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## Correspondence of Consonants in North Halmahera Languages and the Conservation of Archaic Sounds in Galela

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# Language



Limau school.



## Correspondence of Consonants in North Halmahera Languages and the Conservation of Archaic Sounds in Galela

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### I. OBJECT

The Non-Austronesian character of North Halmahera (NH) languages was clearly demonstrated by Van der Veen [1915]. These languages obviously form a closely related group, the proximity of which need not be demonstrated further [GREENBERG 1971: 815]. Moreover, the sound correspondence among these languages is remarkably regular.

The reconstruction of Proto-North-Halmahera (PNH) is an urgent and basic task for a genealogical approach to the NH language group, but except for Hueting's paper on 43 basic words [1908b: 411],<sup>1)</sup> "no 'common' or 'proto' NH has yet been worked out" [CAPELL 1975: 678]. Until today, therefore, Tobelo glosses have been given mainly as representatives of NH [CAPELL 1975: 686-8]; or those of several NH

1) The list drawn up by Hueting [1908b: 411] contains a series of words for reconstructed NH vocabulary in the right-hand column, under the heading "Tern. Halmah." This can be regarded as the first but implicit attempt to reconstruct PNH word forms. But Hueting's intention was to demonstrate the difference between the NH language group and that of South Halmahera languages, and he did not intend explicitly to reconstruct PNH.

languages are mentioned with no evaluation of the degree of conservativeness of their sounds [COWAN 1957: 87], when NH glosses are compared with several languages of Irian Jaya. A thorough evaluation of PNH is a task which still remains [CAPELL 1975: 685].

The consonant correspondences between some NH languages were partly pointed out by Fortgens [1928], Van der Veen [1915] and others. But the consonant correspondences for all NH languages and the principles governing them have still not been clarified properly, because sufficient data for the comparative study of all NH languages remain to be collected; thirty-four percent of the 2,750 terms in Hueting's comparative word list [1908b: 376-407] are lacking. Therefore, the lists of glosses and those of sound correspondences in NH languages must be drawn up before beginning reconstruction of PNH.

The purpose of this paper is twofold. First, to report the result of the author's fieldwork conducted in 1976 and the Ternate workshop in 1979 via comparative lists of the basic vocabulary of NH languages. Second, to attempt to show that the most conservative consonant forms are preserved in present day Galelan words, by demonstrating consonant correspondences derived from the lists and the principles clarifying these correspondences. It is hoped, therefore, that this paper will contribute toward the basic stage of reconstructing PNH.

## II. METHOD

### 1. Basic Method

As the basic methodology of comparative phonology is already well-established in modern linguistics, only specific details will be explained where relevant in the following chapters.

### 2. Working Method

#### 1) INTERVIEWS AND INFORMANTS

In principle, interviews were conducted in Indonesian. There were three exceptions to this, as noted below. Both English and Indonesian were used in the interviews with East Makian-speaking informant, S. Latif, and with Tidore-speaking informant, R. R. Sandiah. Both Indonesian and Japanese were used with Galela-speaking informant, Y. Salama. Linguistic material obtained was transcribed initially in a phonetic alphabet which was changed later to a phonemic transcription conforming to the orthographic system of Standard Indonesian, except for special phonemes that should be treated separately and marked with diacritic marks, details of which are indicated above in the comparative word lists. All interviews were recorded by cassette tape recorder.

I tried to obtain data from at least two informants per language.<sup>2)</sup> Where this was not possible, data were checked against the K.W.I.C. Index of N.M.E. (Na-

tional Museum of Ethnology, Japan) (see the following section 2) which is based on the romanized oral folk literatures of North Halmahera.

## 2) KWIC INDEX.

The K.W.I.C. (Key Word in Context) Index is a list of all the words, alphabetically arranged when roman characters are used, with each word shown in context (i.e. the sentence immediately preceding the word in question, and the sentence following, are provided). The location of each word in the text is noted thereby permitting quick and accurate reference to the original text.

The following KWIC Indices are used:

	Language	Source
1.	Galela	Baarda [1895: 195-555]
2.	Loloda	Baarda [1904: 392-441]
3.	Pagu	Ellen [1916a: 143-195]
4.	Modole	Ellen [1916b: 199-232]
5.	Tobaru	Fortgens [1928: 412-543] (Tobaru=Tabaru)
6.	Ternate	Fortgens [1930: 219-297]

## III. NATURE OF CONSONANT CORRESPONDENCES IN GALELA AND TOBELO

### 1. Consonant Correspondences

Many cognates of the same notion share the same consonant in Galela and Tobelo (e.g.: namo/namo "bird"), whereas many others have different consonants (e.g.: putu/hutu "night"). But in the latter cases there is regularity of correspondence, as exemplified in Table 1.

#### 2) Informants (b.=born):

Galela: (Mr.) Yohanis Salama, b. 1918 in Galela (at Dokulamo).

(Mr.) Niko Peleu, b. 1940 in Galela (at Dokulamo).

Modole: (Mr.) Ahmad, b. 1929 in Tidore (spent his childhood in Modole).

(Mr.) Yonas Gato, b. 1957 in Modole.

Tobaru-Ibu: (Mr.) Lukas Tjahaya (sic), b. 1912 in Jailolo.

Sahu: (Mr.) Frederik Sipollo, b. 1926 in Jailolo.

Waioli: (Mr.) Frederik Sipollo, b. 1926 in Jailolo.

Ternate: (Mr.) Hassan, b. 1919 in Ternate.

(Mr.) Asura Samail, b. 1959 in Ternate.

Tidore: (Mrs.) R. Ramli Sandiah, b. 1944 in Tidore.

(Mr.) Ade Jafar, b. 1958 in Tidore.

W. Makian: (Mr.) Thaib Armayn, b. 1941 in Kayoa (on Lelei Island).

E. Makian: (Mr.) Samad Latif, b. 1930 in Ternate (in an E. Makian-speaking family).

(Mr.) Hakim Ahmad, b. 1957 in E. Makian.

Data for Tobelo and Sahu were provided by Paul Taylor (Yale Univ.) and Leontien Visser (Leiden Univ.), respectively, from their fieldnotes.

