

# A NOTE ON TEHIT (BIRD'S HEAD - IRIAN JAYA)

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## 1. Introduction

The present paper deals mainly with the phonemics and phonetics of the language. It is meant as a preliminary survey to set the direction of research rather than as a definitive statement. Further investigation may modify present results.

### 1.1

About Tehit [təhit<sup>h</sup>]<sup>1</sup> and its speakers relatively little is known. Wurm 1975: 635 states that: "on the Vogelkop Peninsula and the small islands west, northwest and east of it, no additional Papuan language can, with any measure of certainty, be said to be located." Voorhoeve 1975b lists the language in the so-called West Papuan phylum. Together with Kalabra, Seget, Moi, Moraid, and Kuwani it is considered to constitute the West Bird's Head family (see map I). Kalabra, Tehit and Kuwani form together a subgroup within this family. Kuwani is not mentioned in Voorhoeve 1975a and the name is not familiar to us. He states that: "The exact location of the language is not known but [it] should be in the South-Eastern corner of the family's territory, near the phylum border with Konda" (p.718). Probably /qoa/, a small village in that area, is meant. The only form furnished is *tetike*, presumably a corruption of /teT qeI/ 'I am the one who'. The inhabitants of this village have been resettled in Keyen (district Teminabuan) in the neighbourhood of the road which connects Teminabuan and Ayamaru.

Voorhoeve and Wurm mention as their main source of information on these languages: Galis 1955-1956. In addition, there are Anceaux's unpublished notebooks and Cowan 1953, 1960, 1963, and 1965 (especially on the West Papuan Phylum).

### 1.2

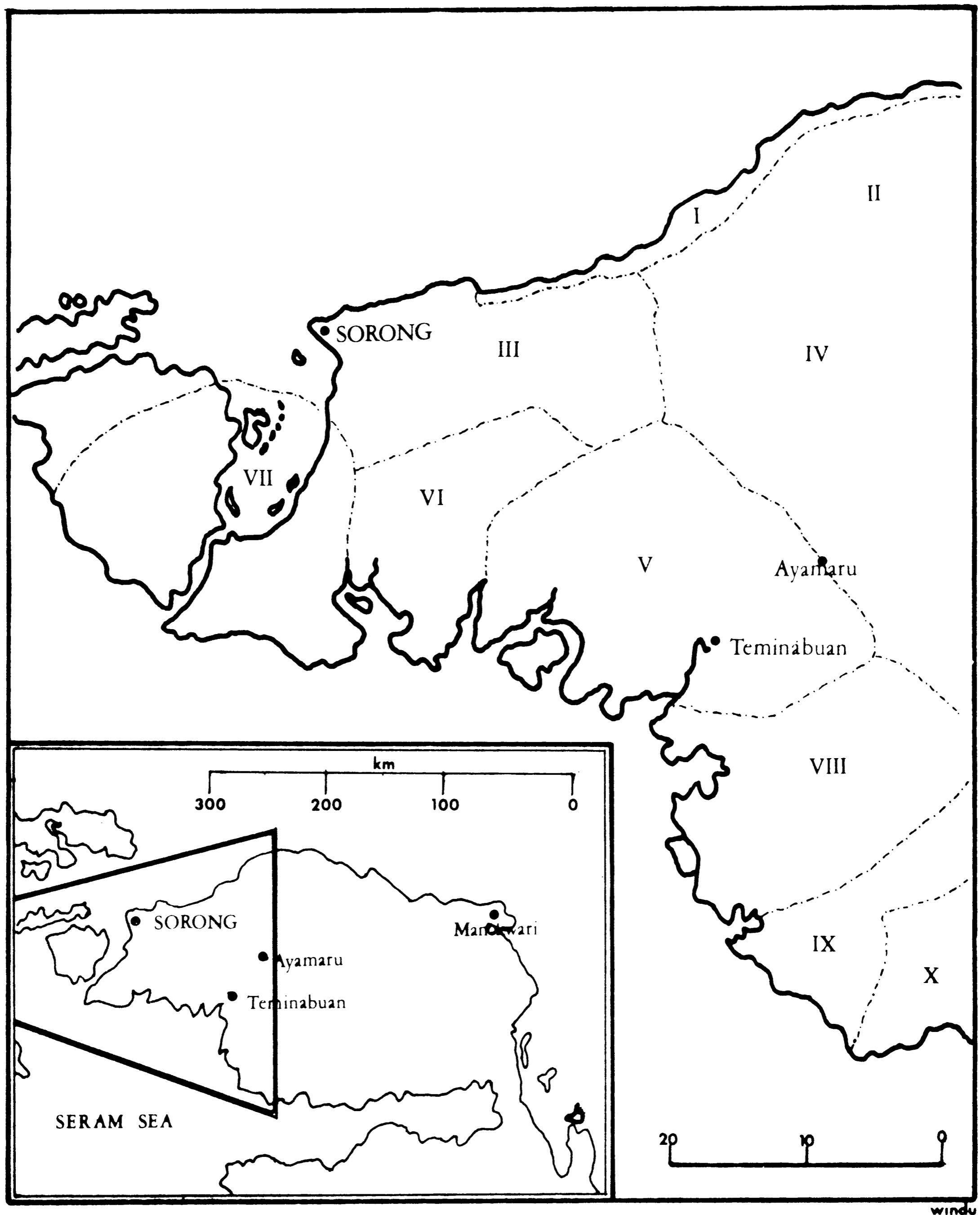
Tehit is spoken in the regency of Sorong in the districts Teminabuan, Ayamaru Selatan and Wanurian Timur. The number of speakers is around 8.500. Below a table is given showing the main dialects and their distribution over the districts, the desas and villages (see maps II and III).

	Dialect	Sub-dialect	Kampong	Desa	Regency
I	/tehidyiT/	-	Teminaban barat or Kampong A and Kampong B Seribau <sup>1</sup> Teminaban timur or Kampong C	Kohoin Kaibus Wer(i)-sar	Teminabuan
II	/mbolflē/ <sup>2</sup>	IIa /gemna/ IIb /afsyā/, /nqna/	Keyen Mbariat Mbariat Konda <sup>2</sup>	" Konda	"
III	/sfaryere/	-	Sekendi Wehali Eles	Kohoin Sawiat "	"
IV	/imyan/	-	Haha Tefot Sadrofoyo Sasenek <sup>3</sup> Weloin <sup>3</sup>	Haha " Sawiat Haha	"
V	/sawyāT/ <sup>4</sup>	-	Sauf Sorowan Sembaru Arus Mefkadyim or Ayamaru	Sauf " Karta-pura " "	Ayamaru
VI	/fqar/	-	Pasir putih Wenslolo Wlek Kmuswa	Pasir putih " "	Teminabuan
VII	/saIfi/	VIIa /saIfi/ VIIb /srer/	Manggro-holc Sayal Mlaswat " Seribau	Manggro-holo Seremuk Manggro-holo " Kohoin	"
VIII	/konyōK/ <sup>5</sup>	-	Sisir Mekambar	Seremuk " Ndiwi	"
IX	/salmeIT/ <sup>6</sup>	-	Ndiwi Kakas	Ndiwi " Brianlo	Wanorian
X	/yaTfle/ (lobaT)	-	Brianlo Klabot Serafoto-lo	Brianlo " "	"
XI	/qlabra/ <sup>7</sup>	-	Wanorian Buk	Beraur " "	"

Table 1

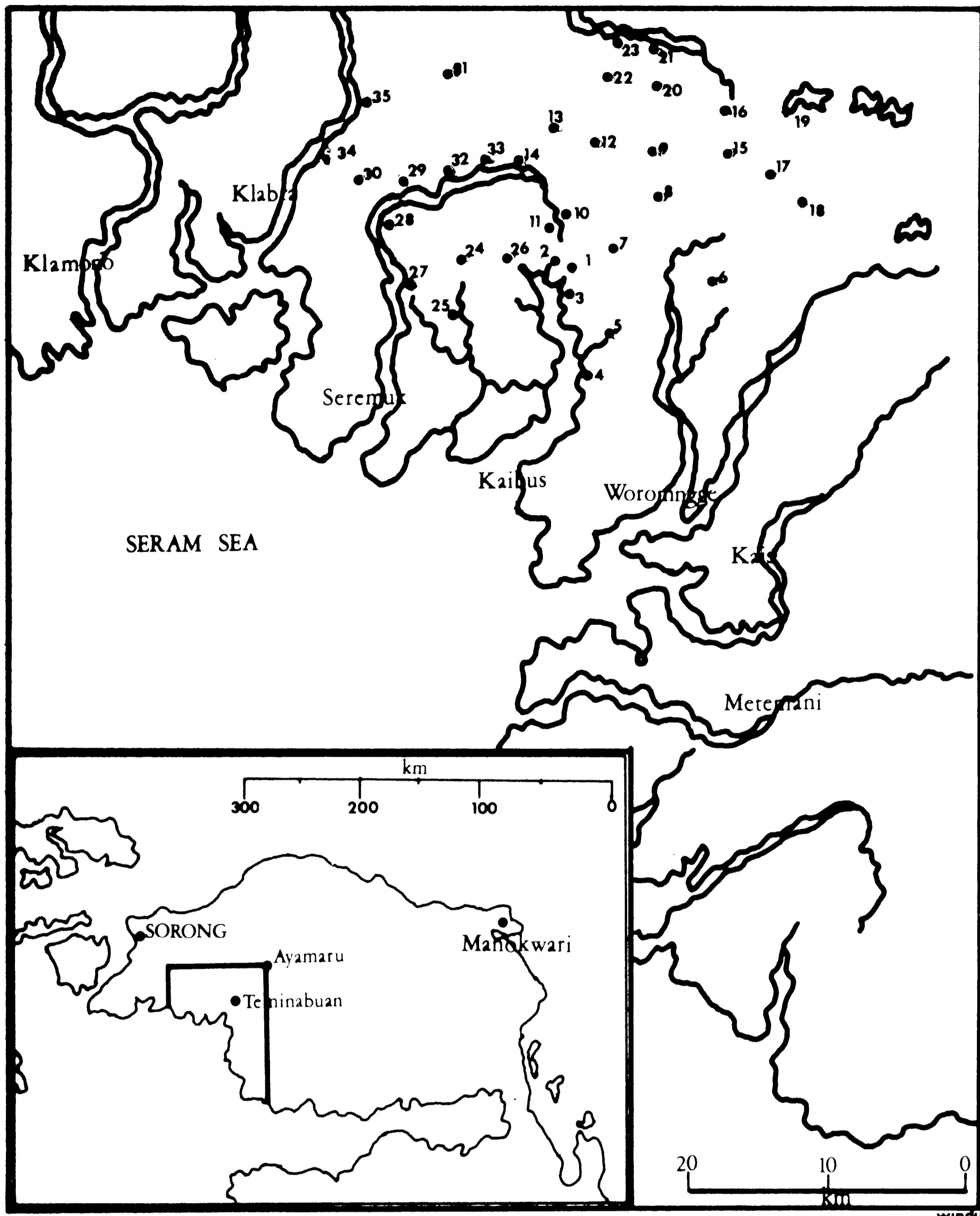
### Commentary

- (1) In Seribau /tehidjiT/, /saIfi/, subdialect /srer/ and the Ogit language are spoken.
- (2) In Konda /mbolflē/ (subdialects IIa and IIb) and the Ogit language are used.
- (3) In Sasenek and Weloin /imyan/ and /yaTfle/ are spoken.
- (4) The speakers of /sawyāT/ also use the Meibrat language.
- (5) /konyōK/ speakers also use the Ogit language.
- (6) /salmeIT/ speakers also use /qlabra/.
- (7) The list of villages given for /qlabra/ is not complete.



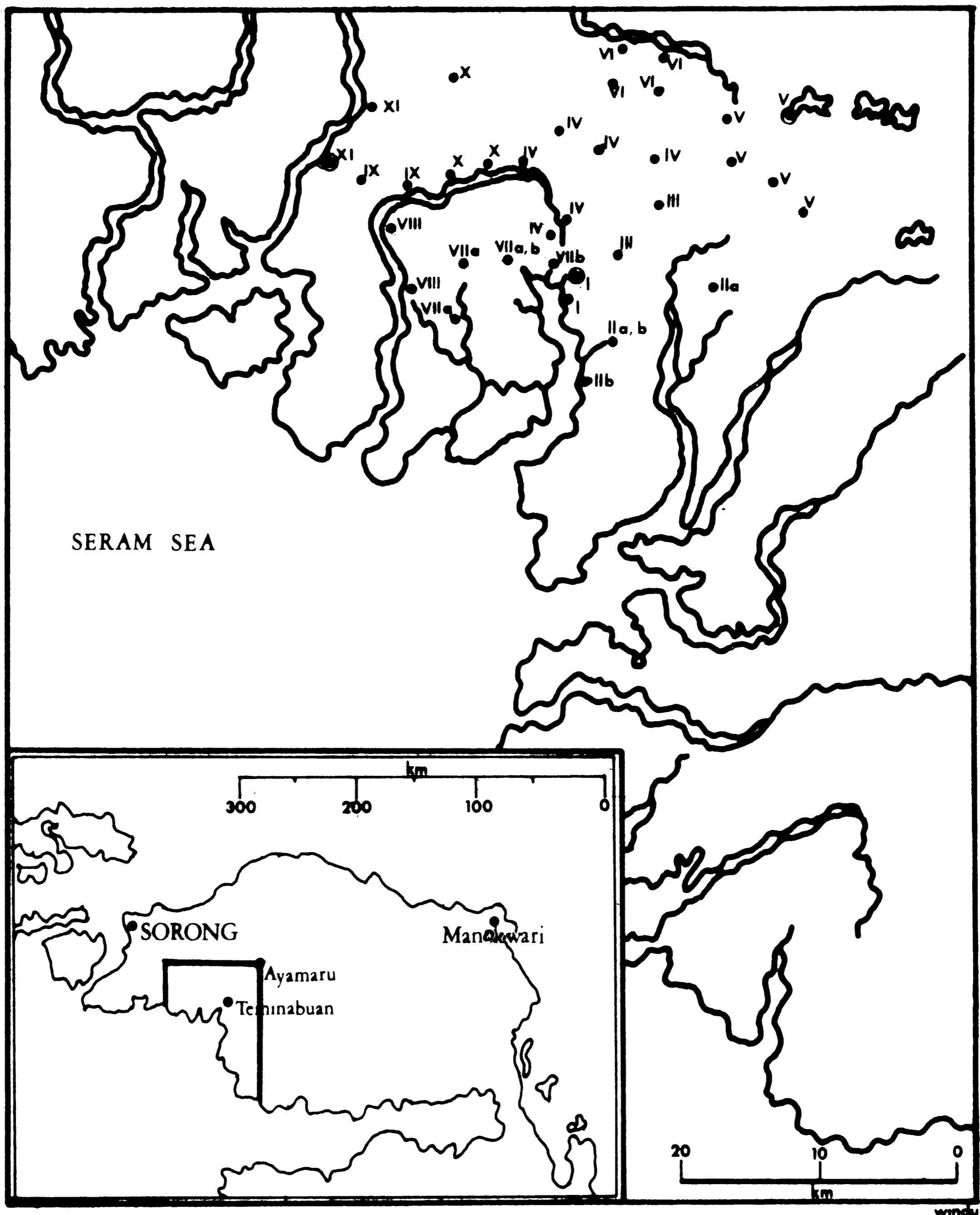
Map I : Tehit and neighbouring languages  
Bird's Head peninsula, Irian Jaya

- |             |  |
|-------------|--|
| I. Biak     | VII. Seget   |
| II. Karon   | VIII. Ogit (Konda, Yahadian, Mugim and Kampung Baru) |
| III. Moi    |  |
| IV. Meibrat | IX. Miraga (Inanwatan, Puragi, Yamarema and Saga)    |
| V. Tehit    |  |
| VI. Klabra  | X. Tarof (Negeribesar, Kasueri and Udagaga)          |



Map II : Tehit area

- |               |               |                  |                |
|---------------|---------------|------------------|----------------|
| 1. Teminabuan | 10. Haha      | 19. Mefkajim/    | 27. Mekambar   |
| 2. Seribau    | 11. Tefot     | Ayamaru          | 28. Sisir      |
| 3. Wer(i)sar  | 12. Sadrofoyo | 20. Kmusa        | 29. Ndiwi      |
| 4. Konda      | 13. Sausanek  | 21. Pasirputih   | 30. Kakas      |
| 5. Mbariat    | 14. Weloin    | 22. Wlek         | 31. Brianlo    |
| 6. Keyen      | 15. Sauf      | 23. Wenslolo     | 32. Klabot     |
| 7. Skendi     | 16. Sroan     | 24. Manggropholo | 33. Serafotolo |
| 8. Wehali     | 17. Sembaro   | 25. Sayal        | 34. Wanorian   |
| 9. Eles       | 18. Arus      | 26. Mlaswat      | 35. Buk        |



Map III : Tehit Area Dialect Distribution

- |                          |                          |
|--------------------------|--------------------------|
| I. /tehidyiT/            | VII. /sa'Ifi/(a)/sa'Ifi/ |
| II. /mbolflē/ (a)/gēmna/ | b)/srer/)                |
| b)/afsyā/, /nqna/)       | VIII. /konyōK/           |
| III. /sfaryere/          | IX. /salmeIT/            |
| IV. /imyan/              | X. /yāTfle/(/lōbaT/)     |
| V. /sawyāT/              | XI. /qlābra/             |
| VI. /fqar/               |                          |

1.3 Below some of the main sound correspondences between the Tehit dialects are given. A blank space indicates that the /tehidyiT/ form is used.

	I /tehidyiT/	II /mbolfle/	III /sfaryere/	IV /imyan/
	/gemna/	/afsya/, /nqna/		
'dish'	[fɪŋgen]		[fʊngʌn]	
'I take back'	[tsalit <sup>h</sup> ]		[tsarut <sup>h</sup> ]	
'she carries'	[mədik <sup>h</sup> ]		[məduk <sup>h</sup> ]	[matik <sup>h</sup> ]
'I'	[tət <sup>h</sup> ]		[ðət <sup>h</sup> ]	
'I throw'	[tselε']		[ðsərɪ']	
'soil'	[mbet <sup>h</sup> ]		[mbet <sup>h</sup> ]	
'language'	[səlɔ']		[səro']	[sal]
'they agreed'	[jsal <sup>j</sup> ɔ']		[jsarjɔ']	
'I am hungry'	[tqadot <sup>h</sup> ]		{ [tqatat <sup>h</sup> ] [tqatot <sup>h</sup> ] }	{ [tqatat <sup>h</sup> ] [tqatot <sup>h</sup> ] }
'blackhead'	[beret <sup>h</sup> ]	[mberet <sup>h</sup> ]		
'are you sure'	[bajt <sup>h</sup> ]	[mbat <sup>h</sup> ]		
'house'	[mbɔl]		[mbɔr]	[bol]
'cultivation in unirigated avables'	[mbjɛlε']		[mbjɛrε']	[bjɛlε']
'money'	[pit̪is]		[pʌðas]	[bit̪is]
'boundary'	[sipat <sup>h</sup> ]		[süpət <sup>h</sup> ]	[sibat <sup>h</sup> ]
'nail'	[paku']			[baku']
'k.o. bamboo'	[tmbuɔ']		[ðəmbɛt̪ɔ']	
'three'	[tɔlɪk <sup>h</sup> ]		[ðɔlɪk <sup>h</sup> ]	
'my foot'	[tdejt <sup>h</sup> ]	[tndet <sup>h</sup> ]	[ðəðoejt <sup>h</sup> ]	[tətejt <sup>h</sup> ]
'it is enough'	[mdɔl]	[mndɔl]	[məðɔl]	[mətɔl]
'it is fast'	[wdɔndo']	[wndɔndo']	[wðɔndo']	[wtɔdo']
'skin-dirt'	[ndəhan]		[nðəhan]	[dəhan]
'my mouth'	[təg <sup>j</sup> ɛt̪ <sup>h</sup> ]	[təŋg <sup>j</sup> ɛt̪ <sup>h</sup> ]	[ðəg <sup>j</sup> it̪ <sup>h</sup> ]	[təkjɛt̪ <sup>h</sup> ]
'she coughs'	[məgɪha']	[məŋgiha']	[məgiha']	[məkiha']
'work'	[krɒdʒə]			[krɒtja']
'chicken'	[kɔkɔk <sup>h</sup> ]			[krɒtja']
'preparation'	[qəd <sup>j</sup> əfa']		[qətjəfa']	[qətjəfa']
'it is heavy'	[mədjən]		[mətjən]	[mətjan]
'bench'	[bənkv̪]		[bʌŋgɔ']	[bʌŋgɔ']
'I talk'	[tsangir]		[tsadır]	[tsadır]
'her neck'	[mŋgɔrom]		[mdɔrom]	[mdɔrom]
'animal'	[goṭ]		[qɔr]	
'I stab them'	[tsaj]			

	V /sawya <sup>1</sup> T/	VI /fqar/	VII /sa <sup>1</sup> Ifi/	VIII /konyo <sup>1</sup> K/	IX /salme <sup>1</sup> IT/
'dish'			/sa <sup>1</sup> Ifi/	/srer/	
'I take back'	{ [funkən] [tsalut <sup>h</sup> ] [matuk <sup>h</sup> ] }	{ [funkən] [tsalut <sup>h</sup> ] [matuk <sup>h</sup> ] }	[finkən]	[fi <sup>1</sup> ingən] [tsa <sup>1</sup> lit <sup>h</sup> ] [ma <sup>1</sup> adik <sup>h</sup> ]	[finkən]
'she carries'					
'I'					[tit <sup>h</sup> ]
'I throw'	[tsülu <sup>h</sup> ] [büt <sup>h</sup> ]			[tsε <sup>1</sup> εlε'] [bε <sup>1</sup> εt <sup>h</sup> ]	[tsli <sup>h</sup> ] [bit <sup>h</sup> ]
'soil'					
'language'	[salu <sup>1</sup> ]	[salu <sup>1</sup> ]		[sa <sup>1</sup> lo <sup>1</sup> ]	
'they agreed'	[jsalju <sup>1</sup> ]	[jsalju <sup>1</sup> ]		[jsa <sup>1</sup> ljo <sup>1</sup> ]	
'I am hungry'	[tqatut <sup>h</sup> ]	[tqatut <sup>h</sup> ]		[tq <sup>1</sup> atot <sup>h</sup> ]	
'blackhead'			[mpεret <sup>h</sup> ] [mpajt <sup>h</sup> ]	[bε <sup>1</sup> εret <sup>h</sup> ] [ba <sup>1</sup> it <sup>h</sup> ]	[mpεret <sup>h</sup> ] [mpajt <sup>h</sup> ]
'are you sure'					
'house'	[bɔl]	[bɔl]	[mpɔl]	[bɔ <sup>1</sup> ɔl]	[mpɔl]
'cultivation in unirigated avables'	[bjεlε']	[bjεlε']	[mpjεlε']	[bi <sup>1</sup> εlε']	[mpjεlε']
'money'	[bütüs]	[bütüs]		[pi <sup>1</sup> tis]	
'boundary'	[sübət <sup>h</sup> ]	[sübət <sup>h</sup> ]		[si <sup>1</sup> pət <sup>h</sup> ]	
'nail'	[bækü <sup>1</sup> ]	[bækü <sup>1</sup> ]		[pa <sup>1</sup> ku <sup>1</sup> ]	
'k.o. bamboo'			[tmpu <sup>1</sup> ɔ']	[tmbu <sup>1</sup> ɔ'] [tɔ <sup>1</sup> lik <sup>h</sup> ]	[tmpu <sup>1</sup> ɔ']
'three'					[tbu <sup>1</sup> ɔ']
'my foot'	[tətujt <sup>h</sup> ]	[tətujt <sup>h</sup> ]	[tətεjt <sup>h</sup> ]	[tədε <sup>1</sup> it <sup>h</sup> ]	[tejt <sup>h</sup> ]
'it is enough'	[mətül]	[mətül]	[mətɔl]	[mədε <sup>1</sup> 1]	[mətɔl]
'it is fast'	[wtudu <sup>1</sup> ]	[wtudu <sup>1</sup> ]	[wtɔntɔ']	[vdɔ <sup>1</sup> dɔ']	[wtədɔ']
'skin-dirt'	[dåhan]	[dåhan]	[ntåhan]	[da <sup>1</sup> han]	[ntåhan]
'my mouth'	[təku <sup>1</sup> u <sup>1</sup> et <sup>h</sup> ]	[təku <sup>1</sup> u <sup>1</sup> et <sup>h</sup> ]	[tətijet <sup>h</sup> ]	[təgi <sup>1</sup> et <sup>h</sup> ]	[təkjet <sup>h</sup> ]
'she coughs'	[məkühə <sup>1</sup> ]	[məkühə <sup>1</sup> ]	[mətiha <sup>1</sup> ]	[məgi <sup>1</sup> ha <sup>1</sup> ]	[məkhə <sup>1</sup> ]
'work'	[krötja <sup>1</sup> ]	[grötja <sup>1</sup> ]	[?rötja <sup>1</sup> ]	[krɔ <sup>1</sup> dja <sup>1</sup> ]	[krötja <sup>1</sup> ] [kṛötja <sup>1</sup> ]
'chicken'		[qóqoq]	[?ɔ']	[kɔ <sup>1</sup> kɔk <sup>h</sup> ]	[qɔqoq]
					[qɔq]
'preparation'	[qətjäfa <sup>1</sup> ]	[qətjäfa <sup>1</sup> ]	[?ətjäfa <sup>1</sup> ]	[?ədjä <sup>1</sup> fə <sup>1</sup> ]	[qətjfä <sup>1</sup> ]
'it is heavy'	[mətjan]	[mətjan]	[mətjan]	[mədja <sup>1</sup> an]	[mətjan]
'bench'	[bängɔ <sup>1</sup> ]	[bängɔ <sup>1</sup> ]	[påŋko <sup>1</sup> ]	[ba <sup>1</sup> ŋko <sup>1</sup> ]	[bngɔ <sup>1</sup> ]
'I talk'	[tsädir]	[tsädir]	[tsänkir]	[tsa <sup>1</sup> dır]	[tsdjr]
'her neck'	[mədjöröm]	[mədjöröm]	[mŋköröm]	[mdɔ <sup>1</sup> röm]	[mŋköröη]
'animal'			[?ɔl]	[?ɔl]	[kol]
'I stab them'			[ts <sup>1</sup> aj]	[ts <sup>1</sup> aj]	[tskaj]

## 1.4

In interethnic contacts a variant of Eastern Malay is used, called [mbrariri'] by the Tehit. This language functions as a *lingua franca* in the whole Bird's Head Peninsula and its environments.<sup>2</sup> It is our impression that almost all Tehit speakers are bilingual or plurilingual: all know Mbrariri, some Indonesian and very few Dutch. In official situations Indonesian is used, Mbrariri is spoken in Church and in the first classes of primary school. The language shows quite a considerable number of loanwords from Dutch which slipped into the language via Mbrariri. This must be explained by the fact that as early as 1927<sup>3</sup> Dutch and Moluccan missionaries started to operate in Teminabuan, Konda, Wersar and Seribau. Appendix III gives a short list of the most common words.

