phrases (VP))
- 

4.2 Since NP and VP functions within the clause (CL), some basic clause types may be considered:

- Equative CL            NP + NP + V (exist)
- Adjectival CL        NP + V (adjective)
- Verbal CL            NP + VP (intransitive)
- NP + NP + VP (transitive)
- NP + NP + NP + VP (bitransitive)
- EQ CL            =        S (NP)            +        EQ (NP / V exist)

Consider the following examples:

Genam Markus gabe.

I            Markus exist here  
‘ I am Markus’

Martin Camat            gemang

Martin District chief exist there  
‘Martin (there) is district chief.’

#### 5. Nouns

**What can be said about nouns? Rather little, it looks like.**

- noun as head of a noun phrase (NP)
- plurality
- male / female classes of nouns

#### 6. Pronominal sets: Free and bound

For the free pronouns Kemtuik have a minimal-**augmented** system:

- four person categories: first, second, third and first + second,
- three numbers: singular, dual and plural.

The combinations give us special forms for inclusive and exclusive first person pronouns for non-singular. The free pronouns do not distinguish gender, but the subject suffixes on final verbs do, compare:

Free pronouns

| person | sg    | du          | pl         |
|--------|-------|-------------|------------|
| 1      | genam | genam-namon | genam-nang |
| 2      | mot   | mot-namon   | mot-nang   |

|     |       |             |            |
|-----|-------|-------------|------------|
| 3   | nemot | nemot-namon | nemot-nang |
| 1+2 | imot  | imot-namon  | imot       |

## Verbal suffixes for Subject

| person | sg  | du  | pl  |
|--------|-----|-----|-----|
| 1exc   | -u  | -u  | -u  |
| 1inc   |     | -on | -on |
| 2      | -o  | -u  | -o  |
| 3masc  | -on | -un | -on |
| 3fem   | -un | -un | -on |

## 7 Verb

- verbroot as head of a verb phrase (VP)

A lot of complex issues. Comparable to Nimboran are the spatial/directional elements attached to main verbs (Steinhauer 1997 summarizes Anceaux 1965:63-79). Jaap (1976:75-83) needs extensive revision and new exposition.

Simple, bare, Verb stems and final, i.e. fully inflected, verbs: for example we need to account for many examples in the Dame Idam text with just a bare verb.

I have started to list the fully inflected forms from that story, but Jaap would be faster and better equipped to fill out the chart in his 2008 document by giving contrastive examples for the paradigm. For example, from 020; we need to have good evidence for the meaning/function of each of the identified morphemes.

- (1) Tap no gemang ikum-ba-w-on.  
road to/at ? see-go.down-CONT-3SG.M  
'At the road he was seeing/looking.'

- (2) Yansu kabung kabuit bu so u-wat-a-ne-te-ba-w-on go.  
Yansu woman unmarried water in RED-bathe-?-PL-?-go.down-CONT-3PL GIV  
'That the Yansu girls were bathing in the river (is what he saw; this captures the clause-final go.)'

Jaap, can you explain 023: glung-lak 'hang-three'?

## 8. Directionals

These can function as main verbs or compounded to other verb stems. The compounds are the result of a verb serialization.

I can't really detect a clear system in Jaap's article (1976:77); the tree of directionals does not seem to align with the examples.

Consider Steinhauer's summary of Anceaux's material of Nimboran (1997:275) and my attempt to align the Kemtuik forms. Can this be done? More differences?

|          | [+S] = involving Speaker | Nim  | K  | [-S] = elsewhere                                                                                                          |                              | K            |
|----------|--------------------------|------|----|---------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|
| [-move]  | zero                     | 0    |    | [+high] = be higher than S<br>[+low] = be lower than S<br>[-high, -low] = be same level as S<br>[-visible] = be invisible | -bá-<br>-ngá-<br>-sá-<br>-ná | be<br>?<br>? |
| [+ move] | <b>from [+S] to ....</b> |      |    | <b>from .... to ....</b>                                                                                                  |                              |              |
|          | [+high] = go up          | -be- | bi | from low or invisible to [high]<br>i.e. 'go up'                                                                           | -bená                        | ban          |

|  |                                    |       |     |                                     |       |     |
|--|------------------------------------|-------|-----|-------------------------------------|-------|-----|
|  | [-high, -low] = go across, level   | -se-  | se  | from below (invis) to there visible | -sená | san |
|  | [+low] = go down                   | -se-  | na  | from below to out of sight          | -kené | kun |
|  | [-vis] = from here to out of sight | -ne-  | ?   | from above/far to below             | -sené | san |
|  |                                    |       |     |                                     |       |     |
|  | <b>from ... to [+S]</b>            |       |     |                                     |       |     |
|  | from [+high] to S = come down to S | -keN- | kun |                                     |       |     |
|  | from [+low] = come up              | -báN- | ban |                                     |       |     |
|  | from [-high, -low] = come across   | -sáN- | san |                                     |       |     |
|  |                                    |       |     |                                     |       |     |

In fact, I wonder if it wouldn't make a lot more sense to simply gloss those forms with 'come up, down, across' (i.e. towards S or deictic center) and 'go up, down, across' (i.e. away from S or deictic center).