Table 1. Consonant correspondences in Galela and Tobelo

	initial		medial			
AA (cf. p. 509)	130	171	231(2)	208	32	126
English	<i>woods</i>	<i>night</i>	<i>we</i> (inc.)	<i>child</i>	<i>nail</i>	<i>fruit</i>
Gal. /p/:	ponga	putu	po	ngopa	gitipi	sopo
Tbe. /h/:	hongana	hutu	ho	ngohaka	gitihiri	hohoka
The other examples in the 222 word list: 157, 186, 200, 225, 299, 345, 426.						
	initial		medial			
AA	91	278	289	1	33	38
English	<i>animal</i>	<i>smell</i>	<i>spit</i>	<i>head</i>	<i>leg, foot</i>	<i>skin</i>
Gal. /h/:	haiwani	hame	hobi	sahe	dohu	kahi
Tbe. /Ø/:	aewani	ame	obiri	saeke	þou	kai
The other examples in the 222 word list: 310, 346, 380, 418, 485, 182, 183, 189, 461 (=463).						
	initial		medial			
AA	427	485	140	60	325	189
English	<i>big</i>	<i>good</i>	<i>lake</i>	<i>meat</i>	<i>sleep</i>	<i>twenty</i>
Gal. /l/:	lamo	loha	talaga	lake	kiolo	monohalo
Tbe. /Ø/:	amoko	oa	taaga	akeme	kiooko	monoako
The other examples in the 222 word list: 141, 464.						
Those in Hueting's word list: 55, 101, 107, 129, 156, 184, 189.						
	initial		medial			
AA	33	149	315	328	Ht.201	Ht.43
English	<i>leg, foot</i>	<i>smoke</i>	<i>swell</i>	<i>eat</i>	<i>cut down</i>	<i>marry</i>
Gal. /d/:	dohu	dopo	ðobo	odo	toda	modoka
Tbe. /y/:	þou	þofo	þoboþo	oþomo	toþanga	moþoka
The other examples in Hueting's word list: 43, 44, 211, 56, 105 <sup>(1)</sup>						
	initial		medial			
AA	1	25	36	53	94	127
English	<i>head</i>	<i>breast</i>	<i>heart</i>	<i>salt</i>	<i>dog</i>	<i>seed</i>
Gal. /s/:	sahe	susu	sininga	gasi	kaso	gisisi
Tbe. /h/:	haeke	huhu	hininga	gahi	kaho	gihih
The other examples in the 222 word list: 43, 124, 126, 236, 277, 313, 337, 346, 385, 388, 397, 435, 180, 181, 461. <sup>(2)</sup>						

(1) Van der Veen mentioned 12 examples (154-156)

(2) Van der Veen mentioned 14 examples (156-157)

Common to all the correspondences illustrated in Table 1 is the contrast of strong and weak consonants: *fortis* and *lenis* in linguistic terms. In regard to the contrast of [p]/[h], for example, the sound [p] requires more energy than [h] for articulation; [p] is *fortis*, [h] *lenis*. Hence, the corresponding consonants can be illustrated as follows:

Galela: p h l d s→*fortis*  
Tobelo: h Ø Ø þ h→*lenis*

## 2. Lenition in Tobelo

One universal cause of sound shifts is the need to economize on the use of energy in producing sounds without upsetting the system of the language. Such an economy

of energy often manifests itself in the weakening of consonants, like [p]→[f]→[h]; the sound of [f] requires less energy than [p] for articulation. This weakening is realized by relaxing the muscular tension during articulation. It is called "lenition" (<*lenis*) which is a phonetic manifestation of the principle of least effort.

When this sound shift is diachronically produced, the *fortis* is older and the *lenis* is more recent. Since Galela has *fortis* and Tobelo has *lenis*, Galela can be regarded as preserving the older consonants and Tobelo the younger.

The nature of each correspondence in lenition is as follows:

- p→h: plosive to fricative
- h→Ø: syncope, apheresis
- l→Ø: syncope, apheresis
- d→ŷ: plosive to glide
- s→h: [s] is best known because of its highest frequency of all the human language sounds (4000–6000 c/s).

### 3. Apocope in Galela

The canonic form of Tobelo words is CV<sub>1</sub>-CV<sub>2</sub>-CV<sub>3</sub> whereas that of Galela is CV<sub>1</sub>-CV<sub>2</sub>, lacking the final syllable CV<sub>3</sub>:

Eng.	<i>ear</i>	<i>nose</i>	<i>tooth</i>	<i>hand</i>	<i>nail</i>
Tbe.	ngauku	ngunungu	ingiri	giama	gitihiri
Gal.	ngau	ngunu	ingi	gia	gitipi

The omission of one or more sounds in final position of lexical items is called "apocope" and is often found between the older cognate and the younger, e.g.: between Italian and French, respectively /piede/ : /pie/ "foot". Hence, the above-mentioned Tobelo-Galela examples might lead to the conclusion that Tobelo is more archaic than Galela. But as has been demonstrated already, the general tendency of lenition is so remarkable in Tobelo that Galela, in comparison, preserves older consonants in CV<sub>1</sub> and CV<sub>2</sub> syllables.

Were only apocope estimated, Galela would not appear to maintain the older consonants, but since it occurs only to CV<sub>3</sub> and lenition occurs in all the syllables in Tobelo, all Galela consonants except those apocopated must be regarded as conserving the older sounds. But when attempting to reconstruct further the older forms of Galela, assistance must be sought from other languages for the consonant of CV<sub>3</sub> that is apocopated in Galela. This problem is discussed in the chapter on the reconstruction of final consonants.

## IV. CONSONANT CORRESPONDENCES BETWEEN GALELA AND OTHER LANGUAGES

### 1. General Aspects of NH Languages and the Linguistic Context of Galela

NH languages are divided into two principal groups, those of mainland Halma-

hera and the languages of the adjacent Western islands: Ternate, Tidore and West Makian. Classification of the West Makian language is still under discussion.<sup>3)</sup> The NH languages of mainland Halmahera have been influenced less by languages from outside NH, whereas those of the islands have been influenced heavily by them in terms of grammatical structure and much of their vocabulary. But their basic vocabularies retain NH features, thus distinguishing them as belonging to the NH language group.

Further, mainland NH languages are roughly divisible into two, one rather mutable and the other somewhat stable. The former group is found in the area that historically has been under the strong influence of Ternate, via Jailolo (where the language of Ternate is spoken), whereas the latter lies along the northeast coast and its hinterland, the region that centers on Galela and Tobelo, and which is the least accessible from Ternate. This difference stems from the degree of Ternatan influence.

