OTHER MATERIALS

3. A NOTE ON SPELLING

The spelling systems used for G by Badudu and by Pateda differ in one major respect. The former writes all glottal stops except word initially, using q, and leaves out w and y after u and i respectively. The latter writes all w and y wherever they occur but no glottal stop. For instance, the sequence ua means uwa in the former's spelling and u?a in the latter's. Both alternatives give a consistent spelling. For the sake of clarity we use a combination of these spelling systems, writing all glottal stops, even word initially, as well as all w and y.

Badudu defines nt as a voiced consonant (konsonan bersuara, 1982:16). Therefore we write nd in words in which Badudu and Pateda use nt. Probably the d in nd is slightly different phonetically from the intervocalic or initial d.

For BM we use Dunnebier's spelling, apart from such usual replacements as u instead of oe.

4. THE G SOUND CHANGES

The Gorontalo sound changes which have been found in the comparative manner outlined above are listed below, each one illustrated by an example of BM-G cognates, and in a sequence which is a highly random one as it is determined to a large degree by the particulars of the available examples. Since many examples show simultaneously the effect of more than one sound change, the examples in the list have for the sake of convenience been selected in such a way that none of them shows the effect of a sound change mentioned lower in the list. The sequence of the sound changes listed has been adapted to this principle wherever necessary. In this way several sound changes are illustrated more than once but, besides at their proper place, only in examples occurring lower in the list.

Some further particulars applying to this list are the following.

1. The term 'sound change' is for the sake of convenience defined as applying to loss or addition of a phoneme as well as to change of one phoneme into another.

2. The figures in brackets (1), (2), etc., which are used to indicate the successive sound changes in the list, serve as references to the sound changes as they occur in the list wherever they are mentioned again in this article.

3. Single consonants mentioned in formulating the sound changes are always meant as those occurring either word initially or intervocalically. Where prenasalised consonants are meant, these are mentioned separately as such.

4. The words 'before', 'after', and 'following' as used in formulating the sound changes are always meant to denote the position *immediately* before or after a particular phoneme.

5. The BM-G cognates selected as examples in the list are always basically each other's exact semantic equivalents in both languages, except in two cases. In BM another word than anak (sub (6)) is in use for *'child'*, but there exist the derivations moŋanak meaning *'young, small (of children)'* and inanakan *'large family, clan'*. The second example mentioned sub (13) is the only example found of the change of -mbo- to -mu-.

6. List of sound changes:
(in arbitrary order)

		Examples: BM	G	
(1)	final ʔ was lost	pulu?	pulu	*'ten'*
(2)	final a became o	mata	mato	*'eye'*
(3)	k became ʔ	kita	ʔito	*'we'*
(4)	initial ʔ before i became y and before other vowels w	iko	yiʔo	*'you'*
		ata	wato	*'slave'*
(5)	o was added after final consonant	utat	wutato	*'brother'*
(6)	n became l	-anak	walaʔo	*'child'*
(7)	g became h	dugi	duhi	*'thorn'*
(8)	b before u became h	bulan	hulalo	*'moon'*
(9)	r became l	ruit	luwito	*'pointed'*
(10)	s became t	siku	tiʔu	*'elbow'*
(11)	mb became m	see (13) and (15)		
(12)	nd became n	tandip	tanipo	*'insert'*
(13)	o following b, mb, d, nd, g, became u	boli	buli	*'price'*
		kombot	ʔomuto	*'k.o. jambu / rose hip'*
		dolop	dulopo	*'dive'*
		bondot	bunuto	*'rotten'*
		agom	wahumo	*'submerge'*
(14)	a following b became o	batu	botu	*'stone'*
		bobag	bubohu	*'strike'*
(15)	a following mb, d, nd, g, ŋg became e	bombaŋ	bumeŋo	*'disperse'*
		dalom	delomo	*'deep'*
		tanda?	tane	*'birthmark'*
		bogani	buheli	*'brave'*
		naŋga	laŋge	*'nangka fruit or tree'*
(16)	mp became mb	ompu	wombu	*'grandchild'*
(17)	nt became nd	untu	wundu	*'carry on the head'*
(18)	ŋk became ŋg	paŋkul	paŋgulo	*'hit'*

5. THE POSITION OF THE BUNDA DIALECT

The Bd dialect is in an intermediate position between G and BM as regards the G sound changes listed above. Several of them have operated in Bd too, but some have not. There is, moreover, one sound change which is peculiar to Bd.

Because of the insufficiency of the quantity and reliability of the data available for Bd this dialect is discussed here briefly and in a very preliminary way. Several uncertainties have remained, some of which may be clarified when better data become available. But some may also be due to the influence of the G language, as G has a dominating position as regards Bd because of its much larger number of speakers and its cultural prestige. It is clear, however, that Bd in several respects is much closer to BM than G. Its intermediate position serves to give additional support to the reconstruction of the G sound changes from a different angle.

1. Final a has not changed, e.g. mata *'eye'*, but k became ʔ (3) and initial ʔ became w or y (4), e.g. ʔita *'we'*, yiʔo *'you'*, wata *'slave'*.

2. There are no final consonants because final ʔ was lost (1) and o was added after other consonants (5), e.g. pulu *'ten'*, wutato *'brother'*.

3. The consonants n (6), g (7), and b (8) have not changed, e.g. wanaʔo *'child'*, dugi *'thorn'*, bula *'moon'* (see 7.1.1.b. below).

4. But s changed into t (10) and mp into mb (16), nt into nd (17) and ŋk into ŋg (18), e.g. tiʔu *'elbow'*, wombu *'grandchild'*, bundu — G hundu — BM buntu *'dike'*, tuŋgudo — G tuŋgudu — BM tuŋkud *'stick'*.

5. Probably mb and nd did not change (11) and (12), e.g. tumbolo — G tumulo *'live'*, tundu — G tunu — BM tunduʔ *'show'*.

6. Probably o became u following b, d, and g (13) unless these were originally final consonants, e.g. buli *'price'*, duŋogo — G duŋohu — BM doŋog *'hear'*, gubi: — G huyi — BM gobii *'night'*.

7. Probably a did not change following voiced occlusive (14) and (15), e.g. batu *'stone'*, dalomo *'deep'*, bugani *'brave'*.

8. r did not change into l (9) but into h, e.g. hibu — G lihu — BM ribu *'thousand'*, habuto — G lahuto — BM rabut, yabut *'pull out'*, guhu *'teacher'* (Mal guru), tindaho — G tinelo — BM sindar *'shine, light'*.

9. Out of the 18 G sound changes 8 operated also in Bd (viz. 1, 3, 4, 5, 10, 16, 17, 18) and 8 did not (viz. 2, 6, 7, 8, 11, 12, 14, 15), one only partially (13) and one was different (9).

6. THE POSITION OF THE BWUOLO LANGUAGE

Because of the paucity of the data available for Bw only a few tentative conclusions can be made concerning the position of this language in comparison with G and BM. They seem to be sufficient, however, to establish that some of the same sound changes have operated in it as in G. For some of these changes only one example was available, however, and for some others none, so that several uncertainties remain to be clarified.

1. Final ʔ was lost (1), e.g. pulu *'ten'*.

2. Final a became o (2), and o was added to other final consonants (5), e.g. mato *'eye'*, ato *'slave'*, anako *'child'*.

3. a following b, d, or g became o, similar to (14) as far as ba is concerned but differing from (15) as to da and ga, e.g. bogu — BM bagu *'new'*, dolomo *'deep'*, bugoni *'brave'*.

4. o following b, d, or g became u (13), e.g. bugoni *'brave'*, duŋogu — BM doŋog *'hear'*.

5. mb became m (11) and nd became n (12), e.g. timoŋo — BM simbaŋ *'weigh'*, tonono — BM tondan *'wages'* (cf. G tonelo *'bride price'*).

6. mp became mb (16) and nt became nd (17), e.g. ombu *'grandchild'*, gondaŋo — BM gantaŋ *'k.o. measuring unit'*.

7. As can be seen from several examples mentioned above, k, n, g, and initial glottal stop did not change.

8. There is one change which is peculiar to Bw, viz. that b preceding u became bw (as in the name Bwuolo itself, which is usually known as Buol), e.g. bwuta — BM butaʔ *'earth'*. As a result the difference between *bo and *bu is retained as bu and bwu.

7. SOME IMPLICATIONS AND FURTHER DETAILS OF THE G SOUND CHANGES

In the following paragraphs some further particulars are discussed showing what effects the sound changes have had on Gorontalo.

One of the most important questions is that of their regularity. If these sound changes deserve this name they should be regular or exceptionless, according to the classical definition of the term sound change or sound law in comparative linguistics. It should be determined how regular they are and, if there are or seem to be exceptions, in how far these can be explained. A partial answer to this question can be found in the way they have been formulated. Whereas several of them have been defined as operating unconditionally, others are stated to apply under specific conditions only, viz. initially, finally, and preceding or following particular sounds. The latter may be considered to be exceptions to unconditional sound changes, regularly explained within the context of the sound changes themselves. Some more complicated cases follow below.

In the present section exceptions occurring in loanwords are left aside provisionally, as they show specific differences, some of which class them together as a distinct group. They are discussed in a separate section (see 8, below).

7.1. The word end

7.1.1. If the sound change under (2) operated regularly the result would be that a never occurs word finally. There are nonetheless several words which have a final a. From those cases in which cognates exist in BM three reasons can be given for the occurrence of final a.

a. Some of these words have originally had a final ?, which was lost according to (1), so that only after this loss of final ? the originally prefinal a became final, e.g.

dila — BM dila? *'tongue'* (1)
dupa — BM dupa? *'to forge'* (1)
huta — BM buta? *'earth'* (8), (1)
?o/yinda — BM inta? *'one'* (4), (17), (1)
mama — BM mama? *'chew betel'* (1)

b. In other cases, many of which are tri- or quadrisyllabic, a final n was lost after prefinal a. Although there are several examples, this loss of final n can not be called a sound change in the same right as the others because there are other words which end in -alo as a reflex of -an, such as tulalo — BM tulan *'bone'*. Possibly this loss of final n was in fact the (sporadic) loss of final lo after a, e.g.

dutula — BM dutunan *'river' - 'river for bathing'* (6)
hulawa — BM bulawan *'gold'* (8)
hutiya — BM gosi?an *'rotan'* (7), (13), (10)
?olowala — BM koloanan *'right hand'* (3), (6)
?oloŋiya — BM koroŋian *'nobleman'* (3), (9)
tambala — BM tampalan *'spotted'* (17)
wulipa — BM ulipan *'centipede'* (4)

In at least one case there is a semantic differentiation between the words with and without the final n or lo, viz. hulalo *'moon, month'* and hula *'month (as a measuring unit)'*, e.g. wolomo hula *'six months'* - BM onom no bulan.

In Bd this loss of final n after a seems to be more regular or perhaps even exceptionless, e.g. tula *'bone'*, bula *'moon'*, dala *'road'*.

A similar loss of final lo from n is met with in the verbal suffix -a (from -alo, from -an), see sub 10.7.3. below, and may be regarded as the origin of the loss treated in the present subsection.

c. Occasionally we find other a final words which have lost a final consonant other than l from n, e.g. hula - BM bulag *'albino'*.

7.1.2. Originally final a? did not result in final a when this was preceded by mb, d, nd, or g because a changed into e in this position according to (15). There are only examples of words with originally final nda?, ga?, and probably mba?, viz.

tane - BM tanda? *'birthmark'* (12), (15), (1)
bohe - BM baga? *'abscess'* (14), (7), (15), (1)
tohe - BM toga? *'lamp'* (7), (15), (1)
time - (e.g. Sangirese) timba? *'scoop out'* (11), (15), (1)

7.1.3. The o which according to (5) was added after final consonant became u according to (13) when this consonant was b, d, or g. This also happened when final a had changed into o according to (2), while the preceding consonant was b, mb, (n)d, or g. As a result there are no words ending in *bo, *do, *ho (from go), *mo (from mbo), or *no (from ndo). Instead these words end in bu, du, hu, mu, or nu, e.g.

waŋgubu - BM aŋkub *'cover'* (4), (18), (5), (13)
wulodu - BM ulod *'caterpillar'* (4), (5), (13)
yilihu - BM ilig *'stream'* (4), (7), (5), (13)
pobu - BM poba *'burn'* - *'burn lime'* (2), (13)
bohu - BM baga *'coal'* (14), (7), (2), (13)
to/onu - BM onda *'where'* (12), (2), (13) (to *'in, at'*)
wonu - BM onda *'if'* - *'where'*

No examples have been found of -du from -da, and of -mu from -mba.

7.2. Initial glottal stop and initial semivowels

Information from native speakers leaves no doubt that glottal stop occurs in initial position in a number of G words. According to sound change (3) it replaces k in that position as it does in intervocalic position. As a result of (3) and (4) vowels do not occur word initially in G.

It is less clear whether initial glottal stop also occurs in BM. According to Dunnebier (1929:317) an initial vowel is preceded by a 'soft blow' (*lichte aanblazing*) to be distinguished from glottal stop as a 'real consonant'. But M. Charles (1974:486) transcribes such BM words with initial q for glottal stop

presumably on the basis of information from BM speakers. If nevertheless the former alternative is the correct one, the G sound change (4) might preferably be formulated as: y was added before initial i and w before other initial vowels.

It seems clear, however, that this sound change took place in word-initial position only, as can be seen from examples as BM onda *'where'* - G wonu *'if'* and G to:nu *'where'*, in which the final o of the preposition to and the initial o of *onu have become o:; and BM ompu *'grandchild, grandfather'* - G wombu *'grandchild'* and tiyombu *'grandfather'*, in which the semivowel is not w but y, following the final i of the 'personal article' ti (from si, as in Malay, but not in BM). The same is the case in G ti:lo *'mother'* and tiyamo *'father'* from *ina and *ama (BM ina? and ama?, contra 7.1.1.a.). Similarly the term wali-wali *'k.o. social class'* may be pronounced with two w's but also as waliyali.

7.3. Convergence and homonymy

In several cases two or more sound changes have directly or indirectly led to the same result, though starting from different origins. In consequence there is a marked tendency towards convergence of sounds in G, which in some cases resulted in the emergence of new homonyms. Some examples are given below.

Since both g and b (before u) changed into h, initial hu in present-day G may be the reflex of either gu or bu, e.g.

huwoto - BM gu?ot *'gums'* (7), (4), (5)
huwo?o - BM buok *'hair'* (8), (3), (5)

Final hu may be the reflex of ga, gu, go, or bu, e.g. (with two pairs of new homonyms):

bohu - BM baga *'coal'* (14), (7), (2), (13)
bohu - BM bagu *'new'* (14), (7)
wahu - BM agow *'to rob'* (4), (7), (13) (BM -ow from -o)
wahu - BM abu *'ashes'* (4), (8)

Similarly both n and r changed into l, so that l in G may be the reflex of n, r, or l, e.g. (with two sets of new homonyms):

huli - BM buli *'loose'* (8)
huli - BM buni *'conceal'* (8), (6)
huli - BM buli? *'underside'* - *'buttocks'* (8), (1)
huli - Bd guli *'to install'* (7)
mulo - BM muna *'first'* (6), (2)
mulo - BM mula *'to plant'* (2)
tuludu - BM tulud *'push off'* (5), (13)
tulubu - BM turub *'burn'* (9), (5), (13)

Other sound changes may also bring about new homonyms, e.g.

tiyo - BM sia *'he'* (10), (2)
tiyo - BM siow *'nine'* (10)

7.4. Some place names

7.4.1. The G pronunciation of names of places outside the G territory naturally shows the effect of the G sound changes and presents good evidence if the original names are known. Some examples are the following:

Moŋonu - BM Moŋondow (12), (13)
Moladu - BM Monado (Manado or Menado, the capital of Minahasa) (6), (13)
Huwa - Gowa (Makassarese kingdom in South Celebes) (7), (13)
Huwolo - Bw Bwuolo - BM Buol (8), (5)
ʔUwaneŋo - Kuwandaŋ (place on the north coast) (3), (12), (15), (5)
Bodu - BM Bado? (the Bajo sea-nomads) (14), (13), (1)
Bune - Bd Bunda (12), (15)

The last comparison shows that the original name must have been *Bonda?, in which the changes (13) and (1) have operated both in G and in Bd. If Bunda was the original form, the G one should have been *hunu.

7.4.2. The G name for Gorontalo is Hulondalo, which can be explained as the regular result of the sound changes (7), (13), (9) and (17). This is partly but not completely confirmed by the Bd and BM forms of this name. The origin of the first l is uncertain. It can be the G reflex of l, r, or n, which in Bd are reflected as l, h, and n. The Bd form of the name is Golondalo, however, and the BM form is Gonontalon. This conflicting evidence can be explained by assuming that the BM form is the original one and the Bd one is a borrowing from G dating from a time when n had become l and nt had become nd in G but the other G sound changes concerned had not yet taken place. The final n of the BM form, which may have dropped in both G and Bd, seems to confirm that the BM form was the original one. The possibility that at one time the name was pronounced Golontalo is confirmed by its form in Makassarese, which is Go!ontalo.

7.5. Semantic change

Although the G - BM cognates given as examples have been limited to those which show no or only a small semantic difference, there are several others in which semantic change has clearly taken place, e.g.

bilohu *'to see'* - BM bilog *'blind'* (7), (13)
yilaluhu *'town'* - BM inalug *'village road'* (4), (6), (7), (5), (13)
ʔuluʔu *'hand'* - BM konuku *'nail of the finger'* (3), (6) (with assimilation of o into u)
walito *'animal skin'* - BM alit *'rope made of animal skin'* (4), (5)

8. BORROWINGS

There are quite a few Gorontalo words which were borrowed from other languages such as Arabic, Malay/Indonesian or Dutch. Very few, if any, of these borrowings show the effects of the G sound changes whenever these are applicable. Most of them do so only partially or not at all. In many cases one particular sound change is applied but another one not. Some sound changes hardly ever occur in loanwords, others occur in some words but not in others. Sometimes there

are two variants of a loanword, one with and one without the sound change concerned. There is also a difference depending on the educational level of the speaker, in such a way that the knowledge of Malay/Indonesian tends to increase the number of cases in which the sound changes are not applied in borrowings from this language.

8.1. Loanwords which have been affected by every applicable sound change are scarce. Even the following two examples pose some problems.

tihi *'mosque'* - BM sigi (10), (7), from Malay masigit *'mosque'* which is ultimately from Arabic masjid *'place of prostration'*. There is a semantic difference in that in BM sigi is a (non-Muslim) *'small village temple'* and masigi is *'mosque'*. Nevertheless it seems most plausible that both tihi and sigi are loanwords. wadala *'horse'* (not in BM; cf. BM kabalo *'horse'* from Spanish) is ultimately derived from Jav. *ajaran *'trained animal'* (4), (9), d from j, and final n dropped according to 7.1.1.b. above.[1] The a instead of e after d is an exception to sound change (16), possibly caused by the palatal origin of this d.

8.2. The way in which various G sound changes have affected borrowings is further exemplified below.

8.2.1. Final a hardly ever changed into o according to (2). An example is perhaps tolimo *'receive'*, if this is a loan from Malay tarima (cf. BM tarima explained as borrowed from Malay) and not inherited.

8.2.2. Initial ʔ is hardly ever replaced by semivowel according to (4); wadala *'horse'* is the only example I have found. As a result there are several loanwords with initial vowel (preceded by ʔ) which is not the result of the loss of initial k, e.g. ʔalabaʔa *'Wednesday'* (Mal/Ar arbaʔa) (Pateda: arabaʔa). On the other hand there are some examples of the loss of initial k according to (3), e.g. ʔapitalau *'admiral'* (Mal kapitan laut), ʔatetela *'ketela'*, ʔupiya *'kopiah, fez'*. In many words the k has been preserved, e.g. kaputeŋi *'captain'* (Du kapitein), nika *'marry'* (Mal/Ar nikah).

8.2.3. Hardly any borrowing has o added after final consonant according to (5). An example is perhaps kayito *'hook'* (Mal kait), which exists beside ʔayito *'hook'* (cf. BM kait *'to knit'*).

In most other cases the vowel added after final consonant of loanwords is either i (unless the final consonant is a labial) or u, while at the same time the penultimate vowel is usually lengthened. Examples with final i are: basi *'craftsman'* (Du baas), di:kili (Mal/Ar dikir), ka:pali *'ship'* (Mal kapal), ka:yini *'cloth'* (Mal kain), ku:raŋi *'less'* (Mal kuraŋ), ka:ntori *'office'* (Mal/Du kantor), me:maŋi *'certainly'* (Mal memaŋ), pa:tali *'market'* (Mal pasar),

ra:cuni *'poison'* (Mal racun), sabari *'patient'* (Mal sabar). The vowel is u if the final consonant is a labial, e.g. ʔima:mu *'imam'*, capu *'seal'* (Mal cap), sababu *'because'* (Mal/Ar sabab), lemu *'glue'* (Mal/Du lem), bomu *'harbour'* (Du boom), kolopu *'all right'* (Du klopt), but also in some other cases, e.g. boku *'bay'* (Du bocht), roku *'frock'* (Du rok), bo:roku *'bail'* (Du borg), ba:ŋgurutu *'bankrupt'* (Du bankroet), bu:tulu *'bottle'* (Mal botol).

8.2.4. There are few examples of n which changed into l according to (6), e.g. talala *'trousers'* (Mal celana).

8.2.5. Often but not always g changed into h according to (7), e.g. da:haŋi *'commerce'* (Mal dagaŋ), but da:giŋi *'meat'* (Mal dagiŋ), halati *'glass'* (Mal/Du gelas), hula *'sugar'* (Mal/Skt gula), huna *'utility'* (Mal guna), naha or naga *'dragon'* (Mal/Skt naga), lahu *'song'* (Mal lagu), but ga:risi *'line'* (Mal garis), etc.