Mbrariri and Indonesian lexical items are abundantly used by the younger, educated people especially in administration and in technical fields.

## 1.5

Don Flassy, now 31 years old, is a native speaker of the /tehidjiT/ dialect. He was born in the village of Saribau, five kilometers from the administrative and cultural centre of the area: Teminabuan.

Besides his native language he speaks Mbrariri, Indonesian and understands Meibrat. He has a working knowledge of Dutch and English. He left his village when he was twelve years old to go to boarding school in Teminabuan where Mbrariri and Dutch were used. Thereafter he lived for several years in Fak-Fak, Merauke and Jayapura and finally came to Java to finish his studies. His knowledge of the language seems good although he occasionally appeared to hesitate in distinguishing between certain sets of long vs. non-long vowels and he sometimes seemed to be uncertain about the meaning of some words. Since no other Tehit speakers were available in Jakarta, further investigation is necessary.

	X /yaTfle/ (lobaT)	XI /qlabra/
'dish'		
'I take back'		
'she carries'		
'I'	[tit <sup>h</sup> ]	[tit <sup>h</sup> ]
'I throw'	[tsil <sup>h</sup> ']	[tslε']
'soil'	[bit <sup>h</sup> ]	[bit <sup>h</sup> ]
'language'		
'they agreed'		
'I am hungry'	[tkatot <sup>h</sup> ]	[tkatot <sup>h</sup> ]
'blackhead'		
'are you sure'		
'house'		
'cultivation in unirrigated avables'		
'money'		
'boundary'		
'nail'		
'k.o. bamboo'		
'three'		
'my foot'	[tetejt <sup>h</sup> ]	[tte:jt <sup>h</sup> ]
'it is enough'	[mtɔl]	[mtɔl]
'it is fast'	[wtɔdɔ']	[wɔtɔdɔ']
'skin-dirt'	[ndəhan]	[dhən]
'my mouth'	[tədjət <sup>h</sup> ]	[tədjət <sup>h</sup> ]
'she coughs'	[mdjihə']	[mdjhə']
'work'		
'chicken'		
'preparation'	[kətjafə']	[ktjfə']
'it is heavy'	[mtjan]	[mtjan]
'bench'	[tsadj r]	[tsdjir]
'I talk'	[tsadjir]	[tsdjir]
'her neck'	[mdjbrom]	[mdjrom]
'animal'	[kol]	[kol]
'I stab them'	[tskaj]	[tskaj]

## 2. Consonant phonemes: realizations<sup>4</sup>

2.0.1 General non-functional modification of consonants: occlusives have a clearly audible aspirated off-glide in word final position (a kind of murmured h).

	la-bials	alve-olars	pala-tals	velars	uvu-lar	glottal
non-cont.	p P b	t T d		k K g	q	
occlusives						
trill		r				
nasals	m	n		ŋ		
frica-tives	f s					
Orals	lateral	l				
Continuants	approxinants	w U	y I			h

Table 3 Tehit consonant phonemes

### 2.0.2 Commentary:

(a) /p/, /b/, /t/, /d/ and /k/, /g/ are neutralized to /P/, /T/, /K/, respectively in the following environments:

- (1) [V-#]: /slop/ 'slipper'  
           /hoUK/ 'earwax'  
           /ubaT/ 'Carambola (*Averrhoa carambola* or *Averrhoa bilimbi*)'

- (2) [V-C#] where [C] stand for [M, W<sup>U</sup>, J<sup>I</sup>]:  
       /slop<sup>M</sup>/ 'the big slipper'  
       /slop<sup>W</sup>/ 'the small slipper,  
                   the slippers'  
       /slop<sup>J</sup>/ 'slippers'

- (3) [V-Fv1. (C)V]:  
       /mqaPseT/ 'she makes a bilabial click  
                   with the right side of her  
                   mouth to express irritation'

(b) /w/, /u/ and /y/, /i/ are neutralized to /U/, /I/, respectively, in:

- (1) [V- # ]: /w'U/ 'he'  
                   /hāI/ 'it does not matter'  
          (2) [V - C]: /hōUK/ 'earwax'  
                   /fēIT/ 'we (incl.) eat'  
                   /IrōIT/ 'they melt'  
          (3) [ # -"C]: /Usqādyhoqm/ 'he reminds her'

N.B. There is a difference between [#"C] and [#-C], e.g.:

- /'ubaT/ kind of fruit (monomorphemic)  
  /UbadeT/ 'he sows' (bimorphemic)  
  /wqoIT/ 'wood, tree' (monomorphemic)  
  /UqoIT/ 'he pushes' (bimorphemic)

(c) Unstressed /i/ and /u/ may always be replaced by /y/ and /w/, respectively, in [C-V], but the converse does not hold true, e.g.: /t̥esia, t̥esya/ family name: /i/ and /u/ are heavy phonemes, /j/ and /w/ are their basic counterparts.

(d) Any stem-final *tautosyllabic* cluster /Vs<sup>Y</sup>/ can be replaced by /Vi<sup>S</sup>/ but the converse does not hold true:

- [qas<sup>j</sup>~qajs~qais] 'chopstick' /qasy/, /qais/  
  [qas<sup>j</sup>M~qajsM~qaisM] 'a big chopstick' /qasym/, /qaism/

But:

- [sis] 'pupil' /sis/  
  [sis"J~sis"I]'pupils' /sisy/ not \*/siIs/  
  [tajs~taɪs] 'I go down' /taɪs/ not \*/tasy/

The relative ordering of /sy/ is heavy with regard to /Is/ (for J, I, W, U, see table 2, fnt.3).

### 2.1 Labials

#### 2.1.1 /p/ →

- 2.1.1.1 [p<sup>-</sup>] in [-0 vcl.]:

- [mrōp<sup>-ka</sup>] 'to make noises' /mrōpka/  
  [ptap<sup>-ta</sup>] 'toy' /ptapta/

2.1.1.2 [p] everywhere else except in the instances mentioned in

2.1.3.

[pit̪is]	'money'	/pit̪is/
[pimp̪n]	'tabletennis'	/pimpon/
[puk̪i']	'vagina'	/puki /
[tpajr]	'I pay'	/tpaɪr/
[plomp̪n]	'dock'	/plompon/
[sip̪ini']	'fairy who lives in the sago plantations'	/sip̪ini/
[?v̪pas]	'police'	/v̪pas/
[?vit̪apM]	'he slaps on the cheeks (repeat- edly)'	/UlaPm/
[tast̪opJ]	'I stop them'	/tstoPy/
[məsap̪er]	'she shakes her head'	/msaper/

2.1.2 /b/ —————>

[b] in all positions except in the instances mentioned in 2.1.3

[bajt̪h]	'Is that so?'	/baɪT/
[bab̪a']	'side course esp. fish' (children's language)	/bab̪a/
[babraqx]	'fast'	/babraq/
[bleq̪x]	'tin'	/bleq/
[bre']	kind of small crab	/bre/
[brem]	idem (fem.)	/brem/
[bobot̪h]	'a rich man'	/bobot̪/
[buos̪oq̪x]	'a child for whom the supplemen- tary bride price has not been paid'	/buosoq/
[wesj̪omb̪oq]	'he got loose'	/Usyomboq/
[mblit̪h]	'fly'	/mblit/
[mblit̪I]	'flies'	/mblity/
[mbot̪]	'house'	/mbol/
[qm̪b̪j̪e']	kind of fish trap	/qm̪bye/

2.1.3 /P/ (archiphoneme of /p/ and /b/) in

2.1.3.2 [-C#] where [C] stands for [M,  
W~U, J~I] and [V-F vcl. (C)V]:

—————> [p ~ b]:

[slop̪~slop~slob]	'pillow-case'	/sloP/
[slup̪~slup~slub]	'a small boat'	/sluP/
[sup̪~sup~sub]	'soup'	/suP/
[tet̪it̪ip̪~tet̪it̪ip~tet̪it̪ib]	'I entrust'	/tt̪itiP/
[fest̪op̪~fest̪op~fest̪ob]	'we (incl.) stop'	/fatoP/
[mq̪ap̪set̪h~mq̪abs̪et̪h]	'she reacts directly'	/mq̪ap̪set/
[jq̪aps̪j̪ot̪h~jq̪abs̪j̪ot̪h]	'they are cowards'	/IqaPsyot/

2.1.4 /m/ —————>

2.1.4.1 [M] in [C"-#]:

[wet̪M]	'female child'	/wetm/
[saq̪M]	'a big knife'	/saqm/
[?v̪Gamb̪inM]	'he gobbles it up'	/Uqambinm/
[mgikM]	'she scratch- es her(self)'	/mgikm/

2.1.4.2 [M ~ m] in [#-"Cvcl.]:

[Msqa'~msqa']	'she stabs'	/msqa/
[Mfla'~mfla']	'she breaks'	/mfla/
[Mp̪ajr~mp̪ajr]	'she pays'	/mp̪aɪr/
[Mt̪oma'~mt̪oma']	'she overcomes'	/mt̪oma/

2.1.4.3 [m] everywhere else:

[?am̪am̪]	'the two of us'	/am̪am̪/
[mɔ̄so']	'she listens'	/mɔ̄so/
[mɔ̄:so']	'Gnetum gnemon Lina'	/mɔ̄oso/
[tmb̪oṭ̪oq̪x]	'fish; Toxetes jaculatrix'	/tmb̪oloq/
[məsāmb̪a']	'he has a presentment'	/msāmb̪a/
[t̪em̪em̪]	'my mother'	/t̪em̪em̪/
[t̪emej̪]	'my mothers'	/t̪emeI/
[?om̪os̪]	'rope, rattan'	/om̪os/
[?v̪mlaq̪x]	'awake'	/Umlaq/
[mrat̪h]	'sharp'	/mrat̪/
[mp̪aɛr]	'I pay'	/mp̪aer/
[qm̪oras]	term of reference for parents who recently lost a young child	/qm̪oras/

2.1.3.1 [-\*] —————>

[p̪h ~ p ~ b]:

[slop̪~slop~slob]	'pillow-case'	/sloP/
[slup̪~slup~slub]	'a small boat'	/sluP/
[sup̪~sup~sub]	'soup'	/suP/
[tet̪it̪ip̪~tet̪it̪ip~tet̪it̪ib]	'I entrust'	/tt̪itiP/
[fest̪op̪~fest̪op~fest̪ob]	'we (incl.) stop'	/fatoP/

2.1.5 /f/ —————>

2.1.5.1 [ɸ] in [#-V(rounded)]:

[ɸɔ̄']	'and then'	/fo/
[ɸɔ̄rɔ̄n]	'wind'	/fɔ̄ron/
[ɸɔ̄mb̪i']	'soil, earth'	/fɔ̄mbi/
[ɸɔ̄Rɔ̄r]	'spot, speck on skin'	/fɔ̄qor/
[ɸɔ̄tɔ̄']	'photograph, picture'	/foto/

- 2.1.5.2 [∅ ~ f] in [C-V(rounded)]:
- [t<sup>g̊</sup>oro'~tf<sup>g̊</sup>oro'] 'I cheat' /t<sup>g̊</sup>oro/
  - [m<sup>g̊</sup>ɔGor<sup>I</sup> ~mf<sup>g̊</sup>ɔGor<sup>I</sup>] 'she has spots on her skin' /mf<sup>g̊</sup>ɔqory/
  - [f<sup>g̊</sup>ongo'~ff<sup>g̊</sup>ongo'] 'we (incl.) tie a knot' /ff<sup>g̊</sup>ongo/
  - [ng<sup>g̊</sup>ori'~nf<sup>g̊</sup>ori] 'you grow, you are still young' /nf<sup>g̊</sup>ori/

- 2.1.5.3 [∅ ~ f] in [#-V(unr.), -#/C]:
- [∅ɑ'~fa'] 'sago' /fa/
  - [∅ɛəqW~fɛəqW] 'a lot of contra-band' /fɛaqw/
  - [∅is~fis] 'schuim' /fis/
  - [?ɑɸ~?af] 'we together (incl.)' /af/
  - [māmbaɸ~māmbaf] 'it(fem.) is grey-ish, faded' /māmbaf/
  - [∅lɛt<sup>h</sup>~flet<sup>h</sup>] 'riddle' /flet/
  - [∅mar~fmar] 'taboo' /fmar/
  - [msaṛāraq~msafrāraq] 'they are piled up' /msafrāraq/
  - [?ūsiጀr<sup>j</sup>ɔq<sup>x</sup>~?ūsifr<sup>j</sup>ɔq<sup>x</sup>] 'he has ichtyosis' /Usifryoq/
  - [?uɸ<sup>j</sup>ɛn~?uf<sup>j</sup>ɛn] 'he catches fish with a net' /Ufyen/

- 2.1.5.4 [∅ ~ f ~ v] in [V - V(rounded)]:
- ['waጀɔq~'waጀɔq~'waጀɔq] 'he is swollen' /'wafoq/
  - [?ūɸ<sup>h</sup>:tɔ~?ūf<sup>h</sup>:tɔ~?ūv<sup>h</sup>:tɔ] 'he cuts away underwood, grass' /Ufoolo/
  - [?ūɸ<sup>h</sup>tɔ~?ūf<sup>h</sup>tɔ~?ūf<sup>h</sup>tɔ] 'it is used, worn' /Ufolo/

- 2.1.5.5 [f ~ v] in [V - V(unrounded)]:
- [?afan~?avan] kind of (edible) caterpillar /afan/
  - [?afε:~?avε:] 'or' /afee/
  - [j<sup>h</sup>:fat<sup>h</sup>~j<sup>h</sup>:vat<sup>h</sup>] 'wound' /jaafat/
  - [tq<sup>h</sup>fɔ'~tq<sup>h</sup>vɔ'] 'intestines' /tq<sup>h</sup>fo/

2.1.6 /w/ —————>

- 2.1.6.1 [W ~ U] in [C - #]:
- [wetW~wet<sup>U</sup>] 'male child; boy' /weTw/

- [simā:tW~simat<sup>U</sup>] 'male casuary, casuaries' /simaaTw/
- [semītW~semīt<sup>U</sup>] 'widower' /semiTw/
- [qlikw~glīk<sup>U</sup>] 'male snake; setan' /qliKw/
- [kokōkW~kokōk<sup>U</sup>] 'cock, chickens' /kokōKw/
- [qlēnW~qlēn<sup>U</sup>] 'male bird, birds' /qlēnw/
- [q<sup>x</sup>afesW~q<sup>x</sup>afes<sup>U</sup>] 'little car-buncle' /qafesw/

2.1.6.2 [w] everywhere else except in [#-"CV] and [V - #] (see 2.1.7):

- [wājn] 'he goes' /wāIn/
- [?ūdɔwājñ] 'he will go' /UdowāIn/
- [wat<sup>h</sup>] 'he eats' /waT/
- [tdēwa'] 'I fight' /tdēwa/
- [wow] 'he' /wōU/
- [swuɔr] 'a support' /swuɔr/
- [q<sup>x</sup>ɛwo'] 'vitamin' /qewo/
- [fsq<sup>x</sup>wajnW] 'we rise up against and compete with him' /fsqewaInw/

2.1.7 /U/ archiponeme of /w/ and unstressed /u/ in

2.1.7.1 [V - #] —————>

- [w ~ ū, ~ ū]:
- [wow~wōU~, wōU] 'he' /wōU/
- [q<sup>x</sup>ow~q<sup>x</sup>ōU~, q<sup>x</sup>ōU] 'this is the man who' /qōU/
- [tsq<sup>x</sup>aw~tsq<sup>x</sup>āU~, tsq<sup>x</sup>āU] 'I stab him' /tsqāU/
- [fsq<sup>x</sup>w~fsq<sup>x</sup>ēU~, fsq<sup>x</sup>ēU] 'we fight him' /fsqeU/

2.1.7.2 [V - C] —————>

- [w ~ ū]:
- [howk<sup>h</sup>~hoጀk<sup>h</sup>] 'ear-wax' /hoUK/
- [mbowk<sup>h</sup>~mbōuk<sup>h</sup>] kind of mushroom /mboUK/
- [sawn~saጀn] 'to-morrow; this morning' /saUn/

2.1.7.3 [# - "Cvcl.] —————>

- [W ~ w ~ ?ū ~ ū]:
- [wsq<sup>x</sup>ād<sup>j</sup>əhōqM~wsq<sup>x</sup>ād<sup>j</sup>əhōqM~?ūsq<sup>x</sup>ād<sup>j</sup>əhōqM~?ūsq<sup>x</sup>ād<sup>j</sup>əhōqM]
- 'he reminds her' /Usqādyhōqm/

2.1.7.4 [# - "Cvcd.] —————>

- [w ~ ?ū ~ ū]:
- [wblēt<sup>h</sup>~?ūblēt<sup>h</sup>~ūblēt<sup>h</sup>] 'he used a

hollow object to produce sounds' /UbleT/  
 [whā:n~?vhā:n~vhā:n] 'he shoots' /Uhaan/  
 [wwa:t<sup>h</sup>~?wa:t<sup>h</sup>~wa:t<sup>h</sup>] 'he is different' /UwaaT/

## 2.2 Alveolars

### 2.2.1 /t/ →

#### 2.2.1.1 [t -] in [-Fvl.]

[t-sa'] 'my head' /tsa/

#### 2.2.1.2 [t] everywhere else except in the instances mentioned in 2.2.3:

[tedɔ'] 'I speak; I want' /tedɔ/  
 [fatar] 'bridge' /fatar/  
 [jator] 'they organize' /jator/  
 [q<sup>X</sup>əbat<sup>i</sup>] 'tobacco' /qbati/

### 2.2.2 /d/ →

#### 2.2.2.1 [d] in [-j]:

[d<sup>j</sup>ām] 'time; watch' /dyam/  
 [d<sup>j</sup>areq<sup>x</sup>] 'the teaching' /dyareq/  
 [lād<sup>j</sup>ot<sup>h</sup>] 'not yet' /lādyot/  
 [Msqād<sup>j</sup>ehq] 'she makes a hole' /msqādyhoq/  
 [təhind<sup>j</sup>ar] 'I stumble' /thindyar/

#### 2.2.2.2 [d] in all other positions except in the instances mentioned in

#### 2.2.3:

[dembir] 'tortoise, turtle' /dembir/  
 [denda'] 'fine' /denda/  
 [mdla:] 'its seed' /mdlaa/  
 [ndlāw] 'the husband' /ndlāw/  
 [ndese'] 'fence' /ndese/  
 [q<sup>X</sup>əfad<sup>a</sup>] 'grubs found in palmtrees' /qfada/

### 2.2.3 /T/ archiphoneme of /t/ and /d/ in

#### 2.2.3.1 [-#] →

#### [t<sup>h</sup> ~ t ~ d]:

[qwat<sup>h</sup>~qwat~qwed] 'first of bride price instalment' /qwaT/  
 [qlat<sup>h</sup>~qlat~qlad] 'a fine' /qlaT/  
 [q<sup>X</sup>iqat<sup>h</sup>~q<sup>X</sup>iqat~q<sup>X</sup>iad] 'sign' /qiAT/  
 [wo:t<sup>h</sup>~wo:t~wo:d] 'he feels hot' /woot/  
 [jef<sup>h</sup>~jfot~jef<sup>d</sup>] 'they finished' /Ifot/  
 [qmndrat<sup>h</sup>~qmndrat~qmndrad]  
 'Diplazium  
 esculentrum  
 Swartz' /qmndraT/

### 2.2.3.2 [- C #] where [C] stands for [M, W ~ U] and in [V - Fvc1. (C)V]

#### [t ~ d]:

[botM~bodM] 'a big sailing boat' /boTm/  
 [fqlatw~fqladw] 'we (incl.) fine him' /fqlatw/  
 [q<sup>at</sup>f<sup>j</sup>ε, ~q<sup>ad</sup>f<sup>j</sup>ε] 'spittle' /qaTfyε/

### 2.2.3.3 [- C #] where [C] stands for [J ~ I]

#### [t ~ d]:

[təsatJ~təsədJ] 'I cut them' /tsaTy/  
 [parutJ~parudJ] 'graters' /paruTy/  
 [hatJ~hadJ] 'there are four of them' /haTy/

### 2.2.4 /n/ →

#### 2.2.4.1 [n] in [-j] and [-J/I]

[n<sup>j</sup>ān] 'in, inside' /nyan/  
 [mən<sup>j</sup>ān] 'machete' /mnyān/  
 [q<sup>X</sup>ən<sup>j</sup>ēn] 'worm in faeces' /qnyen/  
 [tōn<sup>j</sup>ε'] 'I misidentify' /tonye/  
 [mēn<sup>j</sup>ε'] 'he is visible' /mēnye/  
 [hajn<sup>I</sup>~hajnJ] 'belonging to (them)' /hāIny/  
 [hajn<sup>I</sup>~hajnJ] 'dogs, dog' /hōIny/  
 [hajn<sup>JW</sup>~hajn<sup>JU</sup>] 'male dog, the dogs' /hōInyw/  
 [hajn<sup>JM</sup>] 'the female dog' /hōInym/

#### 2.2.4.2 [n] everywhere else:

[nen] 'you (sing.)' /nen/  
 [nan] 'you (plur.)' /nan/  
 [tāna'] 'I come / go to' /tana/  
 [snaʊ] 'moon; month' /snaU/  
 [?v̥r̥orm] 'he feeds her' /Ur̥orm/  
 [nlos] 'you are tired' /nlos/  
 [tqmndrɔ'] 'I am flabber-gasted' /tqmndro/

### 2.2.5 /s/ →

#### 2.2.5.1 [s] in [-j] and [-J/I]:

[s<sup>j</sup>ɔ:] 'who?' /syoo/  
 [Ms<sup>j</sup>ɔ'] 'she breast-feeds; her breast' /msyo/  
 [?as<sup>j</sup>α'] 'shellfish, snail' /asya/

[q <sup>x</sup> <u>as</u> <sup>j</sup> <u>aq</u> <sup>x</sup> ]	'young taro leaves used as a vegetable'	/qasyoq/
[uq <sup>x</sup> <u>a</u> <sup>j</sup> <u>aq</u> <sup>x</sup> ]	'he starts back, he recoils'	/Uqaasyoq/
[q <sup>x</sup> <u>as</u> <sup>j</sup> ]	'chopstick, chopsticks'	/qasy/
[q <sup>x</sup> <u>as</u> <sup>j</sup> w]	'the small chopstick, the chopsticks'	/qasyw/
[q <sup>x</sup> <u>as</u> <sup>j</sup> M]	'the big chopstick'	/qasym/
[sisJ~sisI]	'young man who is being taught in the traditional lore'	/sisy/