Ternate has long been the world-renowned center of the spice trade even prior to the era of great voyaging. Hence its language was influenced strongly by Arabs, Chinese, Portuguese, Dutchmen and others rushed successively to this island in addition to speakers of Austronesian languages. Consequently its structure and vocabulary became strikingly differentiated from the NH languages of the mainland. The following are the examples showing those differences:

#### Vocabulary

AA	1	60	124	157	294	435
English	<i>head</i>	<i>meat</i>	<i>leaf</i>	<i>sky</i>	<i>fear</i>	<i>heavy</i>
Indones.	<i>kepala</i>	<i>daging</i>	<i>daun</i>	<i>langit</i>	<i>takut</i>	<i>berat</i>
Galela	<i>sahe</i>	<i>lake</i>	<i>soka</i>	<i>dipa</i>	<i>modo</i>	<i>tubuso</i>
Loloda	<i>saeke</i>	<i>lakeme</i>	<i>soka</i>	<i>diwama</i>	<i>modongo</i>	<i>tubuso</i>
Tobelo	<i>haeke</i>	<i>akeme</i>	<i>hoka</i>	<i>dihanga</i>	<i>modongo</i>	<i>tubuho</i>
Pagu	<i>saek</i>	<i>lakem</i>	<i>soka</i>		<i>modong</i>	<i>tobuso</i>
Modole	<i>hae'e</i>	<i>a'eme</i>	<i>ho'a</i>	<i>diwanga</i>	<i>modongo</i>	<i>tubuho</i>
Tobaru	<i>saeke</i>	<i>akeme</i>	<i>soka</i>	<i>diwanga</i>	<i>modongo</i>	<i>tubuso</i>
Sahu-Waioli	<i>sae'e</i>	<i>la'eme</i>	<i>so'a</i>	<i>diwanga</i>	<i>mojongo</i>	<i>tubuso</i>
Ternate	<i>dopol</i>	<i>daging</i>	<i>rau</i>	<i>tufa</i>	<i>kolofino</i>	<i>haso</i>

#### Sentence structure

the child	a letter	his father-to	he wrote
Galela: Ma ngopa	o surati	ma baba-ka	wo lefo.
1	2	3	4

3) According to the West Makian informant, from Kayoa Island, more than 70 percent of the population of Kayoa speak West Makian. Kayoa Island can be included, therefore, in the West Makian-speaking area. If West Makian is found to belong to the NH group, Yoshida's linguistic map of the Halmahera (Fig. 1 p. 22) area should be modified in this respect.

	1	4	2	3
Ternate:	Ngofa nage	(wo) lefo	surat	te una i baba.
	child that	(he) wrote	letter	to his father
Indones.:	Anak itu	mengirim	surat	kepada ayahnya.

In Ternate, (wo) is generally omitted in informal expression.

## **2. List of Consonant Correspondences**

Table 2 lists the correspondences of consonants. The mainland NH languages have no consonant cluster. All the syllables are open except some of the finals in Pagu. But in most languages, few exceptional cases are noticed in informal utterances: *obong* < *obongo* (Modole 45), *tumding* < *tumudingi* (Galela 185). Words of Malay origin often keep their original final consonant: *pakean* (79).

In principle, no special difference of correspondence is found between initial and medial. Only Pagu loses regularly the opposition r/l at the final syllable that is closed.

The languages are indicated across the top. The left-most column is a series of labels for correspondences.

Table 2 and Table 3 were drawn based on the author's 222 word list (see below, Comparative Word Lists of NH Languages) and verified from Hueting's list [1908] and Van der Veen's comments [1915: 153–219]. Some series of consonant correspondence appear only once in the 222 word list; they are not considered in compiling Table 2 since a pattern cannot be derived from only one example. Table 3 was drawn for some other series of consonant correspondences which have already become natural-

**Table 2.** Consonant correspondences of NH languages—1

Table 3. Consonant correspondences of NH languages—2

	Gal.	Lol.	Tbe.	Pag.	Mod.	Tba.	SW.	Ter.	Tid.	
C	428	c	c	t	t	t	—	c	c	—
J	481	j	—	—	j	j	j	j	j	ijo (AN.)
NY	226	ny	ny	ny	ny	ny	—	—	—	nyawa (AN.)
Y	287	y	—	—	y	—	y	i	—	suyu
	233'	y	j	y	y	y	(d)	—	—	yo, ya
F	127	—	—	—	f	f	f	f	f	fini
K-2	79	k	k	k	k	k	k	k	k	pakean (AN.)
(ref.)	—	j	j	j	—	—	—	—	—	jiko, jobo (<cobo>)
S-2	187	s	s	s	s	s	s	s	s	si(w)o (AN.)

ized into the sound system of present-day NH languages: C, J, NY, Y (Table 3). Their common feature is more apparent from the Dutch spelling: tj, dj, nj, j. Regarding this problem, Fortgens' comments [1928: 304–305, 317–321] are applicable not only to Tobaru but also to the other mainland NH languages. His comments can be summarized as follows:

- (1) there are few examples of these sounds;
- (2) most of such examples belong to loan words (mainly from Ternate and Malay);
- (3) such loan words cannot be assumed to be native;
- (4) native people pronounce these sounds easily and correctly; and
- (5) these sounds already have become naturalized into the present-day sound systems of their language.

The following comments should be added to those of Fortgens:

- (1) The sounds of C, J, NY and Y are contained in few words that may be native: *jiko, jobo, cobo, yo, ya* and the like; and
- (2) They are especially few in the vocabulary of formal speech for phonostylistic reasons: rather, these sounds are mainly contained in children's vocabulary, especially /c/, /j/; and they occur often in onomatopoeia.

In most of the 23 series of correspondence the same consonants correspond without sound shift (P-2, B, M, W, T, D, N, L-2, R-2, G, NG, J, NY, Y), whereas there are some that show sound shift between corresponding consonants. Especially remarkable and regular sound shifts are found in the series P-1, D, R-1, L-1, K, S, H, that will be discussed in the next section 3.

The following are the examples without sound shift (taken only out of cognates). The sound between two slashes // shows a correspondence in all of the NH languages. Examples in 222 word list are indicated by the number. As sibling terms, numerals, personal pronouns, thermals and colors are listed separately at the last part of 222 word list, numbers of these groups are separated by slashes.

- P-2: /p/ 26, 79, 282, 298, 305, 350, 388, 433, 454, 460, 468.  
 B: /b/ 45, 100, 153, 155, 202, 266, 289, 338, 339, 435/ 216/ 184/ 480.  
 M: /m/ 63, 95, 167, 179, 236, 238, 278, 279, 280, 294, 328, 349, 366, 427/ 180, 183, 185, 188, 189/ 230, 231/ 464.