8.2.6. Mostly r changed into l according to (9), e.g. gulu *'schoolmaster'* (Mal/Skt guru), halahadi *'saw'* (Mal gergaji), luhi *'loss'* (Mal rugi), su:kali *'difficult'* (Mal sukar), but also guru, rugi occur.

8.2.7. There are some examples of the change of bu into hu according to (8), e.g. sahutu *'Saturday'* from *sabutu (Mal/Ar sabtu) and tahuda *'word'* from *sabuda (Mal/Skt sabda).

8.2.8. Usually s changed into t according to (10), e.g. ka:tulu *'mattress'* (Mal kasur), tababu *'because'* (Mal/Ar sabab), tu:kali *'difficult'* (Mal sukar), though in many cases s remained.

8.2.9. There are few examples of the change of o into u following b, d, or g according to (13), e.g. bu:tulu *'bottle'* (Mal botol), du:bulu *'double'* (Mal/Du dobol), dusa *'sin'* (Mal/Skt dosa), huhuhu *'grand vizier'* (BM gogugu from Ternatan (jou) gugu).

8.2.10. In most cases mp changed into mb, and ŋk into ŋg according to (16) and (18), e.g. pomba *'pump'* (Mal/Du pompa), ʔo:ŋgosi *'expenses'* (Mal/Du oŋkos), pa:ŋgati *'rank'* (Mal paŋkat).

8.3. The loanwords in G as briefly described above constitute a heterogeneous group of words, as is usually the case in any language. As they were adopted from structurally quite different languages and presumably at different times in the past, they have been adapted to the existing G sound structure in various ways and degrees. This in itself is a general characteristic which classes them together as a separate group. A second more specific one is the fact that, as mentioned sub 8.2.3. above, the vowel added after final consonant is not o according to the earlier sound change (5) but i or u according to more or less strictly applied rules.

At the same time many examples of loanwords in which G sound changes did take place, show most clearly that the particulars of these sound changes were the same as those found in the inherited part of the vocabulary.

9. UNEXPLAINED EXCEPTIONS

There are a number of G words which, while not obviously recognisable as borrowings, do not show the effect of the applicable sound change as it should have been expected from comparable cases. Most conspicuous are those which clearly have cognates in BM. They do not invalidate the evidence for the sound changes as it has been given earlier, but should be regarded as unexplained exceptions as long as no acceptable explanation has been found.

We give some examples of the most obvious cases.

9.1. Some words have initial ha-, which should have become he if it reflected ga according to (15) as in e.g. hetuto - BM gatut *'hundred'*, viz.

hama - BM gama? *'take'*
hawu - BM gau *'cigarette'*

9.2. A number of G words have initial da, which should have become de according to (15) as e.g. in deheto - BM dagat *'sea'*, viz.

dalalo - BM dalan *'road'*
damahu - BM damag *'resin'*
dalahu - BM darag *'yellow leaf'* - *'yellow'* (but G lalahu Bd dahago *'yellow'*) cf. also datahu *'flat, level'*, not in BM but clearly from *datag.

9.3. A number of G words have initial ba, which should have become bo according to (14) as e.g. in botulo - BM batun *'ascend'*. Some of them have cognates in BM, viz.

bataŋa - BM bataŋan *'body'* - *'personal appearance'*
bataŋo - BM bataŋ *'stem'*
bataʔo - BM batak *'bad-mannered'*

9.4. A number of G words have one or more k's for which ʔ should have been expected according to (3). Some of them have BM cognates, viz.

kikiloʔo - BM kilok *'tickle'*
kokobu - BM kokob *'bite'* - *'chew something hard'*, cf. e.g. ʔoʔodu - BM kokod *'embrace'*.

10. AFFIXES AND MORPHOPHONEMIC ALTERNATIONS

10.1. Quite a few of the G verbal and nominal affixes show the effect of one or more of the sound changes, leading in some cases to morphophonemic alternations. We give the following examples.

10.1.1. The verbal prefix mo has several allomorphs, among which in the first place moN- may be mentioned. The nasal replaces the initial consonant of the base to which the prefix is added and is either m or ŋ. The m occurs if the initial consonant of the base is p, b, or h; the ŋ only if the initial consonant is k, ʔ, w or y, e.g.

pututo : momututo *'to wrap up'* (BM putut)
biyahu : momiyahu *'to care for'* (BM biag : momiag)
huwato : momuwato *'to lift'* (BM buat : momuat *'to lift'*, *'to go upwards'*)
kokobu : moŋokobu *'to bite'* (BM kokob : moŋokob *'to chew something hard'*)
ʔuʔudu : moŋuʔudu *'to remove scales'* (BM kukud : moŋukud *'to scrape'*)
wuli : moŋuli *'to revert to previous condition'* (BM uliʔ : moŋuli *'to recover'*)
yilu : moŋilu *'to drink'* (BM inum : moŋinum).

The cases in which initial h is replaced by m are restricted to those in which h is followed by u and are therefore explicable, as in the example given, by the sound change (8) (bu became hu). In the same way the replacement of initial ʔ, w and y by ŋ can be explained by the sound changes (3) (k became ʔ) and (4) (ʔ became w or y), respectively.

10.1.2. Most bases with initial w and y, however, have an allomorph of the prefix, in which the initial consonant is replaced by h, while a following initial w is replaced by e, and o following initial w by u. These replacements are explicable by the sound changes (7) (g became h), (15) (ga became ge), and (13) (go became gu), as is confirmed by BM cognates, e.g.

yimoʔo : mohimoʔo *'to collect'* (BM imok : mogimok)
wulilo : mohulilo *'to steer'* (BM ulin : mogulin)
waluto : moheluto *'to invite'* (BM anut : moganut)
wotuto : mohututo *'to pass gas'* (BM otut : mogotut)

This implies that diachronically the h did not replace initial w or y, since the latter never occurred in this position, which in the prefixed verb was not the initial one. In fact the allomorph moh- is a reflex of the prefix mog-, which occurs in BM, where it is prefixed to vowel-initial bases only. Clearly the same limitation of occurrence once applied to moh- in G and therefore may be ascribed to Proto-G-BM.

Both G moh- and BM mog- alternate with moŋ- in such a way that every given base concerned has unpredictably either the former or the latter prefix (in BM sometimes both occur with the same base with semantic difference). Sometimes a difference can be observed in this respect between G and BM, e.g. wunemo : mohunemo *'to cure'* - BM undam : moŋundam.

10.1.3. Bases with initial t have an allomorph of the prefix in which t is replaced by l. This can be explained by the assumption that originally this t was replaced by its homorganic nasal n, which afterwards changed into l according to (6), e.g. tone?o : molone?o *'to take soundings'* - BM tondak : monondak.

10.2. Similarly the preterital prefix lo- reflects no- (BM idem) as a result of sound change (6).

10.3. The prefix ?o- denoting possession, which is not dealt with in Badudu 1982 and treated as an independent particle in Pateda 1977, is the reflex of ko- according to (3), e.g. pali *'wound'* : ?opali *'wounded'* - BM pali? : kopali?.

Formally the same prefix occurs with numerals, e.g. wopato *'four'* : ?o:pato *'fourth'* - BM opat : koopat.

10.4. The prefix mo?o-, meaning *'to be able to'*, is the reflex of moko- (BM idem) according to the sound change (3), e.g. mo?oduŋohu *'to be able to hear'* - BM mokodoŋog.

10.5. The prefix mohi-, meaning *'to wear (a piece of clothing)'*, is the reflex of mogi- (BM idem) according to sound change (7), e.g. mohisapatu *'to have shoes on'* - BM mogisapatu.

10.6. There are two infixes, the passive/preterital -il- and the futural -um-. The former is the reflex of -in- according to (6). It may be infixed within prefixes, e.g. ?o- : ?ilo- (BM ko- : kino-). When it is infixed in a base which has initial w, this consonant is replaced by y according to sound change (4), e.g. wohi : yilohi *'give'* (BM ogoi : inogoi).

In those cases in which the change of an initial consonant is conditioned by the occurrence of a particular vowel immediately following it, or the change of vowel by the occurrence of a specific consonant immediately preceding it, such as according to (8) (bu became hu), or (13) (do became du), it might have been expected that these changes did not occur if an infix was placed between this consonant and the immediately following vowel. Some examples of this expected phenomenon occur.

When we compare G dumodupo *'morning'* and du:dupa *'early in the morning'* with BM mododop *'early'*, it is clear that do changed to du twice according to (13), but not where d and o were separated by the infix -um-. Similarly, when

comparing G bubohu *'hit'* and bilobohu *'hit* (pass.)*'* with BM bobag *'hit'*, we see that bo changed to bu according to (13), but not where b and o were separated by the infix -il-. Other examples are: buli *'price'* but biloli *'debt'* - BM boli *'debt, price'*, and hutu *'penis'* but bilutuwa *'castrated'* - BM butu? *'penis'*. G hulo?o *'to sit'* has no cognate in BM nor in Bd, and the initial h could therefore have originated from b or from g. That the former was actually the case appears from the noun bilulo?a *'seat'* (not in Pateda, but found in a G poem).

Probably these are exceptional occurrences, however, at least in the present-day language. Usually this kind of sound change also applies when an infix separates the consonant and the vowel concerned, e.g. dehito *'snatch'* : dumehito *'will snatch'* - BM dagit : dumagit.

10.7. The suffix -a occurs in various morphological functions, among which the imperative may be specially mentioned here. As to its morphophonemic aspects, however, it can be treated as one and the same suffix in all its functions.

10.7.1. It shows the effect of sound changes in cases of bases to which o was added after final consonant according to (5). When the suffix was present, the final consonant of the base was no longer final and therefore o was not added here, or, in other words, the suffix was added immediately after the final consonant of the base. The synchronic result is that the final o of such bases is replaced by the suffix, e.g. pututo *'wrap up'* (BM putut) : pututa *'wrap up!'*.

This also happened when the final consonant of the base was b, d, or g. The suffix -a was added immediately after these, but then changed into e according to (15), just as the o added after the final consonant of such bases changed into u according to (13). The synchronic result is that the suffix -a appears as -e replacing final u, e.g.

tulubu *'burn'* (BM turub) : tulube *'burn!'*
tuludu *'push'* (BM tulud) : tulude *'push!'*
tunuhu *'follow'* (BM tundug) : tunuhe *'follow!'*

10.7.2. In some cases the suffix is synchronically not -a but -ma, -la, or even -ala. These exceptional cases can be explained as the result of the loss of the final consonant of the base (together with that of the o added after it and, in the last mentioned case, of the a preceding it) in other derivations. There are at least three examples which have cognates in BM showing that this was what happened, viz.

yilu *'drink'* : yiluma *'drink!'* - BM inum
wawo *'weave'* : wawola *'weave!'* - BM abol (with assimilation of b to w ?)
pota *'carry on the shoulder'* : pota:la *'carry on the shoulder!'* - BM potaan.

10.7.3. The fact that this -a suffix did not change into -o according to (2), although it is a final vowel, must mean that it was not yet final when this sound change took place and that a final consonant following it was lost

afterwards. This final consonant must have been n and the suffix in fact was the well-known suffix -an, as is proved by BM, where -an occurs in many cases with the same morphological functions as -a and its allomorphs in G, among others that of the imperative. Some examples out of many are the following:

yiluma *'drink!'* - BM inuman *'drink of it!'*
litode *'twine!'* - BM litodan *'roll up!'*
pitota *'tighten!'* - BM pitotan *'strangle (with a rope)!'*

This loss of the final n is analogous to that in trisyllabic nouns such as hulawa *'gold'* (BM bulawan) mentioned earlier (see sub 7.1.1.b. above).

As regards the -a suffix as imperative it may be concluded that this, contrary to Adriani's statement (1908:163) on this point in his remarks about the Gorontalo language, is not the 'conjunctive' or 'irrealis' suffix -a, which is found in several languages such as Javanese, Makassarese and some Bisayan dialects with imperative meaning among others. If it existed in G, it should have become -o according to the sound change (2).

The reason why the suffix -an lost its final n in G may have been that it regularly should have become — and possibly first did become — -alo, whereas -lo also exists as a suffix as well as a separate particle. It may occur in combination with the imperative -a with emphatic meaning, e.g. tali *'buy'* : talia *'buy!'* : talialo *'do buy!'*.

10.8. The 3rd person possessive suffix has two allomorphs, viz. -iyo and -liyo, which reflect -*ia and -*nia according to the sound changes (2) and (6). In BM they are -ea and -ña, the former occurring after final consonant (except ʔ), the latter after final vowel (and ʔ). The same distribution (ʔ left aside) must have existed in G prior to the addition of o after final consonant according to (5). As a result the allomorph -iyo is suffixed to words ending in this o but then replacing this final vowel, e.g. walaʔo *'child'* : walaʔiyo *'his child'*, but e.g. wato *'slave'* : watoliyo *'his slave'*. Historically the o of sound change (5) was never added to words like walaʔiyo since there was no final consonant because of the presence of the suffix.

This phenomenon can be used as a means to find out whether or not a final o or u is diachronically an added one according to (5). For example, the assumption that bi:hu *'lip'* is the cognate of BM bibig according to (5), (7) and with loss of the second b, is confirmed by bi:hiyo *'his lip'*.

11. RELATIVE ORDER

If the several sound changes are compared among each other, it can be remarked that some of them are interrelated with certain others in that they concern the same phoneme in different ways. If these interrelated sound changes are analysed under the assumption that sound changes operate exceptionless within their respective conditional limits and within a certain limited time, it appears to be possible to establish the relative order in which such interrelated sound changes took place.

11.1. In some cases a certain phoneme was lost in all its occurrences as the result of one sound change, but the same phoneme re-emerged elsewhere as the result of another sound change, e.g. all n's were lost after they had become l according to (6), but n re-emerged when d in nd had become lost according to (12); similarly initial ? was lost after it had become w or y according to (4) but re-emerged in other words as the result of the change of k into ? according to (3). This implies that these changes occurred in both cases in the order in which they have been mentioned just now, i.e. the change of n into l took place and ceased operating before that of nd into n began operating, since otherwise n from nd would also have become l. Similarly the change of ? into w/y predated that of k into ?.

11.2. In some cases it can be observed that more than one sound change must have taken place in one and the same position in a given word, which implies that one of these changes operated later in time than the other. Their relative order follows from the details of the changes concerned. For example, if bohu is the reflex of *baga, the final a can only have become u, if it changed into o according to (2) first, since otherwise a following g would become e according to (15). This means that the change of final a into o (2) predated that of go into gu (13) and that of ga into ge (15).

Another example is onu in to:nu *'where'*, BM onda. The final a became o according to (2) first, then changed into u following nd according to (13), after which nd became n according to (12), the relative order thus being onda > ondo > ondu > onu.

A comparable case is the following. If tohe *'lamp'* is the reflex of toga? (BM idem), the loss of final ? according to (1) must have postdated the change of final a into o according to (2), since otherwise the a in ga? would have become final and would then have changed into o, and this into u following g according to (13). This means that the change of final a into o (2) predated the loss of final ? as well as the change of go into gu (13).

11.3. There are also sound changes which must have taken place at the same time, such as (13), o following (m)b, (n)d, or g became u, since this can be formulated as: o following voiced stop became u. This implies that the change of g into h (7) must have postdated (13), since otherwise the final syllable of *bago (from *baga) would have become *ho instead of hu. For the same reason the change of ba into bo (14) must have postdated (13), since otherwise the first syllable of bohu (from *baga) would not have remained bo but would have become bu.

Similarly the change of bu into hu (8) must have predated (13), since otherwise bu from bo (13) would also have changed into hu.

Similarly the change of a following mb, (n)d, or g into e (15) must have predated that of g into h (7), since otherwise *toga would have become *toha instead of tohe.

But the change of ba into bo (14) must have predated (15), since otherwise ba would also have become be according to (15), and it must have postdated (13), since otherwise bo from ba would have become bu according to (13).

11.4. The changes of mb to m and nd to n (11) and (12) are interrelated as in both cases voiced stops preceded by homorganic nasal were lost, but apparently there was no analogous change of ŋg into ŋ (cf. laŋge from *naŋga according to (15). Examples such as kombot — ʔomuto *'k.o. jambu / rose hip'*, tondok — tonuʔo *'fence'*, as well as bombaŋ — bumeŋo *'disperse'* and sindar — tinelo *'light'* show that these changes postdated both (13) and (15).

The changes of mp into mb, nt into nd, and ŋk into ŋg (16), (17) and (18) clearly postdated those of mb into m and nd into n (11) and (12), since otherwise the voiced stops resulting from the former would have become lost as a result of the latter.

11.5. It follows from the foregoing subsections that there are three pairs of interrelated sound changes as well as a group of seven, all of the latter involving voiced stops, for which the relative order within the pair or group is certain, namely:

A. 1. final a > o (2)
   2. loss of final ʔ (1)

B. 1. initial ʔ > w/y
   2. k > ʔ (3)

C. 1. n > l (6)
   2. nd > n (12)

D. 1. bu > hu (8)
   2. (m)bo > (m)bu, (n)do > (n)du, go > gu (13)
   3. ba > bo (14)
   4. mba > mbe, (n)da > (n)de, ga > ge (15)
   5. g > h (7)
   6. mb > m, nd > n (11), (12)
   7. mp > mb, nt > nd, ŋk > ŋg (16), (17), (18)

The relative order of A, B, C, and D cannot be ascertained more precisely than that A1 predated D2, but D4 (and thus D1-3) predated A2 (see 7.1.2.), whereas C1 predated D6.

12. SUBGROUPING

Adriani (1914:183-217) and, following him, Esser (1938) have placed Bolaang Mongondow in a subgroup of Philippine languages together with Sangirese-Talaud and the Minahasa languages, and have grouped Gorontalo together with Buol, Kaidipan and Bulango in a Gorontalo subgroup not belonging to the Philippine languages.

In view of the materials contained in the present article it seems warranted to revise this classification and to group G and BM much more closely together. If BM should be recognised as belonging to the Philippine family of languages, G should at least be included into it too.

This conclusion has also been reached by M. Charles who included Gorontalo in his treatment of Philippine languages "because comparison revealed striking similarity in the vocabularies and (to a point) in the phonological histories of Mongondow and Gorontalo" (1974:487). And we may

add similarity in their morphologies as a third indication of their close relationship.

Whether G and BM together with the other languages mentioned by Adriani and Esser belong to a common subgroup, must be determined by further comparison of these languages among one another and with what is known of Proto-Philippine and Proto-Austronesian.

We mention some points concerning G and BM as examples.

12.1. There are other G-BM correspondences not mentioned before. For instance, in several examples G final -e corresponds to BM final -oi, e.g.

bele - BM baloi *'house'* (with assimilation of the first vowel to the second, cf. Bw bole *'house'*)
pate - BM patoi *'kill'*
tuŋe - BM tuŋoi *'horn'*
wale - BM anoi *'ant'* (4), (6)
wu:wate - BM uatoi *'iron'*
pale - BM payoi *'rice plant'*

In some cases, however, the correspondence is G -i : BM -oi, e.g.

pani - BM pandoi *'skilled'* (12)
wohi - BM (b)ogoi *'give'* (4), (7)

12.2. Though in many cases BM did not change from putative Proto-G-BM, there is also evidence for sound changes which have taken place in BM. For instance, Proto-G-BM apparently retained PAN *S- as h-, with subsequent loss of h- in BM, but not in G, e.g.

G hataŋo - BM asaŋ *'gills'*
G huwabu - BM uab *'yawn'*

In several cases of the correspondence of G l : BM r there is a BM doublet with y, which may point to a development in BM of r to y, e.g.

G lahuto - BM rabut / yabut *'pull out'* PAN (r)ebut/Rabut
G le:to - BM raat / yaat *'bad'* PAN zaqet
G hulu?o - BM buruk / buyuk *'rotten'* (cf. Bd buhu?o) PAN buRuk
G lolom/bula - BM bura? / buya? *'foam'* PAN bujaq

In several other cases, among which the reflexes of PAN j, the correspondence is G l : BM y : Bd h, e.g.

G tili - BM si(y)i? - Bd tihi *'side'* PPH siDiq
G tolomo - BM toyom - Bd toho *'ant'*

12.3. As an alternative of the G sound change (13), i.e. o following (m)b, (n)d, g became u, it may be assumed that this u is a direct reflex of an inherited or secondary schwa, which in other environments is reflected as o, whereas it is reflected as o in all environments in BM. This assumption is made by Charles (1974:469-470) in his explanation of the G word in the example "PPh *dapdap

'Erythrina spp.' ... BM dodap ...; G dudepo ... with /u/ < secondary *e following *d". These alternatives illustrate the difference between considering G and BM as reflecting the higher level proto-languages PPh or PAN directly or via Proto-G-BM, as has been done in the present paper. It seems, however, that examples such as BM poba - G pobu show that the G sound change (13) has indeed taken place, since the final o of the putative intermediate form *pobo does not reflect a schwa. Examples of the change of o into u following g are also to be found in such loanwords as the toponym Huwa from Makassarese Gowa and huhuhu *'grand vizier'* from gogugu (BM idem), from Ternatan (jou) gugu.

NOTE

1. In Jav. itself *ajaran *'horse'* from ajar *'teach, train'* has changed into jaran with loss of initial a analogically to Jav. loss of the verbal prefix a-. The same change may have taken place in Makassarese, in which *'horse'* is jaraŋ and where the verbal prefix a- was usually also dropped. In Buginese, where this prefix has not dropped, the word for *'horse'* has kept its initial a, whereas the palatal consonant was nasalised and geminated: aññaraŋ.

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PROTO-AUSTRONESIAN WORKSHEET

PROTO-AUSTRONESIAN WORKSHEET FOR Gorontalo
(name of language)

LOCATION Indonesia (country) North Celebes (island/province/state)

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This is a worksheet or test list for helping research forms for proto-Austronesian. It consists of some 500 English items to be translated into the target language. The gloss should be put to the right of the English; any discernible cognates (other than the gloss) to the left of the reconstructions, along with their meaning. The bias of the organizer of this list has been towards the Hesperonesian group of languages, particularly of the Philippines, and hence the researcher should consider many of the reconstructions in that light. In effect, several layers of reconstructions are represented: proto-Austronesian, proto-Malayo-Polynesian, proto-Philippine and even proto-Tagalic, with no indications as to which are which. Hence the reconstructions are meant only as a guide and the researcher is appropriately cautioned.