That way we'll get examples like the following (By the way, the FUT suffix is /l/ with [d] as allomorph following a nasal, correct?)

- (3) Genam mea iti-go san-d-u.  
 1SG.SUBJ FUT take-GIV come.across-FUT-1SG  
 'Given that I will get (it) I will come across (= same level); I will get (it) and then I come across.' [these two translations try to capture the meaning contribution of go; may not be the best.]
- (4) Genam mea iti- kun-d-u.  
 1SG.SUBJ FUT take- come.down-FUT-1SG  
 'I will get (it) and come down. I will take it down.'
- (5) Genam mea iti- si-l-u.  
 1SG.SUBJ FUT take- go.down-FUT-1SG  
 'I will get (it) and go down. I will take it down to you or someone else.' [The giving seems to be an implication of the verb iti.]

Looking at Jaap's document 'The verb phrase in Kemtuik', we need a lot of good contrastive examples to verify that analysis.

For example, to get a clear view of tense and aspect (and mood?); many sentences in Dame Idam are apparently tenseless

## 9. Adjectives

Does Kemtuik have a separate word class of adjectives or are they on a par with (other) intransitive verbs?

## 10. Demonstratives and additional elevationals

Ngge 'this, here'

Ngga 'that, there'

## 11. Adverbs and adverbials

Is there a real class of monomorphemic adverbs?

## 12. Postpositions or case marking

A preliminary listing here with rough indication of meanings.

Quite a few examples can be used from the Healey/Werner correspondence. However, the whole idea of sequences of particles is ill-conceived. Some of them may follow each other, but they do not form sequences. There is more hierarchical structure, especially involving the ubiquitous GIVEN marker go.



Make a comment on the enormous frequency of each.

go marks possessive - but is this its basic function? I've seen possessives without it; it seems to indicate some textual deixis, translatable with GIVEN. This can mark NPs and clauses, in which case it could be translated with 'and'. Possibly, two different go's; not sure they are homophones (unrelated) or polysemous (somewhat related) instances.

examples abound.

lo is ergative, or perhaps a better term is instigative, since it is used on NP and clauses to mark

1) transitive subject if disambiguation is necessary, if the agentive subject is focussed.

2) on intransitive subjects that are in control;

3) on instruments;

4) on source or pathway of movement;

5) on clauses that are the cause or reason for the next clause.

Needs example for each.

ey is comitative, translatable by 'with': once or twice in coordinated NP, can be on comitative phrase if separate from Subject NP; can be on colour or material specification.

so marks purposive and inessive, possibly homophonous forms, translatable by 'for, in order to' and 'inside', respectively. examples:

no marks allative: goal or recipient, e.g. N + no iti = take to N = give to N.

Here's an example from the Dame Idam text that illustrates some of these postpositions (enclitics? do they have any phonological processes with the stuff they attach to?)

(6) Dame Idam, nemot go ngoy dan ey  
 Dame Idam 3SG POS beads string with  
 'Dame Idam, his string of beads'

nglangin lo nemot no iti go kabung nang so go  
 father INST 3SG ALL take GIV woman price for GIV  
 that (his) father had given to him, [the comma to convey go] for buying a woman

gemang tong.  
 be.here cut

it was cut. [I am not at all clear about this gemang or its contrast gabe; are these perhaps adverbs of location?]

Other stuff for morphology/word classes, such as conjunctions, interjections, numerals: described in other sections.

## 10 Structure of NP

N + Adj/V + Dem

Where does a Numeral come? Preceding, following N?

Possessive constructions: is there a difference between alienable and inalienable possession?

Do body-part and kinship nouns get treated differently than other nouns when possessed? I have not seen any indication.

## 11 Clause

Word order?

Type of Noun phrases, i.e. arguments, such as Subject, Object, Recipient, other grammatical relations: instrument, location, goal, source, etc.

This ccan/should be linked to section on postpositions.

## 12. Clause combinations

Here we address the various instances of ngga(no) 'that-to/at' = 'then', go 'GIVEN', and so on.