T:	/t/	18, 35, 68, 118, 123, 140, 146, 280, 291, 305, 308, 316, 338, 345, 349, 435, 449, 455, 460, 486/ 180, 182, 183, 184, 185, 186, 190/ 478.
D:	/d/	21×2, 68, 140, 147, 157, 294, 299, 324, 389×2, 449/ 180, 185/ 497 (sahu : /r/).
N:	/n/	8, 36, 44, 63, 127, 146, 224, 237, 257, 277, 288, 366, 421, 434, 491/ 180, 189/ 228, 229, 230, 231, 232, 233.
L-2:	/l/	153, 448, 266(d), 275×2, 399, 462.
R-2:	/r/	284, 314, 366, 433'', 477, 478.
G:	/g/	30, 32, 35, 53, 60, 61, 65×22, 82, 87, 95, 118, 140, 237, 258, 232, 266, 267, 290, 314, 316, 322×2/ 188.
NG:	/ng/	7, 8, 13, 123, 130, 132, 135, 159, 163, 208, 238, 288, 467, 468, 470/ 181, 184, 185, 186/ 227, 228, 231, 232. (459: Tobelo: <i>woata</i> )

### 3. Galela Consonants Compared with Those of Other NH Languages

#### —The position of Galela among NH languages—

The Galela preserves the oldest consonants among all the NH languages. This is clarified by examining the consonant correspondence series containing regular sound shifts (Table 4):

Examples in 222 word list:

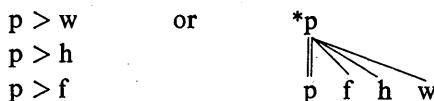
Table 4.

	Gal.	Lol.	Tbe.	Pag.	Mod.	Tba.	SW.	Ter.	Tid.
P-1	p	w	h	w	w	w	w	f	f
D	d	j	ŷ	y	d	d	r	{h ny}	y
L-1	l	l	Ø	l	Ø	Ø	l	l	l
R-1	r	r	r	l	{l r}	r	{d l}	r	r
S-1	s	s	h	s	h	s	s	s	s
H	h	h	Ø	Ø	Ø	Ø	Ø	h	h
K-1	k	k	k	k	'	k	'	k	k

P-1:	32, 126, 149, (150), 157, 171, 200, 208, 225, (299), (345), (354), 426/ 186/ 231(2).
D:	33, (136), 149, 315, 328. (cf. Hueting 43, 44, 56, 105, 211)
L-1:	60, 141, 325, 427, 485/ 189/ 464.
R-1:	9, (13), 32, 143, 199, 224, 238, 267, (433), 455, 457/ 215, 216/ 190/ 478/ 482.
S-1:	1, 25, 36, 43, 53, 61, 94, 124, 126, 127, 236, 277, (279), 287, 313, (315), 337, 346, 380, 385, 388, 397, 435/ 180/ 461, 463/ 477.
H:	1, 2, (33), 38, 82, 128, 278, 289, 346, 380, 386, 418, 434, 459, 485/ (215)/ 182, 183, 189/ 461 (=463).
K-1:	1, 5, (7), 26, 34, 38, 60, 89, 94, (123), 124, (126), 128, 132, 143, (146), 151, 199, 200, 208, 225, 253, 260, (267), (299), (305), 321, 329, 345, 346, 350, 354, 388, 421, 427, (428), (468)/ 491/ (188), (189)/ (461)/ 482.

To the Galelan /p/ correspond /w/, /h/, /f/. This series is labial. The process of labial sound shift is one of the easiest to understand as the following labial correspondences are universal:  $p \rightarrow \Phi \rightarrow f \rightarrow h$  or  $p \rightarrow b \rightarrow \beta \rightarrow v \rightarrow w$ . It is suggestive that Dempwolff's first monograph on Austronesian languages dealt with the labial correspondences [1920]. In principle, the processes of sound shift differ among language groups; sound shift in Indo-European languages is not the same as that in the Austronesian languages. Also, it should be presumed that NH language group had its own process of sound shifts. But since NH languages lack written materials as old as those available for Indo-European languages, one of the possible ways of clarifying this process is to utilize the universal patterns of sound shifts obtained in the past from studies of various language groups, especially those shifts explicable through the principle of economy. Particular attention should be paid to the correspondences among Austronesian languages, many of which are useful for explaining those of NH languages; p is the most *fortis* of p, w, h, f, because it is the only plosive among them. There is no need to discuss the degree of *fortis* of these four sounds, it being only important to note that p is strongest.

When > mark shows the relation of *fortis* > *lenis*, the relationship is:



In this regard, Brandstetter cited the following examples in his comments on the "Law of the Labials" [1916: 271-272] (Table 5):

Table 5.

$p$ pitu Original IN.	>	$f$ fitu Hova	>	$h$ hitu Rottinese
-----------------------------	---	---------------------	---	--------------------------

Easiest to explain are the cases of *apocope*, *syncope* and *apheresis*. They are total disappearance of the sound in each phonetic context: C → Ø. Examples of this kind are the series of L-1 and of H; respectively divided into those which conserve h or 1 and those which have lost them. Galela, Loloda, Pagu, Sahu-Waioli, Ternate and Tidore are conservative with regard to L-1, whereas Tobelo, Modole and Tobaru are shifted. The important point is that Galela belongs to the conservative group both in the L-1 and the H series.

*Correspondence of /k/ and /ʃ/.* /ʃ/ is glottal stop [?]; it often appears at the medial stage whereas the /k/ shifts toward Ø, as in Chinese final in Hokkien dialect:

[k] → [?] → [Ø]  
velar stop → glottal stop → zero

This is explainable as lenition.

*Correspondence of /s/ and /h/.* This correspondence is found in Austronesian, Indo-European, Uralic, and Japanese, among other languages. Its relationship is /s/ → /h/:

English	six	seven	English	go
Indo-Eur.	seks	sept-	Pr. Polyn.	saa'ele
Sanskrit	sát	saptá	Pr. E. Polyn.	saa'ere
Greek	hexa	hepta	Tahitic	haere

Hawaii			Hawaii	here
--------	--	--	--------	------

This correspondence in Philippine and Formosan languages is tabulated by Dahl under \*S-reflexes [35]. Brandstetter cites the following examples, regarding /s/ as original (Table 6):

Table 6.

	s → h		s → h		
	senā	hainā		siwa	hiwa
Sanskrit	Old Persian		IN	Kambarese	

Galela preserves this also.

*R-1 series.* The correspondence of r, l, d coincides with "the RLD law" of Brandstetter. He cited the examples as follows [267]:

r:	pir <sub>1</sub> a	Original IN.	"how much"
l:	pila	Bisaya	" = "
d:	pidan	Balinese	" = "

He regards r<sub>1</sub> as original (lingual r). In this series also Galela preserves the oldest sound, lingual r.