#### 2.2.5.2 [s ~ z] in [V - V]:

[p <sup>á</sup> s <sup>á</sup> ~p <sup>á</sup> z <sup>á</sup> ']	'rice'	/p <sup>á</sup> sa/
[ása~áza']	'sugar cane; sugar'	/ása/
[fisi:~fizi:]	kind of fish	/fisi:/
[tq <sup>é</sup> síkM~tq <sup>é</sup> zíkM]	'I love her; my love (f)'	/tq <sup>é</sup> siKm/

#### 2.2.5.3 [s] everywhere else:

[s <sup>á</sup> t <sup>á</sup> ']	'fire'	/sala/
[srís]	'mouse'	/srís/
[?úseris]	'he gives a love gift'	/Useris/
[tøpas~tøpas]	'I spray'	/tfas/
[m <sup>é</sup> sis~msis]	'she wears a sarong'	/msis/
[m <sup>é</sup> si:s~m <sup>é</sup> si:s]	'she walks along the road, the river'	/msiis/
[?ýG <sup>á</sup> sM~Jq <sup>á</sup> sM]	'they whistle to her'	/Iqasm/
[q <sup>é</sup> m <sup>á</sup> SW~qm <sup>á</sup> SW~q <sup>é</sup> m <sup>á</sup> S~qm <sup>á</sup> S]	'a small string'	/qmbasw/
[Msng <sup>á</sup> q <sup>x</sup> ]	'she has a flat nose'	/msngoq/
[Msnd <sup>á</sup> q <sup>x</sup> ]	'she has a flat nose'	/msndyoq/

#### 2.2.6 /l/ →

##### 2.2.6.1 [‡] in [V(non-front) - ]:

[mbotM]	'a big house'	/mbolm/
[q <sup>x</sup> ɔ‡]	'animal'	/qol/
[?u‡apM]	'he slaps her face'	/UlápM/
[tɔ‡ɔ̄]	'tide'	/tolo/
[jemá‡]	'their tongue(s)'	/Imál/

#### 2.2.6.2 [l] everywhere else:

[helw~hel <sup>U</sup> ]	'cup, glass'	/helw/
[?íli:t <sup>h</sup> ]	'they are far away'	/íliit/
[smil]	'east'	/smil/
[mael <sup>es</sup> ]	'the last (fem.)'	/maeles/
[t <sup>-</sup> sélε']	'I throw'	/tséle/
[tlós~télós]	'I am annoyed, fed up'	/tlos/
[lak <sup>h</sup> ]	'two'	/laK/
[øndl <sup>et</sup> <sup>h</sup> ]	'we (incl.) are lonely'	/fsndleT/
[øndl <sup>et</sup> ndl <sup>at</sup> <sup>h</sup> ]	'we (incl.) are really lonely'	/fsndleTndlaT/
[tmbliaq <sup>x</sup> ~tmblj <sup>x</sup> aq <sup>x</sup> ]	'rainbow'	/tmbliaq~tmblyaq/

#### 2.2.7 /r/ →

##### [r] in all positions:

[ra:]	'who, which'	/raa/
[ra']	'overthere; outside'	/ra/
[r <sup>an</sup> it <sup>h</sup> ]	'downpour'	/raniT/
[r <sup>in</sup> at <sup>h</sup> ]	'sieve made from cloth/barkcloth'	/rinaT/
[r <sup>eg</sup> i']	'thunder'	/rgi/
[r <sup>omb</sup> bombó']	'music which invites people to dance together'	/rombombo/
[r <sup>w</sup> e']	'small island'	/rwe/
[r <sup>j</sup> ere']	'hill'	/ryere/
[s <sup>i</sup> :ra']	'broom'	/siira/
[s <sup>i</sup> ra']	'salt'	/sira/
[sar <sup>as</sup> ]	'eagle'	/sarás/
[s <sup>c</sup> roq]	'spear with several heads (esp. for fishing)'	/soroq/
[trén]	'I pursue, I chase'	/tren/
[nisrojn]	'writing'	/nisroIn/
[srís]	'mouse'	/srís/
[øør <sup>c</sup> q]	'we (incl.) swerve, step aside'	/ffroq/
[?írnó̄']	'they swarm, crowd about'	/Irno/
[mrnujn]	'she has a nice smell'	/mrnuIn/
[thomborm]	'I wrap her up'	/thomborm/
[nwar <sup>I</sup> ]	'you tell them to be quiet'	/nwary/
[?ísworw]	'they support him'	/Isworw/
[?erqat <sup>h</sup> ]	term of reference for parent who has lost his/her unmarried adult child	/érqaT/

## 2.3 Palatals

### 2.3.1 /Y/

#### 2.3.1.1 [J] ~ [I] in [C" - #]:

[q̪lənJ~q̪lən <sup>I</sup> ]	'birds'	/qleny/
[təs <sup>J</sup> ɔqJ~təs <sup>J</sup> ɔq <sup>I</sup> ]	'I make them'	/tsyɔqy/
[sərɪsJ~sərɪs <sup>I</sup> ]	'mice'	/srisy/
[sərɪsJ~sərɪs <sup>I</sup> ]	'plantation'	/sərisy/
[?i'sirikJ~?i'sirik <sup>I</sup> ]	'they sing or speak in an irritating way'	/IsiriKy/
[mbɔtJ~mbɔt <sup>I</sup> ]	'houses'	/mboly/
[botJ~bot <sup>I</sup> ]	'sailing ships'	/boty/
[supJ~sup <sup>I</sup> ]	'soups'	/supy/
[dʒ̪ãmJ~dʒ̪ãm <sup>I</sup> ]	'watches'	/dyamy/
[ha:jnJ~ha:jn <sup>I</sup> ]	'louse; lice'	/ha:Iny/

#### 2.3.1.2 [j] in [C - V] and in [C - #]:

[?as <sup>j</sup> ə']	'shell'	/'asya/
[tɔn <sup>j</sup> əm]	'I do not recognize her'	/tɔnyem/
[la:t <sup>j</sup> ə']	'ant'	/la:lye/
[qəm <sup>j</sup> ə']	'fish-trap'	/qmbye/
[mənd <sup>j</sup> ə']	'it festers, suppurates'	/mendye/
[wf <sup>j</sup> ən]	'he catches fish with a net'	/Ufyen/
[?ag <sup>j</sup> ə']	'germ'	/ägeye/
[q <sup>j</sup> ãm~q <sup>X</sup> əjãm]	'the big bag'	/qyam/
[?ak <sup>j</sup> ə']	'I do not know'	/akyē/
[qas <sup>j</sup> ]	'chopstick'	/qasy/

#### 2.3.1.3 [j] everywhere else except in [# - "CV] and [V - #]

[jas]	'they invite'	/yas/
[jahar]	'ten'	/yahar/
[?ajos]	'arts'	/ayos/
[maja']	'kind of tree hard wood)	/maya/
[q <sup>X</sup> eji?]	kind of rattan	/qeyi/

#### 2.3.2 /I/ archiphonemes of /y/ and unstressed /i/ in

#### 2.3.2.1 [V - #] —————>

[j ~ ɿ' ~ ɿ]:		
[ha:j~ha:ɿ'~ha:ɿ']	'do not'	/ha:l/
[?aj~ai'~ai']	'there are two of them'	/ai'/

[maj~mai'~mai'] kind of tree.  
(Its bark is used for bark cloth)

/mai/

#### 2.3.2.2 [V - C] —————>

[j ~ ɿ]:		
[fejt <sup>h</sup> ~feit <sup>h</sup> ]	'we (incl.) eat'	/feIT/

[mqbejn~mqbein]'her pouch (of kangaroo)' /mqbeIn/

#### 2.3.2.3 [# - "Cvcl.] —————>

[J ~ j ~ ?i ~ ɿ]:		
[Jslà:~jslà:~?islà:~islà:]	'they are sharp'	/Islaa/
[Jkajot <sup>h</sup> ~jkajot <sup>h</sup> ~?ikajot <sup>h</sup> ~ikajot <sup>h</sup> ]	'they are well to do'	/IkayoT/

#### 2.3.2.4 [# - "Cvcd.] —————>

[j ~ ?i ~ ɿ]:		
[jrɔjt <sup>h</sup> ~irɔjt <sup>h</sup> ~irɔjt <sup>h</sup> ]	'they sleep'	/IroIT/

[jmɑ:t~?imɑ:t~imɑ:t]'their tongues' /Imal/

## 2.4 Velars

### 2.4.1 /k/ —————>

[k] in all positions except in the instances mentioned in 2.4.3

[kɔkɔk<sup>h</sup>] 'chicken' /kokoK/

[kidi'] 'adventurer' /kidi/

[kūya'] 'stock; soup' /kua/

[kərbo'] 'percussion instrument with strings' /kerbo/

[kədəra'] 'chair' /kadera/

[?ak<sup>j</sup>ə'] 'I do not know' /akye/

[tqaki'] 'I bind' /tqaki/

[kier] 'sleeping-mat' /kier/

[sika'] 'cat' /sika/

[mkonde'] 'she ties her hair into a knot' /mkonde/

[jkalə'] 'they lose; they give in' /Ikala/

[krod<sup>j</sup>ə'] 'activity; work' /krödy/

### 2.4.2 /g/ —————>

[g] in all positions except in the instances mentioned in 2.4.3

[tago'] 'I make a dry field for cultivation' /tägo/

[na:gow] 'God; he who is in heaven' /naagoU/

[nāngi'] 'woman' /nāngi/

[giha'] 'cough' (noun) /giha/

[girik<sup>h</sup>] 'joy' /giriK/

[mglaq<sup>X</sup>] 'she informs against s.b.' /mglaq/

[jgr̩']	'they are shining'	/Igr̩i/	2.5.2	[q̩ ~ q] in [ # - V]	
[jgr̩i:]	'their branch'	/Igr̩i:/		[q̩akm ~ qakm] 'corpse (of woman)' /qaKm/	
2.4.3	/K/ (archiphonemes of /k/ and /g/) in			[q̩adik ~ qadik] kind of mat (used for several purposes - sleeping mat, umbrella, etc.) /qadiK/	
2.4.3.1	[ - # ] —————>			[q̩ej ~ qe̩i'] 'these here' /qe̩i/	
	[k̩ ~ k ~ g]:			[q̩əmngā'] 'kind of foodcontainer' /qmngā/	
	[g̩ik ~ gik ~ gi̩g]	'sca- bies'			
	[lg̩ik ~ lgik ~ lgig]	'attic'	/lgik/		
	[təhɔk ~ təhɔk ~ təhɔg]	'I re- place'	/thoK/		
	[Mqlak ~ Mqlak ~ Mqlag]	'cost'	/mqlaK/		
2.4.3.2	[- C#] (where [C] stands for [M, W <sup>U</sup> , J <sup>I</sup> ]) and in [V - Fvc1. (C) V]		2.5.3	[G ~ R] in [V - V]:	
	[k ~ g]:			[t̩aG̩ ~ t̩aR̩] 'I come' /taqa/	
	[g̩ikM ~ g̩igM]	'a serious case of scabies'	/giKm/	[m̩a:G̩ ~ m̩a:R̩] 'she drinks' /maaqo/	
	[lg̩ikJ ~ lgigJ ~ lgig ~ lgik]	'attics'	/lgiky/	[w̩aG̩q ~ w̩aR̩q] 'he digs' /wqaq/	
	[thokW ~ thok ~ thogW ~ thog]	'I replace him'	/thoKw/	[t̩edɔG̩ ~ t̩edɔR̩] 'I twist(ropes, etc.)' /tdoqo/	
	[t̩epaksaj ~ t̩epagsaj]	'I force I force them'	/tpaKsaI/	[js̩ ~ js̩] 'they rest/relax (esp. after completed task)' /Isyeqe/	
2.4.4	/n/ —————>			[m̩əG̩i ~ m̩əR̩i ~ m̩əq ~ m̩əq] 'she steps aside' /mqieq/	
	[ngej ~ ngēi'] 'male participant in puberty rites/initiations'	/ngēi/	2.5.4	[q ~ G] in [C - C]:	
	[nganit̩]	'hilt, handle'	/nganit/	[m̩qla: ~ m̩Gla:] 'she is attached to'	/mqlaa/
	[?̩angooq̩]	'advisor/instructor of participants during the puberty rites'	/angoq/	[m̩qlak ~ m̩Glak]	'she is lost' /mqlak/
	[sing̩]	'presently; today'	/singo/	[w̩qr̩ ~ w̩Gr̩]	'she stands' /Uqr̩o/
	[lŋgi']	'fibres made from the <i>Gnetum-gnemur Lina</i> '	/lŋgi/	[\øqndān ~ \øGndān]	'we (incl.) plan' /fqndān/
	[sngat̩]	'fern ( <i>Asplenium maidus</i> )'	/sngat/	2.5.5	[q] in [C - V]:
	[tm̩ngħo']	'I have the hiccups'	/tm̩ngħo/	[d̩eridq̩in]	'teacher in religious affairs' /driTqoIn/
	[m̩ngħoq]	kind of nutmeg tree	/m̩ngoK/	[tsqa:t̩]	'I comb' /tsqaat/
	[bānku']	'seat, desk'	/bānku/	[t̩qaq̩]	'I dig' /tqaq/
	[bānkh]	'bank'	/banK/	[m̩qan]	'she bears fruit' /mqan/
	[s̩enkh]	'iron roofsheets'	/senK/	[sqām]	'big torch' /sqam/
2.5	Uvular /q/ —————>			[fqa:]	a kind of <i>Ophiocephalus striatus</i> (fresh water animal) /fqaa/
2.5.1	[q̩ ~ q] in [ V - # ]:			[fq̩mngā']	'we (incl.) put food in a (kind of) food container' /fqmngā/
	[saq̩ ~ saq]	'knife'	/saq/	2.5.6	[q] everywhere else:
	[haq̩ ~ haq]	'utensils for the preparation of sago'	/haq/	[qmngā']	'kind of food container' /qmngā/
	[m̩ehā:q ~ m̩ehā:q]	'she is bright, clear'	/m̩haaq/	[m̩əqmngā']	'she puts into a (kind of) food container' /mqmngā/
	[?im̩eq̩ ~ ?im̩eq]	'to root up'	/Im̩eq/	[tfiiaq]	term of reference for a woman who has lost one or both of her parents /tfiaq/
	[t̩eq̩ ~ t̩eq]	'I scrape'	/t̩eq/	2.6	Glottal /h/ —————>
	[msq̩eq̩ ~ msq̩eq]	'she likes/loves'	/msqe eq/	[h]:	
	[w̩ngħo:q ~ w̩ngħo:q]	'he is shining'	/w̩ngħooq/	[ha:jn]	'louse' /haaIn/

[təhlējn]	'I claim damages'	/thlēIn/
[məhlik <sup>h</sup> ]	'she picks'	/mhlik/
[məhli:k <sup>h</sup> ]	'she puts / inside'	/mhliik/
[?Uhnd <sup>j</sup> ar]	'he stumbles'	/Uhndyar/
[māha']	'she does not want'	/māha/
[jhənāqM]	'they give it'	/Ihnāqm/
[hōngi']	a kind of <i>Ophiocéphalus striatus</i> (fresh water animal)	/hōngi/

- (2) u and i (glides); are not distinctive in [u/u<sup>u</sup>V] and [i/i<sup>i</sup>V], respectively:
- [wluua'] 'he is gentle' /wlūua/  
 [luwa'] 'scoundrel' /luwa/  
 [Msī:jet<sup>h</sup>] 'she has scars in her face' /msīijet/  
 [msī:iɛt<sup>h</sup>] 'rapids' /msīieT/

- (3) The difference between w, <sup>U</sup> and J, <sup>I</sup>, respectively, is that C" + [W/J] often only results in a kind of velarization or palatalization of the preceding consonant, whereas [C" + <sup>U/I</sup>] combination give the auditory impression of a very short relatively more voiced vowel-like sound. Both possibilities are ad libitum and are not functionally distinct from [C<sup>j</sup>#] or \*[C #]. However, they are in opposition to "full fledged" C+[u/i] in that position; compare:

[sis] /sis/ 'pupil'  
 [sisi'] /sisi/ 'together'  
 [sis<sup>I</sup>-sisJ] /sisy/ 'pupils'

### 3. Vowel phonemes: realizations

#### 3.0 General non-functional modification of vowels:

- After a pause vowels may have an abrupt onset indicated by [?].
- Before a pause non-long vowels may show an abrupt off-glide indicated by ['] (but relatively weaker than [?]).
- Vowels may be slightly nasalized in front or after nasals consonants.
- A slight breathiness has been attested in vowels after (voiced or voiceless) dorso-uvular fricative or trill.

	front			central		
	non-long	long	non-long	long	non-long	long
high	i	ii			u	uu
mid	e	ee			o	oo
low			a	aa		

Table 2  
Phonetic chart: Consonants

#### Notes:

- (1) Both [?] and ['] stand for a glottal stop. The former indicates an abrupt onset to a word-initial vowel, the latter an abrupt offglide in a prepausal vowel. ['] is weaker than [?]. Both are subphonemic.

Table 5  
Tehit vowel phonemes

## 3.1 /i/ —————&gt;

## 3.1.1 [?i~i] in [# - ]:

[?iri~iri]	'the whole day'	/iri/
[?ikw~ikw]	'heaven'	/ikw/
[?iroq~iroq]	kind of red parrot	/iroq/
[?ihin~ihin]	'banyan tree'	/ihin/

## 3.1.2 [i~i] in [C - #]:

[tədi~tədi]	'I fall'	/tdi/
[mmbi~mmbi]	'it is smoky'	/mmbi/
[sri~sri]	'urine'	/sri/

## 3.1.3 [i~i] in [N - ], [- N]:

[ni~ni]	'thing'	/ni/
[tni~tni]	'papers or leaves used for hygie- nical purpose'	/tni/
[wsəni~wsəni]	'to unfold, to spread'	/wsni/
[?ingin~?ingin]	'ring'	/ingin/
[fingən~fingən]	'dish'	/fingən/
[wringin~wringin]	'he fits well into'	/wringin/

## 3.1.4 [i~i] in [G/R - ]:

[təGi̥iɛq̥~təGi̥iɛq̥]	'I disappear'	/tqiɛq/
[mdəGi̥~mdəGi̥]	'it(fem.) has many fruits'	/mdqi/

3.1.5 [i] everywhere else (see also  
2.3.2):

[sis]	'young man who is being taught in the tradi- tional lore'	/sis/
[wi̥iaq]	'squirrel'	/wi̥iaq/, /wyaq/
[təql̥i̥aq̥]	'I am free'	/tqliaq/
[sít̥]	'sleepingroom'	/sít/

## 3.2 /ii/ —————&gt;

## 3.2.1 [?i:~i:] in [# - ]:

[?i:t̥~i:t̥]	'they'	/iit/
[?i:j~i:j]	'their'	/iij/
[?i:ngin~i:ngin]	'elliptical rottan frame with handle of scooping net'	/iingin/

## 3.2.2 [i:~i:] in [N - ] and [- N]:

[wsn̥i~wsni:]	'he lies flat on his stom- ach'	/wsnii/
[n̥i:n̥i~ni:n̥i]	'skin shed by snake'	/niin̥is/
[?un̥i:n̥i~?uni:n̥i]	'he sheds his skin'	/Uniin̥is/

[ki:ndi~ki:ndi'] 'sand' /kiindi/  
[wri:ngin~wri:ngin] 'pounded pois-  
onous lianas used for fish-  
ing' /wriingin/

## 3.2.3 [i: ~ i:] in [G - /R - ]:

[təGi̥:r~təGi̥:r] 'I polish' /tqiir/  
[məRi̥:~məRi̥:] 'it (fem.) is deli-  
cious, tasteful' /mqii/

## 3.2.4 [i:] everywhere else:

[mqri:] 'it (fem.) shines, it  
glitters (fem.)' /mqrii/  
[tqri:ia'] 'I have an appetite' /tqriia/  
[?usi:t̥h] 'he smokes/dries (food)' /Usiit/  
[msi:jet̥h] 'she has scars in her  
face' /msiyyet/  
[jmbi:] 'they smoke (intr.)' /jmbii/  
[mqmbi:] 'she is dusty, full of  
dust' /mqmbii/  
[siri:] 'pith of the sago palm' /sirii/

## 3.3 /e/

## 3.3.1 [?e ~ e] in [# - ]:

[?er̥en~er̥en] 'fish' /er̥en/  
[?er̥j̥enM~er̥j̥enM] 'the big stimulus' /eryenM/  
[?edoro~,~edoro] 'crab' /edoro/  
[?εit̥M~εit̥M] 'navel' /efiTm/  
[?εg̥o~,~εg̥o] 'kind of whale' /efo/  
[?εs̥j̥en~εs̥j̥en] 'egg' /esyen/

## 3.3.2 [ε ~ ε] in [- #]:

[ts̥lel̥~,~ts̥lel̥] 'I throw' /ts̥ele/  
[ts̥ae~,~ts̥ae] 'I keep under my  
arm' /ts̥ae/  
[nd̥ese~,~nd̥ese] 'fence' /nd̥ese/  
[mmbah̥e~,~mmbah̥e] 'she gives orders' /mmbah̥e/  
[q̥ad̥e~,~q̥ad̥e] 'roof' /qade/

## 3.3.3 [ɛ ~ ε] in [N - ] and [- N]:

[n̥en~n̥en] 'you' /nen/  
[h̥en~h̥en] 'blood' /hen/  
[ms̥en̥~,~ms̥en̥] 'she flies' /ms̥ene/  
[s̥embe~,~s̥embe] 'a case of adultery' /s̥embe/  
[q̥n̥j̥en~q̥n̥j̥en] 'worm in faeces' /qnyen/

## 3.3.4 [ε ~ ε] in [- j/i]:

[h̥el̥j̥n~h̥el̥j̥n] 'a demand' /hleIn/  
[məGəb̥e̥j̥n~məGəb̥e̥j̥n] 'her pouch (of  
kangaroo)' /mqab̥eIn/  
[j̥ejt̥h~,~jejt̥h] 'they eat' /y̥eIT/

[ndq<sup>ɛ</sup>jt<sup>h</sup>~ndq<sup>ɛ</sup>jt<sup>h</sup>] term of reference for a man who has lost one or both of his parents /ndqeIT/

3.3.5 [ɛ ~ ε] in [G/R - ]:

[?ɛG<sub>ε</sub>~?ɛG<sub>ε</sub>] 'so is that' /éqe/  
[tədāG<sub>ε</sub>~tədāG<sub>ε</sub>] 'I divide a bunch of bananas into hands' /tdaqe/

3.3.6 [ɛ ~ ε ~ e ~ e] in [G/R - j/ɪ]:

[ts<sup>j</sup>ɛR<sub>ε</sub>j~ts<sup>j</sup>ɛG<sub>ε</sub>i, ts<sup>j</sup>ɛGej~ts<sup>j</sup>ɛRei] 'I release them'/tsyeqeI/

3.3.7 [ε] everywhere else:

[qlɛmbet<sup>h</sup>] 'bad spirit' /qlémbeT/  
[sāmbet<sup>h</sup>] 'beads' /sámbeT/  
[whes] 'he is ashamed' /whes/  
[t̪ereqm] 'I break her' /t̪ereqm/

3.4 /ee/

3.4.1 [ɛ: ~ ε:] in [# - ]:

[?ɛ:zɛ~,~ɛ:zɛ'] 'carrying strap'/eese/  
[?ɛ:vitM~ɛ:vitM] 'a call' /eeviTm/  
[?ɛ:s<sup>j</sup>ɛn~ɛ:s<sup>j</sup>ɛn] 'mushroom' /eésyen/  
[?ɛ:m<sup>j</sup>ɛrqat<sup>h</sup>~ɛ:m<sup>j</sup>ɛrqat<sup>h</sup>] 'damage claimable/suffered because of adultery of one's spouse' /eemyerqaT/

3.4.2 [ɛ: ~ ε:] in [-#/j/ɪ]:

[sɛ:~se:] 'then, so that' /see/  
[sɛlɛ:~sɛle:] 'wooden crowbar' /sélee/  
[q<sup>x</sup>as<sup>j</sup>ɛ:~q<sup>x</sup>as<sup>j</sup>e:] 'still young' /q<sup>x</sup>asyee/  
[sme:r~sme:r] kind of teak tree /smeer/  
[təhɛlɛ:j~təhɛle:j] 'I spy on them' /theleeI/

3.4.3 [ɛ:~ε:] in [G/R - ]:

[?iG<sub>ɛ</sub>:f<sup>j</sup>ɛ~?iR<sub>ɛ</sub>:ɸ<sup>j</sup>ɛ?] 'they make sharp' /Iqéefye/  
[?vG<sub>ɛ</sub>:ndɛ~?vR<sub>ɛ</sub>:ndi'] 'it is not full' /Uqeendi/