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N.B. At the end of the English list is a check-list of reconstructions in alphabetical order. On the last page is a list of all proto-phenemes. Please enter the reflex of your test language for each respective form: initial medial and final consonants under 1, 2, 3 respectively; and vowels in the first, second and third syllable respectively.

e = [e]
ɋ = [ʔ]

*babaw *atas	001	ABOVE HIGH	to titaato mo-laŋgato; layuhu; layi-layiqo
*pulut *rapet	002	ADHESIVE GLUE STICKY	d-um-embiŋo
	003	AFTERNOON	lolaaŋo
	004	ALL	mo-qaaqami, ŋo-qaaqamilo
*antiN	005	AMULET CHARM	qajima
	006	ANIMAL	binaataŋi
*landas-an	007	ANVIL	po-du-dupa
*irek- *kili-kili	008	ARMPIT	huwaŋeqe
*abu *tapu	009	ASHES DUST	wahu peyahuqo
*baNun	010	AWAKE(N)	boŋulo > mo-boŋu (intr), mo-moŋu (trans)
*balakaN	011	BACK	wuleya (from waist up); deqawata (upper part of one's back);
*zaqat	012	BAD EVIL	
*[]anta	013	BAD-TASTING	
*pa[]en	014	BAIT	paalo
*be[n]tuN *buluQ *qauR	015	(BAMBOO)	wawohu; hulapa; tomula; talilo
*pisaN *punti *sagiN	016	(BANANA)	lutu; lambi; bulalowa; luhuto

huli; dibalaka ← mo-leeto

*DiRus	017	BATHE	mo-lihu
*pa-tiyuk-an	018	BEE	tiiqa
*mula[] *puna[]	019	BEGIN ORIGINATE	tumulo > mo-lumulo
*ti[]an	020	BELLY STOMACH	qomboŋo
*babaq	021	BELOW BENEATH UNDER	to tibawa; to waluŋo
*besar hayaqo 'long' *Raya[] *[d]akel	022	BIG LARGE	damaŋo; daqa; hulinda
*manuk	023	BIRD FOWL ANIMAL	buuruŋi maluqo 'chicken' binaataŋi
*lahiR	024	BIRTH BORN	p-il-o-tutu-liyo
*kaRaC	025	BITE	mo-deŋeto
*paQic	026	BITTER	mo-paato
*qitem	027	BLACK	yitomo > mo-itomo
*bulaR *bileR	028	BLIND EYE DISEASE	pitoqo bilohu > mo-milohu 'look'
*buta[]	029	BLIND	pitoqo
*DaRaQ *ZuRuq	030	BLOOD	duhu
*Seyup	031	BLOW	mo-hiipo
*sumpit	032	BLOWGUN SPURT	qi-qindupo

	*awaN	033	BOAT	
	*balutu		CANOE	bulotu
	*[b,w]aNka[q]			
	*badan	034	BODY	qilaaŋgaŋo
	*hawak		WAIST	wawaqo 'body'
	*lawas		ENDURE	
	*Caq[u]laN	035	BONE	tulalo
piŋge 'dish'	*piNgan	036	BOWL	
	*-le[N]kuN		CUP	maŋgo
	*qu[n]tek	037	BRAIN	wutoqo
	*ba-Rani	038	BRAVE	buheli
			HERO	
laŋge 'jack (fruit)'	*naNka	039	BREADFRUIT	
	*susu	040	BREAST	tutu
			MILK	tutu
	*ñawa	041	BREATHE	yilawo > mo-hilawo
tilaŋo 'ray'	*silaw	042	BRIGHT	mo-tilaŋo
			GLARING	moqo-tulopo
	*buNkus	043	BUNDLE	
	*beRkes		WRAP UP	bolulo > mo-malu, pututo > mo-mututo
deqito > mo-deqito, d-um-eqito	*suRaq	044	BURN (intr)	mo-laqito, l-um-aqito
	*sunu[R]		SET ON FIRE	pobu > mo-mobu
			SINGE	
	*lebeN	045	BURY/DIG	bury: mo-lobuŋo
				dig : mo-ŋaqudu (from qaqudu)
	*bunuq	046	BUTCHER	mo-ŋoloto
			STAB	mo-lobuqo
	*bu[r/l]iq	047	BUTTOCKS	tutubu

	*beli[]	048	BUY	mo-tali
	*b[a,e]kal		PROVISIONS	tomequ
	*bati[]is	049	CALF OF LEG	butiyoto
	*ka-rabaw	050	CARABAO	qolobu
	*baba	051	CARRY	mo-delo, mo-laato
	*ha[n]teD		BRING ALONG	
	*zaza		PEDDLE	
	*-suqun	052	CARRY--ON HEAD	wundu > mo-hundu
	*t[o]s[o]qun			
	*pes[o]qan	053	CARRY--ON SHOULDERS	
mo-tapu 'get'	*sape[]	054	CATCH IN HANDS	mo-deqopo
	*dakep		CAPTURE	
	*uba[h]	055	CHANGE	mo-boliqo
	*baliw		EXCHANGE	
	*iba[h]		TRANSFORM	
	*zadi[]		BECOME	mo-wali
	*buRew	056	CHASE AWAY	huhu > mo-muhu
	*mamaq	057	CHEW	mo-mama
	*b-ujiN	058	CHARCOAL	
	*baRaH		LIVE COALS	bohu
	*manuk	059	CHICKEN	maluqo
	*qayam		DOMESTICATED	
	*[]anak	060	CHILD	walaqo
	*liNaw	061	CLEAR	mo-baaŋo
			CALM	
		062	CLOTHING	kaayini, pakeeyaŋi
	*bazu		DRESS/SHIRT	boqo

*ñiyuR	063	COCONUT	boŋo
*baker	064	COOK	mo-tubu
		ROAST	mo-lalaŋo
*lu[n]tuq		READY	
		RIPE	mo-lutu
*tu[R]enaw	065	COLD	mo-huhulo
*seje[d]	066	COMB	mo-heyidu 'to comb'
*dateN	067	COME	mo-o-naqo mayi
*suRuq	068	COMMAND	qahulo > mo-po-qahu
		REQUEST	mo-hile
*baNkay	069	CORPSE	tohulo
*bilaN	070	COUNT	
		CONSIDER	
*takep	071	COVER UP	
*takub			taqubu > mo-laqubu
*bukut			
*buqaya	072	CROCODILE	huwayo
*taNis	073	CRY/WEEP	hiyoŋo > h-um-oyoŋo
*qaRus	074	CURRENT	tolohu
*qañud		FLOW	
*puTul	075	CUT	pondodu > mo-mondodu
		SEVER	
	076	DANCE	tidi (noun)
*DeDeSem	077	DARK	mo-diqolomo
*kusem	078	DARK-COLORED	
*qajaw	079	DAY/SUN	dulahu
*beNel	080	DEAF	buŋolo
*qutaN	081	DEBT	b-il-oli, b-il-uli
		GRATITUDE	
*qawes	082	DEDUCT	yiŋgil-a-lo 'going to
		TAKE AWAY	be deducted'
			(root, yiŋgilo)
*D-idi	083	(DEICTIC--	bo-tiya
		FIRST PERSON)	
*D-ini	084	(DEICTIC--	
		DUAL PERSONS)	
*D-itu	085	(DEICTIC--	
		SECOND PERSON)	bo-tiye
*D-ana	086	(DEICTIC--	bo-yito
		THIRD PERSON)	
*namnam	087	DELICIOUS	mo-tabo
		SUCCULENT	
*Rebaq	088	DESTROY	yi-lopu-wa
			'destroyed)
*maCey	089	DIE	mate
	090	DIRTY	kootoro ;
			mo-tondolomu
*tawaD	091	DISCOUNT	
		FORGIVE	mo-maqapu
		BARGAIN	mo-taawari
*piNgan	092	DISH	piŋge
*Wasu	093	DOG	qapula
*qayam	094	DOMESTICATED	mo-luwamo
		DOG: CHICKEN	'tame,
		TAME ANIMAL	domesticated'
*taRinep	095	DREAM	mo-tohilopo
*Xipi			(verb)

*punay	096	DOVE--WILD	
*[]inum	097	DRINK	wilumo > mo-ŋilu
*tulu[q]	098	DRIP	y h-um-eheto
*pera	099	DRUNK REDDISH	huwo-huwoqo
*maja	100	DRY	mo-heŋu
*balur	101	DRY OUT--FOOD	
	102	DULL NOT SHARP	mo-hulaŋo
*[R]abquk	103	DUST	peyahuqo
*taliNa[]	104	EAR	buloŋa
*tanaq *tuba *[b,D]u[R]taq *tuna[q]	105	EARTH GROUND DIRT	huta
*lin[D]uR	106	EARTHQUAKE	liluhu
*tuli	107	EARWAX	
*ka7en	108	EAT	qaalo > mo-ŋa
*tuNa	109	EEL	qotili
*qi-CeluR	110	EGG	putito
*walu	111	EIGHT	walu
*siku	112	ELBOW	tiqu
*-asuk *surud	113	ENTER WITHDRAW INTO	mo-maso
*salaq	114	ERROR SIN	to-tala
*luwas	115	EXIT COME OUT	l-um-uwalo (verb)
*mahal	116	EXPENSIVE DEAR	mahale
*babaw	117	EXTERIOR OUTSIDE	diluuwari
*pade[m,N]	118	EXTINGUISH QUENCH	pate > mo-mate
*sebu		FADE	mo-luluto (colors) mo-mali
*maCa	119	EYE	mato
*zatuq *labuq *huluR	120	FALL DROP PAY OUT	mo-dehu
*Za[]uq	121	FAR DISTANT	mo-lamiŋo
*qumaH	122	FARM FIELD	qileeŋi "
*gemuk *tabe[q,k]	123	FAT (adj) GREASE	gode; mo-liŋohu tabo
*ama	124	FATHER	ti-yamo
*Depa	125	FATHOM	lopo
*takut	126	FEAR	wohe
*bulu	127	FEATHER HAIR--BODY	layi lambuto; hapato
*Caqi	128	FECES EXCREMENT	bowundo

*pa-kaʔen	129	FEED	qaalo > mo-po-qa
*be-beHi[]	130	FEMALE WOMAN	buwa taa buwa
*kuraN	131	FEW LACKING INSUFFICIENT	ŋo-qidi; ŋo-peqe kuuraŋi; qiilaŋi
*[]away	132	FIGHT	pate > mo-paate-ya ; loohulu > mo-loohulu-wa
*darizi	133	FINGER/TOE	ti-woŋo-wa lo qoluqu
*tuZuq		POINT	mo-lunu (from tunu)
	134	FINISH (OFF) SEAL	
*putus			
*xapuy	135	FIRE	tulu
*qi-kaʔen tola 'fish' *qi-seDaq	136	FISH SIDE DISH	qu po-nula; tola nula
*paRi	137	FISH--RAY	pahi
*balanak	138	(FISH)	bulalaqa
*taNiRi	139	(FISH)	hutuqo (?)
*bali[d/D]a	140	(FISH)	
*lima	141	FIVE	limo
*ñala	142	FLAME	laqito; deqito
*k-e[n]tut	143	FLATULENCE	wotuto (silent); pondulo (audible)
*[l]etaw	144	FLOAT	
mo-bata 'wet' *baSaq	145	FLOOD	
*[q]iluR	146	FLOW CURRENT	yilihu > mo-hilihu 'let flow' tolohu
*buNa *bu[D/z]ak	147	FLOWER	buŋa, hulaqo
*laNaw	148	FLY (INSECT)	laŋo
*layeR	149	FLY (VERB) HOVER	l-um-ayuhu; t-um-omboto
*bujaq	150	FOAM BUBBLE BOIL	mo-didi; mo-lo-lombula, l-um-o-lombula
*e[m]bun	151	FOG MIST CLOUD	heeŋo
tola *seDaq 'fish'	152	FOOD (WITH RICE) SIDE DISH	qila nula
*kaki	153	FOOT/LEG	qoqato
*[d/D]aqeix	154	FOREHEAD/FACE	baya
*xe[m]pat	155	FOUR	wopato
*qa[n]Dep	156	FRONT	dimuka; talu
*buwaq	157	FRUIT	huŋo
*buliR	158	FRUIT--EAR	
*penuq	159	FULL	mo-polu
	160	(FUTURE--PROXIMATE) IN A LITTLE WHILE LATER ON (TODAY)	ŋo-peqe
*qapejuS[u]	161	GALL/BILE	polu
*anitu	162	GHOST SPIRIT	poŋgo

*leyqa[]	163	GINGER	meelito
*kasi *beRey	164	GIVE	wohi > mo-ŋohi
*silaw	165	GLITTER SHINE	t-im-inelo
*lak[a,e]w *panaw	166	GO/LEAVE	naqo > mo-o-naqo 'go'; mo-buŋgato, mo-huwato 'leave'; also tola > mo-lola 'depart'
*kambiN	167	GOAT batade	
*emas *bulawan	168	GOLD YELLOW	hulawa mo-lalahu
	169	GOOD	mo-piyohu
*butiR	170	GRAIN WART	yineŋo
*ha[a,i]men	171	GRASS	huqoyoto
*hizaw	172	GREEN RAW	yidumo > mo-idu me-eŋgo
*hitaq	173	GROIN CROTCH	
*tu[m]buq	174	GROW	mo-butu; t-um-umulo
*bulu	175	HAIR--BODY	lambuto; hapato
*sabut	176	HAIR--FIBROUS	
*quban	177	HAIR--GRAY	wuwalo
*buSek	178	HAIR--HEAD	huwoqo
*taNan *kama[] *lima	179	HAND FIVE	qoluqu, quluqu limo
wali 'yield',*-ani 'crop'	180	HARVEST	qotolo > mo-ŋotolo

(lambuto: genitals, armpits, legs; hapato: nape of neck, hands, trunk)

*i[]a	181	HE/SHE	tiyo
*qulu[]	182	HEAD	luŋgoŋo
*pañDuN	183	HEADPIECE	
*DeNeR	184	HEAR	mo-duŋohu
*pusuq	185	HEART KERNEL	putu
*beRqat	186	HEAVY	mo-bu-buheto
*tuluN	187	HELP ASSIST	yiyo > mo-hiyo; mo-bandu; mo-tuuluŋi
*sed[q]u[q]	188	HICCOUGH SOB SIGH	
*buNsud	189	HILL MOUND	datahu
*-ña	190	HIS/HERS	-liyo
*NisNis	191	HISS SNICKER	
*pukul	192	HIT STRIKE	wumbadu > mo-humbadu; pate > mo-mate
*kepkep *kupkup	193	HOLD TAKE EMBRACE	mo-dihu (from mo-hama dihumo)
*bitbit	194	HOLD--IN FINGERS	
*suNay	195	HORN--ANIMAL	tuŋe
*Rumaq *balay	196	HOUSE CONSTRUCTION	bele wale (classifier, buildings)
*pija	197	HOW-MANY/MUCH?	wolo > ŋo-olo

*Ratus	198	HUNDRED	hetuto
*lapaR	199	HUNGRY	biti-o-lo; polaaŋo-lo
*gutem	200	HUNT	qalupo > mo-ŋalupo
*panaq		BOW/ARROW	pana (in Schröder's Woordenlijst, pala)
*xaku	201	I	waqu
*biras	202	(IN-LAW)	
*hipaR	203	IN-LAW--SISTER	yipahu (sibling-in-law)
*tuNaw	204	(INSECT--TINY, BITING)	tuŋo
*tiyuk	205	INSERT PENETRATE	
*[]iyut	206	INTERCOURSE (CURSE WORD)	
*dalem	207	INTERIOR INSIDE PSYCHE	delomo
*tinaqi	208	INTESTINES/GUTS	toniya
*pulaw	209	ISLAND	liito
*hisaN	210	JAW	wale 'lower jaw'
*[]a[z][a]y	211	JOINT NODE WRIST/ANKLE	huqu 'knee'
*buku			
*qutan	212	JUNGLE WOODS	delomo qayu
*paCey	213	KILL	pate > mo-mate
*tu[]ud	214	KNEE	huqu
*pisaw	215	KNIFE	pito
*taqu	216	KNOW--FACTS	taa > mo-to-ta, qo-taa-wa
*sa[z]@D	217	KNOW--PERSON	
*haReZan	218	LADDER STAIRCASE	tuqadu
*Danaw	219	LAKE POND	bulalo
*ba-Danaw		PUDDLE	
*-uDiSi	220	LATE BEHIND (TIME)	laaŋgari;
*Cawa	221	LAUGH(TER)	mo-qiqi (verb)
*la[m]pis	222	LAYER THIN SLAB	wapidu > mo-hepidu (vb 'to lay a base'
*paQpaQ	223	LEAF	duuŋo
*Dahun		MEDICATE	
*buluN			
*aku[q]	224	LEARN BE RESPONSIBLE	mo-balaajari; mo-poqo-olato taaŋguŋi
*lintaq	225	LEECH	
*-wiRi	226	LEFTSIDE	q o l o - ihi
*paqa[]	227	LEG/FOOT STALK STEM	qoqato bataŋo "
*surat	228	LETTER	tuladu
*hi-ZeRaq	229	LIE DOWN RECLINE	mo-ti-balato

*kilat	230	LIGHTNING	qilato	
	231	LIKE	mo-to-hilawo	
*[]ibeR		DESIRE		
*qapuR	232	LIME	tilo	
*bibiR	233	LIPS	biihu	
*bi[]aR	234	LIVE /layv/ ALIVE LET LOOSE	tumu-tumulo	biyahu > mo-miyahu 'take care of' (?)
*qaCey	235	LIVER	wandohu; wulalipo (?)	
*baha[g]	236	LOINCLOTH	pedito	
*p-añjaN	237	LONG	hayaqo	
*kuCu[] *CumaS	238	LOUSE	qutu; tumo	
	239	LOVE	mo-toliqaŋo ; mo-tilandahu	
*Da-DaRa	240	MAIDEN VIRGIN	du-lahu	
*buhat	241	MAKE/DO	mo-hutu	
*gawa[] *la-laki	242	MALE MAN	lo-laqi taa lo-laqi	
*teNeR	243	MANGROVE		
	244	MANY	daa-daata	
*De	245	(MARKER--DATIVE)	qolo	
*t[e,i]	246	(MARKER--DEFINITE)		
*ke	247	(MARKER--GOAL)	qode	
*sa	248	(MARKER--PLACE)	to	
*[]aN	249	(MARKER--NOMINAL PHRASE)	qu (impersonal), taa (personal)	
*si	250	(MARKER--PERSONAL NAME)	ti	
	251	MEAT FLESH	daagiŋi , tapu	
*bahuR *kahuR	252	MINGLE MIX UP	qulawu > mo-ŋulawu	mo-layiqo 'rise'
*baRqaN	253	MOLAR--TOOTH	bohenjo	
*u[w]aN	254	MONEY	doyi	
*bulan	255	MOON	hulalo	
	256	MORNING	didimodupo, dumodupo	
*lesuN	257	MORTAR	didiŋga	
*ñamuk	258	MOSQUITO	lamuqo	
*lumut *limut	259	MOSS ALGAE	lumuto	
*ina *in[d]eq	260	MOTHER	ti-ilo	
*nahik *sakay	261	MOUNT RIDE UP(WARDS)	mo-ti-lundu mo-taqe→molaqe taqēē (or) taqealo	
*bukid *bulud	262	MOUNTAIN HILL	huqidu datahu	
*ba[q]baq	263	MOUTH	ŋaŋo, tuŋgilo	
*kuSkuS	264	NAIL--FINGER/TOE CLAW; HOOF	luqobu	
*-ajan	265	NAME	taŋgulo	

*saNay	266	NAMESAKE	
*pusej	267	NAVEL	yibuqo
*hampir *[l]apit	268	NEAR	wembidu > me-embidu
*liqeR	269	NECK	buloqo
*buken	270	(NEGATIVE) NOT SO	dii-la
*-[d]i-	271	(NEGATIVE) DON'T	dii-la ; keke-a
*baqeRu[h] *baRu[-]	272	NEW RECENTLY	bohu
*Rabi[]i	273	NIGHT	huwi
*siywa *siwya	274	NINE	tiyo
*nipaq	275	NIPA	
*liseSaq	276	NIT	
*qijuN	277	NOSE	wuliŋo
*ban[i]hed	278	NUMB CRAMP(ED)	
*beRsay	279	OAR/PADDLE	bite > po-mite, bi-bite
*k-uRita	280	OCTOPUS	
*tuqaS	281	OLD	mo-hiihewo, mo-huuhewo
*[i,e]sa	282	ONE	qo-inda 'first'; tuwewu, tuwawu 'one'
*bawaN	283	ONION GARLIC	
*buka[]	284	OPEN UNCOVERED DISCLOSED	huqo
*beNkaR	285	OPEN--APART (AS FLOWER)	
*iba	286	OTHER	weewo ;
*la[]in		DIFFERENT	ŋo-po-hiiy-a (mo-hiiyo 'to separate')
*katiR	287	OUTRIGGER	qatihu
*tiRum	288	OYSTER BLACK INK	
*peDiq *Nilu[]	289	PAIN(FUL) HURT(ING)	mo-ŋiŋi 'feel, be in, pain'
*palaj	290	PALM--OF HAND	paladu
*[a]hanaw	291	(PALM TREE)	waqolo
*kasi	292	(PARTICLE-- EXCUSE) GIVE	
*aDa[]	293	(PARTICLE-- EXISTENTIAL) THERE (IS) HAVE	woluwo
*waDa[] *[]aRDa[]		NOTHING PROLIFIC	
*pa	294	(PARTICLE-- INCOMPLETIVE) STILL; YET; MORE	po
*bayaD	295	PAY	baayari > mo-maayari
*butuq	296	PENIS	wuti
	297	(PERFECTIVE--RECENT) A WHILE AGO	qeŋondiye