A special characteristic of Pagu is that the final syllable is closed where both R-1 and R-2 become /l/ at the final (never /r/). This case is regarded as neutralization by the form of conditioned variant.

*D series:* the correspondence of d, j, ÿ, y, d, r, h, ny. Among these phonemes, /ÿ/ is described using the symbol /λ/ by Hueting [1908a, b, 1936]. Although, his phonetic description is not clear: "... een onzuivere l, geschreven, een overgang tusschen d en l, ..." [1908a: 5]. In his "Iets over ..." [1936: 315], he simply put this phoneme in the category of "Supradentale" without phonetic description. His preoccupation does not seem to be the sound of /λ/ itself, but rather the regular correspondence of this phoneme to those of the other languages of NH and some morphological correspondence within Tobelo language (e.g. "wound": verb *λabo*; noun <*nabo*>, etc.). Although the /λ/ sound that I obtained in the field was [j]. I reserve here this problematic phoneme with the symbol /ÿ/, because of its regular correspondences to the others, as Hueting noted.<sup>4)</sup>

4) The correspondence of y, r, h in PMP has been observed by Dyen, but as belonging to the γ-series of UAN [1965: 303]. This correspondence was already noted by Conant, under the RGH Law [1911: 71–73]. Brandstetter cited the original IN 1 that changes into d, r and y in some Indonesian languages [1916: 267–268].

In Galela, the opposition of /d/ to /d/ is still apparent to native speakers. [d]/d/ and [d]/d/ (dental and alveolar; rather, dental and retroflex) is clearly evident in present day Galela.

Nowadays, however, there are many Galela who always pronounce [d], losing the opposition of /d/ to /d/. This tendency is rather remarkable although regarded as vulgar (*kasar*). According to Fortgens, this opposition has been lost already in Tobaru [1928: 312]. The retroflex d is dominant in all NH languages (in all mainland NH languages, Ternate, Tidore) as well as in West and East Makian; it seems that only Galela conserves dental d opposing retroflex d. Among the phonemes of the D series, the correspondence of d [d], j [d'], d [d] and r [r] is mentioned by Dahl as belonging to the di series of PAN [1976: 64].<sup>5)</sup> In the correspondence of y to d in the following examples, d is older than y:

Japanese 'yoru' < \*dolba (proto-Tungus) "night"

Japanese 'yama' < daba- (written Mongol), \*daw- (proto-Tungus)  
"mountain"

[Miller 86]

Some details remain to be discussed regarding the correspondence of this series, but it can be said that Galela preserves the oldest sound since /d/ or /d/ is fortis.<sup>6)</sup>

On the whole, Galela preserves well the old sounds in that it has retained plosives and caused neither apheresis nor syncope. Accordingly, Galela word forms may show fairly well those of PNH by suffixing the apocopated consonants of -CV<sub>3</sub>.

## V. FINAL CONSONANTS AND THEIR RECONSTRUCTION

All the mainland NH languages, except Galela, preserve final consonants (the final syllable is preserved even in Galela when the accent falls on the penultimate: e.g. Tobelo *hutu* / Galela *putu* "night"). The correspondences of the final consonants are regular and the same as those in the other syllables (CV<sub>1</sub>, CV<sub>2</sub>). Consequently, it is simple to presume the lost final consonant. The table 2 is applicable to this case, too.

Within the 222 words, the lost final consonants in Galela are k, ng, n, r, m, t, s, l. We could not find the other cases (p, d, w, h, c, j, ny, y, f).

## VI. COMPARATIVE WORD LISTS OF NH LANGUAGES

The lists presented here are based on Swadesh's so-called 200 word list compiled for lexicostatistics, supplemented with the words included only in his 100 word list:

5) In Spanish dialects, there are correspondences of y ([j] fricativa) to z (rehilada) or to dz (africada) [VICENTE 1970: 78-79].

6) Only exception is: English hilum (of seed)

Galela woti

Loloda potiti

Tóbelo wotiti

Pagu potit

Modole potiti

Tobaru potiti

[VAN DER VEEN 1915: 159]

breathe	shoot	six	twenty
clothing	sister	seven	hundred
cook	speak	eight	
cry	spear	nine	
dance	work	ten	

Two words, "ice" and "snow", are excluded here because of their obvious irrelevance to the context of Halmahera. A total of 222 words was used to compile the lists in this article. All the notions in Penchoen's article [1968: 866-872] on Swadesh's lists are included, except the above-mentioned two words.

The glosses are arranged in the sequence of the standard checklist compiled by the Institute for the Study of Languages and Cultures of Asia and Africa (I.L.C.A.A.), of Tokyo University of Foreign Studies. In this article, AA is used as the abbreviation for I.L.C.A.A. and Ht for Hueting (e.g.: "AA/Ht—79/9" indicates no. 79 in AA checklist and no. 9 in Hueting's list).

Certain terms are arranged in the final part of my list because of the peculiar nature of NH classificatory systems. Such terms are: sibling terms, numerals, personal pronouns, terms for temperature and "dust" (because of the difficulty of distinguishing it from "ash"). It is difficult to obtain a series of cognates for particular terms: e.g. stick (pole, bar), hunting (by arrow, spear or dog, etc.). Those terms, together with explanatory notes, are also shown at the end of the list. "Day" (163) is put after "year" (167) in order to distinguish "day" from "sun" and also to clarify that it is a unit opposing "year."

#### Phonemic symbols:

- /d/ [d] in Galela, opposing /d/ [d], the latter is predominant in NH languages and both West and East Makian.
- /y/ for Hueting's (λ).