3.4.4 [ɛ ~ ε:] in [-N], [N - ]:

[msnɛ:q~msnɛ:q] 'she is completely finished' /msneeq/  
[təhɛ:nɛ~,təhɛ:nɛ'] 'I throw a lasso' /théene/

3.4.5 [ɛ: ~ ε: ~ ɛ: ~ e:] in [G/R - N]; [ŋɛ:~i,~ngɛ:j~ngɛ:j~ngɛi'] 'male participant in initiation rites' /ngéei/

3.4.6 [ε:] everywhere else:

[sāng<sup>j</sup>ɛ:t<sup>h</sup>] a kind of nutmeg tree /sangyéet/  
[wslɛ:q<sup>X</sup>] 'it (male) is painful; it (male) burns/bites' /Usleeq/  
[wsl<sup>j</sup>ɛ:q<sup>X</sup>] 'he is slow' /Uslyéeq/  
[msrɛ:s] 'she/it (fem.) goes smoothly' /msrees/

3.5 /u/

3.5.1 [v ~ u] in [# - ]:

[?v<sup>u</sup>pas~v<sup>u</sup>pas] 'police' /upas/  
[?v<sup>u</sup>rūs~v<sup>u</sup>rūs] 'belt made from cloth' /urus/  
[?v<sup>u</sup>bat<sup>h</sup>~v<sup>u</sup>bat<sup>h</sup>] 'carambola (*Averrhoa carambola* and *Averrhoa bilimbi*)' /ubaT/

3.5.2 [v' ~ u] in [C - #]:

[q<sup>x</sup>āmbu~,~q<sup>x</sup>āmbu] 'short side of the roof' /qámbu/  
[js<sup>v</sup>usu~,~js<sup>v</sup>usu] 'they move up' /Isúsu/  
[mq<sup>v</sup>abru~,~mq<sup>v</sup>abru] 'she falls off' /mqábru/

3.5.3 [v ~ u] in [N - ], [-N]:

[mr<sup>v</sup>ungo~,~mr<sup>v</sup>ungo] 'it is out of order' /mrungo/  
[l<sup>v</sup>m<sup>v</sup>nma~,~l<sup>v</sup>m<sup>v</sup>nma] 'of course; why not?' /lumon/  
[φm<sup>v</sup>usti~,~φm<sup>v</sup>usti] 'we (incl.) have to, we must' /fmusti/

3.5.4 [v ~ u] [G/R - ]:

[məG<sup>v</sup>uas~məG<sup>v</sup>uas] 'she comforts' /mquas/  
[wm<sup>v</sup>G<sup>v</sup>ul~wm<sup>v</sup>R<sup>v</sup>ul] 'he is sobbing' /wmóqu/  
[w<sup>v</sup>l<sup>v</sup>uua~w<sup>v</sup>l<sup>v</sup>uua] 'he is gentle, sweet' /Ulúa/  
[l<sup>v</sup>uwa~l<sup>v</sup>uwa] 'scamp, scoundrel' /luwa/

3.5.5 [v] in all other cases (see also 2.1.7):

[?v<sup>v</sup>rūs] 'belt made of cloth' /urus/  
[sāmbur] term of reference for a parent who lost his/her adult married child /sambur/  
[sqad<sup>v</sup>jn] term of reference for a non-adult child who lost one or both of his parents /sqaduIn/  
[wq<sup>v</sup>abuk<sup>h</sup>] 'he farts' /UqabuK/  
[wl<sup>v</sup>uua] 'he is gentle, sweet' /Ulúa/  
[l<sup>v</sup>uwa] 'scamp, scoundrel' /luwa/

- |  |   |
|--|---|
| 3.6 /uu/ (in loans only) —————>  | 3.8.6 [ɔ] everywhere else:<br>[kɔkɔkɔ] 'chickens' /kokoKy/<br>[dʒɔrɔs] 'disease' /dyoros/<br>[təhrɔ'] 'I build' /thro/<br>[kɔtktɔtε'] 'small boat (without outriggers)' /kolKole/<br>[tuvɔq] 'palm wine' /tuoq/<br>[muuɔq] 'he/it is bent, crooked' /muoq/                      |
| 3.7 /ü/ and /üü/ are marginal phonemes. They occur only in the speech of people older than 65 years and whose language is relatively little influenced by Indonesian. These realizations occur instead of those of /u/ and /uu/ in the speech of the younger, educated people (see 6.5): | 3.9 /oo/ —————>   |
| [?üpəs~üpəs] 'police' /üpəs/<br>[qambü~qambü] 'shut side of the roof' /qambu/<br>[gü:rü~gü:rü] 'teacher' /güürü/<br>[məGüüas~məGüüas] 'she comforts' /mquas/   | 3.9.1 [?ɔ: ~ ɔ:] in [# - ]:<br>[?ɔ:gɔ'~ɔ:gɔ'] 'banana' /oogo/<br>[?ɔ:gɔseren~ɔ:gɔseren] 'pawpaw' /oogoseren/<br>[?ɔ:sɔq~ɔ:sɔq] 'wooden frame of standing fising net/ fire place' /oosoq/  |
| 3.8 /o/  | 3.9.2 [ɔ: ~ o:] in [- #/w/v]:<br>[mlo:~mlo:] 'she is hanging' /mloo/<br>[msafatɔ:~msafatɔ:] 'it (f.) is not enough' /msaloloo/<br>[wəhɔmɔ:~wəhɔmɔ:] 'he works slowly' /whomoo/<br>[sɔ:w~sɔ:w] 'whom does it concern?' /syooU/<br>[ŋlɔ:w~ŋlɔ:w] kind of small cork-tree /nglooU/ |
| 3.8.1 [?ɔ ~ ɔ] in [# - ]:<br>[?ɔdin~ɔdin] 'good advice' /odin/<br>[?ɔgar~ɔgar] 'the place where the sago pith is pounded' /ogar/<br>[?ɔtlin~ɔtlin] 'palm' /olin/   | 3.9.3 [ɔ: ~ o:] 'in [G/R - #]:<br>[wəGɔ:~wəGɔ:] 'he is o.k.' /wqoo/<br>[mfagɔ:~mfagɔ:] 'she is not wet' /mfagqoo/   |
| 3.8.2 [ɔ' ~ ɔ] in [- #]:<br>[sətɔ'~sətɔ] 'language; voice' /salo/<br>[mslo'~məslo'] 'she is dry' /mslo/  | 3.9.4 [ɔ: ~ ɔ:] in [- N], [N - ]:<br>[jŋɔngɔ:~jŋɔngɔ:] 'they catch fish with their hands touching in the water' /Inqongoo/<br>[s1ɔ:m~s1ɔ:m] 'the morning star' /sloom/  |
| 3.8.3 [ɔ ~ ɔ] in [N - ], [- N]:<br>[hɔmbɔr~hɔmbɔr] 'packet' /hombor/<br>[hɔngi'~hɔngi'] a kind of <i>Ophiocephalus striatus</i> (fresh water animal) /hongi/<br>[mrɔnɔm~mrɔnɔm] 'her mother in law' /mrönöm/<br>[hɔngɔ'~hɔngɔ'] 'tower' /hongo/  | 3.9.5 [ɔ:] everywhere else:<br>[mɔ:tʰ] 'she looks at' /msoot/<br>[tlɔ:jtʰ] 'I go/come through' /tlioIT/<br>[jɔ:fi'] 'their wing' /yooli/<br>[ɸfɔ:dɔ'] 'we (incl.) cross over' /ffoodo/  |
| 3.8.4 [ɔ ~ o] in [- w/v]:<br>[ɔ:goɔ] 'small banana' /oogoU/<br>[səlow~səlou] 'little voice' /salou/<br>[qɔw~qɔw~qɔv'~qɔv'] 'this one (m)' /qou/<br>[wɔw~wɔw~woɔv'~woɔv'] 'he' /woU/<br>[təhɔukʰ~təhɔwɔkʰ] 'I replace' /thoUK/  | 3.10 /a/  |
| 3.8.5 [ɔ ~ o] in [G/R - ]:<br>[wəGɔ:Gɔ~wəGɔ:Gɔ] 'he is ill' /wqoqo/<br>[təRɔ:kɔq'~təRɔ:kɔq'] 'I slaughter' /tqolooq/<br>[qɔ:Gɔ'~qɔ:Gɔ] 'frog' /qaqo/   | 3.10.1 [?ɑ ~ ɑ] in [# - ]:<br>[?adʒɑ'~adʒɑ'] 'champion' /adya/<br>[?age'~age'] 'jack' /age/   |

[?af<sup>j</sup>ε, ~af<sup>j</sup>ε] 'centipede' /aflye/  
 [?avān, ~avān] 'cocoon of wood  
 beetle' /afān/

3.10.2 [ɑ' ~ ɑ] in [- #]:

[sāt̄ɑ' ~ sāt̄ɑ] 'fire' /sala/  
 [?is̄j̄ɑ̄t̄ɑ, ~js̄ɑ̄t̄ɑ] 'they make  
 a roof' /Isljala/  
 [q<sup>x</sup>əd̄j̄ɑ̄fɑ, ~qd̄j̄ɑ̄fɑ] 'prepara-  
 tions' /qdyafa~  
 qdyafa/

3.10.3 [ã ~ ɑ] in [- N], [N - ]:

[?ãnda' ~ ?anda'] 'Artocarpus  
 communis' /anda/  
 [təhāmbar, ~təhāmbar] 'I together  
 with them' /thāmbar/  
 [fsāngir, ~fsāngir] 'we (incl.)  
 speak' /fsāngir/

3.10.4 [ɑ ~ ɑ] in [G/R - ]:

[taGɑ', ~taGɑ'] 'I come' /tāqa/  
 [sōGɑr, ~sōGɑr] 'torch made of resin' /sōqar/  
 [ɸɑRɑ', ~ɸɑRɑ'] 'thorn' /fāqa/

3.10.5 [ɑ] everywhere else:

[q<sup>x</sup>əbāti'] 'tobacco' /qbāti/  
 [sārbak<sup>h</sup>] 'annoying' /sārbaK/  
 [t̄-sāda'] 'my forehead' /tsāda/

3.11 /aa/ →

3.11.1 [?a: ~ a:] in [# - ]:

[?a:gō~a:gō] 'above, upstairs' /aago/  
 [?a:baqM~ā:baqM] 'big bad news' /āabaqm/

3.11.2 [ã: ~ a:] in [N - ], [- N]:

[nā:n~na:n] 'you (plur.) want' /naan/  
 [mā:m~ma:m] 'we (excl.) want' /maam/  
 [n<sup>j</sup>ā:n~n<sup>j</sup>a:n] 'inside, in' /nyaan/  
 [jā:ngā~jā:ngā] 'they react' /yāanga/

3.11.3 [a:] ~ [a:] in [G/R - ]:

[məGā:Gō' ~ məgā:Gō] 'her limbs  
 are sleeping' /mqāaqa/  
 [?vGā:rat<sup>h</sup> ~ ?vGā:rat<sup>h</sup>] 'she is  
 paralyzed' /Uqāarat/

3.11.4 [a:] everywhere else:

[tsla:q] 'I ring' /tslaaq/  
 [sa:lo'] 'commotion' /saalo/  
 [wha:t<sup>h</sup>] 'he is angry' /waaT/  
 [tqlā:mbər] 'I offer' /tqlāamber/  
 [mbajtna:] 'as always;  
 normally' /mbaItna/

3.11.4 [?ɪra:s] 'they are not  
 ashamed' /Irāas/  
 [ra:t-qlālo'] 'examination' /raatqlālo/

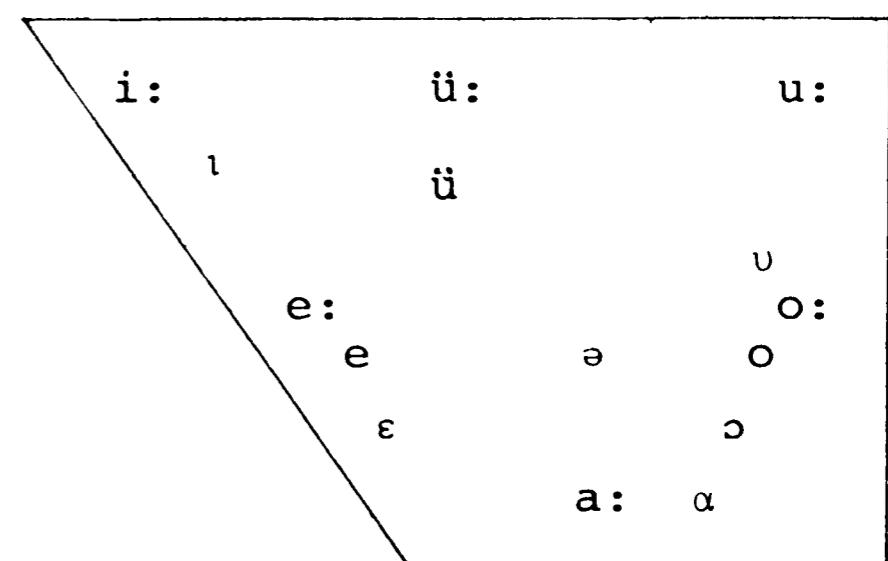


Table 6 Auditory vowel quadrilateral: Tehit main vowel allophones.

3.12.0 [ə] does not have a phonemic status. It may be inserted between almost any two consonants provided that they do not occur in the postnuclear margin of the final syllable of the word, or, that they do not belong to the tautomorphemic clusters: /mb/, /ng/, /nd/ and /Cy/:

/tqmndrō/ 'I hanker after' may be realized as:

[təqēmndrō', tqēmndrō', tqmēndrō',  
 tqmndērō'] or [təqēmēndērō'] but not  
 \*[təqēmēnēdērō']

/tyafaT/ 'I am wounded' →  
 [t<sup>h</sup>yāfat<sup>h</sup>, təyāfat<sup>h</sup>]

/syom/ 'breast (fem.)' →  
 \*[səyom] but [syom]

/tsyaaTm/ 'I point at it (f.)' →  
 \*[t<sup>h</sup>sya:təM] but [t<sup>h</sup>sya:tM]

/tTfa/ 'I touch' →  
 [tədēfā'], [tdēfā'],  
 [tətfā'] or [ttfā']

/mbadēT/ 'she sows' →  
 [m<sup>h</sup>bādēt<sup>h</sup>, məbadēt<sup>h</sup>] but

/mboly/ 'houses' →  
 [mbolJ] not \*[məboləJ]

3.12.1 [ẽ ~ ə] in [N - ], [- N]:

[nēdō', ~nēdō'] 'you want;  
 you say' /ndo/  
 [nēndōr, ~nēndōr] 'you knocks o.s.' /nndor/  
 [wēngōrō, ~wēngōrō] 'his neck' /wngōro/

3.12.2 [ə] everywhere else:

[tədō',] 'I say, I want' /tdo/  
 [fəg<sup>j</sup>ət<sup>h</sup>] 'our mouth' /fgyeT/

[qəmndrāt <sup>h</sup> ]	' <i>Diplazium esculentum Swartz'</i>	/qmndraT/	vs. /d/ /mpraq/ 'it (f.) cracks' /mdraq/ 'she tears off'
[səndlēt <sup>h</sup> ~ sndlēt <sup>h</sup> ]	'lonely'	/sndlēT/	/tpaqm/ 'I pack it (f.) up' /tdaqm/ 'I cut it (f.) into pieces'
[wəsndlēt <sup>h</sup> ]	'he is lonely'	/wsndlēT/	vs. /n/ /mqapra/ 'we (excl.) spread everywhere' /mqanra/ 'with our (excl.) full consciousness'
[tēmbrēngat <sup>h</sup> ]	'I do not care'	/tmbrengat/	vs. /r/ /Upaqm/ 'he packs it (f.) up' /Uraqm/ 'he tears it off'
[mēsngōq <sup>x</sup> ~ mēsngōq <sup>x</sup> ]	'she has a flat nose'	/msngōq/	/Urepe/ 'it (m) becomes a new waterway' /Urere/ 'he is generous, liberal'
[mēGmngā', ~mēGmngā']	'she puts food into a (kind of) food container'	/mqmngā/	vs. /s/ /sipaTm/ 'boundary' /sisatm/ a kind of big shell
[q <sup>x</sup> əlik <sup>h</sup> ]	'snake'	/qliK/	/paqm/ 'a big pack' /saqm/ 'a big knife'
[mēdm̩ba', ~mēdm̩ba']	'she is middle sized'	/mdmba/	vs. /l/ /Ipaq/ 'they pack' /Ilāq/ 'they draw up'
[tdəfā', ~tədfā', ~tədəfā']	'I touch'	/tdfa/	/mpépem/ 'her vagina (f)' /mpélem/ 'she stops her'
[mēslā', ~mēslā', ~mēslā']	'it (f.) is sharp (of thorns)'	/msla/	vs. /y/ /spaT/ 'Trichogaster' /syat/ 'paint' /pot/ 'pot' /yoT/ 'they are warm'

## 4. Oppositions

### 4.1 Consonant phonemes: oppositions

#### 4.1.1 /p/

vs. /b/ /mpraq/ 'it (f.) cracks'	
/mbraq/ 'she is quick'	
/Iqapra/ 'they spread everywhere'	
/Iqabra/ 'they told'	
vs. /m/ /sipaT/ 'boundary'	
/simat/ 'casuary'	
/pasa/ 'rice'	
/masa/ 'its (fem.) upper side'	
vs. /f/ /tpaer/ 'I pay'	
/tfaer/ 'I sail'	
/Uropa/ 'it (m.) snaps'	
/Urofa/ 'he cuts down the sago palm'	
vs. /w/ /kapur/ 'chalk'	
/kawur/ 'slave'	
/tpaqy/ 'I wrap them up'	
/twaqy/ 'I give them a name'	
vs. /t/ /mrōpa/ 'it (f.) snaps'	
/mrōta/ 'it (f.) explodes; burst out'	
/spaT/ 'Trichogaster' (fresh water fish)	
/staT/ 'town'	

vs. /d/ /mpraq/ 'it (f.) cracks'	
/mdraq/ 'she tears off'	
/tpaqm/ 'I pack it (f.) up'	
/tdaqm/ 'I cut it (f.) into pieces'	
vs. /n/ /mqapra/ 'we (excl.) spread everywhere'	
/mqanra/ 'with our (excl.) full consciousness'	
vs. /r/ /Upaqm/ 'he packs it (f.) up'	
/Uraqm/ 'he tears it off'	
/Urepe/ 'it (m) becomes a new waterway'	
/Urere/ 'he is generous, liberal'	
vs. /s/ /sipaTm/ 'boundary'	
/sisatm/ a kind of big shell	
/paqm/ 'a big pack'	
/saqm/ 'a big knife'	
vs. /l/ /Ipaq/ 'they pack'	
/Ilāq/ 'they draw up'	
/mpépem/ 'her vagina (f)'	
/mpélem/ 'she stops her'	
vs. /y/ /spaT/ 'Trichogaster'	
/syat/ 'paint'	
/pot/ 'pot'	
/yoT/ 'they are warm'	
vs. /k/ /wapur/ 'Massoia aromatica'	
(kind of wood)	
/wakur/ 'he agrees'	
/pokoK/ 'problem; the main thing'	
/kokoK/ 'chicken'	
vs. /g/ /mrēpe/ 'it (f.) becomes a water way'	
/mrēge/ 'it (f.) contents'	
/pepem/ 'a big vagina'	
/gēpem/ 'a big hair pin'	
vs. /ŋ/ /mrēpe/ 'it (f.) becomes a new waterway'	
* /mrēne/	
vs. /q/ /spaT/	
/sqaT/ 'comb'	
/pasa/ 'rice'	
/qasa/ kind of swamp grass	
vs. /h/ /mrōpa/ 'it (f.) snaps'	
/mrōha/ 'it (f.) becomes calm, quiet'	
/tpaq/ 'I wrap up s.m.t.'	
/thaq/ 'I am free'	

#### 4.1.2 /b/

vs. /m/	/mraq/	'she tears up'
	/braq/	'quick'
	/moT/	'its (f) motif, its (f)
	/boT/	'sail ship'
vs. /f/	/mbar/	'midrib of palmfrond'
	/mfar/	'its (f) motif, its (f) colour'
	/msbal/	'it (f) is tasteless'
	/msfal/	'she feels hot/bad'
vs. /w/	/mbareI/	'outrigger'
	/mwareI/	'she washes them'
	/mbyele/	'dry field (used for cultivation)'
	/mwyele/	'she floats in the air (esp. eagles)'
vs. /t/	/bab/	'side-dish esp. fish and meat' (infant's speech; also used by grown-ups in contact with infants)
	/taba/	'date; calender'
	/boT/	'sail ship'
	/toT/	'I feel hot'
vs. /d/	/UbreIn/	'he circumcizes/he is circumcized'
	/UdreIn/	'he demands; he claims'
	/mraq/	'she is quick'
	/mdraq/	'she cuts open (esp. shells and belly of game)'
vs. /n/	/boT/	'sail ship'
	/noT/	'cloth'
	/mbareT/	'floor-covering'
	/mnareT/	'she copes with many problems'
vs. /r/	/mbet/	'soil; land'
	/mreT/	'she is weighed down (with cares, labour)'
	/mbyas/	'mist, haze'
	/mryas/	'she decorates'
vs. /s/	/bre/	'crab (small sort)'
	/sre/	(kind of) 'fragrant grass' (used for cooking)
	/mbol/	'house, home'
	/msol/	'she is restless'
vs. /l/	/mbi/	'smoke'
	/mli/	'she is swinging'
	/mboK/	(kind of) 'mushroom'
	/mloK/	'she picks up'
vs. /I/	/braq/	'quick'
	/Iraq/	'they tore off'

vs. /I/	/bri/	'the middle one'
	/Iri/	'they are yellow'
vs. /k/	/bereT/	'wart'
	/kereT/	'clan'
	/mqabru/	'it (f) disintegrates; rots'
	/mqakru/	'she calls the chickens'
vs. /g/	/boT/	'sail ship'
	/goT/	'ditch'
	/mbeT/	'soil'
	/mgeT/	'her mouth'
vs. /ŋ/	/mbeT/	'soil'
	*/mŋeT/	
vs. /q/	/bleq/	'a tin'
	/qleq/	'hole'
	/mbri/	'the middle one (f)'
	/mqri/	'it (f) shines, glitters'
vs. /h/	/UbleT/	'it (m) jingles'
	/UhleT/	'he overcomes'
4.1.3 /m/		
vs. /f/	/uqamra/	'he snarls at s.b.'
	/uqafra/	'he is nervous'
	/mraq/	'she tears'
	/fraq/	'travel expenses'
vs. /w/	/maaIn/	'she goes'
	/waaiIn/	'he goes'
vs. /u/	/ram/	'woman'
	/naU/	'man'
vs. /t/	/mleli/	'she does not participate'
	/tleli/	'I do not participate'
	/mali/	'she goes'
	/tali/	'I go'
vs. /d/	/nmor/	'you are still young'
	/ndor/	'you knock'
	/qomo/	'floor'
	/qodo/	'bamboo'
vs. /n/	/moT/	'she feels hot'
	/noT/	'cloth'
	/msor/	'she sews'
	/nsor/	'you sew'
vs. /r/	/fmaq/	'we (incl.) wear on the neck'
	/fraq/	'travel expenses'
	/mdma/	'it (f) is short'
	/mdra/	'it (f) is melted'