*Cau	298	PERSON HUMAN	tawu
*[]uraN		CHILD	walaqo; banda; taa qu kikiqo
*qaSelu	299	PESTLE	walaqo didiŋga
*[d/D]aSak	300	PHLEGM	huwodu ; qalaqo
*babuy	301	PIG	boyi
*ha-DiRi	302	PILLAR--OF HOUSE STAND	wolihi t-im-ihulo , mo-ti-tihulo
*banu[w]a	303	(PLACE)--LAND COUNTRY, VILLAGE	lipu
*tanem	304	PLANT (noun)	mulo
	305	PLAY	yitohu > mo-yitohu
*tuZuq	306	POINT (TO/OUT) TEACH	tunu > mo-lunu mo-po-tunu
*ku[D]en	307	POT--COOKING	quloŋo
*pa-	308	(PREFIX-- CAUSATIVE) FEED	po-
*qi-	309	PREFIX-- INSTRUMENTA	po-; po-..-a (morphophonemically, poH-)
*paN-	310	PREFIX-- INSTRUMENTAL	poN-; poN-..-a
*k[a/e]-	311	PREFIX-- STATIVE/NOMINAL	qo-
*b[a/e]-	312	PREFIX--NOMINAL	
*peRes	313	PRESS OUT WRING	pitolo > mo-mitolo
*begar	314	PROUD STUBBORN	soomboŋi, batiŋga
	315	PULL	bandaŋo > mo-mandaŋo biyandaŋo > mo-miyandaŋo
*nanaq	316	PUS	
	317	PUSH	wundulo > mo-hundulo; mo-hipelo
*taRuq	318	PUT AWAY HIDE	tuuqo > mo-luuqo ; huli > mo-muli
*kunu[n]	319	(QUOTATIVE) RUMOR	
*kasaw	320	RAFTER	
*quZaN	321	RAIN	didi
*b-al-aNaw *b[a]luntu	322	RAINBOW	
*quway	323	RATTAN	hutiya
*siNaR	324	RAY--SUN	
*baca	325	READ	mo-baca
*-iRaq *pera	326	RED DRUNK	welamo > me-ela huwo-huwoqo
*suRuq	327	REQUEST COMMAND	mo-hile
*[]uli[q]	328	RETURN	m-uli; mo-to-wuli; mo-bale
*tabuli	329	REVERSE TURN OVER	
*Rusuk	330	RIB--BONE	datala
*h[e,i]may	331	RICE--COOKED	qila

*betiq	332	RICE--POPPED	
*beRas	333	RICE--MILLED	tapu lo pale
*pajey	334	RICE--SEEDLINGS	pale
*biNka *puTu	335	RICE CAKE	
*bubuN	336	RIDGE OF ROOF	huuŋo (as seen from underneath)
*tuqu	337	RIGHT CORRECT ON TARGET	banari
*-wanaN	338	RIGHTSIDE	q o l o -wala
*Rabut	339	RIP LOOSE	wahu > mo-hehu 'take by force', 'seize'
*suNay	340	RIVER	dutula
*Zalan	341	ROAD/WALK	dalalo
*seRaq	342	ROAST	
*qatep	343	ROOF--THATCH	watopo
*-akaD	344	ROOT (OUT) DIG OUT	
*tali	345	ROPE TWINE	tali
	346	ROTTEN	mo-hutodu
*lekuN *like[D]	347	ROUND CIRCLE	hulu-hululo liliŋo
	348	RUB	wudedu > mo-hudedu
*layaR	349	SAIL--OF BOAT	layahu
*asin	350	SALT	watiŋo
*pasiR *p[a,i]nta[d]	351	SAND	huŋayo
*besuR *sawa	352	SATISFIED FULL	mo-tolu lo-butuhu
*bicara	353	SAY/SPEAK	mo-bisala; mo-loqiya
*tabuR *sabu[D,R]	354	SCATTER SPREAD	hulayadu > mo-mulayadu
*guntiN	355	SCISSORS	hu-hundiŋo
*kiskis	356	SCRAPE	mo-po-yilito
*garis	357	SCRATCH	qahu > mo-ŋahu
*-iyak	358	SCREAM/YELL	mo-malaqo; wuwatiqo > mo-ŋuwatiqo
*lawuD	359	SEA	deheto
*kiTa[7]	360	SEE	wondoŋo > q-il-o-ondoŋ-a
*beñhiq	361	SEED	bili
*piliq	362	SELECT	pili > mo-mili
*pa-saliw	363	SELL	mo-po-tali
*pitu	364	SEVEN	pitu
*zaqit	365	SEW	detumo > mo-detu
*heyaq	366	SHAME SHY FACE	wolito mo-olito
*tazem	367	SHARP	mo-lalito
	368	SHEATH(E) SHIELD	

*baRa	369	SHOULDER	binguŋo
*quDaN	370	SHRIMP	hele
	371	SIBLING (YOUNGER/OLDER BROTHER/SISTER)	taa yali-yali (younger); taa mo-huhula (older)
*sakit	372	SICK(NESS)	ŋoŋoto (noun) mo-ŋoŋoto (adjective)
*pihak	373	SIDE (location)	tili; mambahu, mindihu, qambahu
*pirak	374	SILVER	talaqa
*salaq	375	SIN ERROR	to-tala
	376	SING	mo-lohidu, mo-mañañi
	377	SIT	mo-ti-huloqo
*puNkuR		REAR END	tutubu 'buttocks'
*7enem	378	SIX	wolomo
*kulit	379	SKIN	qalipo
*laNit	380	SKY HEAVEN	huluŋo
*tiDuR *tuDuR	381	SLEEP	mo-tuluhu
	382	SMALL	kikiqo
		SHORT	kodo-kodoqo; limbu-limbuqo; limbo-limboŋo
*[]intuk		TINY	
*behew	383	SMELL	qabuhu 'underarm odor'
*bahuq		ODOR	boolo
*h[a,e]Rum		FRAGRANCE	wonu
*pañDay	384	SMITH SKILLED	pani mo-to-ta
*asu	385	SMOKE	poloqo
	386	SMOOTH	mo-dipulato; tidito
*sawa	387	(SNAKE)	tulidu 'snake'
*tapak	388	SOLE/FOOTPRINT	
*bujiN *[]aRiw	389	SOOTY	
*asem	390	SOUR	mo-lotiŋo
	391	SPEAR	to-tobuqo; juwelele
*baNkas	392	SPECKLED--FOWL	
	393	SPEND THE NIGHT	
*peDes	394	SPICY/HOT	mo-lolowo
*la[b,w]a[]	395	SPIDER(WEB)	spider: daŋga-daŋga web: lawaŋo
*[d/D]aSak *ludaSaq *tupa *[d]ula[]	396	SPIT(TLE)	yiyohu
*wasay	397	SPLIT AXE CHOP IN TWO	mo-butaqo buliiŋo
*-awa	398	SPOUSE	hiyalo; dile (polite)
	399	SQUEEZE	tondolo > mo-londolo
*DiRi *se-n-DiRi	400	STAND (UP) ONESELF	t-im-ihulo hi-hilawo
*bituqen	401	STAR	poliyama
*batu[]	402	STONE	botu

*baRyu	403	STORM	dutalo
*dapuR	404	STOVE/KITCHEN	depula
	405	STRAIGHT DIRECT FRANK	mo-tulidu
*tepat			
*azar	406	STUDY TEACH	mo-balaajari qaajari > mo-ŋaajari
*sepsep *SiRup	407	SUCK	yinupo > mo-hinupo
*-i	408	(SUFFIX-- LOCATIVE)	-a (declarative), -i (imperative)
*-an	409	(SUFFIX-- NOMINAL/STATIVE)	-a or -alo (OF) (RF) Imp fut
*-en	410	(SUFFIX-- PASSIVE)	-lo; -o-lo
		FOOD	qu qaalo (lit., 'jang dimakan')
*tebuSu	411	SUGAR CANE	patodu
*qajaw	412	SUN	mato lo dulahu
*DaRat	413	SURFACE SEA PLAIN	baya deheto
*manis *tamqis *namnam	414	SWEET	woliŋo > mo-oliŋo
*laNuy	415	SWIM	mo-lolaŋi
*duyan	416	SWING/ROCK	mo-po-luŋge-luŋgelo
*[]ikuR *[]ipus	417	TAIL	patahu
*anu[w]aN	418	TAMARAW WATER BUFFALO	buqulu tutu qolobo
	419	TARO	bete
*tuZuq	420	TEACH POINT OUT	qaajari > mo-ŋaajari mo-po-tunu
*-puluq	421	TEN	mo-pulu
*anay	422	TERMITE WHITE ANT	wale
*lasu[R/g]	423	TESTICLES	hutu
*siDa	424	THEY	timoŋoliyo
*kapal *besar	425	THICK BROAD WIDE	mo-hulaŋo mo-taŋgalo
*paqa	426	THIGH/LEG	buŋo lopa
*nipis *ni[w]aN	427	THIN SKINNY NARROW	mo-lipa wepito > me-epito
*[]aman *Dem-an	428	THINK REMEMBER	pikiiraŋi > mo-mikiiraŋi tolomo > mo-lolomo
	429	THIRSTY	mo-to-toqaŋo
*ribu	430	THOUSAND	lihu
*telu[h]	431	THREE	to-tolu; towu, too, to
	432	THROW	mo-dembeŋo; paqi > mo-maqi

*petiR	433	THUNDER	bulonggodu
	434	TIE	buhuto > mo-muhuto; tihuto > mo-lihuto
	435	TODAY NOW	dulahee bo-tiya; yiindiye masaa tiya
*deNan	436	TOGETHER WITH SIMULTANEOUS	wolo
	437	TOMORROW	loombu
*dilaq	438	TONGUE LICK	dila mo-dilato
*-ipen	439	TOOTH	dungito
*suluq	440	TORCH	mayango
	441	TRANSFER MOVE	pinda > mo-minda (trans)
*kaSiw	442	TREE/WOOD	bungo / qayu
*puqun	443	TREE--TRUNK BASIS	bungo
*puna[]		ORIGIN	bungo
*taRum	444	TREE--INDIGO	
*bak[h]aw	445	(TREE)	
*pahuq	446	(TREE/FRUIT)	
*balik	447	TURN--AROUND TURN BACK	mo-bale
*DewSa	448	TWO	du-luwo
*piluq	449	TWIST BRAID	bibidu; mo-libudu; tohungo > mo-lohungo; mo-liito tulapidu > mo-lulapidu

(mo-lohungo and mo-liito mean 'to twine, to spin')

	450	UGLY	
*payuN	451	UMBRELLA	toyungo
*[]iSeq	452	URINE	loyili
*puki	453	VAGINA	tele, pundingo 'female genitals'
*7uRaC	454	VEIN SINEW	lindidu
*-aR-	455	(VERBAL-- ACTIVE INFIX)	
*ma-	456	(VERBAL-- ACTIVE PREFIX)	mo- (morpho-phonemically, moH-)
*[]u[n]tu	457	(VERTICAL) UP/DOWN	mola (direction particle)
*[]utaq	458	VOMIT	mo-tuqo
*hawak	459	WAIST	wohuta
*hulat	460	WAIT EXPECT	wolato > mo-hulato
*diNdiN	461	WALL	dingingo
*[]ibeR	462	WANT DESIRE	mo-huto mo-to-hilawo
	463	WARM	
*pasuq		HOT	mo-patu
*Sinaw *huRas	464	WASH RINSE OFF	wulo > mo-ngulo wuheto > mo-uheto
*baseq *basuq	465	WASH UP	
*wa[]iR *Danum *tubiR	466	WATER LIQUID STILL WATER	taluhu

*kami	467	WE (EXCLUSIVE)	qami, qami-yaatiya
*kita	468	WE (INCLUSIVE)	qito
*kaya	469	WEALTH	RICHkaya;taa woluwo 'one who is rich'
*tenu7un *habel	470	WEAVE BLANKET	wawolo > mo-hewo wuloto
*apa *anu	471	WHAT?	wolo
	472	WHEN?	qomolu-wa (future); qomo-qomolu (past)
	473	WHERE?	to qu toonu
*NesNes	474	WHINE WHIMPER	
*putiq	475	WHITE	mo-puti
	476	WHO?	taa toonu
	477	WHOSE?	lo taa toonu
	478	WHY?	mo-ŋol-a; lo-ŋol-a
*balu	479	WIDOW(ER)	bolu; janda
*haNin	480	WIND/AIR	dupoto
*habaRat	481	WIND--NORTHWEST	
*timuR	482	WIND--RAIN	
*salatan	483	WIND--SOUTH	
*pakpak	484	WING	polipiqo
*ñiRu	485	WINNOWING BASKET	
	486	WIPE OFF	mo-luluto; payidu > mo-mayidu
*[]alam	487	WISE SMART	
*bukbuk	488	WOOD-BORER	
*ulej	489	WORM--EARTH	wulodu
	490	WORM--STOMACH	huŋguluwaŋa 'roundworm'
*peRaq	491	WRING/TWIST	pitolo > mo-mitolo
*surat	492	WRITE	tuladu > mo-luladu
*qubi	493	YAM	qatetela
*taqun *panahun *daquR	494	YEAR SEASON/CYCLE	taawunu polo; sembo
*tapay	495	YEAST	
	496	YELLOW	mo-lalahu
*[h]e[h]e	497	YES	qooqo
	498	YESTERDAY	qolaaŋo
*kamu	499	YOU--PLURAL	timoŋoli
*-kaw *iXu[]	500	YOU--SINGULAR	yiqo

487 []alam
428 []aman
060 []anak
013 []anta
249 []aN
389 []aRiw
132 []away
210 []a[z][a]y
231 []ibeR
462 []ibeR
417 []ikuR
382 []intuk
097 []inum
417 []ipus
452 []iSeq
206 []iyut
328 []uli[q]
457 []u[n]tu
298 []uRaN
458 []utaq
009 abu
293 aDa[]
291 [a]hanaw
265 -ajan
344 -akaD
224 aku[q]
124 ama
409 -an
422 anay
180 -ani
162 anitu
005 antiN
471 anu
418 anu[w]aN
471 apa
390 asem
350 asin
385 asu
113 -asuk
455 -aR-

001 atas
033 awaN
406 azar
051 baba
021 babaq
001 babaw
117 babaw
301 babuy
325 baca
034 badan
219 baDanaw
312 b[a/e]-
236 baha[g]
383 bahuq
252 bahuR
048 b[a]kal
064 baker
445 bak[h]aw
011 balakaN
138 balanak
322 balaNaw
196 balay
140 bali[d/D]a
447 balik
055 baliw
479 balu
322 b[a]luntu
101 balur

033 balutu
278 ban[i]hed
303 banu[w]a
033 [b]aNka[q]
392 baNkas
069 baNkay
010 baNun
263 ba[q]baq
272 baqeRu[h]
369 baRa[]
058 baRaH

038 baRani
253 baRqaN
272 baRu[]
403 baRyu
465 baseq
465 basuq
145 baSaq
049 bati[]is
402 batu[]
283 bawaN
295 bayaD
062 bazu
130 be-beHi[]
314 begar
383 behew
048 b[e]kal
048 beli[]
015 be[n]tuN
361 beñhiq
080 beNel
285 beNkeR
333 beRas
164 beRey
043 beRkes
186 beRqat
279 beRsay
022 besar
425 besar
352 besuR
332 betin
234 bi[]ak
233 bibiR
353 bicara
070 bilaN
028 bileR
335 biNka
202 biras
194 bitbit
401 bituqen
336 bubuN

147 bu[D/z]ak
241 buhat
150 bujaq
058 bujiN
389 bujiN
284 buka[]
488 bukbuk
270 buken
262 bukid
211 buku
071 bukut
255 bulan
028 bulaR
168 bulawan
158 buliR
127 bulu
175 bulu
189 bulud
262 bulud
223 buluN
015 buluQ
046 bunuq
147 buNa
043 buNkus
189 buNsud
072 buqaya
047 bu[r/l]iq
056 buRew
105 [b]u[R]taq
178 buSek
029 buta[]
170 butiR
206 butuq
157 buwaq
128 Caqi
035 Caq[u]leN
248 Cau
221 Cawa
110 -CeluR
238 CumaS

022 [d]akel
054 dakep
207 dalem
404 dapuR
494 daquR
133 darizi
067 dateN
436 deNan
271 [d]i
438 dilaq
461 diNdiN
396 [d]ula[]
416 duyan
240 Da-DaRa
223 Dahun
086 D-ana
219 Danaw
466 Danum
030 DaRaQ
413 DaRat
245 De
077 DeDeSem
428 Dem-an
184 DeNeR
125 Depa
448 Dewha
083 D-idi
084 D-ini
400 DiRi[]
017 DiRus
085 D-itu
105 [D]u[R]taq
154 [d/D]aqeiY
300 [d/D]aSak
396 [d/D]aSak
168 emas
151 e[m]bun
410 -en
143 e[n]tut

282 esa
348 galiN
357 garis
241 gawa[]
123 gemuk
348 giliN
355 guntiN
199 gutem
481 habaRat
470 habel
302 ha-DiRi
383 h[a]Rum
171 hal[a,i]men
268 hampir
051 ha[n]teD
480 haNin
218 ha-ReZan
034 hawak
459 hawak
497 [h]e[h]e
331 h[e]may
383 h[e]Rum
366 heya[q]
331 h[i]may
203 hipaR
210 hisaN
173 hitaq
172 hizaw
229 hi-ZeRaq
460 hulat
120 huluR
464 huRas
408 -i
181 i[]a
286 iba[]
055 iba[]
260 ina
260 in[d]eq
439 ipen
008 irek

326 iRaq
282 isa
358 iyak
500 iXu[]
311 ka-
442 kahiw
252 kahuR
153 kaki
179 kama[]
167 kambiN
467 kami
499 kamu
425 kapal
050 karabaw
025 kaRaC
320 kasaw
164 kasi
292 kasi
287 katiR
500 kaw
469 kaya
108 ka7en
129 ka7en
136 ka7en
247 ke
311 ke-
143 k-e[n]tut
193 kepkep
230 kilat
008 kili-kili
356 kiskis
468 kita
360 kiTa[7]
238 kuCu[]
307 ku[D]en
379 kulit
319 kunu[n]
193 kupkup
131 kuraN
280 k-uRita
078 kusem

264 kuSkuS
395 la[b]a[]
120 labuq
024 lahiR
286 la[]in
166 lak[a]w
166 lak[e]w
242 laki
242 la-laki
222 la[m]pis
007 landas-an
148 laNaw
380 laNit
415 laNuy
199 lapaR
268 [l]apit
423 lasu[R/g]
395 la[w]a[]
034 lawas
359 lawuD
349 layaR
149 layeR
045 lebeN
347 lekuN
036 le[N]kuN
257 lesuN
144 [l]etaw
163 leyqa
347 like[D]
141 lima
179 lima
259 limut
106 lin[D]uR
225 lintaq
061 liNaw
269 liqeR
276 liseSaq
396 ludaSaq
259 lumut
064 lu[m]tuq
115 luwas

456 ma-
119 maCa
089 maCey
116 mahal
100 maja
057 mamaq
414 manis
023 manuk
059 manuk
019 mula
261 nahik
087 namnam
414 namnam
316 nanaq
039 naNka
275 nipaq
427 nipis
427 ni[w]aN
190 ña
142 ñala
258 ñamuk
041 ñawa
485 ñiRu
063 ñiyuR
474 NesNes
289 Nilu
191 NiaNis
308 pa-
294 pa
213 paCey
118 pade[m,N]
446 pahuq
334 pajey
129 pa-ka7en
484 pakpak
290 palaj
494 panahun
200 panaq
166 panaw
351 p[a]nta[d]
384 pañDay

183 pañDuN
237 pañjaN
310 paN-
227 paqa[]
426 paqa[]
026 paQiC
223 paQpaQ
137 paRi
363 pa-saliw
351 pasiR
463 pasuq
018 patiyukan
014 pa[]un
451 payuN
394 peDes
289 peDiq
099 pera
326 pera
491 peRaq
313 peRes
053 pes[o]qan
433 petiR
159 penuq
373 pibak
197 pija
362 piliq
449 piluq
036 piNgan
092 piNgan
374 pirak
016 pisaN
215 pisaw
364 pitu
453 puki
192 pukul
209 pulaw
421 puluq
002 pulut
019 puna[]
443 "
096 punay

016 punti
377 puNkuR
443 puqun
267 pusej
185 pusuq
475 putiq
134 putus
335 puTu
075 puTul
235 qaCey
079 qajaw
412 qajaw
156 qanDep
074 qañud
161 qapejuSu
232 qapuR
074 qaRus
299 qaSelu
343 qatep
015 qauR
082 qawes
059 qayam
094 qayam
309 qi-
110 qi-CeluR
136 qi-ka7en
146 qiluR
136 qi-saDaq
027 qitem
277 qijuN
177 quban
493 qubi
370 quDaN
182 qulu[]
122 qumaH
037 qu[n]tek
212 qutan
081 qutaN
323 quway
321 quZaN
002 rapet

430 ribu
273 Rabi[]i
103 Rabquk
339 Rabut
198 Ratus
022 Raya[]
088 Rebaq
196 Rumaq
330 Rusuk
248 sa
354 sabu[D]
354 sabu[R]
176 sabut
016 sagiN
261 sakay
372 sakit
114 salaq
375 salaq
483 salatan
363 saliw
266 saNay
054 sape[]
353 sawa
387 sawa
398 sawa[]
216 sa[z]eD
118 sebu
188 sedquq
136 seDaq
152 seDaq
066 seje[d]
400 senDiRi
407 sepsep
342 seRaq
250 si
424 siDa
112 siku
042 silaw
165 silaw
324 siNaR
274 siwya
274 siywa

440 suluq
032 sumpit
044 sunu[R]
195 suNay
340 suNay
052 suqun
228 surat
492 surat
113 surud
040 susu
044 suRaq
068 suRuq
327 suRuq
031 Seyup
464 Sinaw
407 SiRup
123 tabe[q,k]
329 tabuli
354 tabuR
071 takep
071 takub
126 takut
345 tali[]
104 taliNa[]
414 tamqis
105 tanaq
304 tanem
179 taNan
139 taNiRi
073 taNis
388 tapak
495 tapay
009 tapu
216 taqu
494 taqun
095 taRinep
444 taRum
318 taRuq
091 tawaD
367 tazem
411 tebuSu

246 t[e,i]
431 telu[h]
470 tenu7un
243 teNeR
405 tepat
020 ti[]an
381 tiDuR
482 timuR
208 tinaqi
288 tiRum
205 tiyuk
052 tósoqun
105 tuba
466 tubiR
381 tuDuR
107 tuli
187 tuluN
098 tulu[q]
174 tu[m]buq
105 tuna[q]
204 tuNaw
109 tuNa
396 tupa[]
281 tuqaS
337 tuqu[]
065 tu[R]enaw
214 tu[]ud
133 tuZuq
306 tuZuq
420 tuZuq
055 uba[h]
220 uDiSi
058 ujiN
489 ulej
280 uRita
254 u[w]aN
293 waDa[]
466 wa[]iR
111 walu

338 wanaN
033 [w]aÑka[q]
397 wasay
226 wiRi
093 Wasu
201 xaku
135 xapuy
155 xe[m]pat
095 Xipi
012 zaqat
365 zaqit
120 zatuq
051 zaza
055 Zadi[]
341 Zalan
121 Za[]uq
030 ZuRuq
378 7enem
454 7uRaC

The following is the order of the symbols used. They follow Dyen (1965 "Formosan Evidence") except for the following: N = ŋ ; N = N_1 ; 7 = ? ; [o] = vowel is not determined. Brackets with a single phoneme [P] indicate that the phoneme occurs sporadically. Brackets with two phonemes [P/p] indicate that the status of either has not yet been determined; while [P,p] indicates that both phonemes are in competition.