Table 7. Comparative word lists of NH languages

AA/Ht English Indones.	1/1 head kepala	2/3 hair rambut	5/85 eye mata	7/6 ear telinga	8/2 nose hidung
Galela	sahe(*k)	hutu	lako	ngau>(*k)	ngunu(*ng)
Loloda	saeke	utu	lako	ngauku	ngunungu
Tobelo	haeke	utu	lako	ngauku	ngunungu
Pagu	saek	beleti	lako	ngauku	ngunung
Modole	hae'e	utu	yao, la'o	ngau	ngunung
Tobaru	saeke	utu	ako	ngaoku	ngununu
Sahu	sae'e	utu	la'o	ngau'u	ngunungu
Waioli	=	=	=	=	=
Ternate	dopolو	hutu	lako	ngau	ngunu
Tidore	dofolo	hutu	lao	ngau	ngun
W. Makian	apota	onga	afe	kamou	mude fete
E. Makian	poyo	kaklé	mto	baibio	hungo
AA/Ht English Indones.	9/86 mouth mulut	11/67 tongue lidah	13/ tooth gigi	18/87 neck leher	21/89 back belakang
Galela	uru	lade	ingi(*r)	tolo	dudu(*n)
Loloda	uru	lajema	ingiri		dudunu
Tobelo	uru	akiri	ingiri	tomara	porete
Pagu	ulu	akil		tomal	poret, tomal
Modole	ulu	a'i(1i)	ingi	toma	dudung
Tobaru	uru	ngangaeme	ingiri	tomara	audunu
Sahu	madanga	aidi	ingidi	camala	dudunu
Waioli	udu	=	=	=	=
Ternate	mada	aki	ing	cama	dudu
Tidore f	moda	aki	ing	sako	dulu
W. Makian	mada	belubelu	wi	ru	gapu
E. Makian	sumo	plelo	lallo	gowo	lagulo
AA/Ht English Indones.	25/ breast buah dada	26/88 belly perut	30/82 hand tangan	32/214 nail kuku	33/13 leg, foot kaki
Galela	susu	poko(*r)	gia(*m)	gitipi(*r)	dohu
Loloda	susu	pokoro	giama	gitiwiri	jou
Tobelo	huhu	mamata	giama	gitihiri	ŷou
Pagu	susu	pokol	giam	gitiwil	you
Modole	susu	po'o	giam	gitiwili	dou
Tobaru	susu	pokoro	giama	gitiwiri	dou
Sahu	susu	pó'olo	giama	kiciwidi	rou
Waioli	=	=	=	=	=
Ternate	isi	oru	gia	kulcifi	hohu
Tidore	isu	oru	gia	(ju)jum	yohu
W. Makian	susu	bódo	ia	jupi	gofi
E. Makian	susu	bingo	komo	kuyo	wè

(2)

AA/Ht English Indones.	34 knee lutut	35/148 liver hati	36 heart jantung	37 guts usus	38/32 skin kulit
Galela	puku	gate	sininga	toto	kahi
Loloda	wuwuku	gate	sinyia	toto	kai
Tobelo	buku	gate	hininga	wariki	kai
Pagu	bubukul	gatel		walik	kai
Modole	bubu'u	gate	mili	gale-gale	'ai
Tobaru	bubuku	gate	fuo	toto	kai
Sahu	busu'údu	gatere		uru	eno'o
Waioli	=	=	gatere	=	=
Ternate	buku-buku	gate	gate	gale-gale	ahi
Tidore	buku-buku	gate	nyinga	gale-gale	ahi
W. Makian	papú	amo	sinéf	gale-gale	fi
E. Makian	pappúko	yoco	wlo	gale-gale	liko

AA/Ht English Indones.	43 fat, grease gemuk	44/154 blood darah	45/155 bone tulang	53 salt garam	60 meat daging
Galela	saki	au(*n)	kobo(*ng)	gasi	lake
Loloda		aunu	kobongo	gasi	lakeme
Tobelo	haki	awunu	kobongo	gahi	akeme
Pagu	golol	aun	kobong	gasi	lakem
Modole	gutul	aunu	obongo	gahili	a'eme
Tobaru	saki	aunu	kobongo	gasi	akeme
Sahu	gaji	ngaunu	obongo	gasi	la'eme
Waioli	=	=	=	=	=
Ternate	gaji	awo	obo	gasi	daging
Tidore	gaji	au	goka	gasi	daging
W. Makian	gaji	uni	subébi	ase	gagi
E. Makian	gaji	lo	yoyo	yasin	wókono

AA/Ht English Indones.	61/83 egg telur	63 bird burung, manuk	64 wing sayap	65 feather bulu	68 horn tanduk
Galela	boro	namo	golipupu	gogo	tadu
Loloda	tounu	namoro		gogo	
Tobelo	gohi	namo	gahuhu	gogo	taduku
Pagu	gosi	namo		gogo	
Modole	gohi	namo	gatu'u	gogo	tadu'u
Tobaru	gosi	namoro	gatúuku	gogo	taduku
Sahu	gosi	namo	galatu'u	gogo	tadu'u
Waioli	=	=	=	=	=
Ternate	boro	namo	pila	gogo	tadu
Tidore	gosi	namo	pila	gogo	tadu
W. Makian	esi	haiwáni	paya-paya	gigó	tadik
E. Makian	tolo	nurung	háiiku	hattulo	tattaku

(3)

AA/Ht English Indones.	76 spear tombak	79 clothing pakaian	82/92 snake ular	83 worm cacing	87 louse kutu, tuma
Galela	kamanu	pakeang	ngihia	kalubati	gani
Loloda	kamanu	pakeangi	tomo	owana, oana	gani
Tobelo	kuama	pakeangi	dodiha	kolubati	gani
Pagu			ngia		tani, gane
Modole	tutudu	pakean	ngia	ulubitanga	gani
Tobaru	kuama	pakean	nyia	kalubati	ga'ani
Sahu	sagu-sagu	pakean	ngia	kolotidi	gane, kane
Waioli	=	=	=	=	=
Ternate	sagu-sagu	pakean	ngohia	koltidi	gan
Tidore	sagu-sagu	pakean	yega	koltidi	gan
W. Makian	sagu-sagu	pakéan	abeí	lalati	bene
E. Makian	tombak	pakéan	kôlai	let	kut
AA/Ht English Indones.	89/19 fish ikan	91 animal binatang	94/16 dog anjing	95/176 rope tali	100/57 tail ekor
Galela	nawo(*k)	haiwani	kaso	gumi(*n)	pego
Loloda	naoko	haiwani	kaso	gumini	bikini
Tobelo	nauoko	aewani	kaho	gumini	bikini
Pagu	naok	aiwani	kaso	gumin	pote
Modole	na'o'o	haewani	aho	bubusu'u	'bi'iní
Tobaru	naoko	haiwani	kaso	gumini	bikini
Sahu	nyao'o	haiwani	nunu'u	gumi	di'imí
Waioli	=	=	kauna	=	=
Ternate	nyau	binatang	kaso	gumi	biki
Tidore	nyau	binatang	kaso	gumi	bi
W. Makian	yao	haiwani	aso	lalongi	biso
E. Makian	yan	haiwan	nnyo	wola	kaku
AA/Ht English Indones.	118/21 wood(tree) kayu	121 grass rumput	123/182 root akar	124 leaf daun	125/95 flower bunga
Galela	gota	ngangaru	ngutu(*k)	soka	leru
Loloda	gota	ngutuku	soka	dopo	
Tobelo	gota	gudara	ngutuku	hoka	huri
Pagu	gota		ngutuk	soka	
Modole	gota	ubutu	ngutu'u	ho'a	bunga
Tobaru	gota	gudara	ngutuku	soka	ratana
Sahu	pongo	gudara	utu'u	so'a	saya
Waioli	=	=	=	=	=
Ternate	hate	gofu	utu	rau	saya
Tidore	hate	gofu	utu	rau	saya
W. Makian	fete	piri-piri	utu	we	saya
E. Makian	ai	dawa	wowo	lu	saya