vs. /s/ /mala/ 'she cuts, chops'	4.1.4 vs. /n/ /fsaliT/ 'we (incl.) return'
/sala/ 'fire'	/nsaliT/ 'you return'
/mna/ 'her hand'	/tqefye/ 'I sharpen; I whet'
/sna/ 'moon'	/tqenye/ 'my lap'
vs. /l/ /memem/ 'her mother'	vs. /r/ /Iqafa/ 'they guess'
/memel/ 'medal'	/Iqara/ 'they stay'
/mayar/ 'fifty'	/mfaT/ 'she gives a baby its name'
/layar/ 'twenty'	/mraT/ 'it (f.) is sharp'
vs. /y/ /mmada/ 'its (f.) front'	vs. /s/ /fe/ 'about; because'
/myada/ 'its (f) mouth (of river)'	/se/ 'water'
/medi/ 'she lays down, puts down'	/mfoT/ 'it (f.) is finished'
/yedi/ 'their'	/msoT/ 'she looks at'
vs. /k/ /midi/ 'we (excl.) are from different places of origin'.	vs. /l/ /Ufon/ 'it (m.) is full'
/kidi/ 'wanderer'	/Ulón/ 'he boasts'
/mowo/ 'she burns; she bakes'	/fofo/ 'belt'
/kowo/ 'bumble-bee'	/folo/ 'dry field no longer used for cultivation'
vs. /g/ /tmaaq/ 'I am still awake'	vs. /I/ /fleli/ 'we (inc.) sit'
/tgaaq/ 'I report'	/Iléli/ 'they sit'
/tmaram/ 'I abuse her'	/lam/ 'we (excl.) two'
/tgaram/ 'I disturb her'	/laI/ 'they two'
vs. /ŋ/ /mgeT/ 'her mouth'	vs. /g/ /Uflaq/ 'his penis'
/ngeT/ 'doubt'	/Uglaq/ 'his reports'
/mgyan/ 'all of us (ex.)'	/fofo/ 'belt'
/ngyan/ 'the future'	/fogo/ 'we (incl.) make/have a field/garden'
vs. /q/ /mom/ 'she'	vs. /k/ /fidi/ 'we (incl.) have a different place of origin'
/qom/ 'this (f.)'	/kidi/ 'wanderer'
/qomoU/ 'small floor'	/tfiri/ 'I speed up'
/qoqou/ 'sickness'	/tkiri/ 'I am annoyed'
vs. /h/ /mahaT/ 'the fourth'	vs. /ŋ/ /fgyan/ 'all of us (inc.)'
/hahaT/ 'tattoo'	/ngyan/ 'the future'
4.1.4 /f/	vs. /q/ /tfqaqa/ 'I make a dam'
vs. /w/ /fafog/ 'we (incl.) are swelling'	/tqaqa/ 'my anus'
/wafog/ 'he is swelling'	/farog/ 'cork'
/farog/ 'we (incl.) are glad'	/qarog/ kind of parrot
/warog/ 'he is glad'	vs. /h/ /tfaT/ 'I give a baby its name'
vs. /t/ /fafan/ 'we (incl.) hold in our lap'	/thaT/ 'I am angry with s.b.'
/tafan/ 'I hold in my lap'	/kifa/ 'stick for fishing-rod'
/mqafiT/ 'she makes an inviting gesture with her hand'	/kiha/ 'cough'
/mqatiT/ 'she calls for help'	4.1.5 /w/
vs. /d/ /mfooro/ 'she teases'	vs. /t/ /waaIn/ 'he goes'
/mdooro/ 'she is in pain'	/taaIn/ 'I go'
/qafotw/ 'a small mast'	/weT/ 'child'
/qadotw/ 'starving'	/teT/ 'I; me'

vs. /d/	/Uwalo/	'he hides'		vs. /r/	/teT/	'I; me'
	/Udalo/	'he plaits'			/meT/	kind of small black bird
	/wawa/	'he cries'			/tewerm/	'I pass her'
	/wada/	'its (m.) front'			/rewerm/	'a big rest'
vs. /n/	/wot/	'he feels hot'		vs. /s/	/tasi/	'ocean, sea'
	/not/	'you feel hot'			/sasi/	'time, period'
	/UmbaIT/	'he plays'			/tawa/	'I cry'
	/nmbaIT/	'you play'			/sawa/	'always, as usually'
vs. /r/	/mwane/	'she asks for'		vs. /l/	/tolik/	'three'
	/mrane/	'her footprints'			/lolik/	'hole'
vs. /s/	/wen/	'area for hunting and sago preparation'			/toto/	'pure'
	/sen/	'cent'			/tolo/	'the tides; time'
vs. /l/	/wait/	'the left'		vs. /y/	/tomon/	'bamboo cylinder for keeping palm wine'
	/laIT/	'magician; witch'			/yomon/	'enemies'
	/mwua/	'her spirit'			/town/	'star'
	/mlua/	'she is soft, gentle, kind'			/yowon/	kind of tree
vs. /y/	/wafaT/	'he repairs/he binds st. together'		vs. /k/	/taaIn/	'I go'
	/yafaT/	'they repair'			/kaaIn/	'clothes'
vs. /k/	/kowo/	kind of beetle (esp. in palm trees)			/taUr/	'bow'
	/koko/	'chicken'			/kaUr/	'slave'
	/widi/	'he has a different place of origin'		vs. /g/	/tara/	'I creep'
	/kidi/	'wanderer'			/gara/	'sea'
vs. /g/	/mweT/	'she is still young; it (f.) is small'			/tarisw/	'my father in law'
	/mgeT/	'its (f.) opening (of door) mouth (of river)'			/garisw/	'a small match'
	/weliT/	'he waves'		vs. /n/	/tgyeT/	'my mouth'
	/geliT/	'slaver, slobber (n.)'			/ngyeT/	'prohibited'
vs. /ŋ/	/kowo/	kind of beetle			/tgaris/	'I draw a line'
	*/ŋowo/				/ngaris/	'kind of tree'
vs. /h/	/waaIn/	'he goes'		vs. /q/	/taqo/	'I am here'
	/haaIn/	'louse'			/qaqo/	'frog'
	/waT/	'he eats'			/tambo/	'spider'
	/haT/	'four'			/qambo/	'short sides of the roof'
4.1.6 /t/				vs. /h/	/toto/	'pure'
vs. /d/	/toto/	'pure'			/toho/	'small fishing net esp. used by women'
	/todo/	'I swing; I shake'			/taT/	'I eat'
	/tasi/	'ocean, sea'			/haT/	'four'
	/dasi/	'tie'		4.1.7 /d/		
vs. /n/	/tnii/	'I make them; napkins'		vs. /n/	/tdot/	See Appendix II
	/nnii/	'you make them'			/tnot/	'I know'
	/tosi/	'I point out'			/tdi/	'I fall'
	/nosi/	'you point out'			/tni/	'napkins for hygienical purposes'

vs. /r/	/mdoro/ 'it (f.) smarts'	vs. /s/	/nala/ 'you pay back'
	/mroro/ 'we (excl.) walk together'		/sala/ 'fire'
	/UdiriK/ 'it (m) is finished'	vs. /l/	/nemai/ 'you test them'
	/UririK/ 'it (m) is pale, yellow (of skin)'		/lemaI/ 'they are the persons who'
vs. /s/	/tdaIn/ 'I give way; I go way'	/nan/	'you (plur.)'
	/tsaIn/ 'I wrap food in leaves to roast it in the ashes'	/lan/	'you two, the two of you'
	/mda/ 'her nose'	vs. /y/	/nena/ 'your hands'
	/msa/ 'her head'		/yena/ 'their hands'
vs. /l/	/mdo/ 'she says'	vs. /k/	/nambin/ 'you appropriate'
	/mlo/ 'she hangs'		/kambin/ 'goat'
	/mdeIT/ 'her foot'		/nafir/ 'angel'
	/mleIT/ 'kind of kangaroo living in the trees'		/kafir/ 'heathen'
vs. /y/	/tdeqe/ 'I withdraw from'	vs. /g/	/mani/ 'she lulls (a child); lullaby'
	/tyeque/ 'I have a rest'		/magi/ 'she is dead'
	/tdir/ 'wall'		/yono/ 'their father'
	/tyir/ 'I grind'		/yogo/ 'they establish a field'
vs. /k/	/fdiri/ 'we (inc.) are to late to be present at the funeral'	vs. /n/	/ngaris/ 'you make a line'
	/fkiri/ 'we (inc.) annoyed'		/ngaris/ kind of tree
	/mdayoT/ 'we (excl.) are separated'		/ngyan/ 'all of you; you'
	/mkayoT/ 'we (excl.) are rich'		/ngyan/ 'the future'
vs. /g/	/tdlim/ 'I untie it (f)'	vs. /q/	/Inadla/ 'they let loose'
	/tglim/ 'I detest it (f)'		/Iqadla/ 'they become dented'
	/mdi/ 'she falls'		/nafuk/ 'you make a knot'
	/mgi/ 'she struggles'		/qafuk/ 'scrotum (testicles)'
vs. /n/	/tdge/ 'I give way'	vs. /h/	/naaIn/ 'you go'
	/tnge/ 'I ask for help'		/haaIn/ 'louse'
vs. /q/	/mdafaq/ 'she is an outsider'		/nayar/ 'eagle'
	/mqafaq/ 'she is in a hurry'		/hayar/ 'forty'
	/UdafqoK/ 'his nose bridge'	/r/	
	/UqafqoK/ 'his knuckle'	vs. /s/	/mraT/ 'it (f) is sharp'
vs. /h/	/tdambem/ 'I wake her up'		/msaT/ 'it (f) is torn out'
	/thambem/ 'I pursue her'		/tror/ 'I feed'
	/hadat/ 'custom'		/tsor/ 'I sew'
	/hahaT/ 'tattoo'	vs. /l/	/wron/ 'he is still alive'
4.1.8 /n/			/wlon/ 'he makes a joke'
vs. /r/	/tnenm/ 'I make it (f) pointed'		/IriiT/ 'they burn'
	/trenm/ 'I run after her'		/IliliT/ 'they are far away'
	/qonon/ 'name giving ceremony (8 days after the birth of the child)'	vs. /y/	/yewer/ 'they pass'
	/qoron/ 'string of a bow'		/mewer/ 'she passes'
vs. /s/	/neye/ 'you press heavily'	vs. /I/	/Igi/ 'they forced'
	/seye/ 'lasso used for catching birds'		/rgi/ 'thunder'
		vs. /k/	/rapor/ 'report (esp. at school)'
			/kapor/ 'chalk'

vs. /k/ /rawur/ 'redbrown loris'	vs. /h/ /saq/ 'knife'
/kawur/ 'slave'	/haq/ 'container used for extraction of sago flower from the pith'
vs. /g/ /eren/ 'fish'	/mseq/ 'it (f) is smooth'
/egen/ 'needle (made from bird bone)'	/mheq/ 'her tooth'
/gepe/ 'hairpin'	
/repe/ 'small waterway'	4.1.10 /l/
vs. /n/ /Urgi/ 'it (m) trembles'	vs. /y/ /lafi/ 'insect'
/Ungi/ 'he needs help'	/yafi/ 'they are sour'
vs. /q/ /treq/ 'I turn away'	/lasy/ 'sheets'
/tqeQ/ 'I cree in'	/yasy/ 'they invite them'
/romo/ 'leak'	vs. /k/ /luwa/ 'reptiles; scoundrel'
/qomo/ 'floor'	/kuwa/ 'broth'
vs. /m/ /mraaT/ 'it (f) is closed'	/lowo/ 'to combine'
/mhaaT/ 'she is angry'	/kowo/ 'bumble-bee; beetle'
/tran/ 'I pioneer; I open up'	vs. /g/ /mlili/ 'it (f) is blistered'
/than/ 'I shoot'	/mgili/ 'it (f) is funny'
4.1.9 /s/	/mleT/ 'she puts a liquid in a pot'
vs. /l/ /msis/ 'she wears a sarong'	/mgeT/ 'her opening'
/mlis/ 'it (f) is far away'	vs. /n/ /Ulgin/ 'he falls forward'
/msas/ 'she touches'	/Ungin/ 'he rubs his nose making a sound'
/mlas/ 'its (f) sheet; its (f) leaf'	vs. /q/ /tsyololon/ 'I insert'
vs. /y/ /siT/ 'sleeping room'	/tsyøqon/ 'I suck'
/yiT/ 'they'	/laK/ 'two'
/msoso/ 'she puts under seal'	/qaK/ 'corpse'
/myoso/ 'she is in the direction of'	vs. /h/ /laI/ 'they two'
vs. /k/ /srис/ 'mouse'	/haI/ 'oh, now; nothing, don't worry'
/kris/ 'dagger'	/mloK/ 'she picks up'
/sabel/ 'sword'	/mhoK/ 'she replaces'
/kabel/ 'cable, nylon string'	4.1.11 /y/
/sisi/ 'together'	vs. /k/ /layiT/ 'they two'
/kisi/ 'lath work, lathing'	*/lakiT/
vs. /g/ /msyat/ 'it (f) is broken'	/yowo/ 'they bake'
/mgyat/ 'she demands'	/kowo/ 'bumble-bee'
/IsiriK/ 'they are altogether wrong'	vs. /g/ /yandon/ 'they slander'
/IgiriK/ 'they shout'	/gandon/ 'corn, grain'
vs. /n/ /tsge/ 'I lead'	/yara/ 'they creep'
/tnge/ 'I need your help'	/gara/ 'sea'
/sgyet/ 'door'	vs. /n/ /ygyan/ 'they all'
/ngyeT/ 'prohibition'	/ngyan/ 'the future'
vs. /q/ /Usableq/ 'he already has a wound on his head'	vs. /h/ /yeIT/ 'they eat'
/Uqableq/ 'he becomes dented'	/heIT/ 'stop'
/msoli/ 'she goes quickly'	/maya/ 'kind of hardwood'
/mqoli/ 'she is mad'	/maha/ 'she did not like'

4.1.12 /k/	vs. /g/ /kyeT/ 'rumours' /gyeT/ 'mouth' /tkiri/ 'I am annoyed' /tgiri/ 'I stay without food'	vs. /T/ /teP/ 'tape' /teT/ 'I' vs. /U/ /tstoP/ 'I stop' */tstoU/
	vs. /ŋ/ /tkiri/ 'I am annoyed' */tniri/	vs. /I/ /koP/ 'direction' /kɔI/ 'bed'
	vs. /q/ /mloK/ 'she picks up' /mlɔq/ 'it (f) is unstable' /kafir/ 'heathen' /qafir/ 'a serious case'	4.1.17 /T/ vs. /K/ /teT/ 'I' /teK/ 'typewriter' */kokot/ /kokoK/ 'chicken'
	vs. /h/ /Ik̥ambar/ 'they are twins' /Ihambar/ 'they are together' /ħaaIn/ 'louse' /k̥aaIn/ 'cloth'	4.2 Vowel phonemes: oppositions
4.1.13 /g/	vs. /n/ /sigo/ 'kind of snail' */sinq/	4.2.1 /i/ vs. /ii/ /Usi/ 'his face' /Usii/ 'he sinks' /ingin/ 'ring' /iingin/ 'rattan frame with handle (of net)'
	vs. /q/ /gáda/ 'preserved fish or meat' /qáda/ 'cudgel' /UgyeT/ 'his mouth' /UqyeT/ 'he makes a sign'	vs. /e/ /taasi/ 'I am fit' /taase/ 'I sleep' /tsriT/ 'I dive' /tsreT/ 'I am wet'
	vs. /h/ /mgri/ 'its (f) branch' /mhri/ 'she climbs; she goes upstairs' /mgara/ 'she stayed' /mharā/ 'she goes till a certain point and not further'	vs. /o/ /erim/ 'only her' /erom/ 'sin' /tfdinm/ 'I knock against something (f)' /tfdonm/ 'I print batik'
4.1.14 /n/	vs. /q/ /oqou/ 'that (m., near Addr.)' */onoU/	vs. /a/ /msi/ 'her face' /msa/ 'her head' /tdi/ 'I fall' /tda/ 'my nose'
	vs. /h/* /mnaq/ /mhaq/ 'it (f) is shining'	vs. /y/ /sopi/ 'kind of alcoholic drink' /sopy/ 'a lot of soup' /sisi/ 'belonging to our group; together' /sisy/ 'pupils/participants in traditional educational system'
4.1.15 /q/	vs. /h/ /mqaq/ 'he digs' /mhaq/ 'it is shining'	
	vs. /q/ /theneI/ 'I lasso them' /theneq/ 'I search'	
4.1.16 /P/	vs. /K/ /hoP/ 'director' /hoK/ 'ear wax' /seP/ 'boss' /seK/ 'shag' /teP/ 'tape' /teK/ 'typewriter'	4.2.2 /e/ vs. /ee/ /tséle/ 'I throw away' /tséele/ 'I am in a dilemma' /mhéle/ 'she selects' /mhéele/ 'she peeps'
		vs. /v/ /twéoq/ 'I curl up my lip' /twuoq/ 'palm wine'

vs. /o/ /teT/	'I, me'	vs./oo/ /mslaa/ 'it (f) is sharp'
/toT/	'I am hot'	/msloo/ 'it (f) is dry'
/mseq/	'it (f) is slippery'	vs./ee/ /sqaam/ 'torch'
/msoq/	'she feels well'	/squeem/ 'quarrel'
vs. /a/ /sike/	'don't worry'	4.2.7 /uu/
/sika/	'cat'	vs./ii/ /msuuT/
/Use/	'it (f) is wet'	/msiiT/
/Usa/	'his head'	vs./oo/ /msuuT/
4.2.3 /u/		/msooT/ 'its marrow'
vs./uu/ /ubaT/	' <i>Averrhoa belimbi</i> '	vs./ee/ /msuuT/
/uubaT/	'medicine'	/mseeT/ 'cockroach'
/msusu/	'she pushes forward'	4.2.8 /ii/
/msūusu/	'she suckles'	vs./oo/ /msooT/
vs. /o/ /tqasut/	'I whistle'	/msiiT/
/tqasot/	'I fart'	vs./ee/ /msiiT/
vs. /a/ /tsuTm/	'I reminded her'	/mseeT/
/tsaTm/	'I cut it (f) up'	4.2.9 /oo/
/mkurus/	'she is slim'	vs./ee/ /Isloo/ 'they are dry'
/mkuras/	'she washes cloth(es) after soaking them in soap water'	/Islee/ 'they are in pain; they smart (of wounds)'
vs. /w/ /uworo/	'swinging, lurching'	/msyooT/ 'it (f) expands; it (f) swells'
/wuoro/	kind of tree (whose leaves are used to flavor food)	/msyeeT/ 'it (f) spouts; falls down in great quantities (esp. water)'
4.2.4 /o/		4.2.10 /U/
vs./oo/ /msoT/	'she looks at; she re- ognizes'	vs. /I/ /faU/ 'the small sagopalm, sa- gopalms'
/msooT/	'its (f) marrow'	/faI/ 'many sagopalms'
/mlo/	'it (f) barks'	/UsroIn/ 'he writes'
/mloo/	'it (f) hangs'	/IsroIn/ 'they write'
vs. /a/ /mslo/	'it (f) is dry'	/ U /
/msla/	'it (f) is sharp'	vs. /ɔ/ /taUr/ 'bow'
/Isamso/	'they are annoyed'	/taɔr/ kind of fish
/Isamsa/	'there are extraordinary of them'	4.2.11 /I/
4.2.5 /a/		vs. /e/ /ngait/ 'not'
vs./aa/ /tfas/	'I preserve'	/ngaeT/ 'to cook sago without previous soaking'
/tfaas/	'I spray'	4.3 The place of the stress is distinctive:
/mlaq/	'she is still awake'	
/mlaaq/	'she transports'	
4.2.6 /aa/		
vs./uu/ /msaaT/	'it (f) is torn'	/wqoIT/ 'wood'
/msuuT/	'she makes an inviting sound'	/UqoIT/ 'he pushes'
vs./ii/ /msaaT/	'it (f) is torn'	/wasI/ 'he is floating away'
/msiiT/	'it (f) is roasted'	/wasI/ 'he has a look at'
		/waasi/ 'it/he is suitable'
		/waasi/ 'not at all, without'

/t̪ali/	'sun, day, time'	/ao/	/taɔr/	kind of fish
/t̪ali/	'I go to'		/fao/	'loin cloth'
/w̪ambe/	'ladder'	/ae/	/tsae/	'I carry under my arm'
/wambe/	'he becomes'		/aen/	'bait'
/s̪ala/	'fire'	/aI/	/haIn/	'somebody's own'
/sala/	kind of tree		/tsaInm/	'I bundle it (f)'

## 5. Distribution of phonemes

### 5.1 Two place vowel clusters

V1 ↓	V2+	u	o	a	e	i	I	U	uu	oo	aa	ee	ii
u		+	+	+		+							
o			+	+		+	+						
a				+	+		+	+					
e				+	+		+	+					
i				+	+	+		+					
I													
U													
uu													
oo						+	+						
aa						+	+						
ee						+	+						
ii							+						

Table 7: Vowelclusters in Tehit

/uo/	/qmbuo/s/	'muscle, sinew'	/ia/	/mbian/	'operating'	
	/tmbuo/	kind of bamboo		/mqlia/	'she is floating'	
/ua/	/mlua/	'she is soft, moderate'	/ie/	/mbien/	'shells'	
	/kua/	'broth'	/ii/	/tgii/	'I force them'	
/ue/	/m̪ue/	'she is shining'		/talii/	'days'	
	/msue/	'she rushes past'	/iu/	/tsliliU/	'I walk on the side of it (m)'	
/uI/	/sqaduIn/	term of reference for a non-adult child who lost one or both its parents		/niU/	'thing (m), things'	
	/buI/	'prison'	/ooI/	/mqooIT/	'she pushes'	
/oa/	/ŋgroan/	'yesterday'		/sooI/	'side-dish'	
	/ml̪oana/	'it (f) is too wide (of clothes)'	/ooU/	/syooU/	'whom does it concern?'	
/oe/	/mqoe/	'she divides'		/aaI/	/haaIn/	'louse'
	/Isœq/	'they are lost'			/mbaaIT/	kind of yeast made from bark, used in manufacture of palm-wine
/oI/	/qoIT/	'overthere'	/aaU/	/tsqaaU/	'I stab him'	
	/tsroIn/	'I write'		/nqaaU/	'the pitiful'	
/ou/	/qou/	'he who is here'	/eeI/	/qeeI/	kind of rattan	
	/qmbous/	'side-dish (vegetables)'	/eeU/	/selēeU/	'small wooden crowbar'	
				/srēeu/	'fragrant grass used for cooking'	
			/iiU/	/tsliliU/	'I caress him'	
				/qmiiU/	'a lot of dust'	

## 5.2 Two place consonant clusters

p	b	P	f	m	w	U	t	d	T	r	n	s	l	y	I	k	g	K	n	q	h	#
p							+	+														
b								+	+	+	+	+										
P	+	+								+												+
f	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
m	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
w														+	+							
U	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
t	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
d		+	+					+	+	+	+	+										
T		+	+	+					+													+
r	+	+	+	+					+	+	+	+	+	+	+	+	+	+	+	+	+	
n	+	+	+	+					+	+	+	+	+	+	+	+	+	+	+	+	+	
s	+	+	+	+					+	+	+	+	+	+	+	+	+	+	+	+	+	
l	+	+	+	+					+		+	+	+	+	+	+	+	+	+	+	+	
Y																						
I	+	+	+	+										+	+	+	+	+	+	+	+	
k														+								
g														+								
K		+	+											+								
ŋ														++								
q	+	+	+																+	+		
h																						
#	+	+	+	+	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	

Table 8

/pt/ /ptápta/ 'to play soldier', /pr/ /tpréman/ 'I am a free man'.

/bd/ /bdaq/ 'powder', /br/ /braq/ 'fast; quick', /bn/ /qabneT/ 'local government', /bl/ /mqableT/ 'it (f) is empty', /by/ /simbyar/ 'bee'.

/Pm/ /tstoPm/ 'I stop her', /Pw/ /tlapw/ 'I hit him on the ears', /Ps/ /kaPser/ 'echo', /Py/ /ulaPy/ 'he hits them on the ears', /P#/ /suP/ 'soup'

/fp/ /fpáer/ 'we (incl.) pay', /fb/ fbémper/ 'we white-wash', /ff/ /ffáda/ 'our (incl.) colour', /fm/ /fmal/ 'our (incl.) tongue', /fw/ /fwet/ 'we are small', /ft/ /ftóma/ 'we are against', /fd/ /fdéfit/ 'our (incl.) ear(s)', /fr/ /fra/ 'leave', /fn/ /fnoot/ 'we (incl.) know', /fs/ /fsa/ 'our head', /fy/ fyafaT/ 'we have a wound, we are wounded', /fl/ /flis/ 'we are far away',

/fk/ /fkuurus/ 'we are skinny', /fg/ /fgyet/ 'our mouth', /fq/ /fqmat/ 'our stomach', /fh/ /fhen/ 'we are with blood', /f#/ /faf/ 'we'.

/mp/ /mpáer/ 'she pays', /mb/ /mbádet/ 'we (excl.) sow', /mf/ /mple/ 'we (excl.) are big', /mm/ /mmibi/ 'it (f) is smoky', /mw/ /mwane/ 'she asks for', /mt/ /mtamre/ 'six', /md/ /mdo/ 'we (excl.) say', /md/ /mdyan/ 'we are heavy', /mr/ /mróno/ 'her mother in law', /mn/ /mnoot/ 'she knows', /ms/ /msalo/ 'we quarrel', /ml/ /Usimlaq/ 'she is still awake', /my/ /myafat/ 'she has a wound', /mk/ /mkafir/ 'she is a heathen', /mg/ /mgihaq/ 'she tears off', /mq/ /mqlaK/ 'she is lost', /mh/ /mhan/ 'she shoots', /m#/ /saqm/ 'a big knife'.

/wn/ /wniT/ 'container for burning charcoal', /wl/ /wlin/ 'stairs', /wy/ /wyar/ 'crocodile', /wq/ /wqoIT/ 'tree'.