	1	2	3
1. []			
2. a	u	a	o
3. b	h/b-	-b/w-	
4. c			
5. C		t	
6. d			
7. D	d-	-l-	
8. e		o	
9. g			
10. h			
11. H			
12. i		i	
13. j			
14. k		q	
15. l		l	
16. m		m	
17. n		l	
18. ñ			
19. N		ŋ	
20. N			

	1	2	3
21. o			
22. p		p	
23. q	⊂	ø	
24. Q			
25. r			
26. R		h	
27. s		t	
28. S		ø/⊂	
29. t		t	
30. T		t	
31. u		u	
32. w		w	-aw > -o
33. W			
34. x			
35. X			
36. y			
37. z			
38. Z			
39. 7			

PROTO-PHILIPPINE WORKSHEET

PROTO-PHILIPPINE WORKSHEET For [redacted] Gorontalo

Basic Interrogatives:

01. What? wɔlɔ ʔutiyɛ
02. Who? ~~taatonta~~ taa tɔɔnu taa bɔyitɔ
03. Whose? ʔu wɔlita ʔu tiye
04. where? tɔ ʔu tɔɔnu hulɔndalo
05. when (past)? ʔɔmɔ ʔɔmɔlu tiyo lee dungga
06. when)future)? ʔɔmɔluwa tiyo mee dungga
07. why? (yi)lɔngɔla
08. how (manner)? wɔlɔɔlɔ
09. how (degree)? wɔlɔɔlɔ lamingiyɔ
10. how much? ngɔɔlɔ haragaaliyɔ
11. how many? ngɔɔlɔ lɔta wutatumu
12. to what degree? –
13. in what rank? taa ngɔɔlɔ liyo yiʔɔ
14. how much apiece? ngɔɔlɔ ŋgɔ putu
15. do what? wɔlɔ ʔu hee pohutuɔ mu (pass) ~ hee mɔhutu wɔlɔ yiʔɔ
16. isn't that so? diila ~ dɛʔɛ

BASIC DEICTICS

17. this one (near me) qutiya
18. ~~this one (near us)~~ qutiyɛ
19. that one (near you) quyitɔ
20. that one (far away) quyitɔ

40 bɛlɛ mɔpiyɔhu a ʔutiyɛ
41 taa lɔlaʔi bɔyitɔ kaya daʔa

21 bɔtiya waʔu
22 bɔtiya ʔami
23 yiʔɔ tɛɛtɔ
24 timɔngoliyɔ tɛɛmɔla (upland)
tɛɛmɔta (downland)
botiyɛ doyimu 'Here's your money'
boyito bɛlɛmu 'there's your house'
bɔyitɔ timɔngoliyɔ 'There they are'
25 jaa pɔnaʔɔ
26 waʔu diila hee mɔnaʔɔ timiʔidu dulahu
27 waʔu diila lɔɔ naʔɔ ʔɔlaangɔ
ʔɛngondiyɛ
28 waʔu diila mɔɔ naʔɔ lɔɔmbu
ngɔpɛʔɛ maʔɔ
29 waʔu dɔnggɔ muda
30 waʔu diilalɔ muda
31 tiyɔ kaya
32 tiyɔ diila kaya
33 tiyɔ bɔtiyɛ diila tā mɔm(ɔ)mɛɛngila, bɔɔ taa
mɔh(ɔ)halawa
34 ʔami ʔɔ ʔuʔaalɔ
35 ʔami diila ʔɔ ʔuʔaalɔ
36 tiyɔ ʔɔ dɔyi
37 diila ʔɔ dɔyi tiyɔ
diyaalu ~ diyaaluwo (answer only)
38 ʔɔ bɛlɛ timɔngoliyɔ
39 ǰaa ʔɔ bɛlɛ timɔngoliyɔ

FOCUS PATTERNS:

palɛ mɔali taliyɔlaa tɔ paatali ~ palɛ ʔɔ taliya to paatali

42. Rice can be bought in the market.
palɛ jaa mɔali taliyɔlaa to paatali ~ palɛ jaa ʔɔ taliya to paatali
43. Rice cannot be bought now.
jaa ʔilo taliya palɛ ʔɔ laangɔ
44. Rice could not be bought yesterday.
taa ʔukiki ʔaa bɔtiyɛ taa maa mɔŋaa ʔupɔnula
45. This is the child that will eat the fish.
ʔupɔnula bɔtiyɛ ʔu maa ʔaalɔ lɔ taa ʔu kiki ʔaa bɔtiyɛ
46. This is the fish which the child will eat.
pitɔ bɔtiyɛ ʔu maa ⁼ pɔmutuliyɔ ʔupɔnula lɔ taa ʔukiki ʔaa bɔtiyɛ
47. This is the knife with which the child will cut the fish.
huwali bɔtiyɛ ʔu maa tuwɔtɔ lɔ taa ʔu kiki ʔaa bɔtiyɛ
48. This is the room which the child will enter.
tangɔ bɔtiyɛ ʔu pilɔtilunduwa lobuurungi
49. This is the branch on which the bird landed.
roti bɔtiyɛ ʔu pilɔ titambɛya lɔ langɔ
50. This is the bread on which the fly landed.
langɔ bɔtiyɛ ʔu lɔti tambɛ tɔ rɔti
51. This is the fly which landed on the bread.
taa lɔla ʔi bɔitɔ maa mɔna ʔɔ a ʔɔ dɛ milangɔ
52. The man will go to the beach/seashore.
ʔami yilɛɛ dungga tɔ taawunu yilalu maqɔ
53. We arrived last year.
ʔami maa mɔɔ na ʔɔ tɔ dulahu ʔisinini
54. We will go on Monday.
ʔami maa mɔbunggatɔ tɔ dɔlɔmɔ ʔu tɔɔlɔ huŋi
55. He will leave within three days.
tiyɔ lɛɛ dungga mayi tɔ ʔaraba ʔa yilalu maʔɔ
56. He came last Wednesday.
tiyɔ mɛɛ dungga mayi tɔ juma ʔati talu_talu
57. He will come next Friday.
mowali mɔlɔlangi yiʔɔ lɔlaanga bɔtiyɛ
58. You (sing.) can go swimming this afternoon.
jaa ~~bɔ~~wali ~~bɔ~~lɔlangi timɔngoli =duumɔdupa ~~bɔtiyɛ~~
59. You (pl.) could not go swimming this morning.
dee jam tuju timɔngoliyɔ bɔlɔ (conj) mɔngaa huŋi
60. They don't eat supper until seven p.m.
ʔɔlɔbu bɔyitɔ tambɔ_tambɔ tɔlataʔɔ (mud)
61. The carabao is wallowing in the mudhole.
ʔɔlɔbu bɔyitɔ yilatɛ ʔɔlaangɔ
62. The carabao was killed yesterday.
ʔɔlɔbu bɔyitɔ maa pɔtali lɔɔmbu
63. The carabao will be sold tomorrow.
bɔtiyɛ doyi pɔ tali limɔngoliyɔ ʔɔlɔbu
64. This is the money they will use to buy the carabao.

bɔtiyɛ ʔatɛtɛla pɔlulɔʔuʔu ʔupɔnula mu

65. This is the yam I will exchange for your fish.
pɔtaliya rɔti doyi bɔtiyɛ

66. Buy the bread with this money.
pɔlulɔʔa ʔatɛtɛla ʔupɔnula bɔtiyɛ

67. Trade this fish for some yams.
ʔupɔnula bɔtiyɛ ʔu maa taliyɔ lɔ taa dulahu bɔyitɔ

68. This is the fish which the maiden will buy.
ʔupɔnula bɔtiyɛ ʔu maa pɔtali lɔ taa dulahu bɔyitɔ

69. This is the fish which the maiden will sell.
pinggɛ bɔtiyɛ ʔu maa wuheta lɔ taa dulahu bɔ yitɔ

70. This is the plate which the maiden will wash.
taambati bɔtiyɛ ʔu pilɔtuluhɛ li prɛsidɛn

71. This is the place where the president lied down.
taa ʔukiki ʔaa bɔtiyɛ taa maa pɔtaliya liyɔ lɔ taa lɔla ʔi bɔitɔ rɔti

72. This is the child for whom the man will buy bread.
taa dulahu bɔtiyɛ taa (maa) pɔtaliya liyɔ lɔ taa lɔla ʔi bɔyitɔ rɔti

73. This is the maiden from whom the man will buy bread.
taa ʔukiki ʔaa bɔtiyɛ taa ~~pɛʔi~~ pɛʔi taliya liyɔ ʔupɔnula lɔ taa lɔla ʔi bɔyitɔ

74. This is the child whom the man will have buy fish.
Jaa pɛʔi taliyɛ roti tamu, yiʔo taa potali

75. Do not have the visitor buy bread: you buy it.
Jaa potali roti, potali palɛ maʔɔ

76. Do not buy bread, buy rice.
Jaa (maʔɔ) wohiyɛ doyi, wohiyi (wohii) ʔuʔaalɔ

77. Do not give money, give food.
Jaa (maʔɔ) baayarii huʔalimɔ, baayariipɔ palɛ

78. Do not pay for the ring, pay for the rice first.
Jaa ʔiʔiyi waʔu, ʔiʔiyi timɔŋɔliyɔ

79. Do not laugh at me, laugh at them.
Dɛɛ lɔɔmbu bɔlɔ bubɔ ʔaʔu talala bɔtiyɛ

80. I will not wash these trousers until tomorrow.
Jaa pɔtaliʔu ʔupɔnula bɔtiyɛ, bɔɔ maa ʔalɔʔu

81. I will not sell this fish, I will eat it instead.
waʔu diila loonaʔɔ ʔɔdɛ garɛja tɔ ʔahadi yilalu maʔɔ

82. I did not go to church last Sunday.
Diipɔ yilɔhiʔu ʔɔdɛ ʔɔliyɔ tandamata bɔtiyɛ

83. I did not give this gift to her yet.
Diila ʔilaaʔu lutu

84. I did not eat the banana.
Diila tilaliʔu ʔupɔnula bɔyitɔ, bɔɔ ~~ma~~ lɔtali palɛ waʔu

85. I did not buy that fish, I bought rice instead.
Diila diliiluʔu ti Maria, bɔɔ ti Lily

86. I did not kiss Maria, but I kissed Lily.
Diila bilubɔʔaʔu talala bɔyitɔ, bɔɔ kamɛja bɔtiyɛ

87. I didn't wash those pants yet, but I washed this shirt.
Diila hiluʔɔʔu janɛla, bɔɔ pindu

88. I did not open the window but I opened the door.

PRONOUN FORMS:

89. I am running. Wa?u taa tɛtɛ tɛtɛ ?ɔ ✓
90. Thou art running. yi ?ɔ ✓
91. He/she is running. tiyɔ ✓
92. We (exclusive) are running. ?ami taa hi tɛtɛ ?a ✓
93. We (inclusive) are running. ?itɔ taa hi tɛtɛ ?a ✓
94. You (pl.) are running. timɔŋɔli ✓
95. They are running. timɔŋɔliyɔ ✓
96. The others are running (but we are not). taa wuwɛɛwɔ hitɛtɛ?a, bɔɔ ?itɔ taa diila
97. Everybody is running. ŋɔ taa ŋɔ taa hitɛtɛ?a

98. This house is... mine. Bɛlɛ bɔtiyɛ ?uwɔla?u
99. thine. ?uwɔlɛmu
100. his, hers. ?uwɔliyɔ
101. ours (excl.) ?uwɔlami
102. ours (incl.) ?uwɔlandɔ
103. yours (pl.) ?uwɔlimɔŋɔli
104. theirs ?uwɔlimɔŋɔliyɔ

105. He was called by me. tiliyaŋu?u tiyɔ
106. You were seen by him. ?ilɔɔndɔŋaliyɔ yi?ɔ
107. This was made by you (sing.). pilɔhutumu ?utiyɛ
108. The children of my uncle are rich. wala?i pɔ?uwamaa?u kaya

MARKERS

109. This was brought by the maiden. dilɛlɔ mayi lɔ taa dulahu ?utiyɛ
110. This was brought by Juan. dilɛlɔ mayi lɛyi Juan ?utiyɛ
111. Peter was shot by Paul. bilutahɛɛ Paul tɛi Peter
112. Give the money to Maria. wɔhiya mɔta ?ɔdɛ ?ɔli Maria doyi
113. Give the gift to the girl. wɔhiya mɔta ?ɔdɛ ?ɔlɔ taa buwa bɔyitɔ tanda mata

114. DISCOURSE PARTICLES:

114. (question) dɛlɔ _____ Did he really go the Manila? (kaya')

115. (excuse) _____ But I was sick then. (kasi)

116. (patience) mulɔ _____ Wait first. (muna)

117. (quotative) ʔuwaliyɔ _____ They say you are rich. (daw, kuno)

118. (durative) lɔ _____ Are you finished now? (na)

119. (sustaining) pɔ _____ I am not finished yet. (pa)

120. (consequence) dɛbɔ _____ When he comes, then we'll go. (dayon)

121. (immediate) mɔta _____ Do you need this right away? (agad)

122. (limiting) bɔɔ _____ Just a little is left. (lamang)

123. (reflexive) ɪshihilawɔ _____ I myself will do it. (mismo)

124. (estimate) ŋɔpɛʔɛ _____ It is just about ready. (halos)

125. (emphatic) tutu _____ She is very, very beautiful. (talaga)

126. (discovery) buwayi _____ Oh my goodness, it's done. (pala)

127. (affirmative) ʔɔɔʔɔ _____ Yes, I know already. (nga', ngani')

128. (ignorance) diila ʔɔtaawa ~ jaa ʔɔtaawa _____ I do not know. (aywan, ambot, tao)

129. (permissive) mɔwali _____ May I borrow this? (maari', pwede)

130. (possibility) mɛɛ _____ You might fall. (yata')

131. (optative) tanu _____ I would like a little money only. (sana)

132. (answer) ʔɔlɔ _____ Good afternoon. (man, din, naman)

133. (qualifying) ʔɔdɛlɔ _____ He is somewhat rich. (tila, medyo, matsa)

NUMERALS AND ENUMERATIVES (*ka enumerative marker, *batu, etc.)

134. one baby ŋɔta

135. one flower tuwawu

136. one house(hold) tuwawu

137. two children duulɔta

138. three people towulɔta

139. four bananas ~~w~~lutu wɔpatɔwɔŋɔ

140. five sheets of paper limɔ lɔpita

141. six shirts ɸ wɔlɔmɔ pita

142. seven cigarettes pitu lɔ putu

143. eight stones ~~watu~~ bɔtu mɔhɛlu walu

144. nine eggs tiyɔ lɔ bɔtu

145. These three black cats were drowned. tɛtɛ moyitɔmaa totolu bɔtiyɛ lɔ ʔahumɔ

146. Those six fat men killed the carabao. mɔŋɔlɔlaʔi wɔlɔmɔta boyitɔ lɔ matɛ ʔɔlɔbu

COMPARISONS WITH ADJECTIVES. ʔuʔaalɔʔu lɛbɛ mɔpiyɔhɛʔɔ lɔ ʔuʔaalɔ lɔ babu

147. My food is better than the maid's. tiyɔ ʔɔlɔŋiya kaya daʔa tɔ duniya

148. He is the richest king in the world. waʔu lɛbɛ ~~mɔlaŋgataʔɔ lɛyi~~ mɔlaŋgatuma maʔɔ

149. I am taller/shorter than you. waʔu taa lɛbɛ mɔliŋohu ~~tɔ~~ pamiliiʔu

150. I am the fatest one in our family.

N. B. possible irrealis verb slots:

1. imperative (negative/positive)
2. past or perfective negatives
3. aorist or adverbial/interrogative constructions.

VERBAL RELATIONS

Timɔŋɔliyɔ bii bii salawa

151. (MUTUAL) They talked to each other.

Timɔŋɔliyɔ buubuutahɛ

152. They shoot at each other.

mɔtuutuuladɛ ʔitɔ

153. We will write to each other.

154. (RELATION) father and son mɔtɔliyamɔ.

155. They are mother and child. mɔtɔ liilɔ

156. We are first cousins. mɔtɔlipɔ ʔuwalaʔa

157. (RECIPROCAL) I want to talk to you. Waʔu @ ʔɔhilaa mɔbisala wɔlɛmu

158. He wants to see/meet with us. Tiyɔ ʔɔhilaa mɔmilɔhɛɛ / mɔdudunggaaya wɔlandɔ

159. (ABILITATIVE, CAUSATIVE) makes one thirsty mɔpɔ tɔtɔʔaŋɔ

160. soperific/makes one sleepy mɔpɔtuluhu

161. makes you hungry mɔpɔ bifi

162. makes us tired mɔpɔ wɔŋɔlɔ

163. (INTENSIVE) They ate and ate at the party last night. ʔaalaa bɔli ʔaalɔ timɔŋɔliyɔ tɔ kalajaa ʔɔhui

164. We walked and walked all day. hi naʔɔwa bɔli hinaʔɔwa ʔami ŋɔhilayaʔɔ dulahu

GENERAL PHRASES AND GREETINGS.

always in Moslem way

165. Good morning/noon/ day, afternoon, evening.

166. Where are you going? maa ʔɔdɛ ʔutɔɔnu ju?

167. Where have you been? maa lɔndɔ ʔutɔɔnu ju?

168. I'll just go ahead (of you). maa mɔtitimulɔ ju

169. Thank you... You're welcome. Tatimakaseh ju! kɔmbali

170. How old are you now? maa ŋɔɔlɔ tutumuluma

171. (SPECIAL POSSESSION). This is my eye.../carabao.../house.../amulet.

ʔutiyɛ mɔtɔʔu, ʔɔlɔbuʔu, bɛlɛʔu, ʔaŋimaʔu

ADDITIONAL VOCABULARY ITEMS.