(4)

AA/Ht English Indones.	126/95 fruit buah	127 seed benih, biji	128 bark kulit(pohon)	130 woods hutan	132/112 way jalan
Galela	sopo(*k)	gisisi	kahi	ponga(*n)	ngeko(*m)
Loloda	sowok		kai	hongana	ngekomo
Tobelo	hohoko	gehihi	kai	hongana	ngekomo
Pagu	sowok		kai	bongana	ngekom
Modole	howo'o	fini	'ai	bongana	nge'omo
Tobaru	sowoko	fini	kai	bongana	ngekomo
Sahu	sowo'o	fini	eno'o	bangana	ngo'omo
Waioli	=	=	=	=	=
Ternate	sofo	fini	ahi	banga	ngoko
Tidore	sofo	fin	ahi	banga	linga
W. Makian	sopo	asál	fi	pangan	gopao
E. Makian	sapo	bitib	liko	uwat	lolani

AA/Ht English Indones.	135 river sungai, kali	136 mountain gunung	140 lake telaga	141/94 sea laut	143/17 water air
Galela	selera	tala	talaga	ngolo(*t)	ake(*r)
Loloda	ngairi	joku		ngoloto	akere
Tobelo	ngaere	ŷoku	taaga	ngooto	akere
Pagu	ngail	yeku	talaga	ngolot	akel
Modole	ngaili	de'u	talaga	ngooto	a'ele
Tobaru	ngairi	deku	talaga	ngooto	akere
Sahu	ngapanga	kie	talaga	ngoloto	banyo
Waioli	=	=	=	teongo	=
Ternate	ake uhi-uhi	kie	talaga	ngolo	ake
Tidore	ake yuhi	kie	talaga	ngolo	ake
W. Makian	songa	pu	talaga	fisi	be
E. Makian	woya	uwat	talaga	wolat	woya

AA/Ht English Indones.	145/78 stone batu	146 earth tanah	147 sand pasir	149/105 smoke asap	150(=148) ash(=dust) abu(=abu)
Galela	teto	tona(*k)	dowongi	dopo	gaapo
Loloda	seleo	tonaka	dongi	jowo	kawo
Tobelo	helewo	tonaka	dowongi	ŷoho	kafo, kohuhono
Pagu	mamaling	tonak	dowongi	yowo, nyowo	kakawo
Modole	mamalingi	tona'a	dowongi	yowo	fia, 'a'awo
Tobaru	teto	tonaka	dowongi	dowo	kuru
Sahu	madi	tana'a	dowongi	loworo	itomo
Waioli	=	=	=	=	uturu
Ternate	mari	kaha	dowong	nyofo, nyefo	fika
Tidore	mafу	hale	uyu	yofo	fika
W. Makian	mai	afi	afi	soi	ruru
E. Makian	lälai	dádodoba	nyannyana	yasu	tattapil

(5)

AA/Ht English Indones.	151/96 fire api	152/169 wind angin	153 cloud awan	154 fog kabut	155/81 rain hujan
Galela	uku	paro	lobi	rasa	muura
Loloda	uku	wuwulu	lobi		besaka
Tobelo	uku	hidaloko	lobi	houramu	awana
Pagu	uku	gagál	sauramo	sauramo	besak
Modole	u'u	dado'o	lobi	sauramo	beha'a
Tobaru	uku	dadoko	lobi	kakamoro	besaka
Sahu	u'u	karawiana	kamo-kamo	lobi-lobi	besa'a
Waioli	=	lohoko	=	=	=
Ternate	uku	kore	kamo <sup>2</sup> , lobi	suramo	besa
Tidore	uku	kore	lobi	suramo	bosa
W. Makian	ipi	wudu	marú	mararú	pongi
E. Makian	lutan	moda	mayas	lobi-lobi	ulan

AA/Ht English Indones.	157 sky langit	159 sun matahari	160 moon bulan	162/69 star bintang	167 year tahun
Galela	dipa(*ng)	wange	ngoosa	ngoma	taun
Loloda	diwama	ange	iloa	ngoma	pariama
Tobelo	dihanga	wange	mede	murumu	pariama
Pagu		wange	pede		
Modole	diwanga	wange	mede	mamanga	pariama
Tobaru	diwanga	wange	mede	ngoma	pariama
Sahu	diwanga	wangere	ngara	mudu-mudu	musung
Waioli	=	=	=	=	=
Ternate	tufa	wange ma lako	ara	ngama	taun
Tidore	tufa	wange	ora	ngoma	taun
W. Makian	tupam	win da afe	odo	pariama	taon
E. Makian	langit	nngan ni mto	páit	batól	táun

AA/Ht English Indones.	163 day hari	171 night malam	176 when? kapan, bila?	194 all segala	195 some beberapa
Galela	wange	putu	muruode	moi-moi	ma nuka
Loloda	ange	(w)utu	kawuru	moi-moi	
Tobelo	wange	hutu	muruonoka	moi-moi	moruono
Pagu	wange	wutu, lobil	muluoka	moi-moi	
Modole	wange	wutu	muluwo'a	moi-moi	muluwo'a
Tobaru	wange	biri	muruoka	yódumu	ngai muruo
Sahu	wangere	lobidi	ngau'ia	moimoini	muduoia
Waioli	=	=	sa'alow'i'a	=	muduo'i'a
Ternate	wangé	gamam	wange rao	moi-moi	rau
Tidore	wange	sifutu	fio	moi-moi	ngairau
W. Makian	win	kaman	pariú	fāmási	iwuya
E. Makian	nngan	galmúmit	poíso	hasóle	(piso)

(6)