/Up/ /Upáer/ 'he pays', /Ub/ /UbadeT/ 'he sows', /Uf/ /Ufayar/ 'he sails', /Um/ /UmbáIT/ 'he plays', /Uw/ /UweT/ 'he is small', /Ut/ /Utahor/ 'he doesn't have enough', /Ud/ /UdaI/ 'he/it has holes', /baUT/ 'bolt' /Ur/ /Uraana/ 'he tells', /Un/ /UnoOT/ 'he knows', /Us/ /Uslón/ 'he catches', /Ul/ /Ulale/ 'he (is) below', /Uy/ /Uyafat/ 'he has a wound', /Uk/ /Ukiri/ 'he hates', /Ug/ /UgyéT/ 'his mouth', /Un/ /Ungongo/ 'he catches fishes with his hands', /Uq/ /Uqami/ 'he remembers', /U#/ /tséleU/ 'I throw him'.

/tp/ /tpáer/ 'I pay', /tb/ /tbor/ 'I bore', /tf/ /tfálikI/ 'I put them into', /tm/ /tmótmol/ 'I remember', /tw/ /twalism/ 'I caress her', /tt/ /ttoma/ 'I go against', /td/ /tdo/ 'I say', /tT/ /tTfa/ 'I touch', /tr/ /triT/ 'I burn s.th.', /tn/ /tni/ 'cloth used for hygienical purposes', /ts/ /tsi/ 'my face', /tl/ /tlófos/ 'I change s.th.', /ty/ /tyaqa/ 'I am angry', /tk/ /tkáyet/ 'I am rich', /tg/ /tgiha/ 'I cough', /tq/ /tqolq/ 'I slaughter', /th/ /thanw/ 'I shoot her'.

/dm/ /madma/ 'she is short', /dw/ /taridwa/ 'I accompany', /dr/ /drom/ 'drum', /dn/ /dnes/ 'thereafter', /dl/ /tsádlan/ 'I use a pillow for my head', /dy/ /dyáreq/ 'education', /dg/ /dger/ 'ravine', /dq/ /mádqe/ 'bunch (of fruit)'.

/Tf/ /teTfa/ 'I touch', /Tm/ /qwaTm/ 'the instalment of the brideprice', /Tw/ /msaTw/ 'she cuts him', /Ts/ /mqáTsi/ 'she does not allow sb. to participate', /Ty/ /IgyéTy/ 'their mouths', /T#/ /weT/ 'child'.

/rp/ /m̥arpaq/ 'she flounders', /rb/ /s̥arbaK/ 'sacred',  
 /rf/ /t̥ferfik/ 'I create', /rm/ /rmiT/ 'moss', /rw/  
 /rwe/ 'island', /rt/ /harta/ 'brideprice', /rd/  
 /mqordooq/ 'it (f) is broken', /rn/ /éernaIt/ 'food', /rs/  
 /tw̥arsaq/ 'I say hallo', /rl/ /wy̥arlaIT/ 'evil spirit  
 appearing in the shape of a crocodile', /ry/ /f̥atary/  
 'pier, landing-stage', /rk/ /rk̥aqa/ 'beach', /rg/  
 /t̥qorgim/ 'I cover it (f)', /rq/ /erqaT/ term of refer-  
 ence for a parent who has lost an adult unmarried child,  
 /rh/ /m̥ärhe/ 'she who opens her eyes wide', /r#/  
 /thomb̥or/ 'I wrap up'

/np/ /np̥aer/ 'you pay', /nb/ /nbraq/ 'you are fast',  
 /nf/ /nfaTm/ 'you give her a title', /nm/ /nm̥otmolm/  
 'you remember her', /nw/ /td̥oanw/ 'I take it (m) out',  
 /nt/ /ntakoor/ 'you are short of (money etc.)', /nd/  
 /t̥endir/ 'I touch', /nT/ /nTfa/ 'you touch', /nr/  
 /nr̥onom/ 'your mother-in-law', /nn/ /nnooT/ 'you in-  
 vite', /ns/ /ns̥amblitm/ 'your mind', /nl/ /nleT/ 'you  
 lick off', /ny/ /tq̥aIny/ 'I buy them', /nk/ /b̥anku/  
 'bench', /ng/ /n̥angi/ 'women', /nK/ /banK/ 'bank', /nq/  
 /nq̥aIT/ 'you bind', /nh/ /nhānam/ 'you recognize her',  
 /n#/ /nen/ 'you'.

/sp/ /spirbuI/ 'warder', /sb/ /mr̥osbi/ 'she lets the  
 water splash', /sf/ /sfa/ 'mountain', /sm/ /n̥asmit/  
 'the drunk, drunkard', /sw/ /md̥aswala/ 'she slides out',  
 /st/ /k̥asti/ kind of ball game, /sd/ /sde/ 'Tuna, *Thyn-*  
*nus tuninna*', /sr/ /sris/ 'mouse', /sn/ /snaU/ 'moon',  
 /sl/ /sl̥awa/ kind of folk song, /sy/ /syooma/ 'who?'  
 /sk/ /àske/ 'don't believe it', /sg/ /sgeTm/ 'big door',  
 /sq/ /sq̥aT/ 'comb', /sh/ /she/ 'courage', /s#/ /sris/  
 'mouse'.

/lp/ /t̥alpa/ 'I am not present', /lf/ /falfali/ 'as  
 fast as possible', /lm/ /imuón/ 'while', /lw/ /qolw/  
 'a male animal', /ld/ /saldaloq/ 'stove, fireplace in  
 kitchen', /ls/ /salsa/ 'traces of camp fire', /ly/  
 /qoly/ 'animal', /lg/ /lgiK/ 'attic, top floor', /lq/  
 /w̥alqeT/ 'he who pretends', /lh/ /wm̥alhoq/ 'he is ex-  
 hausted', /l#/ /smil/ 'east'.

/Ip/ /Ip̥aer/ 'they pay', /Ib/ /IbádeT/ 'they sow', /If/  
 /Ifayar/ 'they sail', /Im/ /imb̥aIT/ 'they play', /Iw/  
 /Iw̥eT/ 'they are small', /It/ /Itahor/ 'they do not have  
 enough', /Id/ /Idai/ 'they have holes', /Ir/ /Irāana/  
 'they tell', /In/ /InooT/ 'they know', /Is/ /Islon/  
 'they catch', /Il/ /Ilale/ 'they (are) below', /Ik/  
 /Ikiri/ 'they hate', /Ig/ /IgyeT/ 'their mouth(es)',  
 /In/ /Ingōngo/ 'they catch fishes with their hands',  
 /Iq/ /Iq̥ami/ 'they remember', /I#/ /buI/ 'prison'.

/kr/ /kr̥odya/ 'work', /kn/ /knoP/ 'button', /kl/ /IkloP/  
 'they are fit', /ky/ /kyar/ 'mat'.

/gr/ /magri/ 'that one is (f) brunch', /gl/ /glas/ 'glass',  
 /gy/ /ségyeT/ 'mouth of the river', /gh/ /meghiaq/ 'it  
 (f) torns out'.

/Km/ /tgiKm/ 'I rub her', /Kw/ /kokokw/ 'rooster', /Ks/  
 /laKsa/ 'a million', /Ky/ /mboKy/ 'kind of mushroom',  
 /K#/ /banK/ 'bank'.

/nk/ /b̥anko/ 'bench', /ng/ /wongir/ 'black heron', /nK/  
 /senK/ 'iron roof'.

/qb/ /qban/ 'the nubile women of the clan', /qf/ /teqfas/  
 'I clean and smoke fish, etc.', /qm/ /teqmaT/ /my stom-  
 ach', /qw/ /slaqw/ 'small bracelet', /qd/ /qdan/ 'dirt',  
 /qr/ /qr̥andos/ 'rubbish (esp. in gardens)', /qn/ /w̥eqnaq/  
 'he inherits', /qs/ /qsi/ 'wood fibres used for prepa-  
 ration of ropes', /ql/ /m̥eqli/ 'it (f) is mucous', /qy/  
 /qya/ 'bags', /qh/ /qhan/ 'war', /q#/ /mhaq/ 'it (f) is  
 shining'.

/hd/ /mahda/ 'the first (f)', /hr/ /hr̥anda/ 'tray', /hn/  
 /tehnaq/ 'I give', /hl/ /tehloIn/ 'I season', /hy/  
 /fehyas/ 'we decorate'.

## 6. The syllable

6.1 The syllable structure can be summarized  
 as: (C<sub>1</sub>) (C<sub>2</sub>) (C<sub>3</sub>) (C<sub>4</sub>) (C<sub>5</sub>) V (C<sub>6</sub>)  
 (C<sub>7</sub>) (C<sub>8</sub>). Whenever one or more con-  
 sonants occur in intervocalic posi-  
 tion they are prenuclear.

V	:/a/	'don't'
VC	:/af/	'we two'
VCC	:/aeTm/	'white cockatoo (f)
VCCC	:/osym/	'a great guidance'
CV	:/sala/	'fire'
CCV	:/tlo/	'I bring sb. to bed'
CCCV	:/m̥mbi/	'it is smoky'
CCCCV	:/tgdyafa/	'I make preparations'
CCCCCV	:/tm̥ngho/	'I choke'
CVC	:/mam/	'we (excl.)'
CVCC	:/fisy/	'form'
CVCCC	:/q̥asym/	'a big chopstick'
CCVC	:/msam/	'her head'
CCVCC	:/mbeTm/	'soil (f)'
CCVCCC	:/mhanym/	'it (f) is her own'

CCCVC	:/sŋgaT/	kind of fern ( <i>Aspidium aidus?</i> )
CCCVCC	:/m̥syosy/	'she gives birth'
CCCVCCC	:/m̥syosyw/	'she gives birth to him'
CCCCVVC	:/qrmbaT/	'handle'
CCCCVCC	:/tqndanm/	'my great plan'
CCCCVCCC	:/tqndasym/	'I blame her in public'
CCCCCVC	:/m̥brmbaq/	'parasitic plant ( <i>Loranthaceae</i> )'
CCCCCVCC	:/fndngerm/	'we (incl.) block it (f)'
CCCCCVCCC:	/fq̥ngrasyw/	'we (incl.) tear it (m) to pieces.'

## 6.2

In Tehit words of one to six syllables occur:

1. Syllable /mbol/ 'home'
2. Syllables /tmb̥ember/ 'I smear'
3. " /tityoqo/ 'coconut'
4. " /ts̥alowaniK/ 'I speak on behalf of s.b. else'
5. " /tityoqoqaqa/ 'all kinds of coconuts'
6. " /ts̥alowanikwanaK/ 'I only speak on behalf of s.o. else'

## 7. Text

### 7.1 Text: phonetic transcription

- 1 [n̥irānā f̥emr̥es.]
- 2 nā mādi māfi q̥ohojn.
- 3 mb̥ias ūq̥ajt sejāda ūv̥at w̥angit<sup>h</sup>.
- 4 nā mādi om m̥reū ws̥fūon ūq̥ānās ng̥ajt ūq̥azotis, j̥ezikgi mb̥ias w̥aq̥embenrit ow.
- 5 jejn sedādoq̥awaq, wi mānōs<sup>j</sup>: nā m̥re jn̥ot ng̥ajt<sup>h</sup>, q̥awaqnde r̥ānge q̥ej.
- 6 m̥ndēwanik<sup>h</sup>, jn̥ot āmo ūd̥o jejn āf̥e', j̥ein sebra matān.
- 7 nā m̥eq̥liia m̥gr̥oqeijn, tāfi māzēn mā:in sebra sm̥il, ērindē saūn ūf̥i, tāfi m̥mbliaq̥ ng̥ajt<sup>h</sup>.
- 8 w̥ethēn n̥ān j̥ewa fe Iq̥adot<sup>h</sup>, nānēgi 'j̥ori nāndēta n̥ān nā md̥odrār fe ērnejt ūmb̥osi'.
- 9 ?af̥owq̥ava w̥ari safarfl̥ ūmb̥a ni w̥aroq ūv̥sr̥et<sup>h</sup>, sāgo sāfa j̥egi', nā ej Iq̥om̥in.
- 10 tāli ūf̥i q̥o fl̥as<sup>j</sup>ao w̥adrār ow ws̥indik ūflān h̥ele', h̥ele m̥di māna ql̥en nājarw.

- 11 maz̥e nā jd̥ik q̥len nājar ūws̥ene w̥ati sebraūdi', ?ērindē ql̥en ow w̥aliq̥isloq̥.
- 12 maz̥e nā ūmb̥ah̥e w̥angit n̥ig̥ot w̥aroq n̥ān, sāmaq̥ ēri j̥el̥otisloq̥ sāgo'.
- 13 tāli m̥re ūf̥i q̥o fl̥as<sup>j</sup>ao w̥adrār ūv̥d̥: "ma:, ql̥en aw̥et n̥en, n̥s̥ene nā:in ja'."
- 14 ql̥en aw̥et om ms̥ene m̥mb̥aduw̥i mā:in sebraūd̥i māli sebraūq̥ro, m̥laq̥ mānā sejāda hōu'.
- 15 q̥lew ḁet om ms̥ene m̥atiq̥oli m̥al m̥do': "ts̥ene t̥emb̥aduw̥i, ts̥ene ts̥j̥āf̥a sedādo q̥awaq̥, se w̥idit<sup>h</sup>, sāvarfl̥e', m̥biās w̥aq̥emb̥engit<sup>h</sup>, ts̥a m̥d̥od̥or tāfi āgo', t̥edrik sejāda', s̥efl̥e, tāli āgo'."
- 16 j̥os̥o le m̥nde ūR̥o q̥o, fl̥as<sup>j</sup>ao w̥adrār ow ūv̥d̥:"j̥o', nd̥ri:is m̥beres se: n̥eq̥a for̥inmb̥ie:!"
- 17 maz̥e ql̥en aw̥et om ms̥ene m̥aq̥sa', nā mādi om ms̥atiq̥enq̥r̥owajn mānā', maz̥e ūdr̥ik d̥enēs sejāda ūv̥.
- 18 j̥ine wi nā ūd̥o s̥erēnōmb̥o q̥o ūs̥ot s̥āfa ram m̥emb̥i'.
- 19 "m̥bo nā m̥re j̥ezē āmo j̥eq̥ q̥o". nā om m̥esāng̥ir m̥awaīn.
- 20 fl̥as<sup>j</sup>ao w̥adrār ow w̥e:v̥itsi w̥d̥o: "s̥j̥ō.m̥a nānō:?"
- 21 nā ra: j̥ezē q̥ombideit raj Is̥āf̥it ūd̥o:"t̥et e:, q̥ond̥j̥ot t̥et<sup>h</sup>, t̥edi tā:In fe ūn̥im, ra: s̥j̥ō:ma n̥enō:?"
- 22 "fl̥as<sup>j</sup>ao t̥et<sup>h</sup>, t̥ari w̥amb̥an, t̥esiā", nā sāgo l̥ēma q̥om̥, n̥s̥j̥ā s̥āfa fe t̥et se: for̥inmb̥i sis̥iē:."
- 23 q̥ond̥j̥ot ūs̥j̥ā s̥āfa fe nā om, t̥es̥j̥ā w̥asen ūs̥j̥āh̥ok q̥od̥ose mānā q̥ond̥j̥ot fe ūq̥āin ng̥ait ni m̥re m̥nde ūR̥om̥.
- 24 q̥ond̥j̥ot w̥eq̥o h̥riēn maz̥e w̥ari nā mānō ūq̥ej j̥or̥inmb̥i s̥izi'.
- 25 fl̥as<sup>j</sup>ao w̥amb̥i ūmb̥aduw̥i w̥aze w̥erh̥enM, na m̥aroq̥ om m̥arinmb̥i s̥ros q̥awaq̥nde se w̥az̥a ūg̥o q̥o j̥ezē s̥izi ūj̥ere k̥ik̥isow.]

### 7.2 Text: Phonemic transcription

- 1 /nirāna femr̥es.
- 2 na mādi māli q̥ohojn.
- 3 mb̥ias ūq̥āIT seyāda ūv̥at w̥angit.

- 4 na madi om mre'U Usfuron Iqanas ngait Iqaso lis, jésikgi mbias wáqembenriT ou.
- 5 yeIn sedadoqawaq, wi mano syoo na mre Inoot ngait, qawaq nde ränge qéI.
- 6 mndewaniK, Inoot amo Idó yeIn ale, yeIn sébra matan.
- 7 na mqlia mqroqeIn, tali masen maaIn sébra smil, érinde saUn oli, tali mmbliaq ngait.
- 8 weT hen nyan yewa fe IqadoT, nangi yori nandla nyan na mdodrar fe éneIT ImboSi.
- 9 aloUqafa wari safarflle Umba ni waroq ou UsréT, sago sala yégi, na eI Igomin.
- 10 tali oli fo flasyao wadrar ou Usindik Uflan héle, héle mdi mana glen nayarw.
- 11 mase na Idik glen nayar ou Usene wali sébraudi, érinde glen ou walioli sloq.
- 12 mase na Imbahe wangit niqol waroq nyan, samaq éri yéloli sloq sago.
- 13 tali mre oli fo flasyao wadrar ou Udo:"maa, glen awéT nen, nsene naaIn ya.
- 14 glen awéT om msene mmbaduwi maaIn sébraudi mali sébraUqro, mlaq mana se yada hou.
- 15 glen aeT om msene malioli myal mdo: "tsene tmbaduwi, tsene tsyalá, se dado qawaq, se widiT, safar fle, mbias Uqembengit, tsa mdodor tali ago, tdrik se yada, se fle, tali ago."
- 16 yoso le mnde oqo fo, flasyao wadrar ou Udo: "yo! ndrie mbéres see nqa forinmbiee!"
- 17 mase glen awéT om msene maqsa, na madi om msalien qrowain mana, mase Idrik dnes se yada ou.
- 18 yine wi na Idó serenombo fo IsoT sala ram mmbi.
- 19 "mbo na mre yese amo yeq qo." na om msangir mawaIn.
- 20 flasyao wadrar ou weefiTSi Udo: "syooma nanoo?"
- 21 na raa yese fombideIT ráI Isalit Idó. "teT ee, qondyol teT, tdi taai fe onim, raa syooma nenoo?"
- 22 "flasyao teT, tarí wamban, tézia, na sago lémá qom, nsya sala fe teT see forimbi sisiee."
- 23 qondyol Usyá sala fe na om, tézia wasen fo

- 23 UsyáhoK qodose mana qondyol fe Uqain ngait ni mre mnde oqom.
- 24 qondyol Uqoyo hrien masé wari na mano éqeI yorinmbi sisi.
- 25 flasyao wambi Umbaduwi wase wrhem, na maroq om marinmbi sros qawaq nde se wasa ago fo jese sisi ryere kikisoU./
- ### 7.3 Text: Interlinear English translation
- 1 /nirana fe-mrës.  
story the-first
- 2 na m- ádi m- ali  
human-being they who are escaped they- to qohoin  
Kohoin
- 3 mbias U- qait se yada ó- U-  
mist it(m)- ties water mouth those they- rat wangit.  
covered completely
- 4 na m- ádi o-  
human being they- who are escaped those- m mre- U U- sfuron I- qanas (plur.) one- (m) his- eyes they- strong ngait I- qaso lis, j- ézikgi mbias not they- look far, they- penetrate mist w- á- qemben- riT ó- U he- who- covers- closely this- (m).
- 5 y- eIn se- dado- qawaq,  
they- from water- the other side- continuous wi mano- syoo- country across the sea, place another- who na mre I- noot ngait, qawaq human being some they- know not, continuous nde ränge q- ei till today this- (pl.)
- 6 mndewaniK, I- noot amo I- do y- although, then- know also they- say they- eIn ale, come from overthere (rel. lower than the S) y- eIn sébra matan. they- come from stream south.
- 7 na m- qlia m- qroqeIn, tali human being they- float they- wait, sun m- ásen m- áaIn sébra smil, it (f)- arises it (f)- comes stream east

erinde saUn      oli    tali m-        mbliaq  
 but     morning again sun it (f)- orbits  
 ngaIT.  
 not.

8 wet    hen nyan                y-        éwa fe  
 child red in (the-group) they- cry because  
 I-    qadoT, na-                ngi y-  
 they- hungry, human being- wife they-  
 ori    na-                ndla    nyan  
 together human being- husband in (-the-group)  
 na                m-    dodrar fe        éneiT  
 human being they- discuss about food  
 I-                mbosi.  
 it (pl.)- absent.

9 aloUqafa w-    ári        safar fle U-  
 wave     it (m)- together wind big they-  
 mba ni    w-    aroq o-U    U-    sret,  
 fight thing they- many those- they- wet,  
 sago sala y-        égi,                na  
 also fire it (plur.)- extinguished, human  
 e-I    I-    qomin.  
 being these they-cold.

10 tali óli    fo    flasyao w-    a drar  
 Day again then Flasyao he- who- is old  
 o-    U    U-    sindik    U-    flan    héle,  
 this-(m) he- stands-up he- draws lot,  
 héle m-    di    m-    ana qlen nayar- w.  
 lot it (f) falls it (f)- to bird eagle- (m).

11 mase' na                I-    diK    qlen nayar  
 then human being they- send bird eagle  
 o-    U    U-    sene w-    ali sebra-  
 this- (m) it (m)- flies it (m)- to stream-  
 U-    di,                éri-    nde    qlen  
 it (m)- falls (→West) only- until bird  
 o-    U    w-    ali-    oli    sloq.  
 this- (m) it (m)- to- again empty.

12 mase' na                I-    mbahe wangiT ni-  
 then human being they- order all    thing-  
 qol                w-    a-    røq    nyan,  
 wild (> animal) they- who- are many in (-the-  
 samaq    éri. y-    el    oli    sloq    sago.  
 group) in vain only they- to- again empty too.

13 tali mre' oli    fo    flasyao w-    a  
 day a    again thereupon Flasyao he- who-  
 drar    o-    U    U- do: "maa, qlen aweT  
 is old this- (m) he- says: "well, bird white-  
 nan, n-    sene n-    aaIn ya."  
 cockatoo you, you- fly you- go turn."

14 qlen aweT                o-    m    m-    sene  
 bird white - cockatoo this- (f) it (f)- flies  
 m-    mbaduwi m-    aaIn sebra-U-di  
 it (f)- passes it (f)- goes West  
 m-    ali    sebra- U-    qro,  
 it (f)- goes stream-it (m)- stands (> East),  
 m-    laq                m-    ana se    yada  
 it (f)- brings-itself it (f)- to water mouth  
 hoU.  
 extensive.

15 qlen aeT                o-    m    m-    sene  
 bird white cockatoo this- (f) it (f)- flies  
 m-    ali-    oli    m-    yal    m-    do:  
 it (f)- to- again it (f)- shouts it (f)- says:  
 "t- sene t- mbaduwi, t- sene t- syala,  
 "I- fly I- pass,    I- fly I- soar,  
 se-    dado-    qawaq,    se    wi-    diT  
 country- across- the sea, water place- or-  
 safar fle, mbias  
 dinary (>place of origin) storm big, mist  
 U-    qembengiT    t-    sa    m-    dodor  
 it (m)- covers closely, my- head it(f)- goes  
 t- ali ago,    t- driK    se  
 straight I- to upstream, I- penetrate water  
 yada, se    fle t- ali ago."  
 mouth, water big, I- to upstream."

16 y-    oso    le                m-    nde oqo  
 they- listen (prom. marker) they- as that  
 fo,    flasyao w-    a        drar o-    U    U-  
 and, Flasyao he- who- is old this- (m) he  
 do: "yo!    n-                drie  
 (m)- says: "come on! you(plur.)- pull-out  
 mberes    see    n-                qa    f-  
 anchor (pole) sothat you(plur.)- come we-  
 orinmbi-    ee!"  
 sail upstream- (exclamation) !"

17 mase'    qlen aweT                o-m    m-  
 thereupon bird white cockatoo this(f) it(f)-  
 sene m-    aqsa,                na-    m-  
 flies it(f)- leads-the-way, human being they-  
 a    di                o-m    m-    salien qrowain  
 who- are escaped these they- paddle follow  
 m-    ana, mase' I-    driK    dnes  
 they- to,    then then- penetrate and-then  
 se    yada o-    U.  
 water mouth this- (m).