172. accustomed/used to biyasa
173. anger/angry yiŋɔ
174. answer/reply tuwahu/tamɛtɔ
175. anus tutubu
176. areca nut kača
177. ask/question mɔhindu
178. betel leaf tɛmbɛ
179. boil (water) taluhɛɛ lɔmbu-bmbula
180. borrow/lend mɔbulɔtɔ
181. breakfast simuukulu
182. butterfly ʔaliŋuwa
183. call mɔtiyaŋɔ
184. ceiling pahu
185. chest/bust duhɛlɔ
186. coconut shell--half/ladle buʔawu
187. companion wiyɔ
188. cough tɛmbɛdu
189. crow/blackbird paaʔɔ
190. deer buʔulu
191. difficult/hard mɔtɔtɔlɔ
192. dirty laundry kaayini bubɔʔalɔ
193. door huhɛbu
194. east matɔ lo dulahu
195. easy mɔluwahu
196. eggplant ʔatimbu
197. fall/drop mɔdɛhu
198. fast/quick mɔliŋgahu
199. fence bala
200. (flavor of unripe banana) lambi
201. floor talɔhu
202. forget mɔlipatɔ
203. frog tumbihɛ
204. husk of rice taapɔ
205. if/when(ever) wɔnu
206. itch(y) mɔtɔhidu
207. joke/funny mɔʔɔ ziʔi
208. kick mɔlɛpa/mɔhiŋgodu
209. lame/crippled pɛŋgɔ
210. last night ʔɔhuyi
211. last week dimiŋgu yilalu maʔɔ
212. lie/deceive mɔhimbulɔ
213. lie--on back mɔtitiŋgaya
214. lie--on side mɔhindili
215. lie--on stomach mɔtidambaʔɔ
216. lightweight mɔhɛɛlɔ
217. lonely mɔɔlɔlɔ
218. lose/misplace mɔɔli
219. lungs paaŋgala
220. massage tahuli
221. masturbate mɔhulupɔ
222. mat ʔamɔŋɔ
223. monkey dihɛ, ʔɛgɔ
224. must/should mush
225. nape of neck bulɔʔɔ
226. need paralu
227. needle dudɛtu
228. next to (each other) tɔtili
229. noon mɔhulɔɔnu
230. peanuts kača
231. pillow ʔaaŋuluwa
232. pound rice mɔlɔbuʔɔ
233. put feet over mɔti lɔ nuhu
234. raft hɛʔita
235. rat/mouse ʔudu
236. remove-bones (fish) mɔhiŋgi tulalɔ
237. remove-feathers mɔlambutɔ
238. remove-lice (hair) mɔŋutu
239. remove-tartar (teeth) mɔmahutaa duŋitɔ
240. repeat mɔblaŋɔ
241. ring huʔalimɔ
242. same/similar tuntuwawu
243. sand huŋayɔ
244. scab kukudu
245. scar landa
246. scratch (itch) mɔŋahu
247. shade/shadow hɔlilu
248. show/demonstrate mɔpɔ bilɔhu
249. slave watɔ
250. sleep together with mɔtuluhɛɛ samaʔ
251. soup::stew sopu
252. span (8 in.) laŋɔ
253. spring::well mɔpɔtiʔɔ
254. steal mɔtaʔɔ
255. steel/iron wuwatɛ
256. strong mɔlɔtɔlɔ
257. swallow mɔlɔlɔlɔ
258. sweat mɔɔliŋɔ
259. thorn mɔŋandaŋɔ

260. summit/peak titaatɔ
261. throat bulɔʔɔ
262. toothless
263. turbid/murky mɔdiʔɔlɔmɔ
264. turtle pɔmbɔlu
265. wait (for) mɔhulatɔ
266. walk/hike mɔnɔnaʔɔ
267. water jar bɔlingɔ
268. waterfall
269. wave (ocean) buʔɔlɔ
270. weak mɔlululuhu
271. west ʔɔtɔlɔpa
272. what-you-may-call-it wɔlɔpɔʔɔlɔ
273. which (one)? ʔutɔɔnu
274. win/defeat mɔʔɔhama
275. window janela
276. wine--rice lɛnɛɛweri
277. winnow tilfihɛ
278. whisper mɔlɔhumɔ

OTHER MATERIALS

T e m e y i S a h a l a (M a n u l i)

"The Rout and Defeat of Permesta in Gorontalo"°°

by Temeyi Sahala (Manuli), born 1903; Talumopatu Village, Tapa Sub-district, Kabupaten Gorontalo, North Celebes, Republic of Indonesia

1.	bisimila mongajala	In the name of God we begin our account.
2.	Poromesa balabala	Permesta had extended its control
3.	leyidungga to Dunggala	as far as Donggala [on the West coast of Central Celebes];
4.	londo pusa qawati Monggawasala	a central government force from Makassar [that had been dispatched by the Hasanuddin (South and Southeast Celebes) Regional Command]
5.	maa mayi to Bilungaala	had reached Bilungala Village [on the South coast of North Celebes, to the East of Gorontalo town].
6.	dee malo too lo dalala	There were actually three units in the field [that were loyal to the central government]:
7.	wolo Tamigaviliyo	There was the Panta Marga unit [Brawijaya Command, East Java];
8.	Hasanudi qawati qoluwoliyo	the Hasanuddin unit was the second;
9.	Limba maa qotoluliyo	and the Jungle Force was the third.
10.	malo tilolimoliyo	The command of the Jungle Force had been accepted by Bapak Nani Wartabone [tokoh daerah who had led the anti-Dutch Gorontalo force during the Revolution].
11.	liyamo li Jonuliyo	At the direction of Pak Nani,

°°Translated into Indonesian from the Gorontalo by Hamzah Machmoed; English translation by John Little. All rights reserved; this is pre-publication copy.

12.	diloqa lo qu mopiyo	prayers for God's blessing were said;
13.	maqa piluwasaliyo	then he and his men fasted;
14.	donggo tilabiyaliyo	moreover, they engaged in communal prayer
15.	too lo huwi temboliyo	for a period of three days;
16.	puwasalimongoliyo bolo maa yilomeliyo	only then did they break their fast.
17.	to dulahu Dumaqati	On Friday,
18.	Temeyi Jonu qawati	Pak Nani Wartabone
19.	loduqa to barakati	prayed for God's blessing,
20.	tiyo bolo lopopasi	and recited certain mantras [to ready himself and his men for battle].
		Note: Gorontalo people believe that Nani Wartabone is invulnerable.
21.	qaati bolo qanabuwaliyo	Now his loyal followers
22.	maa tilitiliyangiyo	were summoned by Pak Nani
23.	de tanggi lo butaqiyo	to a branch of the river.
24.	maqa wilahuqaliyo	There all those who had not been strengthened by the recitation of the mantras
25.	toonula taa henguliyo	were bathed to the accompaniment of prayers.
26.	laato poqitiyangiyo	He then immediately ordered that
27.	tanggungalo botuliyo	cases of ammunition be placed on the men's shoulders
28.	pomutuwa huludiyo	and carried across a bridge.
29.	polalibe to Buqata	They advanced by way of the village of Bu'ata [in southern Suwawa, East of Gorontalo town],
30.	popodehuwa de Tapa	and thence to the sub-district of Tapa

[North-East-North of Gorontalo town].

31. polondale duhi bata — They had to climb hills
32. to qu hipangapangata — that were covered with thorn-bushes;
33. to qu didiya mobata — the way was muddy and slippery because it was raining.

34. biti diila moqorasa — They didn't feel hungry
35. leyidungga de qu lata — until they reached some level ground
36. dilidiya yilobata — that was also wet with rain.
37. ma to Boongoqime mayi — At Bongo'ime village [in Kabila Sub-district, just East of Gorontalo town and Tapa Sub-district],
38. pusa pandapandangayi — they came upon one of the government units marching in a column,
39. malo widuwidumayi — all in khaki,
40. hilembolemboqa mayi — platoon by platoon.
41. sambe qode Tamboqayi — The government column passed through Tambo'o village [still in Kabila Sub-district]
42. malo to Bulotalangi — on their way to Bulotalangi [a village in Tapa Sub-district],
43. wilonga lotisanangi — where they halted to eat and relax.
44. kapala Bulotalangi qonggo tiwi-tiwimbangi — The chief of Bulotalangi was still trying to make up his mind [which side to support],
45. qangi hende heemomikiirangi — he was weighing the pros and the cons,
46. taa hende poqiqawalalo — all the while urging the government troops to eat.

47. tiyo timihulo lumuwalo — He got to his feet and went out
48. mopeehu taa qahulalo — to find one of his subordinates,
49. poqiteleponuwalo — to tell him to telephone Permesta [head-quarters].

50.	qalo bolo dulutulililiyo	The only person he could find was his clerk,
51.	taa hende qahulaliyo	the person to whom he always gave orders.
52.	Temeyi Ari tolililiyo	The clerk was called Temeyi Ari;
53.	quwalo totametiyo	this unfortunate individual claimed to be
54.	mongongoto qombongiyo	sick at his stomach;
55.	mongongoto lunggongiyo	he said he had a headache, too,
56.	moleeto hilawaliyo	and didn't feel at all well.
57.	tingga lahilahi tiyo	But in fact he was trying to avoid carrying out the chief's order,
58.	qu wito boo duwitiyo	because he was afraid.
59.	qiyo taa malo qilahulaliyo	And so the chief had to summon
60.	Temeyi Gapa tolililiyo	another man, called Temeyi Gapa,
61.	laato lononaqo tiyo	who went right away to do as he had been told.
62.	taa hende poqaaloliyo	The soldiers, who were continually being urged to eat up,
63.	tihuliyo tihuliyo	were all standing around.
64.	yilonga dilutuliyo	The village chief left off eating
65.	kandooli tameqoliyo	and hurried to his office.
66.	pusa ngoqinda hitayangalo	Quick as a flash some government soldiers tore after him,
67.	ngoqinda hibalangalo	they crossed the road
68.	kaandoli tameqalo	to the office on the double,
69.	lodulodudumbaqalo	and pushed their way in.
70.	ti dulutuli moteleponu tiyo	The clerk was placing his call;
71.	ngoqinda kilokoqiyo	the government soldiers rapped
72.	qawati to lunggongiyo	him on the head with their knuckles.

73.	kawa qu yilandatiyo	They jerked out the telephone wire,
74.	tiyo taa diledeqiyo	and dragged the clerk outside.
75.	ti Bulotalangi qolo	They then confronted
76.	qati donggo wapitolo	the village chief,
77.	do Suwawa tiyangolo	who was taken to Suwawa [next sub-district to the East of Kabila Sub-district],
78.	tiyo donggo butoqolo	and there tried;
79.	wonu moqotapu wolo	I don't know what sentence
80.	ta hende popoyimoqolo	was handed down by the court.
81.	maqo teleponuwolo	If the telephone call had gotten through,
82.	tongaqu mobunggalolo	the Permesta forces would have scattered;
83.	tongaqu tumeteqolo	they would have gotten away,
84.	ma mali moboocoro	and the maneuvers by the government side would have been a secret no more.
85.	bo ti wulenga ti Papi	Only Van Gobel, the head of the Tapa Sub-district,
86.	losalamu yilodati	greeted the government troops and shook hands with them;
87.	laato lohindu luwasi	but he then asked permission to leave,
88.	peqe lowali panyaki	and this almost got him into trouble,
89.	boo diila ti Papi mota	since it was supposed that he
90.	li Bulotalangi mota	and the chief of Bulotalangi village
91.	ta mota yilopoqota	had gone off to alert the Permesta people.
92.	tabi lo raqayati lo kota	[If Permesta had gotten the word,] the people in Gorontalo town
93.	qopeqe mota lopota	would have suffered many casualties;
94.	didu hitombotombota	they wouldn't have had a chance to escape,
95.	didu hidiyodiyota	to flee for their lives,

96. qiloqulunga to kota — because they would have been surrounded.
97. lapotilimongoliyo — According to a report made by some Permesta people,
98. Magalibu huwiliyo — Permesta was preparing to mount an attack
99. mayi tilondalaliyo — at sundown that evening,
100. halapulimongoliyo — because they thought
101. ta yilondo huludiyo — that there were soldiers advancing from the interior of Suwawa
102. ta pilopolawahiyo — who had been detached from the main force
103. liyamo li Jonuliyo — by Pak Nani Wartabone,
104. pilatuju qeenggadeliyo — detachments purposely limited in size.
105. qu pilongohiyaliyo — The places where the government troops were positioned
106. Poromesa lopobutu — were fired on by Permesta artillery;
107. diila tilunggulo musu — the shells didn't hit the government positions,
108. lodehu to qu ngoputu — but instead fell short.
109. wonu tiluliyaliyo — If the Permesta fire had been returned
110. lo pusa timongoliyo — by the government detachments,
111. qu witolo teteqiyo — the Permesta soldiers would have retreated.
112. to pusa ma hulahulandudiyo — The government troops opened fire;
113. maa tolitoliyongiyo — bullets whistled through the brush
114. bo bulubuluhutiyo — the air was filled with noise and tumult.
115. de malo buluhutalo — When the firing died down,
116. tombaqa lomeendalo — the Permesta soldiers retreated.
117. Talaga potuwotalo — The government troops entered the sub-district of Talaga,
118. Talaga tiluwotiyo — and by three o'clock

119.	jamu tiga temboliyo	Talaga was under their control.
120.	mota heewadupaliyo	The government side set up lookout posts,
121.	pusa qonggo hiwaduwadupa	and while the guards made their rounds,
122.	qu weewo hibalata hiluquta	the other soldiers lay down to rest,
123.	dalahu hibelequta	concealing themselves among the yellow foliage.
124.	yilobaangaqo huta	The next morning, as soon as it was light,
125.	malo yilolilililihuta	the battle was joined;
126.	qu weewo hipongindupa	some of the troops ran as fast as a dart from a blowgun,
127.	malo hipongoohiya	firing and being fired upon;
128.	qu weewo hipolahiya	others just ran away.
129.	lopopoqooyonga mota	When the smoke of battle had cleared,
130.	yinda kilumisi mota	the number of casualties was ascertained:
131.	Polomesa kulubani walu lo ta	Permesta had lost eight men,
132.	to Pusa bo duu lo ta	while the government had lost only two.
133.	taa hidutuwa hipolota	People lay sprawled on the ground;
134.	laqiyati hilonggulongguwa	civilians appeared at windows and came out of their hiding-places,
135.	mota malo hiwopowopota	slowly and carefully picking their way.
136.	bake yimoqalo	The dead bodies were collected,
137.	mota poqilobungalo	and arrangements were made for them to be buried;
138.	qisinini qode kota	on Monday they were taken to Gorontalo town.

HANDWRITTEN NOTES

Gorontalo deictics

	ka-D-	itu
1st	bo-tiya	qod-iya
2nd	bo-tiye	qod-iye
3rd	bo-yito	qod-ito

*	iya
*	iyan
*	itu

qode 'ke'

wolo 'sama'

$e < \quad * \; i, \; ay, \; \partial y$

*a > o

*ay > ey

*ən > ə

i > ɨ

e > u

[ə]

u > u

* =

Rakit >

heqitə

Ø- > w

qu qaŋ Wolo 'sama'

taa 'qaŋ - personal'

ti si

to sa Daqa

qolo Kan

~~qoDe~~ qode 'ke'

to qolo

to qoDe

b — w

b — b

K > q

d > d [D]

-d- > I

-n- > I

z > l

* zaqat>

mo-leeto

s > t

g > h

R > h

h > h

r > l

l > l

Gorontalo

verifies ± animate in common noun markers.

Gor [h]

(mɔh=ulato	<	*hulat	wait)
huwabu	<	*huɸab	yawn
hatanɟo	<	*ha:saŋ	gills

wahumo	<	*haR[ʔ]əm	'submerge'
wulipa	<	*qaluhipan	'centipede'
huwoʔo	<	*buhək	'hair'
wawo(la)	<	*habəl	'weave (it)!'

Gorontalo support vowels

m, l, ŋ, p, t, ʔ / #ɔ
b, d, h / #u

mo-hiipo, mo-leeto, maluʔo, tulalo ^ moitomo, lobuŋo
taʔubu, huʔidu, datahu
paladu duŋohu

	-a	-e	-i
'raft' *Rakit > Gor	heʔita		
'ear' > Gor	bulɔŋa		
'dear' *mahal > Gor		mahale	
'mackeral *balanak > Gor	bulalaʔa		
'meat' *daging > Gor			daagingi
'lacking' *kuraŋ > Gor			kuuraŋi
'bird' *buruŋ > Gor			buuruŋi
'stove **dapur > Gor	depula		

$a_2 > ɔ$	$a_2 > a$	$a_2 > e$	$a_1 > ɔ$	$a_1 > a$
bɔtu 'stone'	amɔ 'father'	bele 'house'	matɔ 'eye'	tɔla 'fish'
bɔhenɔ 'molar'	ʔa^{m}bu 'gathering'	hetutɔ '100'	tabɔ 'grease'	~~(buŋa flower)~~
bɔhu 'new'	tahu 'hide'	mɔleetɔ 'bad'	tiyamɔ 'father'	hulaʔɔ 'flower'
bɔhe 'abscess'	ʔalaʔɔ 'child'		lɔpɔ 'fathom'	wɔpatɔ '4'
pɔ^{m}banɔ 'riverbank'	huwayɔ 'crocodile'		limɔ 'five'	
bɔhu 'embers'	tabɔ 'fat'		hunɔ 'fruit'	
	ilawɔ 'breathe'		tiyɔ 'he'	
	mama 'chew'		tumɔ 'louse'	
	malu^{ʔ}a 'chicken'		tiilɔ 'mother'	
	ʀami 'we'		huʔɔ 'open'	
	lami 'ours'			
	watɔpɔ 'roof'			
	taʔe 'ride'			
	pale 'uncooked rice'			
	taapɔ 'chaff'			
	lamuʔɔ 'mosquito'			
	taluhu 'water'			

b huwaɔ 'crocodile'; ɓele 'house' huʔidu 'mountain'

p ƒitɔŋi 'cheek'

d

Ɗ ɨihu 'bathe' ; ɗuhu 'blood'

t

s ti (Tm) ; ta (Cm) ; tutu 'breast'

k malu?ɔ 'chicken' ; alaʔɔ 'child' ; lamuʔɔ 'mosquito'

g

R liɦu 'bathe' ; duɦu 'blood' ; taɦu 'hide'

m mama 'chew' ; yiluma 'drink!' ; lamuʔɔ 'mosquito'

n li (Am-pero(sg.) ; lɔ (Dp-perf.) ; -il-- (infix) ; yiluma 'drink!' ; ʔaala 'eat!'

ŋ pitɔŋi 'cheek'

w ilawɔ 'breathe'

Gorontalo

Verb paradigm (cf. Oc. Ling. 9.1: 13)

ti payituwa maamɔdede?aa roda (wɔ)lɔ tali ?ɔde paatali
the man will pull Om cart with rope to market

roda maadede?Da li payituwa (wɔ)lɔ tali ?ɔde paatali
cart will be pulled by man with rope to market

tali pɔdede?i payituwa [redacted] roda ?ɔde paatali.
rope will be used-by man cart to market

paatali pɔdede?a li payituwa roda wɔlɔ tali.
market place-pulled in/at by man cart with rope

Gorontalo data (length / morphophonemics)

*kaan ↳ *qaal		
qaalólo	kaanən°	OF, fut. kainən
qíla	k=i n=(n)an	rucie kinan
moŋa	mə^{Nk}ŋan	± eat mayan
qaala	kaana	OF, command ka:na
*sakay ↳ *tage		
tagealo	saka y=an°	RF, fut
tagei	saka y=i	RF, command
molage	mə Ns akay ↓ l	

bɔtu 'stone'; amɔ 'father'; ʔambu 'gathering'; tahu 'hide'; ɓele 'house'; hetutɔ 'knee'
ɓɔhenɔ 'molar'; alaʔɔ 'child'; huwayɔ 'crocodile'; ʔaala 'eat!'; tabɔ 'fat'
mɔleetɔ 'ugly'; ilawɔ 'breathe'; mama 'chew'; maluʔu 'chicken'; tiilɔ 'mother'; ɓɔhu 'nose'

a_1 yiʔɔ T/pro-2s ; tiɔ 'T/pro-3s' ; ⁿdɔ D/pro ; liyɔ A/pro-3s ; pɔ (Dp-fut.)
a_2 kami T/pro-1p ; ɲami A/pro-1p ; bɔhe 'abscess'; pɔᵐbaŋɔ 'riverbank'
a_3

-aɡ# ɓɔhe 'abscess'; laŋge 'jackfruit'
-an# piŋge 'plate'; mɔleetɔ 'ugly'

$ə_1$ (w)atɔpɔ 'roof'
$ə_2$ wohi 'give'; ɔlatɔ 'wait'
$ə_3$

u_1 ʔu A/pro-1s ; mu A/pro-2s
u_2 duhu, tutu
u_3 huwayɔ 'crocodile'
} u

i_1 ti
i_2 ilawɔ, lihɔ
i_3 pitaŋi
} [illegible] > i

OTHER MATERIALS

GORONTALO PHONOLOGY AND MORPHOPHONEMICS

A Thesis

Presented to the Faculty of the Graduate School

of Cornell University for the Degree of

Master of Arts

by

Hamzah Machmoed

January 1973

BIOGRAPHICAL SKETCH

Hamzah Machmoed was born in Gorontalo, North Sulawesi (Celebes), Indonesia, on September 27, 1946. He attended primary and normal secondary school (S.G.A.) in Gorontalo. From 1963-1966 he was a teacher at Chung Hwa (Chinese) High School in Gorontalo, and from October 1966 to April 1970 he taught at a private religious (Muhammadiyah) high school in the same town. While there, he was principal informant to Mr. A. John Little, Jr. when Mr. Little was carrying out his linguistic field work in Gorontalo, from 1969 to 1970. [Professor Little is now on the faculty of the East Asian Language and Literature Department at the University of Wisconsin.]

In 1970 before he left for Cornell University, the author was in his third year of studies at Manado Government Teacher Training College (IKIP), Gorontalo branch. He held a teaching fellowship from Cornell University from 1970-1972 enabling him to pursue graduate studies in linguistics.

He is married to the former Warni Elvini Oli-I, and they have one daughter, Natalie.

DEDICATION

IN MEMORY OF

MY FATHER

ALI MACHMOED BIN AMIR

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Of course, as the author, I claim exclusive responsibility for all the shortcomings and faults that remain.

TABLE OF CONTENTS

Chapter			Page
I.	INTRODUCTION.		1
	1.01.	Background	1
	1.02.	Methodological preliminaries	2
	1.1.	Inventory of phonemes and their distribution	3
	1.11.	Consonants	3
	1.12.	Vowels	6
	1.13.	Syllable structure and segmentation	7
	1.2.	Phonetic make up of the phoneme. . .	11
	1.21.	Consonants	11
	1.22.	Vowels	15
	1.3.	Interpretation of the inventory in terms of distinctive features	16
	1.4.	Phonological words	19
	1.5.	Intonation contours.	20
		Footnotes for Chapter I.	23
II.	MORPHOPHONEMICS		24
	2.1.	Semi-automatic alternations.	25
	2.11.	Insertion of y, w or lengthening of vowel	25
	2.12.	Dropping of vowel.	25
	2.13.	Assimilation	26
	2.14.	Dropping of root-final consonant . .	27

2.2. Rules affecting words of more than three syllables. 28

2.21. Syntactic markers with trisyllabic forms ending in e and o 28

2.22. Suffix -a. 29

2.23. Other changes of trisyllabic words 29

2.3. Reduplication. 31

2.4. Verbal affixes 32

2.41. Alternation of prefixes ending in -h 32

2.42. Change of a to e when moh- is added 33

2.43. Alternation of prefixes ending in N. 34

2.44. Decision whether a prefix ends in -h, -n or -Ø 35

Footnotes for Chapter II 36

CHAPTER ONE

1.0. Introduction.

1.01. Background.

Gorontalo is a Malayo-Polynesian language spoken in North Sulawesi (Celebes) by about 600,000 people.[1] There are two main dialects, the Atinggola dialect, which is spoken in northern coast area and Suwawa dialect, which is spoken in southern coast area. It is difficult to say whether the 'speech-types' used by these communities are separate languages or merely dialects of a single language. Speakers find the Gorontalo, Suwawa, Atinggola dialects mutually intelligible but experience some difficulty. The position of Gorontalo within the Malayo-Polynesian group is not known for certain at this point.[2] It is, however, typologically similar to other languages of Northern Celebes and the Philippines.