18 y-    ine    wi    na                I-    do  
 they- in/on place human being they- say

serenombo fo I- sot sala ra-  
 Serenombo then they- see fire outside/o-  
     m m- mbi.  
 verthere- (f) it(f)- smokes.  
 19 "mbo na mre y- ese  
     probably human being some they- live  
     amo y- eq. qo." na  
     perhaps they- at/in here." human being  
     o- m m- sangir mawaIn.  
     this- (f) they- say together.  
 20 flasyao w- a drar o- U w- eefitsi  
     Flasyao he- who-is old this- (m) he- asks  
     U- do: "syooma nan- oo?"  
     he- says: "who you- (excl. marker)?"  
 21 na raa y- ese fombi- deIT  
     human being who they- live land- foot  
     ra- I I- salit  
     (>mainland) overthere- they they- answer  
     I- do: "teT ee, qondyl  
     they- say: "I (excl. marker) Khondyl  
     teT, t- di t- aaIn fe onim,  
     I, I- escape I- come via (cape) Onim,  
     raa syooma nen- oo?"  
     but/and who you- (excl. marker)?"  
 22 "flasyao teT, t- ari wamban, tesia,  
     "Flasyao I, I- together Wamban, Tesia,  
     na sago lema qo-m n- sya  
     human being also that-are these, you- give  
     sala fe teT see f- orinmbi  
     fire to I so that we- go up stream  
     sisi- ee."  
     together- (excl. marker)."  
 23 qondyl U- sya sala fe na  
     Khondyl he- gives fire to human being  
     o-m, tesya w- asen fo U -sya-  
     these, Tesya he- stands up and he-gives-  
     hoK qodo-se m-ana qondyl  
     in return bamboo-water it(f)-to Khondyl  
     fe U- qaIn ngait ni mre m-  
     because he- has not thing a it(f)-  
     nde oqo- m.  
     as that- (f).  
 24 qondyl U- qoyo hrien mase w- ari  
     Khondyl he- pack-up things and he- to-  
     na mano eqe-I y-  
     gether human being other those they-  
     orinmbi sisi.  
     go upstream together.

25 flasyao w- ambi U- mbaduwi  
     Flasyao he- turned [to the left] he- passes  
     w- ase wrhen- m , na m-  
     he- lives Wrhen- (f), human being they-  
     aroq o-m m- arinmbi sros  
     many these they- upstream straight ahead  
     qawaq nde se w-a sa  
     through as far as water it(f) that-is head  
     ago fo y- ese sisi ryere  
     upstream then they- live together hill  
     kikiso- U./  
     Kikiso- (m).

#### 7.4 Free English translation

- 1 The first story
- 2 The refugees <sup>1)</sup> go to Khohoin. <sup>2)</sup>
- 3 Mist covered the mouths of the rivers <sup>3)</sup> completely.
- 4 None of the refugees had eyes strong enough to penetrate the thick mist.
- 5 They came from the other side of the ocean but until today nobody knows exactly from which place.
- 6 Though they know that they came from somewhere South.
- 7 They floated and were waiting for the sun to rise in the East but the next morning the sun did not appear.
- 8 Their children were crying because they were hungry and the adults spoke with sorrow about the absence of food.
- 9 The waves and the wind besieged them and all their possessions became wet, their fire went out and they were cold.
- 10 The following day the old Flasyao <sup>4)</sup> drew lots, and they picked the eagle.
- 11 So, the people sent the eagle to the West but it came back without result.
- 12 Thereafter the people sent out every animal aboard, but in vain; they too came back without result.
- 13 Another time the old Flasyao said: "Well, white cockatoo, it is your turn to fly now."
- 14 The white cockatoo flew to the West than

14 turned to the East and arrived at an open river mouth.<sup>5)</sup>

15 The white cockatoo flew back and cried:  
 "I have been flying and soaring  
 I, who come from across the sea,  
 from our homeland.  
 Through violent storms and thick mists  
 I found my way to the mouth of  
 the big river and I went upstream."

16 When they had heard this, the old Flasyao said: "Come on, pull out the anchorpole, come and let's sail upstream!"

17 The white cockatoo led the way and the refugees paddled after it and entered the estuary.

18 When they came near a place called Serenombo<sup>6)</sup>, they saw the smoke of a fire.

19 "Somebody probably lives here," they said to each other.

20 The old Flasyao asked: "Who are you?"

21 The people who lived there on the banks answered: "I, I am Khondyol, I fled via Cape Onim<sup>7)</sup>, but who are you?"

22 "I am Flasyao, and here are also Wamban and Tesia and all the others. Give me fire and let us sail upstream together."

23 Khondyol gave them fire and Tesia gave Khondyol a bamboo water container in return, because he did not have a thing like that.

24 Khondyol packed his things and went upstream together with the others.

25 Flasyao turned [to the left] and settled in Wrhen<sup>8)</sup>. The others went straight up to the upper part of the estuary and settled on the hill Kikiso<sup>9)</sup>.

#### Notes

- (1) It is not known what caused them to fly.
- (2) Original name for Teminabuan.
- (3) Meant are the rivers Kaibus, Beraur, Keyen and Seremuk.
- (4) The leader of the group.
- (5) The river Kaibus.
- (6) Serenombo is located on the left bank of the estuary, a few kilometers

- from the coast.
- (7) Fak-fak.
- (8) Whren lies approximately 2 kilometers as the crow flies from Teminabuan. Flasyao ascended the left branch of the Kaibus, the Seribau.
- (9) The hill Kikiso lies in Teminabuan.

#### 7.5 Text: Free Indonesian translation

- 1 Ceritera pertama
- 2 Perpindahan manusia ke Khohoin
- 3 Kabut rapat menyelimuti muara-muara sungai itu dengan sempurnanya.
- 4 Para pengungsi itu tak satupun kuat matanya menatap jauh mengatasi kabut tebal itu.
- 5 Mereka datang dari seberang samudera, negeri mana itu sebenarnya tak seorangpun dapat mengatakannya hingga sekarang.
- 6 Meskipun demikian mereka tahu pasti kedatangan mereka dari sana, dari sebelah selatan.
- 7 Mereka, para pengungsi itu mengapung sambil menantikan matahari bangkit dari sebelah timur, namun hingga hari berikutnya pun matahari tak menampakkan diri.
- 8 Anak-anak kecil merengek lapar, para perempuan dan lelaki sangat kuatir karena tidak ada lagi sesuatu untuk dimakan.
- 9 Amukan ombak dan angin ribut membasahi segala sesuatu yang ada, begitu pula api yang dibawa menjadi padam sehingga orang-orang itu menjadi kedinginan.
- 10 Keesokan harinya Flasyao tua bangkit melepas undi, dan undian jatuh pada burung elang.
- 11 Lalu diutus oranglah burung elang itu ke arah barat namun burung itu ternyata kembali dengan hampa.
- 12 Kemudian diutus pula binatang-binatang lainnya, namun mereka pun tetap kembali dengan tak berhasil pula.
- 13 Dan pada kesempatan lainnya Flasyao tua berkata: "Kakatua putih, sekarang giliranmu, terbanglah pula."

- 14 Burung kakatua putih itu terbang dari arah barat melintas ke arah utara, tibalah ia pada muara sungai besar.
- 15 Burung kakatua putih itu terbang pulang, sambil berkata:  
 "Aku terbang melintas, aku terbang melayah seberang samudera, tanah asal.  
 Angin ribut, kabut selimuti  
 kepala ku menegak, tujuku ke atas  
 aku masuki muara, sungai besar tujuanku"
- 16 Setelah mendengar demikian, Flasyao tua itupun berkata: "Ayolah, cabut tiang penyanggah supaya kita mudik"
- 17 Lalu burung kakatua putih itu pun terbang mendahului dan para pengungsi itu berdayung mengikutinya kemudian barulah mereka memasuki muara sungai itu.
- 18 Tiba pada suatu tempat yang dinamakan Serenombo tampak oleh mereka asap api mengepul.
- 19 "Mungkin tempat ini telah dihuni orang lain." kata mereka satu sama lain.
- 20 Flasyao tua itu lalu menyapa: "Siapakah kamu?"
- 21 Orang yang berdiam di daratan itu kembali membala: "Aku, akulah Khonjol, aku mengungsi dengan melewati (tanjung) Onim; sedang kau siapa?"
- 22 "Aku ini Flasyao, aku bersama Wamban, Tesia dan semura orang ada di sini. Berikan aku api supaya kita mudik bersama."
- 23 Khonjol memberikan orang-orang itu api, Tesia lalu mengantikannya dengan bambu air (tabung air) karena Khonjol tidak memiliki sesuatu seperti itu.
- 24 Khonjol, setelah mengemas barang-barangnya iapun turut mudik bersama orang-orang itu.
- 25 Flasyao membelok ke kanan dan pergi menempati Wrhen, sedang orang lainnya terus memudik ke hulu sungai lalu bersama-sama menempati bukit Kikiso.

based on the Indonesian spelling system. Digraphs are used for the long vowel phonemes. Stress is not indicated.

Tehit phonemes	Suggested symbols	Indonesian symbols
/p/	/o/	p o p o
/b/	/oo/	b oo b
/P/	/u/	p u p, b u
/m/	/uu/	m uu m
/w/	/VIC/	w i w i
	/VUC/	u u
/t/	/I/(everywhere else)	t y t i
/d/	/U/(everywhere else)	d w d u
/T/	/ty/	t c t, d c
/r/	/dy/	r j r j
/n/	/ny/	n ny n ny
/s/	/ly/	s ly s ly
/f/	/sy/	f sy f sy
/l/		l l
/y/		y J
/k/		k k
/g/		g g
/K/		k k, g
/ŋ/		ng ng
/q/		kh
/h/		h h
/a/		a a
/aa/		aa
/e/		e e
/ee/		ee
/i/		i i
/ii/		ii

## 8.2 Text: in the proposed orthography

- 1 Nirana femres.
- 2 Na madi mali Khohoin.
- 3 Mbias wkhait seyada ow wrat wanggit.
- 4 Na madi om mrew wsfuon ykhanas nggait ykhoso lis, yesikgi mbias wakhembenrit ow.
- 5 yein sedadokhawakh, wi manosyoo na mre ynoot nggait, khawakhnde rangge khey.
- 6 Mndewanik, ynoot amo ydo yein ale yein sebra matan.

## 8. Orthography

### 8.1 For obvious reasons the orthography is

- 7 Na mkhlia mkhrokhein, tali masen maain  
sebra smil, erinde saun oli, tali mmbliakh  
nggait.
- 8 Wet hen nyan yewa fe ykhadot, nangi yori  
nandla nyan na mdodrar fe erneit ymbosi.
- 9 Aloukhafa wari safar fle wmba ni warokh  
ow wsret, sago sala yegi, na ei ykhomin.
- 10 Tali oli fo Flasyao wadrar ow wsindik  
wflan hele, hele mdi mana khlen nayarw.
- 11 Mase na ydik khlen nayar ow wsene wali  
sebraudi, erinde khlen ow walioli slokh.
- 12 Mase na ymbahe wanggit nikhol warokh nyan,  
samakh eri yeloli slokh sago.
- 13 Tali mre oli fo Flasyao wadrar ow wdo: "maa,  
khlen awet nen, nsene naain ya."
- 14 Khlen awet om msene mmbaduwi mmain sebrandi  
mali sebraukhro, mlakh mana seyada how.
- 15 Khlen awet om msene malioli myal mdo:  
"Tsene tmbaduwi, tsene tsyala, sedadokha-  
wakh, se widit, safar fle, mbias wkhem-  
bengit, tsa mdodor tali ago, tdrik seyada,  
se fle, tali ago."
- 16 Yoso le mnde okho fo, Flasyao wadrar ow wdo:  
"Yo! Ndrie mberes see nkha forinmbi ee!"
- 17 Mase khlen awet om msene maksha, na madi om  
msalien khrowain mana, mase ydrik dnes  
seyada ow.
- 18 Yine wi na ydo Serenombo fo ysot sala ram  
mmbi.
- 19 "Mbo na mre yese amo yekh kho." na om  
msanggir mawain.
- 20 Flasyao wadrar ow weefitsi wdo: "Syooma  
nan oo?"
- 21 Na raa yes<sup>e</sup> fombideit rai ysalit ydo: "Tet  
ee, Khondyol tet, tdi taain fe Onim, raa  
syooma nen oo?"
- 22 "Flasyao tet, tari Wamban, Tesia, ba sago  
lema khom, nsya sala fe tet see forinmbi  
sisi ee."
- 23 Khondyol wsya sala fe na om, Tesia wasen  
fo wsyahok khodose mana Khondyol fe wkhain  
nggait ni mre mnde okhom.
- 24 Khondyol wkhoyo hrien mase wari na mano

- 24 ekhey yorinmbi sisi.
- 25 Flasyao wambi wmbaduwi wase Wrhenm, na  
marokh om marinmbi sros khawakh nde se  
wasa ago fo yese sisi ryere Kikisow.

#### Footnotes

- 1) The following symbols have been used:

C	consonant
V	vowel
C-	unreleased
~	nasalization
ˇ	shortened
..	breathiness
V., V:	length
˘	rounded
—>	is realized as
#	presence of wordboundary
"	syllable boundary or morpheme boundary
/	or
~	in free variation with
-	relevant position in the syllable/word
[ ], / /	prominence peak
F	fricative
O	occlusive
N	nasal
vcl	voiceless
vcd	voiced
[ MWJIU ]	voiceless sounds

- 2) Before Mbrariri (also: Mariri) became into use as *lingua franca*, another language functioned as means of interethnic communication, the Onim language (in Tehit called [qsa']). Onim was spoken in Kaimana, the Onim peninsula (Fakfak), along the coast of the Maccluer Gulf, in the northern, southeastern and western part of the Bird's Head Peninsula and in the northern part of Raja Ampat. Tradition has it that this language was also used in commercial contacts with the Portugese. It was eventually replaced by Mbrariri since the relations with the inhabitants of the Vogelkop became more intensive with Ternate and Tidore. Onim is still known in the Tehit area by people of sixty years and older.
- 3) According to Simon Tesia (53 y.) and Anton H. Flassy (52 y.)

- 4) As framework for the description the theories of Trubetzkoy and Ebeling have been chosen; see also Stokhof 1979.

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\* \* \*

## Appendix I

## Some observations on Tehit grammar

The language shows two noun classes: those which occur with possession marking prefixes and those which do not. The former class consists of nouns denoting parts of a (greater) whole such as bodyparts, parts of a tree or house and those denoting kinship relations and similar notions. The latter class includes all other nouns.

Column A in matrix I shows all possessive prefixes occurring with class 1 nouns, column B the free possessive pronouns which precede class 2 nouns:

A B

		sing.	t	teda	tefe	
1st pers.	plur.	incl.	f	fafi		
		excl.	m	mami		
	dual	incl.	(1)af	(1)afafi		
		excl.	(1)am	(1)amami	(1)amefe	
2nd pers.	sing.		n	nena	nefe	
	plur.			nani		
	dual		(1)an	(1)anani	(1)anefe	
3rd pers	sing.	masc.	w	wowa	wefe	
		fem.	m	moma	mefe	
	plur.		y	yedi	yefe	
	dual		(1)ay	(1)ayyedi	(1)ayefe	

Matrix I

list

Preliminary classification,

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\* \* \*

There is no difference between 2<sup>nd</sup>. pers. sing. and plur. in Col. A and in the second variant of Col. B.

The same holds true for 1<sup>st</sup>. per. pl. excl. and 3<sup>rd</sup>. pers. sing. fem.

Below a few examples are given:

## Class 1 nouns

w- <sup>1</sup> afō *	'his older sister'
m- <sup>1</sup> ono	'her father, our (excl.) father'
y- <sup>1</sup> amon	'their older brother'
t- <sup>1</sup> hāno	'my sister'
f- <sup>1</sup> olo	'our (incl.) origins'
t- <sup>1</sup> deit	'my foot'
n-gri	'your branch (sing. and plur.)'
n-gyen	'your hair' (idem)

\*) In this appendix a simplified notation is used.

## Class 2 nouns

moma wqōit	'her tree'
wowa buku	'his book'
yēdi asāy	'their sugar'
fāfi qbāti	'our (incl.) tobacco'
māmi mbol	'our (excl.) house'

The possessives used with class 2 nouns function attributively as well as predicatively:

buku wowa 'the book(s) is/are his'

In class 1 nouns with an initial stemvowel the possessive prefix is obligatory. Nouns with an initial stemconsonant occur also without a possession marker but then they have

(a) a generic reference:

t-éna 'my hand'

\* ena

m-feli 'her vagina'

feli 'vaginas, the vagina, a vagina'

or (in combination with another noun)

(b) an indefinite reference:

wqoit deit '(a) tree root(s)'

tree root

vs. wqoit m-deit 'roots of the tree(s)'

tree its(f)-root

N.B. A similar effect is also obtained with all class 1 nouns by replacing the poss. suff. by *na-* for humans and *ni-* for non-humans:

na - óno 'father; fatherhood'

man - father

ni - ólo 'origins'

thing-origin

ni - feli

thing- vagina 'things pertaining to/in connection with the vagina, etc.'

	s.	pl.	du.
1	t-ono	f-óno	(1)a-f-óno
		m-óno	(1)a-m-óno
2	n - óno		(1)a-n-óno
3	w-óno	y-óno	(1)a-y-óno
	m-óno		

Matrix II: Class 1 nouns in initial stemvowel:

- ono 'father'

	s.	pl.	du.
1	tsi-tési	fsi-fési	(1)afsi
		msi-mési	(1)amsi
2	nsi-nési		(1)ansi
3	wsi-wési	ysi-yési	(1)aísi
	msi-mési		

Matrix III: Class 1 nouns in initial stem consonant: - si-esi 'face'

The possession markers from Matrix I show a great similarity with the independent personal pronouns:

		sing.	plur.	dual
1	incl.	tet	faf	(1)afaf~laf
	excl.		mam	(1)amam~lam
2		nen	nan	(1)anán~lan
3	masc.	wow	yit *)	(1)ayit~lay
	fem.	mom		

\*) also yiy, yey and iit.

#### Matrix IV

The pronouns distinguish between 1<sup>st</sup>, 2<sup>nd</sup> 3<sup>rd</sup> person in singular, plural and dual. In the third pers. sing. there is an opposition masc. vs. fem., which is neutralized in the third pers. plur. and dual. In the first pers. plur. and dual the pronoun distinguishes between 'inclusive we' and 'exclusive we'.

The third person pronouns show a stemvowel alternation between non-front-vowel (singular) and front-vowel (non-singular). In all other persons an alternation in the opposite direction is demonstrable.

The free prs. pronouns are used as (optional) subject forms as well as object forms:

(tet)	t-	sot	mom	'I see her'
I	I-	see	her	
(yit)	y-	sot	la- n(áñ)	'they see you two'
they	they-	see	two- you	
(faf)	f-	sot	yit	'we see them'
we (incl.)	we-	see	them	

1 <sup>st</sup> pers.	sing.		t	
	plur.	incl.	f	
		excl.	m	
	dual	incl.	(1)af	
2 <sup>nd</sup> pers.	sing.		n*)	
	plur.	plur.		
		dual	(1)an	
	3 <sup>rd</sup> pers.	sing.	w	
3 <sup>rd</sup> pers.		masc.		
		fem.	m	
		def.	+ H(uman)	
		- H	w	
		indef.	y	
		dual	(1)ay	

#### Matrix V

\*) In addressing a person/persons a Tehit speaker often uses the third pers. form instead of the second pers. form. This usage indicates the speaker's irritation and/or anger with the addressee or his respect for him; it suggests "distantness", compare:

-ngwen 'lazy' : m-ŋwen-m! 'you (f.s.) are lazy!'  
w-ŋwen-w! 'you (m.s.) are lazy!'  
y-ŋwen-y! 'you (plur.) are lazy!'  
instead of: \*n-ŋwen 'you (s. and plur.) are lazy !'  
m-ndloq-m! 'you (f.s.) are a whore!'  
etc.

Matrix V shows prefixes which function as obligatory subject markers with the verb and with predicatively used adjectives. The third person non-dual markers occur also as suffixes with verbs and nouns. In the former case they function as object markers. Again, no difference is made between 2<sup>nd</sup> pers. sing. and plur. However, in several cases alternation of the stem vowel (s) in singular vs. non-singular forms prevents ambiguity, e.g.

nāain 'you go'	vs. nēin 'you (plur.) go'
nat 'you eat'	vs. nēit 'you (plur.) eat'
nāse 'you sleep'	vs. nēse 'you (plur.) sleep'
nāsuk 'you defaecate'	vs. nōsik 'you (plur.) defaecate'
nāmbe 'you become'	vs. nimbe 'you (plur.) become'
nādik 'you carry'	vs. nōdik 'you (plur.) carry'
nāaqo 'you drink'	vs. nōoqo 'you (plur.) drink'

see also Matrix I, IV, VII and VIII for other cases with two different stem vowels depending on singularity or non-singularity.

In the third person prefixes which function as subject markers there is an opposition demonstrable between masculine vs. feminine in the singular. The plural falls into two classes: definite vs. indefinite (or neutral). The indefinite 3<sup>rd</sup> pers. plur. is expressed by *y*, the definite 3<sup>rd</sup> pers. plur. by *m* for +H nouns (thus coinciding with 3<sup>rd</sup> pers. sing. fem.), and by *w* for -H nouns (coinciding with 3<sup>rd</sup>. p. sing. masc.):

verb with alternating stem vowel	verb without alternating stem vowel
to go	to see

t-āain	'I go'	t-sot 'I see'
n-āain	'you (sing.) go', etc.	n-sot 'you (sing.) see', etc.
w-āain	(1)he,(2)they(-H),e.g.pigs, ships(def.)	w-sot
m-āain	(1)she,(2)they(+H),e.g.men, women(def.)	m-sot
f-ein	'we (incl.)'	f-sot
m-ein	'we (excl.)'	m-sot
n-ein	'you (plur.)'	n-sot
y-ein	'they (indef.)'	y-sot
(1)a-f-ein	'we two (incl.)'	(1)a-f-sot
(1)a-m-ein	'we two (excl.)'	(1)a-m-sot
(1)a-n-ein	'you two'	(1)a-n-sot
(1)a-y-ein	'they two'	(1)a-y-sot

The *w*, *m* and *y* suffixes function as object markers with the verb. However, then the reduced system of oppositions as indicated in matrix I and IV holds true:

w "masc. sing."	vs. m "fem. sing."	vs. y "plur."
(tet)	t-	sot- m
(I)	I-	see- her
(yit)	y-	sot- w
(they)	they-	see- him
(nen)	n-	sot- y
(you)	you-	see- them

Nouns occurring with the suffixes *m*, *w* or *y* are marked versus those with *ø* which are unmarked for number and gender and which often have a generic reference (see matrix VI). We have categorized the Tehit nouns provisionally into two main classes: Human vs. non Human. Non-Human nouns are divided into two subcategories: Animate vs. non-animate. Non-animate nouns in turn fall into two subclasses: big things, units, wholes vs. small things, parts of a whole.