Gorontalo and other closely related languages have received almost no attention either from amateur or professional linguists, and this present analysis is, in fact, a ground-breaking attempt. The neglect of these languages has been partly due to the higher priority which the Indonesian government has set in implementing a program of developing and establishing the official language, Bahasa Indonesia. The Indonesian language, especially the Manado dialect has become widely spoken throughout the Gorontalo

speech community and an overwhelmingly large portion of the population has a good knowledge of the Manado dialect and often standard Indonesian as well. In the city of Gorontalo the Indonesian language is the language of education and almost all public occasions. In rural areas Gorontalo is still used for primary education and other occasions. There is no Gorontalo language press nor are Gorontalo language publications of any sort being produced. However, there is a rich literature of historical, religious, and poetic content.

This work deals with the phonology, including morphophonemics, of Gorontalo. It is based upon my own intuitions and observations of my speech as a native speaker. I have also made use of the tape recordings taken in Indonesia from a number of native speakers of various age groups originating from different locations of the Gorontalo speech area. I have found little that differs substantially from my own speech.

1.02. Methodological Preliminaries.

The methodology employed here follows closely Hockett (1958). Although these methods of analysis have been questioned in the past decade and more, there is nevertheless justification in presenting the data in this fashion to enhance its utility in comparative typological and historical studies (Weinreich: 1967. See also the article by Schane). However, the classical model has been

revised somewhat. I will not remain silent on certain socio-linguistic aspects of phoneme distribution and will make special mention of phonemes and sequences characteristic of loan words, and of phonemes and sequences confined to certain morphological environments. This treatment is analogous to the treatment given by Stevens (1968).

1.1. Inventory of phonemes and their distribution.

Gorontalo has an inventory of 28 segmental phonemes and seven suprasegmental phonemes. The segmental phonemes are: 24 consonants and 5 vowels; the suprasegmental phonemes are: 1 juncture, 3 terminal contours, and 3 pitch levels.

1.11. Consonants.

The consonant phonemes are shown in the following chart:

Consonants	Bilabial	Apico-alveolar	Dorso-velar	Glottal
Voiceless stops	p	t		q
Voiced stops	b	d		
Prenasalized stops	m_b	n_d	η_g	
Nasals	m	n	η	
Lateral		l		
Glides		y	w	h

In addition /$\overset{v}{c}$, k, $\overset{v}{j}$, g, ñ, s, $\overset{v}{s}$, r/ occur, but only in

words which the native speakers recognize to be borrowings. There is also a phoneme /$^{\tilde{n}}_{j}$/ which occurs in only one form I know. The presence of these forms adds a lamino-palatal series ($^{\breve{}}_{c}$, $^{\breve{}}_{j}$, $^{n\breve{}}_{j}$, ñ and $^{\breve{}}_{s}$), dorso-velar stops (g and k),-- fricatives (s, $^{\breve{}}_{s}$) and a trill (r) which originally did not occur in Gorontalo.

1.111. Examples in initial position (words felt to be native):

/p/ /pala/ 'nutmeg', /t/ /tala/ 'mistake', /b/ /bala/ 'fence', /d/ /damaŋo/ 'big', /^{n}d/ /^{n}dali/ 'Let us!', /m/ /mato/ 'eye', /n/ /naana/ 'mother', /ŋ/ /ŋaŋo/ 'mouth', /l/ /lalabu/ 'tide', /y/ /yitohu/ 'toy', /w/ /wadala/ 'horse', /h/ /huhebu/ 'door'. ^{ŋ}g does not occur initially. ^{m}b occurs in word initial position only when preceded by another word: dja ^{m}badi tiyo 'Don't hit him' but wu^{m}badi tiyo 'Hit him'.

1.112. Examples in medial position (words felt to be native):

/p/ /taputo/ 'shroud of unbleached cotton', /t/ /potu/ 'house pillar', /b/ /tabaqa/ 'tobacco' (a borrowing but felt to be native), /d/ /toduwo/ 'invitation', /^{m}b/ /la^{m}bi/ 'banana', /^{n}d/ /te^{n}deleŋa/ 'squirrel', /^{ŋ}g/ la^{ŋ}ge/ 'jack fruit', /$^{n\breve{}}_{j}$/ /qo$^{n\breve{}}_{j}$opo/ 'short', /m/ /tomula/ 'bamboo', /n/ /tunuhu/ 'continuation', /ŋ/ /boŋo/ 'coconut' /l/ /talohu/ 'floor', /y/ /tiyo^{m}bu/ 'grandparents', /w/ /pawodu/ 'thatched roof of palm leaves', /h/ /bohulo/ 'kind of fruit'.

1.113. Examples of phonemes which occur in borrowings. /$\overset{\vee}{c}$/ /$\overset{\vee}{c}$obaaqani/ 'ordeal', /ka$\overset{\vee}{c}$amata/ 'eye glasses', /k/ /kaa^{m}buŋu/ 'village', /$\overset{\vee}{j}$/ /$\overset{\vee}{j}$ala$\overset{\vee}{j}$ala/ 'rail', /g/ /guru/ 'teacher', /soroga/ 'heaven', /ñ/ /ñoña/ 'Mrs', /siño/ 'European lad', /s/ /susu/ 'milk', /$\overset{\vee}{s}$/ /$\overset{\vee}{s}$aitaani/ 'Satan', /qaa$\overset{\vee}{s}$iki/ 'passionate(ly)', /r/ raa$\overset{\vee}{c}$uni/ 'poison', /karabu/ 'kind of earrings'. The phoneme /$\overset{\vee}{s}$/ does not occur in the speech of unsophisticated speakers who have had little contact with Arabic or Indonesian. In their speech /s/ is substituted for /$\overset{\vee}{s}$/.

Examples of minimal pairs.

/t/ and /d/	/te^{m}be/ 'betel leaf' and
	/de^{m}be/ a name of a place
/d/ and /$\overset{\vee}{j}$/	/badi/ 'small dagger' and
	/ba$\overset{\vee}{j}$i/ 'prop'
/$\overset{\vee}{c}$/ and /$\overset{\vee}{j}$/	/po$\overset{\vee}{c}$i/ 'bowl' and
	/pu$\overset{\vee}{j}$i/ 'praise'
/$\overset{\vee}{c}$/ and /s/	/po$\overset{\vee}{c}$i/ 'bowl' and
	/posi/ 'post'
/m/, /n/, and /ŋ/ in	/sima/ a personal name
	/sina/ 'Chinese'
	/siŋa/ 'lion'
/l/ and /r/	/pali/ 'wound' and
	/pari/ 'partner'
/l/ and /n/	/bule/ 'efforts' and
	/bune/ a name of a district

1.12. Vowels

The vowel inventory is presented in the following chart:

	front	central	back
high	i		u
mid	e		o
low		a	

These vowels occur short and long. Examples:

Words with short vowels are:

/i/ /biyoŋo/ 'crazy'
/e/ /bele/ 'house'
/a/ /patodu/ 'sugar cane'
/u/ /huqidu/ 'mountain'
/o/ /botu/ 'stone'

Minimal pairs:

/i/, /o/, and /u/

/qami/ 'we (excluding you)'
/qamo/ 'bread fruit'
/qamu/ personal name

/u/ and /o/

/tubu/ 'the way of cooking' and
/tubo/ 'respectful greeting (made with hands, finger tips upward)'

/e/ and /i/

/bele/ 'house' and
/beli/ 'bell'

/e/ and /u/

/bohe/ 'abscess' and
/bohu/ 'new'

/e/ and /a/

/pale/ 'uncooked rice' and
/pala/ 'nutmeg'

Long vowels:

/i/	/biihu/	'lips'
/e/	/mee$^{\eta}$go/	'uncooked; unripe'
/a/	/baapu/	'grandfather'
/u/	/tuuta/	'nonsense'
/o/	/loo^{m}bu/	'tomorrow'

Short and long vowels are contrasted in the following minimal pairs:

/i/ and /ii/	/bibi/	'aunt'
	/biibi/	'sinker'
/e/ and /ee/	/teya/	a woman's name
	/teeya/	'here'
/a/ and /aa/	/pali/	'wound'
	/paali/	term of address to one's youngest uncle
/u/ and /uu/	/tuna/	a man's name
	/tuuna/	'circumcise'
/o/ and /oo/	/bolo/	'only'
	/boolo/	'hiccough'

Vowels do not occur in word-initial position (cf. 1.13).

1.13. Syllable structure and segmentation.

Except in loanwords and morphologically definable categories (1.131 to 1.132) the Gorontalo syllable is CV or V. That is, every occurrence of one of the five vowels /i e a o u/ constitutes a syllable peak, and every consonant is an onset for the following vowel. The syllable V occurs only in sequences C V_1V_1. The long vocoidal

segments a: e: i: o: u: are represented phonemically as sequences of two vowels /aa ee ii oo uu/ and are treated as two syllables, for reasons of rhythm and timing. Forms like /biihu/ [bi'ihu] 'lip', /peedi/ [pɛ'ɛdi] 'poison', /taata/ [ta'ata] 'elder sister', /loo^{m}bu/ [lɔ'ɔ^{m}bu] 'tomorrow', /piilu/ [pi'ilu] 'fairy tale', /neene/ [nɛ'ɛnɛ] 'grandmother', /taapo/ [ta'apɔ] 'rice chaff', and /toonu/ [tɔ'ɔnu] 'where?' are three syllables. We consider them three syllables because they are similar in rhythm and timing to a form such as /dutula/ [du'tula] 'river', /dulahu/ [du'lahu] 'sun', and /watiŋo/ [wa'tiŋo] 'salt' In Hockett's terminology, these are examples of 'peak defined by vocoid and duration'.[3] Furthermore, analysis of the long vocoidal segments in this way allows a very general statement for placement of stress, to be given below.

There are no sequences V_1V_2. A form like ['tei] 'tea' is analyzed as /teyi/. In any case there is no contrast between ['eyi] and ['ei], nor between ['ai] and ['ayi], ['ae] and ['aye], ['awu] and ['au], ['awo] and ['ao]; nor between ['ia] and ['iya], ['eya] and ['ea], ['uwa] and ['ua] or ['oa] and ['owa]; nor between ['ei] and ['eyi], ['ie] and ['iye]; ['uo] and ['uwo], ['ou] and ['owu].

The phonemes /c͡ʋ j͡ʋ ñ/ occur both initially and medially. We consider them unit onsets because there are no other laminalized or palatalized contoids or sequences

of contoid plus y, and since the general syllable structure is (C)V.

This argument of syllable structure also applies to the unit analysis of the prenasalized stops: /^{m}b, ^{n}d, $n^{y}j$, ^{ŋ}g/. In native words, there are no other sequences of sonorant plus stop. It would not be phonetically realistic to analyze the nasal as closing a syllable, since /^{m}b/, /^{n}d/ and /$n^{y}j$/ occur initially and further all forms such as /taŋi/ 'rubber' and /ta^{ŋ}gi/ 'ditch', are similar in rhythm and timing.

Most forms of foreign origin adhere to this pattern. Clusters are borrowed broken by a vowel. Final consonants are provided with a following vowel sometimes /u/, more often /i/, or in some forms the final consonant is dropped:

/kaambuŋu/	'village	:	Indonesian <u>kampung</u>
/patuluti/	'pencil'	:	Dutch <u>potlood</u>
/qeemberi/	'bucket'	:	Indonesian <u>ember</u>
/baawaŋi/	'onion'	:	Indonesian <u>bawang</u>
/kuwasi/	'paint brush'	:	Dutch kwast
/galasi/	'glass'	:	Dutch <u>glas</u>
/baara/	'west'	:	Indonesian <u>barat</u>
/teekeni/	'photograph'	:	Dutch <u>tekening</u>

1.131. Exceptions.

In normal speech sequences shaped $C_1V_1C_1V_1$(C)V(C)V(CV) the first vowel is lost when something is prefixed. Thus to <u>kukuyuqu</u> 'crow' plus <u>mo-</u> (active verb prefix) becomes

mokkuyuqu ('crow'). In fancy or slow speech this vowel dropping does not take place mokukuyuqu. Thus we get long segments t: p: s: l: n: m: h: d: b: in derivatives from verbal roots forming nouns of agent, instrument, and place. We will write C: as CC.

/pottuluhe/ 'bed' /motuluhu/ 'to sleep'

/tamoppotulude/ 'accuser' /mopotuludu/ 'to accuse'

/tamossurikia/ 'slanderer' /mosuriki/ 'to slander'

/pollulade/ 'desk' /moluladu/ 'to write'

/poŋŋilia/ 'toilet' /moŋili/ 'to defecate'

/pommilohe/ 'lookout place' /momilohu/ 'to look at'

/poddahawa/ 'post' /modaha/ 'to guard'

Similarly in nominal derivatives from verbs the first consonant of the root is doubled (from what may morphophonemically be analyzed as reduplication of the first syllable of the root).

tuluhu 'sleep' + reduplication + po- + (change of u to e ⟶ pottuluhe)

(However in slow, fancy speech this is potutuluhe.)

The syllabification of these forms is $CVC_1|C_1V$.

1.1311. Loanwords.

In a few forms which are clearly of foreign origin there are consonant clusters:

/-rl-/ /qarloji/ 'clock' (cf. Malay <arlodji Dutch reloge)

/-rt-/ /qartape/ 'potato' (Dutch aardappel)

/-qr-/ /maqripati/ 'knowledge' (<Arabic)

/-qp-/ /baqpau/ 'Chinese noodles'

/-st-/ /musti/ 'must' (<Indonesian)

/-lm-/ /qalmanak/ 'calendar' (<Dutch)

and some of the names of the months, where the sequences /br pr st pt kt/ occur medially (/pebruari/, /qapril/, /qagustus/, /september/, /qoktober/ <Dutch). Thus for loan-words we also show the checked syllables /-il -us -er/ finally.

1.2. Phonetic make up of the phoneme.

1.21. Consonants:

Phoneme	Allophone	Description Environment Example
/p/	p	Bilabial unaspirated voiceless fortis stop, in all position. [po'pati] /popati/ 'hoe' [qa'pula] /qapula/ 'dog'
/b/	ɓ	Voiced unaspirated bilabial. Imploded in stressed or in slow speech, in all positions.
	b	In rapid speech or in unstressed syllables. [ɓo'heŋo] or [bo'heŋo] 'molar' [ɓoŋo] /boŋo/ or ['boŋo] 'coconut'
/t/	t	Apico-alveolar unaspirated voice-less stop, in all positions. ['tutu] /tutu/ 'breast'

/d/	d	Apico-alveolar voiced stop in all positions. ['duhu] /duhu/ 'blood' [ta'diya] /tadiya/ 'oath'
	d̂	Apico-alveolar voiced stop with imploded in stressed or in slow speech in all positions. [d̂u'uŋo] /duuŋo/ 'leaf' [d̂ila] 'tongue'
/č/	č	Lamino-alveo palatal unaspirated voiceless stop, slightly affricated. [t^{y}i'rita] /čirita/ 'story' [kat^{y}a'mata] /kačamata/ 'eye-glasses'
/ǰ/	ǰ	Lamino-alveo palatal voiced stop, slightly affricated. ['d^{y}amu] /ǰamu/ 'hour' ['med^{y}a] /meǰa/ 'table'
/k/	k	Voiceless, unaspirated dorso-velar fortis stop, in all positions. [ko'^{m}boŋi] /ko^{m}boŋi/ 'potbellied' ['paku] /paku/ 'nail'
	k̀	Voiceless, fronted unaspirated dorso-velar fortis stop before front vowels. [k̀i'k̀iqo] /kikiqo/ 'small'

	k	Voiceless, backed unaspirated dorso-velar fortis stop before back vowels. [ku'kudu] /kukudu/ 'scabies'
/g/	g	Voiced dorso-velar lenis stop, in all positions. [go:'go] /googo/ 'ghost'
	g	Imploded dorso-velar lenis stop. Occurs in rapid speech or in stressed syllables, in all positions. ['guru] /guru/ 'teacher' [so'gano] /sogano/ 'bamboo for carrying water'
/^{m}b/	^{m}b	Bilabial prenasalized stop. ['^{m}badi] /^{m}badi/ 'Hit!' ['la^{m}bi] /la^{m}bi/ 'unripe banana'
/^{n}d/	^{n}d	Apico-alveolar prenasalized stop. ['^{n}dali] /^{n}dali/ 'Come on!' ['hu^{n}du] /hu^{n}du/ 'hill'
/$^{\tilde{n}}_{\check{j}}$/	$^{\tilde{n}}_{\check{j}}$	Lamino-alveo palatal prenasalized stop. [$^{\tilde{n}}_{\check{j}}$u'upo] /$^{\tilde{n}}_{\check{j}}$uupo/ 'prostitute'
/$^{\eta}$g/	$^{\eta}$g	Dorso-velar prenasalized stop. ['po$^{\eta}$go] /po$^{\eta}$go/ 'ghost'
/m/	m	Voiced bilabial nasal.

[ma'lita] /malita/ 'pepper'

[la'muqo] /lamuqo/ 'mosquito'

/n/ n Voiced apico-alveolar nasal.

[na'nati] /nanati/ 'pineapple'

[to'niya] /toniya/ 'intestines'

/ñ/ ñ Voiced lamino-alveo palatal nasal.

[ña'ñiyan] /ñañiyan/ 'song'

/ŋ/ ŋ Voiced dorso-velar nasal.

['ŋamo] /ŋamo/ 'amuck'

[ba'ŋaŋo] /baŋaŋo/ 'sultry'

/s/ s Voiceless apico-alveolar fricative.

[sa'^{n}dale] /sa^{n}dale/ 'slipper'

[ka'subi] /kasubi/ 'cassava'

/s̬/ s̬ Voiceless grooved lamino-alveo palatal fricative.

[s̬aha'adati] /s̬ahaadati/ 'confession in Islam'

[qa's̬uura] /qas̬uura/ 'the 10th day of Muharram'

/l/ l Voiced apico-alveolar lateral stop.

[li'yodu] /liyodu/ 'footprint'

[bu'liiŋo] /buliiŋo/ 'axe'

/r/ r Voiced apico-alveolar trill.

['remu] /remu/ 'brake'

[ma'rapo] /marapo/ 'unlucky'

/y/ y Voiced glide vocoid: high, front,

unrounded

[yi'buqo] /yibuqo/ 'navel'

[popo'yolo] /popoyolo/ 'sharp object'

/w/ w Voiced glide vocoid: high, back, rounded

[wa'ŋopa] /waŋopa/ 'cave'

[tu'wali] /tuwali/ 'enemy, opposite side'

/h/ h Voiceless glottal fricative.

[hu'waŋo] /huwaŋo/ 'hole'

[bu'uhuto] /buuhuto/ 'string'

/q/ q Glottal voiceless stop.

[qa'bati] /qabati/ 'seedy banana'

[bu'qulu] /buqulu/ 'deer'

1.22. Vowels:

/i/ i Short high front unrounded vocoid with tense onset, in all positions.

[yila'mahu] /yilamahu/ 'face powder'

Medially:

[qo'yile] /qoyile/ 'mango'

[pi^{ŋ}ge] /pi^{ŋ}ge/ 'plate'

[pi'toŋi] /pitoŋi/ 'cheek'

/e/ e High mid front unrounded vocoid before /y, w/ and when doubled.

['teyi] /teyi/ 'tea'

[mohewu'waŋo] /mohewuwaŋo/ 'to bark'

[ke'wuŋa] /kewuŋa/ 'Bend it!'

ɛ — In other positions: a low mid front unrounded allophone:

[bɛ:'lɛya] /beeleya/ 'cage'

['tɛtɛ] /tete/ 'cat'

[huwa'ŋɛqɛ] /huwaŋeqe/ 'underarm'

/a/ — a — Short low central unrounded vocoid, in all positions.

['wato] /wato/ 'slave'

[ta'lala] /talala/ 'trousers'

/u/ — u — Short high back rounded vocoid, in all positions.

[wu'nɛmo] /wunemo/ 'medicine'

[ta'luhu] /taluhu/ 'water'

[tu'u^{ŋ}gudu] /tuu^{ŋ}gudu/ 'walking stick'

/o/ — Short mid back rounded vocoid.

[pɔ'^{m}baŋɔ] /pɔ^{m}baŋɔ/ 'river bank'

Long mid back rounded vocoid.

Medially and finally:

[tɔ'ɔnu] /tɔɔnu/ 'where?'

['bɔɔ] /bɔɔ/ 'only'

1.3. Interpretation of the inventory in terms of distinctive features.

The following set of distinctive features show a

possible componential analysis of Gorontalo phonemes. This analysis will be based on Hockett 1955: 129 ff.;

b - p	voiced (±V)
p - t	point of articulator
^{m}b - p	prenasalization
m - b	nasalization
s - t	type of obstruent
s - $\overset{\cup}{s}$	type of opening
l, r - d	sonorant vs stop
r - l	trill vs lateral

p	t	$\overset{\cup}{c}$	k	q
(-V)	(-V)	(-V)	(-V)	(-V)
(+ Bilabial)	(+ Alveolar)	(+ Lamino alveolo palatal)	(+ Dorso)	(+ Glottal)
(+ stop)	(+ stop)	(+ stop)	(+ stop)	(+ stop)
b	d	$\overset{\cup}{j}$		g
(+V)	(+V)	(+V)		(+V)
(+ Bilabial)	(+ Alveolar)	(+ Lamino alveolar)		(+ Dorso)
(+ stop)	(+ stop)	(+ stop)		(+ stop)
^{m}b	^{n}d	$\tilde{n}\overset{\cup}{j}$		$^{\eta}$g
(+ Bilabial)	(+ Alveolar)	(+ Lamino alveolar)		(+ Dorso velar)
(+ Pre-nasalized)	(+ Pre-nasalized)	(+ Pre-nasalized)		(+ Pre-nasalized)
(+ stop)	(+ stop)	(+ stop)		(+ stop)
(+ Voiced)	(+ Voiced)	(+ Voiced)		(+ Voiced)

m	n	ñ	n
(+ Bilabial)	(+ Alveolar)	(+ Lamino alveolar)	(+ Dorso velar)
(+ Nasal)	(+ Nasal)	(+ Nasal)	(+ Nasal)
(+ stop)	(+ stop)	(+ stop)	(+ stop)
(+ Voiced)	(+ Voiced)	(+ Voiced)	(+ Voiced)

s	+ Fricative rill	(- voiced)	(+ apico alveolar)
s	+ Fricative groove	(- voiced)	(+ lamino alveolar)
l	+ Lateral opening	(+ voiced)	(+ apico alveolar)
r	+ Trill	(+ voiced)	(+ apico alveolar)
h	+ Fricative + glottal	(- voiced)	
w	+ Semivowel + bilabial	(+ voiced)	
y	+ Semivowel + lamino palatal	(+ voiced)	

The feature 'consonantal' and 'sonorant' divide phonemes into three classes:

$$\begin{bmatrix} + \text{ consonantal} \\ - \text{ sonorant} \end{bmatrix} : \text{ obstruents}$$

$$\begin{bmatrix} + \text{ consonantal} \\ + \text{ sonorant} \end{bmatrix} : \text{ sonorants and glides}$$

$$\begin{bmatrix} - \text{ consonantal} \\ + \text{ sonorant} \end{bmatrix} : \text{ vowels}$$

The feature 'glottal' distinguishes /q/ and /h/ from the other phonemes.

The redundancies in this set of features can be filled in by appropriate redundancy rules. For example:

$$\begin{bmatrix} + \text{ consonantal} \\ + \text{ sonorant} \\ - \text{ glottal} \end{bmatrix} \qquad + \text{ voice}$$

(All nonglottal sonorant consonants are voiced.)

As for sequential constraint rules, the syllable structure CV or V accounts for limitations of occurrence. Other than that V occurs only after a like vowel. There is no other constraint. The exceptions to this syllable structure are doubled consonants (C_1C_1) and a few unassimilated borrowings.

1.4. Phonological words.

Words are phonologically defined by a stressed syllable on the penult. Any sequence of syllables can be interpreted as a sequence of phonological words by observing the placement of the stress. A nonsense sequence ba bi 'pa pi po 'ka ki ko la li'i lo automatically breaks up into babi'papi # po'kaki # kolali'ilo.

A real example:

tamottuulu'ŋiyaqolaa'tiyabe'yito is phonologically

tamottuuluŋiya	qolaatiya	beyito	'person
person who always helps	to me	that	

who always helps me'

Gorontalo has enclitics and proclitics, short form syntactically analyzable as words which combine phonologically with the forms they precede or follow to form a single phonological word, e. g.

liyo 'his', and qu 'my' are enclitic.

ti'ilo 'mother' tiilo'liyo 'her mother' tii'laqu 'my mother'

Similarly po 'still' and lo 'already' are enclitic.

tiyo 'he' + po 'still' ⟶ ti'yopo 'also him'

loonaqo 'came' + lo 'already' ⟶ loona'qo'lo 'already came'

An example of a proclitic: qo 'there is'

qo 'there is' + taluhu 'water' ⟶ qota'luhu 'there is some water'

The placement of the stress is predictable in terms of phonological word boundaries; it always falls on the penult. There are no monosyllabic phonological words. All monosyllabic lexemes (words syntactically defined) are enclitic or proclitic.

1.5. Intonation contours.

Gorontalo has three distinctive pitch levels (1. low, 2. high, 3. contrastive and emphatic) and three distinctive terminal contours (↓ pitch fall, ↑ pitch rise, | sustained pitch). Sample utterances with intonation indicated follow.

Normal colorless statement:

/^{1}tiyo + qobele + ^{2}damaŋo^{1} ↓/ 'He has a big house.'

(/tiyo/ 'he'; /qo/ 'to have'; /bele/ 'house';

/damaŋo/ 'big')

With pause:

/^{1}lapatoqo + ^{2}yiloyitohu^{1} | ^{1}tiyo + ^{2}yilolihu^{1} ↓/

'After he played, he took a bath.'

(/lapataqo/ 'after'; /tiyo/ 'he, she'; /moyitohu/

'to play'; /molihu/ 'to take a bath'; /yilo-/

(past tense prefix))

Contrastive pitch:

/^{1}diila + ^{2}timaamaqu + ^{1}tiyo | ^{1}boo ^{3}titantequ^{1} ↓/

'She is not my mother, but my aunt.'

(/diila/ 'no, not (noun negator)'; /maama/ 'mother';

/tio/ 'he, she'; /boo/ 'but'; /tante/ 'aunt';

/qu/ 'my'; /ti-/ (particle with proper names,

kinship terms)

With interrogative words:

/^{1}wolo + ^{2}quwito^{1} ↓/ 'What is that?'

(/wolo/ 'what?', /quwito/ 'that')

/^{1}^{2}toonu^{1} ↓/ 'Where is it?' (/toonu/ 'where?')

/^{1}yilo^{2}ŋola^{1} ↓/ 'Why?' (/moŋola/ 'What for?';

/yilo/ (past tense prefix))

Yes-or-no question:

/^{1}wo^{2}lo^{1}lo | ^{1}piyopi^{2}yohu^{2} ↑/ 'Hello!'

(literally: 'How (is it)? Good?)

/^{1}yiqo + maa moonaqo + qode^{2}yitohu^{2} ↑/

'Are you going to the performance?'

(/yiqo/ 'you (singular familiar)'; /maa/ 'to want'; to intend; (preverb particle indicating futurity)'; /moonaqo/ 'to go'; /qode-/ 'to'; /yitohu/ 'entertainment')

FOOTNOTES FOR CHAPTER I

1. Statistical pocketbook of Indonesia, 1968 and 1969, p. 35. Biro Pusat Statistik - Djakarta.
2. Dyen, Isidore, 1965. A lexicostatistical classification of the Austronesian languages. Memoir 19, p. 27.
3. Hockett, C. F., 1955. A manual of phonology, IJAL, p. 55.

CHAPTER II

2.0. Morphophonemics.

The morphophonemic alternations of Gorontalo are for the most part closely tied in with the phonological sequences which occur. However, such rules tied to the phonology are not automatic. There are three possible rules which may apply, each of which is motivated by the phonology. Which rule applies is not predictable in terms of the phonology. We thus term them semi-automatic rules. We first begin with these semi-automatic rules of morphophonemic alternations.

The basic rule is that the Gorontalo syllable must have the shape CV or V, and a syllable V occurs only in the sequence CV_1V_1. Thus when two vowels come together in a morphological process there are three things which may take place:

(1) A vowel is dropped or

(2) A glide y or w is inserted when the two vowels are not the same or the two vowels contract into a long vowel when they are the same.

(3) One of the vowel is assimilated to the other and there is lengthening.

We say these processes are semi-automatic because the choice of process (1), (2) or (3) are stateable in terms

of broad categories of forms but not in terms of phonological environment.

At the end of a word a final consonant of the root is dropped. See examples under 2.14. Further, rules affecting words of more than three syllables modify these three rules further as specified in 2.2.

2.1. Semi-automatic alternations.

2.11. Insertion of y, w or lengthening of vowel.

Y and w may be inserted between two vowels. This insertion takes place:

1. Whenever roots begin with a vowel in root initial position. Y inserted before i, w inserted before a, e, u, o.
2. After root final i, e, a, and u before prefixes beginning with a vowel, e. g.

wohi + a → wohiya 'Give it!' (Imp.)

pate + a → pateya 'Kill it!' (Imp.)

bala + i → balayi 'Put a fence around!' (Imp.)

wu^{n}du + olo → wu^{n}duwolo 'be carried on one's head' (Future)

Alternation in the root is shown below:

a. # i → y + i

b. # a, o, u → w + a, o, u , e. g.

yimoqolo 'will be collected'

wunduwolo 'will be carried on head'

2.12. Dropping of vowel.

The suffixes -alo and -olo are passive suffixes. When

the suffix -alo (the local passive suffix) is added to the root the final vowel of the root is automatically lost, e.g.

atopo 'roof' -alo → watopalo[1] 'be roofed'

ameto 'transfer' -alo → wametalo 'be transferred'

u^{m}bato 'layer' -alo → wu^{m}batalo 'be spread out on'

With the suffix -olo (the direct passive suffix) there are morphophonemic changes which must be accounted for. When the suffix -olo is added to roots ending with -o, the -o is lost, e. g.

alito 'skin' + -olo → walitolo 'be skinned'

imoqo 'gather' + -olo → yimoqolo 'be gathered'

palito 'revolve' + -olo → palitolo 'be revolved'

When a root ends in i or u, y and w are automatically inserted before the o:

paqi 'throw' + -olo → paqiyolo 'be thrown'

u^{n}du 'carry on head' + -olo → wu^{n}duwolo 'be carried on head'

For roots ending in -e the suffix -olo has the shape -elo, e. g.

pa$^{\eta}$ge 'to pick' + -olo → pa$^{\eta}$geelo 'be picked'

pule 'disturb' + -olo → puleelo 'be disturbed'

pate 'kill' + -olo → pateelo 'be killed'

2.13. Assimilation.

Assimilation is a process in which one phoneme becomes partly or wholly similar to or identical with its neighboring phoneme or phonemes. Except for the change of -olo

(the direct passive suffix) to -elo (cf. 2.12 above), only progressive assimilation, i.e., one in which the changing phoneme occurs before the one which causes the change, is found in the data.

Prefixes with the shape qo- -a and mo- have alternants with qe- -a or qe- -e and me- before roots with initial e. These alternations are optional, but usually, take place in normal speech, e. g.

ema	'care'	+ qo- -a →	qeema[2]	'able to be cared for'
e$^{\eta}$gilo	'take away'	+ qo- -a →	qee$^{\eta}$gila	'have a miscarriage'
epito	'narrow'	+ qo- -a →	qeepita	'have difficulty'
e^{m}bahu	'fall down'	+ qo- -a →	qee^{m}bahe	'be hit by a falling thing'

The prefix mo- indicating adjectives also takes such alternations.

e$^{\eta}$gilo	+	mo- →	mee$^{\eta}$gi	'loose'
epito	+	mo- →	meepito	'narrow'
e^{m}bahu	+	mo- →	mee^{m}bahu	'falling down'

2.14. Dropping of root-final consonant.

A root-final consonant is dropped if no suffix is added.

ilum 'drink'	+	moN →	moŋilu	'drink (active)' vs
ilum	+	-a →	yiluma	'Drink it! (Imp.)'
boŋul 'wake'	+	moN →	momoŋu	'wake (active)', but
boŋul	+	-a →	boŋula	'Wake him up! (Imp.)'
tapil 'drop'	+	moN →	molapi	'drop (active', but
tapil	+	-a →	tapila	'Drop it! (Imp.)'

2.141. When the root contains a long vowel before the final consonant and the final is dropped, the long vowel is shortened, e. g.

qaal- 'eat' + <u>-a</u> → qaala 'Eat it!', but

qaal- + <u>moN</u>→ moŋa 'eat (active)'

There are no monosyllabic roots although there are roots of the shape CVVC.

2.2. Rules affecting words of more than three syllables.

2.21. Syntactic markers with trisyllabic forms ending in <u>e</u> and <u>o</u>. In certain syntactic constructions involving trisyllabic forms, a word final <u>-u</u> changes to <u>ee</u> and final <u>-o</u> changes to <u>aa</u>. These constructions are:

(1) Noun followed by adjective attribute

qamoŋo 'mat' + mota$^{\eta}$galo 'wide' →

qamoŋaa mota$^{\eta}$galo 'a wide mat'

tuladu 'letter + mopiyohu 'good' →

tuladee mopiyohu 'a good letter'

(2) Adjective followed by an adverb

moleeto 'ugly' + daqa 'very' →

moleetaa daqa 'very ugly'

mopiyohu 'good' + tutu 'truly' →

mopiyohee tutu 'truly good'

(3) Active verb followed by a complement

momilohu 'see' + qoliyo 'him' →

momilohee qoliyo 'see him'

momuhuto 'water (active)' + buŋa 'flower' →

momuhutaa buŋa 'to water flowers'

2.22. Suffix -a.

If the suffix -a is added to a number of bases ending in -a, -o, or -u, the final -a or -o is dropped; the -u is changed to e and dropped.

tuladu 'write' + poN- + R + -a → pollulade 'place of writing'

qabuto 'stop' + poN- + R + -a → ponŋabuta 'small bus terminal'

ema 'care' + qo- -a → qeema 'can be cared for'

2.23. Other changes of trisyllabic words.

When the genetive form of a pronoun or the noun markers follow a trisyllabic base ending in -u or -o, the -u or -o is dropped and the genetive form minus the l is used. The pronouns and noun markers with l form are:

liyo	'his'
limoŋoli	'your (plural)'
limoŋoliyo	'their'
li	female name or honorific marker
lee	male name marker

Examples with nouns:

NP		+ Attribute particle	+ NP
bohito	'toddy'	li	amo→bohitiyamo 'Father's toddy'
tuladu	'letter'	lee	tune→tuladee tune 'Tune's letter'

NP		+ Possessive pronoun		+ NP
patodu	'sugar cane'	liyo	→	patodiyo 'his sugar cane'

dinino 'wall' limonoli → dininimonoli 'your wall'

Examples with verbs:

VP	+ Attribute particle	+ NP
piliyaqato 'was climbed'	lee	tune→piliyaqatee tune 'It was climbed by Tune'
tiluladu 'was written'	liyo →	tiluladiyo 'it was written by him'

This contrasts with disyllabic roots where the rule does not hold.

NP	+ Attribute particle	+ NP
bele 'house'	li	baapu → belelibaapu 'grandfather's house'

Nor does the rule hold for polysyllabic roots ending in -a and for some trisyllabic words ending in -o and -u.

NP	+ Attribute particle	+ NP
qapula 'dog'	lee	nani → qapulaleenani 'Nani's dog'
qolobu 'water buffalo'	li	paali → qolobulipaali 'Uncle's water buffalo'
huwayo 'crocodile'	li	paapa → huwayolipaapa 'Father's crocodile'

2.24. Further, for trisyllabic bases ending in -o, the o changes to u before the forms -qu 'my, by me' and -mu 'your, by you'.

walaqo	'child'	+ -qu →	walaququ	'my child'
walaqo		+ -mu →	walaqumu	'your child'
qamonо	'mat'	+ -qu →	qamonuqu	'my mat'
qamonо		+ -mu →	qamonumu	'your mat'

2.3. Reduplication.

Reduplication is of three kinds:

(R1) Doubling of initial consonant of the root, or in slow careful speech the initial syllable reduplicated.

(R2) Long vowel reduplication, prefixation of the consonant plus the first-vowel lengthened. This forms verbs of reciprocal action.

(R3) Prefixation of the first two syllables of the root. This forms the present singular active of verbs.

Examples:

(R1) tuuluŋi 'help' + mo- + initial consonant reduplication + -a → mottuuluŋiya 'one who always wants to help'

lihu 'bath' + po- + R + -a → pollihuwa 'bathroom'

(R2) paqi 'throw + mo- + reduplication of initial consonant with first vowel lengthened + -a → mopaapaaqiya 'throwing s.t. to each other'

yindu 'ask' + mo- + R C_1 with V_1 lengthened + -a → mohiihiinduwa 'asking each other'

(R3) huluqo 'sit' + reduplication of the first two syllables → hulohuloqo 'in the process of sitting'

If a verb form infixed with -um- or -im- is reduplicated, the -um- or -im- is also repeated to form the present

singular active.

Examples:

tayaŋo 'jump' + -um- + R → tumatumayaŋo 'jumping or able to jump'

teteqo 'run' + -im- + R → timetimeteqo 'running or able to run'

2.4. Verbal affixes.

The following chart shows the past tense affixes of Gorontalo.

Active	Direct Passive	Local Passive
-ilum-	-il-	-il- -a
loh-	piloh- /-il-[3]	piloh- -a/ or -e
loN-	piloN- /-il-[3]	piloN- -a/ or -e
lo-	none	qilo- -a

Examples:

Active	Direct Passive	Local Passive
tilummayaŋo 'jumped up'	tilayaŋo	tilayaŋa (root: tayaŋo)
lohundudu 'pushed up'	pilohundudu	pilodahawa (root: daha)
lomilohu 'looked at'	pilomilohu	pilomilohe (root: bilohu)
lohuloqo 'sat'		qilohuloqa (root: huloqo)

2.41. Alternation of prefixes ending in -h.

Before root-initial vowels i, u, e, o, and a, the h of the prefix moh- or loh- remains:

ilawo 'breath' + loh- → lohilawo 'to breathe'

uwaliŋo 'return' + loh- → lohuwaliŋo 'to go home'

e^{m}bahu 'falling' + loh- → lohe^{m}bahu 'to make s. t. fall down'

olato 'wait' + loh- → loholato 'to wait'

alahu 'distance' + loh- → lohalahu 'to step aside'

Before initial consonants d, ^{v}j, g, ^{nv}j, m, n, ñ, and s the h of the prefix moh- or loh- is dropped.[4]

Examples:

daha + loh- → lodaha 'guarded'

^{v}jo$^{\eta}$ge + loh- → lo^{v}jo$^{\eta}$ge 'danced'

guru + loh- → loguru 'learned'

^{nv}juupo + loh- → lo^{nv}juupo 'ran around with a woman'

mama + loh- → lomama 'chewed betel'

ñomo + loh- → loñomo 'immersed'

nika + loh- → lonika 'married'

sukuru + loh- → losukuru 'thanked God'

2.42. Change of a to e when moh- is added.

Some base forms with the root-initial vowel a change the a to e when the prefix moh- is added to the root. There are two solutions possible:

(1) Ascribing the difference to two different prefixes: loh_1- which does not change the base with a and loh_2- which does.

apa + loh_1- → lohapa 'observed carefully'

ami + loh_2- → lohemi 'poured'

Examples:

moh_1- : alahu 'distance' + moh- mohalahu 'to step aside'

	alaqo	'child'	+ moh- →	mohalaqo 'to give birth; fertile'
moh_2-:	atopo	'roof'	+ moh- →	mohetopo 'to roof'
	apito	'stop-over'	+ moh- →	mohepito 'to stop over'
	apidu	'cover'	+ moh- →	mohepidu 'to cover'
	ameto	'trans-ference'	+ moh- →	mohemeto 'to transfer'
	aluŋo	'space under house'	+ moh- →	moheluŋo 'to bend over'

(2) Another possibility would be to ascribe the change to the root: $\underline{a}_1$ > $\underline{a}$ when loh- is added to the root; $\underline{a}_2$ > $\underline{e}$ when loh- is added.

loh- + $a_1$pa > lohapa 'observed carefully'

loh- + $a_2$lito > lohelito 'skinned' (active)

This interpretation would, of course, apply to the prefix moh- as well.

2.43. Alternation of prefixes ending in N.

The symbol N- at the end of a prefix represents a morphophonemic process of substitution of the initial consonant of the root. The alternation is stateable in terms of the initial phoneme of the root as shown in the following chart.

Root beginning with	When a prefix with N is added the initial consonant of the root →
p, b, h	m
t	l
k, q, [initial vowel]	ŋ

Examples:

po^{n}dodu	+	moN-	→	momo^{n}dodu	'to cut'
bilohu	+	moN-	→	momilohu	'to see'
huqo	+	moN-	→	momuqo	'to open'
tahu	+	moN-	→	molahu	'to keep'
kokoqo	+	moN-	→	moŋokoqo	'to knock'
qa^{m}bu	+	moN-	→	moŋa^{m}bu	'to gather'
ohi	+	moN-	→	moŋohi	'to give'
ilum	+	moN-	→	moŋilu	'to drink'

2.44. Decision whether a prefix ends in -h, -N or -Ø.

The contrast between moh- and moN- has been lost with verbs beginning in d, $\overset{\cup}{\text{j}}$, g, $\text{n}\overset{\cup}{\text{j}}$, etc. Thus when a verb begins with mod-(lod-) or $\text{mo}\overset{\cup}{\text{j}}$-/($\text{lo}\overset{\cup}{\text{j}}$-), etc. we do not know whether the underlying form has the prefix moh-/(loh-) or moN-/(loN-). Similarly the contrast between moh-/(loh-) and mo-/(lo-) has been lost with all roots beginning with a consonant. We have, however, one clue: verbs with a prefix lo- have a local passive qilo- -a or qilo- -e whereas verbs with a prefix loh- have a local passive pilo- -a or pilo- -e. For verbs with a prefix mo-/(lo- and a local passive qilo- -a, we analyze this as the prefix loh- rather than lo-. E.g. the passive lohuloqo 'sat' is qilohuloqa 'was occupied' from the root huloqo 'sit'. Thus we analyze lohuloqo as lo- plus huloqo.

FOOTNOTES FOR CHAPTER II

1. The occurrence of initial w- and y- in initial position for roots beginning in vowel is automatic and described in 2.11.
2. The addition of -a to these roots is discussed in 2.22.
3. The choice of piloh- or -il- is lexically determined. Lohembahu 'felled (loh- + embahu) has a passive yilembahu (-il- + embahu) but lotali 'bought' has a passive pilotali (piloh- + tali). Similarly the choice between piloN- and -il- is lexically determined. Lomate 'killed' (loN- + pate), pilate 'was killed' but lomilohu 'saw' (loN- + bilohu) and pilomilohu (piloN- + bilohu) 'was seen'.
4. See the discussion in 2.44.

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