In +H nouns and +A nouns *w* and *m* indicate "sing. masc." and "sing. fem.", respectively:

mqan-m	'dog (female), bitch'
mqan-w	'dog (male)'
vs. mqan	'dogs, dog'
na-m	'woman'
na-w	'man'
vs. na	'human being, people'
sma-m	'wife'

sma-w	'husband'
vs. sma	'spouse, married people'
wet-m	'girl'
wet-w	'boy'
vs. wet	'child, children'

In nouns representing male or female beings *w* and *m* often have a definite reference:

ndla	'husband'
ndla-w	'the husband'

Needless to say, possession markers give the phrase a definite specific reference too:

t'eda mqan-m	'my bitch'
t-sma-m	'my wife'

At this stage of our investigation it is difficult to say which suffix has to be assigned to -A nouns. There is a group which allow both of them and where *w* stands for "smallness" "being part of a whole" and "definiteness" and *m* for "bigness" being an unit" and "definiteness":

wqoit	'tree, trees'	mbol	'house, houses'
wqoit-m	'the big tree'	mbol-m	'the big house'
wqoit-w	'the small tree, the trees'	mbol-w	'the small house, the houses'
t-éna	'my hand, my hands'		
t-éna-m	'my hand, my whole hand'		
t-éna-w	'my hand, part of my hand'		

But in other cases the choice is unpredictable and should be indicated in the dictionary. Examples are:

w:snaw	'moon'	m:fombim	'land, mainland'
maruw	'lake'	talim	'sun'
taliw	'day'	ronm	'life'
qadotw	'famine'	qesikm	'love'
tambraw	'jungle'	egim	'death'
qoqow	'illness'	qolm	'bad and wild spirit'
qahew	'torrent, flood'		

When *m* occurs with +H nouns and *w* with -H nouns they may also have a plural definite reference:

na-m	'the people; the men; the women'
sma-m	'the married couple; the wives; the husbands'

ndla-m	'the husbands'
wet-m	'the children'
mqan-w	'the dogs'
mbol-w	'the houses'
sika-w	'the cats'
wqoit-w	'the trees'

Plural indefinite reference is designated by *y* if the stem is not preceded by a possession marker:

sma-y	'married people'
na-y	'people'
ndla-y	'husbands'
mqan-y	'dogs'
mboly	'houses'
wqoity	'trees'

Words such as *sugar*, *sand* normally take -y:

kindi-y	'sand'
asay	'sugar'

		-H			
		-A			
		+H	+A	+big (a whole)	-big (part of a whole)
marked	sing.	msc. (def.)	w		
		fem. (def.)	m		
	plur.	def.	m	w	
		indef.		y	
unmarked/generic				ø	

Matrix VI

examples: qorik	'pig, pigs'
qorikw	'(1) the boar, (2) the pigs'
qorikm	'the sow'
qoriky	'pigs'
t-qain kindi	'I buy sand'
" kindiy	'I buy sand; several kinds of sand'
" kindim	'I buy the heap of sand'
" kindiw	'I buy part of the sand, I buy the heaps of sand'

Compare the meaning of the following SV clauses:

wet(-w)	w-aaain	the boy goes	(+H)
qorik(-w)	w-aaain	(1) the boar goes	(+A)
		(2) the pigs go	(+A)
kapal(-w)	w-aaain	(1) the small ship goes	(-A)
		(2) the ships go	(-A)
wet(-m)	m-aaain	(1) the girl goes	(+H)
		(2) the children go	(+H)
qorik(-m)	m-aaain	'the female pig goes'	(+A)
kapal(-m)	m-aaain	'the big ship goes'	(-A)
wet(-y)	y-ein	'children go'	(+H)
qorik(-y)	y-ein	'pigs go'	(+A)
kapal(-y)	y-ein	'ships go'	(-A)

w, m, y function as phrase boundary markers:

wet-m	but wet qo-o-m	'that child (near Addr.)'
(tet) t-sya	siröt	'I give letters'
(tet) t-sya	siröt tolky	'I give three letters'

Reduplication with the noun indicates plurality too; there are two types:

- (1) with stem vowel alternation, signalling: variation, diversity,
- (2) without stem vowel alternation, indicating: distributivity, grouping, e.g.:

wqoit-wqoit	'(several) clusters of trees, threes dispersed over the area'
wqoit-qat	'all kinds of trees'
vs. wqoit-w	'the trees'
wqoit-y	'trees'
wqoit	'tree, trees'
wet-wet	'several (little) groups of children'
wet-at	'all kinds of children'
mbol-mbol	'several clusters of houses'
mbol-mbal	'all kinds of houses'
qoqo-qoqo	'serious illness/diseases, appearing frequently'
qoqo-qaqqa	'all sorts of diseases'
sapu-sapu	'several clusters of broom'
sapu-sapa	'all sorts of brooms'

Semantic functions such as recipient, beneficiary, instrument, direction, time, location, etc. are expressed by prepositional

phrases. When used with transitive verbs the prepositions show agreement with the preceding object. Some have stem vowel alternation between sing. and non-singular forms:

singular	non-singular	
-aq	-eq	'at, in'
-ali	-oli	'to'
-aaain	-ein	'from'
-ana	-ine	'for', 'to'

### Matrix VII

Examples are:

(tet) t-sya siröt- m	I - give letter- fem.	'I give the letter'
(tet) t-sya siröt(-m) m-ana nen	fem-to you to you'	
(tet) t-sya siröt(m) m-ana yit	'I give the letter they to them'	
(tet) t-sya siröt(y) y-inen	wow/ mom / yit / nen, etc.	
	plur-to he /she / they / you	
	'I give the letters to him, her, them, etc.'	
(mom) m- mba	(tet) t-ari hamer	
she she- hits	I I-with hammer	"she hits me with a hammer"
(mom) m-mba	(tet) t-ari hamer t-aq pasar	
	I-in marketplace	
	'she hits me with a hammer in the marketplace'	
(faf) f-mba	(mom) m-ari hamer m-aq pasar m-ari ngrōan	
we we(incl.)		yes-
		terday
	'we hit her yesterday with a hammer in the market-	
	place'	
siröt m- aaain	(tet) t- aq	
letter she- from	I I-in/at	'the letter comes from me'
(mom) m- sya buku(y)	y- ein pasar y-	
(she) she- gives book (-plur.)	they- from market they-	
ine f-	eme- m	
to our(incl.)	- mother- fem.	'she gives books from the market to our mother'
(tet) t-sya buku m- ana	wet hnyo- w	
I I-give book fem-	to child nice- male	
	'I give the (big) book to the nice boy'	

Tenses are not indicated with the verb,

but must be inferred from the context (modal auxiliaries and/or lexical clues).

ngroan (mom) m- mba t- ari hamer  
yesterday (she) she- hit I- with hammer  
'Yesterday she hit me with a hammer.'

m-do/maam m-sroin sirot̩y.  
she-plans/she will she-writes letters  
'She will write letters'  
ngroan maam m-sroin sirot̩y  
yesterday  
'Yesterday she wanted/planned to write letters.'  
(mom) m-do m-sroin wale buku-m  
she she-will/she-plans she-writes finish book'  
'She will/plans to finish the writing of the book.'  
ngroan (mom) m-do m-sroin wale buku-m  
'Yesterday she planned to finish the writing of the book.'

		base		masc.	fem.	plur.			
		S	'this'	sing.	plur.	qow	qom	qey	1
		A	'that'	qo-	qe-	oqow	oqom	eqey	2
distant	spatial	'that over-there on the other side'		ana-		anaw anam anay			3
		'that relatively lower than S/A, in the middle of'		ale'		alew ale'm ale'y			4
cata-phoric	temporal	'that what is to be expected'							5
anaphoric		'that what happened'		-aqo-	-eqe-	waqow maqom yeqey			
distant	spatial	'that relatively higher than S/A'; outside'		ra-		raw ram ray			6
		'that at either end of a road, river, etc.' (further than (3))		qoit-	qeit-	qoitw qoitm qeity			7
anaphoric		'this, that known to S and A'		o-	e-	ow	om	ey	8

Examples are:

- 1 /fan qom/ 'this road (near S)'
- 2 /fan oqom/ 'that road (near A)'
- 3 /fan anam/ '(I) that road over there (not near S or A)'  
'(2) that road on the other side (relatively lower than S or A)'
- 4 /fan ale'm/ 'the/that road (which we are planning to take)'
- 5 /fan maqom/ 'the/that road (which we have taken)'
- 6 /fan ram/ 'that road outside (relatively higher than S or A)'
- 7 /fan qoitm/ 'that road over there (slightly sloping), (either) end of the road'
- 8 /fan om/ 'the road you know; known to us'

qom and qow may be combined with sets 1, 2, 3, 4, 5, 7, to indicate 'a high degree of proximity' in the literal as well as in the meta-phonical sense.

qom occurs with masc. and plur. forms, qow with the fem. form, e.g.:

- |          |  |
|----------|--|
| qomqom   | 'this very near to me (f)'                   |
| qowqow   | idem (m)                                     |
| qomqey   | 'these very near to me'                      |
| qomoqom  | 'that very near to you (f)'                  |
| qowoqow  | idem (m)                                     |
| qomeqey  | 'those very near to you'                     |
| qomaqom  | 'that what just happened to me (f)'          |
| qowaqow  | idem (m)                                     |
| qomqoitm | 'that over there at the end of the road (f)' |
| qowqoitw | idem (m)                                     |
| qomqeity | idem (plur.)                                 |

Deictics in combination with the independent personal pronouns occur in the plur. form (in 'y) only, though the pronoun may designate one person:

- |          |                       |
|----------|-----------------------|
| tet qey  | 'I, here'             |
| faf qey  | 'we, we here (incl.)' |
| yit eqey | 'they over there'     |
| yit qey  | 'they here'           |
| nen qey  | 'you here' (sing.)    |
| nan eqey | 'you there' (plur.)   |

## Appendix II

### Tehit Kinship Terms

Superscript  $\circ$  indicates "For Female ego", an asterisk stands for "For Male ego" and + means "deceased"

/t <sup>1</sup> onoU/	F, MH( $\neq$ F), HF(riend's)F,	/t <sup>1</sup> alwyetm/	HZ, Zy $\circ$ , MZYD $\circ$ , FBYD $\circ$ , FZD $\circ$ , FW $\circ$ (W $\neq$ M), FB $\circ$ D $\circ$ , MH $\circ$ D $\circ$ (H $\neq$ F), FDy $\circ$ ( $\neq$ Zy), MDy $\circ$ ( $\neq$ Zy), HF(riend's)Z
/t <sup>1</sup> emem/	M, MBD, FW( $\neq$ M), HF(riend's)M	/tafom/	HFD( $\neq$ HZ), HMD( $\neq$ HZ)
/taamuKw/	MB, MFBS, MFZS, MMBS, MMZS, FMBS		Zo, Bo $^1$ , Bo $^2$ , By $^1$ W $\circ$ , By $^2$ W $\circ$ , MBD, MZO $\circ$ D, MBSW, MZOSW, FBoD, FBoSW, FB $\circ$ SW $\circ$ , FZSW $\circ$ , FW $\circ$ D $\circ$ (W $\neq$ M), MH $\circ$ D $\circ$ (H $\neq$ F), FD $\circ$ ( $\neq$ Zo), MD $\circ$ ( $\neq$ Zo)
/taamuKm/	FZ, FFBD, FMBD, FFZD, FMZD		Zy*, Zo*, MBD*, MZD*, FBD*, FZD*, FWD*(W $\neq$ M), MHD*(H $\neq$ F), FDy*( $\neq$ Zy), FD $\circ$ ( $\neq$ Zo), MDy*( $\neq$ Zy), MD $\circ$ ( $\neq$ Zo)
/t <sup>1</sup> mbeleU/	FBo, FFBoS, FMBoS, FMZoS, MZO $\circ$ H, FFBoS, FMZoS,	/thanom/	Zy*, Zo*, MBD*, MZD*, FBD*, FZD*, FWD*(W $\neq$ M), MHD*(H $\neq$ F), FDy*( $\neq$ Zy), FD $\circ$ ( $\neq$ Zo), MDy*( $\neq$ Zy), MD $\circ$ ( $\neq$ Zo)
/t <sup>1</sup> mbelem/	MZO, MFB $\circ$ D, MMBD, MMZO $\circ$ D, FB $\circ$ W, FMBD, FMZO $\circ$ D, FW $^1$ ( $\neq$ M)	/t <sup>1</sup> areU/	HF, HBO, HMB, HFB, HMZH, HFZH, HFF, HMF, HFS $\circ$ , HMH( $\neq$ HF), HF(riend's)F, HF(riend's)Bo, HFS( $\neq$ HBO), HMS( $\neq$ HBO)
/t <sup>1</sup> qe <sup>1</sup> esim/	MZY, MFB $\circ$ D, MFZD, MMZYD, FB $\circ$ W FFZD, FMZYD, FW $^2$ ( $\neq$ M)		SW*, WZSW, WBSW, By $\circ$ W*, BSW*, ZSW*, MZYSW*, FZSW*, FB $\circ$ SW*, SW*, SSW*, DSW*, WSW(S $\neq$ ego's C), WF(riend's)SW
/tdoTw/	FFByS, FFZS, FMZY $\circ$ S, MZYH, FB $\circ$ , FFByS, FMByS, MH $^2$ ( $\neq$ F)	/t <sup>1</sup> arem/	HZ $\circ$ , Zo $\circ$ H*, MBDH, MZO $\circ$ DH, MZYDH*, FBoDH, FB $\circ$ DH*, FZDH*
/tryem/	MBW	/t <sup>1</sup> maITw/	Zy $\circ$ H $\circ$ , BDH, ZDH, MZYDH $\circ$ , FZDH $\circ$ , DH, FB $\circ$ DH $\circ$ , FZDH $\circ$ , SDH, DDH, WZDH, WBDH, HZDH, HBDH, HDH(D $\neq$ ego's C), WDH(D $\neq$ ego's C), HF(riend's)DH, WF(riend's)DH
/t <sup>1</sup> asyoloU/	MBS		
/t <sup>1</sup> asyolom/	MBD	/t <sup>1</sup> qonsyofou/	
/tafasw/	FZH, WBS		
/tafasm/	WBD, WBSW,		
/t <sup>1</sup> adeU/	FF, MF, BBS, BDS, ZSS, ZDS, MFB, MMB, FFB, FMB, WBDS, WBSS, WZDS, WZSS, HBDS, HBSS, HZDS, HZSS, SS, DS		
/t <sup>1</sup> adem/	FM, MM, BSD, BDD, ZSD, ZDD, MFZ, MMZ, FFZ, FMZ, WBDD, WBSD, WZDD, WZSD, HBDD, HBSD, HZDD, HZSD, DD, SD		
/t <sup>1</sup> qoqosw/	FFF, FMF, MFF, MMF, SSS, SDS, DSS, DDS	/t <sup>1</sup> efeT, t <sup>1</sup> efeweT, C, HC( $\neq$ ego's C), WC( $\neq$ ego's C), WZC, HBC, HZC, BC, ZC	
/t <sup>1</sup> qoqosm/	FFM, FMM, MFM, MMM, SSD, SDD, DSD, DDD	t <sup>1</sup> aweT/	
/twidinw/	FFFF, FFFM, MMMM, MMFF, etc., SSSS etc.	/t <sup>1</sup> efeTw, t <sup>1</sup> efeweTw, t <sup>1</sup> aweTw/	S, HS( $\neq$ ego's C), WS( $\neq$ ego's C), WZS, HBS, HZS, BS*, ZS $\circ$ , MBSS*, MBSD*, MBDS, MZSS*, MZDS*, MZDD, FBSS*, FBDS, FZSS*, FZDS, WF(riend's)S, HF(riend's)S,
/twidinm/	FFFM, FFMM, MMMM, MMFM, etc., DDDD etc.		
/tablalw/	FFFFF, MMMMF, etc., FFFFFFF, etc., SSSSS etc.	/t <sup>1</sup> efeTw, t <sup>1</sup> efeweTw, t <sup>1</sup> aweTw/	
/tblalm/	FFFFM, MMMMM, etc., MMMMMetc., DDDDD etc.		
/tamow/	Bo, MBS, MZO $\circ$ S, MZY $\circ$ S, FBoS, FB $\circ$ S $\circ$ , FZS $\circ$ , FW $\circ$ S $\circ$ (W $\neq$ M), FW $\circ$ S $\circ$ (W $\neq$ M), MHS $\circ$ O(H $\neq$ F), MHSy $\circ$ (H $\neq$ F), FSy $\circ$ ( $\neq$ By), FS $\circ$ ( $\neq$ Bo), MSy $\circ$ ( $\neq$ By), MS $\circ$ ( $\neq$ Bo), HF(riend's)Bo	/t <sup>1</sup> efeTqafeU/	FZS
/talwyetw/	FB $\circ$ y, By, MZY $\circ$ S*, FB $\circ$ S*, FZS*, FW $\circ$ S $\circ$ (W $\neq$ M), MHSy $\circ$ (H $\neq$ F), FSy $\circ$ ( $\neq$ By), MSy $\circ$ ( $\neq$ By), HF(riend's)By, HFS( $\neq$ HBy), HMG( $\neq$ HBy)	/t <sup>1</sup> efeTqafem/	FZD
		/t <sup>1</sup> awet dyaqan/	'adopted child'
		/tar <sup>1</sup> oU/	ZS*, MBDS*, MZDS*, FBDS*, FZDS*
		/tar <sup>1</sup> om/	ZD*, MZDD*, MBDD*, FBDD*, FZDD*
		/tal <sup>1</sup> oweTw/	BS $\circ$ , MBSS $\circ$ , MZSS $\circ$ , FBSS $\circ$ , FZSS $\circ$
		/tal <sup>1</sup> oweTw/	BD $\circ$ , MBSD $\circ$ , MZSD $\circ$ , FBSD $\circ$ , FZSD $\circ$
		/tsmaU/	H
		/tsmam/	W

/tsmaU(a)sadyeU/	H+	/tasyeU/	WB, WFBS, WMBS, WFZS, WMZS,
/tsmam(a)sadyem/	W+		WF(riend's)B, WFS( $\neq$ WB),
/tsmam(a)olom/	W <sub>1</sub>		WMS( $\neq$ WB)
/tsmam(a)eесем/	W <sub>2</sub>	/tasyem/	WZY, WBW, WFBYD, WMByD, WFZyD,
/tarisw/	WF, WMB, WFB, WMZH, WFZH, WFF, WMF, WMH( $\neq$ WF), FSy* ( $\neq$ By), WF(riend's)F,		WMZyD, WF(riend's)Z, WFD( $\neq$ WZY), WMD( $\neq$ WZY)
/tarism/	WZo, WM, WMZ, WFZ, WMBW, WFBW, WFM, WMM, WFBOD, WMBOD, WFZoD, WMZoD, WFW( $\neq$ WM), WF(riend's)M WFD( $\neq$ WZo), WMD( $\neq$ WZo)	/tfaInw/	BWB, ZHB, BWF, ZHF, SWF, DHF, SWB, DHB, SWZH, DHZH
/tronom/	HZSW, HBSW, HM, HMZ, HFZ, HMBW, HFBW, HFM, HMM, HMBW, BSW <sup>o</sup> , ZSW <sup>o</sup> , MZYSW <sup>o</sup> , SW <sup>o</sup> , FZSW <sup>o</sup> , HBSW, HZSW, SSW <sup>o</sup> , DSW <sup>o</sup> , HFW( $\neq$ HM), HSW(S $\neq$ ego's C), HF(riend's)M, HF(riend's) SW,	/tfaInm/	BWZ, ZHZ, BWM, ZHM, SWM, DHM, SWZ, DHZ, SWBW, DHBW
		/tmeIsw/	MBDS, WZH, WBDH, WF(riend's)H
		/tmeIsm/	MBDD
		/tamblem/	HBW, HF(riend's)W
		/tqombonw/	ZH(if Z+), HB(if H+), WB(if W+)
		/tqombonm/	BW(if B+), HZ(if H+), WZ(if W+)
		/angait/	'ancestors'

### Appendix III

#### Some Dutch loanwords

Dutch	Tehit	English
aannemer	/'anemer/	'contractor'
aanval	/maanfal teT/	'I have an attack'
afkeuren	/tafker/	'I condemn, I declare unfit'
album	/'albум/	'album'
ambachtschool	/hambaKsxol/	'technical school'
anker	/'aŋker/	'anchor'
atlas	/'atlas/	'atlas'
auto	/'oto/	'car'
bak	/bak/	'container'
band	/ban/	'belt, tires'
bank	/banK/, /baŋK/	'bank'
bank	/banko/	'bench'
batterij	/batreI/	'battery'
behandel	/tbahandel/	'I handle'
bier	/bir/	'beer'
bivak	/fefaq/	'bivouac'
blik	/bleq/	'tin'
blok	/blooK/	1) 'block' (noun) 2) 'block' (verb)
boei	/buI/	'prison'
boks	/boKs/	'playpen'
boon	/bon/	'bill'
boor	/bor/	'bore'
boot	/boT/	'sailship'
bout	/baUT/	'bolt'
breien	/mbreeI/	'she knits'

cake	/keeK/	'cake'
carnaval	/karnafal/	'carnival'
castorolie	/kaströli/	'castor-oil'
cement	/smeen/	'cement'
cent	/sen/	'cent'
centimeter	/sénti/	'centimeter'
centraal	/sentral/	'electricity works'
chef	/seP/	'boss'
christen	/kristen/	'Christian'
christus	/kristus/	'Christ'
cipier	/spirlbúI/	'jailer'
clerk	/klereK/	'clerk'
code	/kóde/	'code'
colli	/koli/	'package, case'
commissaris	/kómisaris/	'police-commissioner'
compact	/fkómpaK/	'we are in close cooperation'
competitie	/kómpetisi/	'competition' (of game)
complex	/kómpleks/	'block' (of building)
concept	/konsep/	'concept'
conditie	/kondisi/	'condition, situation'
conferentie	/kónfrensi/	'conference'
connectie	/koneksi/	'connections'
consequent	/kónsekwen/	'consistent'
constant	/kónstan/	'constant'
contact	/tkontak/	'I switch on' (of light etc.)
contant	/tkontan/	'I put s.b. to shame, I embarrass'
continu	/kontinyo/	'continuous'
contra	/kontra/	'contra'
contract	/kóntrak/	'contract'
controleur	/kontroler/	'kind of civil servant'

copra	/kɔpra/	'copra'	kalender	/k(a)lēndər/	'calendar'
corporatie	/kōperasi/	'co-operative store'	kanon	/kānōn/	'canon'
corvee	/korfēI/	'fatigue-duty'	kantoor	/kāntōr/	'office'
cylinder	/slinder/	'cylinder'	karton	/kārtōn/	'card-board'
daag!	/daa(h)!/	'bye'	karwei	/karfēI/	'fatigue-duty, corvee'
das	/dāsi/	'tie'	katapult	/kārtapel/	'catapult'
deficit	/dēfisit/	'deficit'	kerk	/kerK/	'church'
dek	/deK/	'deck'	kerkraad	/krekraT, kērkraT/	'church council'
dekken	/dēken/	'to guard, to cover'	ketel	/kētel/	'kettle'
deksel	/dēKsel/	'cover, lid'	keuren	/ker, kēren/	'to examine'
divan	/dipan/	'divan'	kleed	/klet/	'dress'
doek	/duK/	'handkerchief'	klep	/kleP/	'valoe'
doel	/tdūul/	'I kick at'	knoop	/knōP/	'button'
dok	/doK/	'dock'	koekjes	/kōkis/	'biscuits'
dokter	/dōkter/	'doctor'	komitee	/kōmite/	'committee'
doos	/doos/	'case'	kommandant	/kōmandan/	'commander'
draad (schroef)	/draaT/	'thread of a screw'	kommando	/tkōmando/	'I give orders'
dubbel	/tdobol/	'I do s.t. twice'	kommissie	/kōmisi/	'committee'
dynamo	/dinamo/	'dynamo'	kompas	/kōmpas/	'compass'
dysenterie	/dēsentri/	'dysentery'	konkreet	/kōnkrit/	'concrete'
echo	/eho/	'echo'	kraag	/kraK/	'collar'
electriciteit	/lēstriK/	'electricity'	kraan	/kran/	'tap'
emmer	/ember/	'pail'	kritiek	/tkritiK/	'criticize'
eternit	/etērnit/	'asbestos cement'	lamp	/lāmpu/	'lamp'
fabriek	/fābriK/	'works'	landbouw	/lānbou/	'agriculture'
familie	/fam(ili)/	'family'	landen	/lānden/	'to land'
foto	/foto/	'photograph, picture'	landings-vaartuig	/laanden/	'landingcraft'
fundatie	/fandāsi/	'foundation'	lap	/tlaaPm/	'I slap her in the face'
glas	/glas/	'glass'	lood	/loT/	'lead, sounding-lead'
goot	/goT/	'gutter'	maatschappij	/māskapeI/	'company'
gordijn	/horden/	'curtain'	mantel	/mantel/	'coat'
gouverneur	/gōbnor, gubernor/	'governor'	mast	/masT/	'mast'
handenarbeid	/Ihāndērar-beIT/	'they get manual instruction'	(ik) nood	/tnooTy/	'I invite them'
handdoek	/hāndoK/	'towel'	pak	/paK/	'parcel'
hemd	/heemT/	'shirt'	pan	/pan/	'pot'
hoek	/huk/	'corner'	passen	/pas/	'suits/fits well'
hoofd	/hoP/	'director'	pen	/pēn(a)/	'writing-pen'
hoofdagent	/hopahen/	'police sergeant'	pen, 'pin	/pēnen/	'dowel'
hospitaal	/hōspital/	'hospital'	pet	/peT/	'cap'
ijs	/es/	'ice'	pil	/pel/	'pill'
injectie	/miyēksi/	'she injects'	plafond	/plāfon/	'ceiling'
internaat	/internat/	'boarding school'	pot	/poT/	'pot'
jurk	/yorK/	'dress'	pro	/pro/	'pro'
kaart	/kaar/	'map'	radio	/rādiō/	'radio'
kabel	/kābel/	'cable'	raport	/rapor/	'report'
			regel	/rēger/	'ridge(?)'

rekenen	/treken/	'I calculate'	telefoon	/t̪alipon/	'telephon'
ring	/rin/	'ring'	toestel	/tustel/	'camera, apparatus'
ritssluiting	/riTsleT/	'zip-fastener'	tong	/ton/	'barrel'
rol	/rool/	'waffle'	veldbed	/falbeT/	'camp-bed'
rooster	/rooster/	'roster, timetable'	verdori!	/fordori!/	'the deuce!'
sabel	/sabel/	'machete'	vergadering	/ferhadriŋ/	'churchmeeting'
sandaal	/sndal/	'sandal'	vergroot	/t̪erhrot/	'I exaggerate'
servet	/sarpeT/	'cloth'	verpleger	/ferpleher/	'male nurse'
shag	/seK/	'tobacco shag'	verrek!	/farek/	'I do not care'
slof	/slooP/	'slipper'	vork	/porK, forK/	'fork'
spannend	/spanen/	'exciting'	vracht	/fraq/	'travel expenses'
stad	/staT/	'town'	zink	/senk/	'zinc'; 'iron roofsheets'
stop	/stoP/	'stop'	zonder	/sondor/	'without'
straat	/satraT/	'street'	zuster	/suster/	'nurse'
tekort	/tekoor/	'shortage'			

Jakarta 1979

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