AA/Ht English Indones.	199/38 husband suami, laki	200/36 wife isteri	202/74 father ayah, bapak	203/73 mother ibu	208/15 child anak
Galela	roka(*t)	pedeka(*t)	baba	awa, meme	ngopa(*k)
Loloda	rokata	wejeka	ama	ina	ngoaka
Tobelo	rokata	hekata	ama	ayo	ngohaka
Pagu	lokat	wekat	eya, dea	ela	ngoa
Modole	lo'ata +	we'ata	dea	eha +	ngoa'a +
Tobaru	rokata	wekata	dea	esa	ngowaka
Sahu	naudu	were'a	baba	meme	ngowa'a
Waioli	=	=	=	=	=
Ternate	raka	foheka	baba	aya	ngofa
Tidore	ra, (nau)	fayâ	baba	yaya	ngofa
W. Makian	at	papáa	boba	mâ	oma
E. Makian	ni mon + o'ata	ni mapin	aba	mama + asa	mto + ngoa
AA/Ht English Indones.	224/37 male lakilaki	225/35 female perempuan	226 person orang	236 other lain	238/42 name nama(kecil)
Galela	yanau (*naur)	ngopedeka	nyawa	somoa	ronga
Loloda	nauru	ngowejeka	nyawa	somoa	romanga
Tobelo	nauru	ngoheka	nyawa	homoa	romanga
Pagu	naul	ngeweka	nyawa	somoa	lomang
Modole	naulu	ngewea	nyawa	homoa +	ronga
Tobaru	nauru	ngeweka	nyawa	somoa	ronga
Sahu	naudu	were'a	ngowa'a	lelegu	lomanga
Waioli	=	=	=	=	=
Ternate	nonau	foheka	mancia	reregu	ronga
Tidore	nonau	(fo)fayâ	mansia	regu	ronga
W. Makian	aatí	papaatí	mancía	faese	aem
E. Makian	mon	mapin	manusia	maleo + somoa	so
AA/Ht English Indones.	237 who? siapa?	253 what? apa?	256 how? bagaimana?	260 where? mana?	257 here sini
Galela	nago	okia	okia-so	kiaka	kanena
Loloda	nagongo	okia	doa	kiaka	
Tobelo	nagonanga	okia	(car)okia	kiaka	nenanga
Pagu	nagona	okia		kiaka	neena
Modole	nago ona	o'ia	dodoau	ia'a	nena +
Tobaru	nago ona	okia	kokia	kiaka	nengoka
Sahu	aguna	orou	sa'alou	le'a	anê
Waioli	agiana	=	=	ale'a	=
Ternate	nage	koa	dogasá	kasô	kanê
Tidore	nage	mega	(ga)tebé	kabê	karê
W. Makian	mu	pamá	(ha)paató	sito	(se)sine
E. Makian	yalho	yapu	dôhapan	polô =pololi	annê + nengoa

(7)

AA/Ht	258		266	267/143	275		277/119
English	there		left	right	see		hear
Indones.	situ		kiri	kanan	lihat		dengar
Galela	kagena		gubali	girina(*k)	kelelo		ise(*n)
Loloda	menege		gubali	giniraka	kelelo		isene
Tobelo	genanga		gubadi	niraka	oriki		ihene
Pagu				gunilak	gelelo		isen
Modole	geena'a		gubali	girina'a +	gelelo +		ihe +
Tobaru	geenaka		gubali	girinaka	make		isene
Sahu	agê		gubadi	guida'a	odi'i		isene
Waioli	=		=	=	ma'e		isen(e)
Ternate	kagê		kubadi	gunyira	nyodi		ise
Tidore	kagê		kubali	kunyira	hoda		baso
W. Makian	(so)soma		kabali	kayai	ficô		baço
E. Makian	addia		balit	woyan +guida'a	mam + itutu +ngoli'i		longa +gisene
AA/Ht	278		279	280/45	282/120		283
English	smell		breathe	say	cry		sing
Indones.	✓ciuum, bau		✓napas	✓sebut	✓jerit		✓nyanyi
Galela	hame		woma	temo	ore(*s)		nyanyi
Loloda	ame		ngomasâ	temo	poaka		
Tobelo	ame		womaha	temo	poaka		nyanyi
Pagu	ame		oma	temo	poak, pola		
Modole	ame		oma(sa)	temo +	orese +		jaji
Tobaru	ami		omasa	tesongo	orese		jaji
Sahu	tumese		ngamasâ	terongo	poa'a		manyanyi
Waioli	=		=	=	=		=
Ternate	hame		ma sugo	waje	torara, ari		nyani
Tidore	hame		ma sugo	waje	ria		(ma)nyani
W. Makian	isi		fa'amo	teng	egit		nyani
E. Makian	hotan		yol manowo	halusa +tesongo	nângai +todoana		nyani
AA/Ht	284		285	287	288/76		289
English	dance		speak	suck	vomit		spit
Indones.	✓tari		bicara	✓isap	mutah		✓ludah
Galela	selo		bicara	suyu	nguna(*ng)		hobi(*r)
Loloda			bicara				kobiri
Tobelo	ronge			fififi	wunenge		obiri
Pagu				wiwi, isis	nguneng		obil
Modole	rongge +		ma deade	huyu +	ngunanga		obili +
Tobaru	roge		demo	wiwi	munana		kibiti
Sahu	rongge		kanau	suyu	ngunanga		obidi
Waioli	roge		=	=	=		=
Ternate	ronggeng		temo	sui	una		nguci
Tidore	rongge(ng)		bicara	fifi	una		honguci
W. Makian	ronggé(ng)		bicara	udu	kawé		ujuf
E. Makian	rónggen +roge		bicara	sodas +oele(water)	ñwa		ídís +kibiti

(8)

AA/Ht English Indones.	290 bite $\sqrt{gigit}$	291 laugh $\sqrt{tawa}$	294/113 fear takut	298 hit $\sqrt{pukul}$	299 shoot $\sqrt{tembak}$
Galela	goli	dohe	modo(*ng)	ngapo	dupu
Loloda	goli	iete	modongo	posana	dupuku
Tobelo	goli	iete	modongo	poha	duhuku
Pagu	goli	iete, siet	modong	posal, gosa	duuk
Modole	goli	hiyete	modongo	cira +	duu +
Tobaru	goli	iyete	modongo	asana	duuku
Sahu	gogodi	nyelo'o	mojongo	ca'olo	tabu
Waioli	=	=	=	motu	=
Ternate	logi	ohe	kolofino	cako	tabu
Tidore	goli	ohe	kolofino	cako	torobe
W. Makian	korutu	(y)ae	mijo	wakis	tebel
E. Makian	babas	namlíh	kiu	wet + goosa	tabal + tu'u
AA/Ht English Indones.	303 throw $\sqrt{lempar}$	305/77 pierce $\sqrt{tusuk}$	308 push $\sqrt{dorong}$	309 pull $\sqrt{tarik}$	310 take, hold $\sqrt{bawa}$
Galela	sariwi	topo(*k)	hito(si)	lia	aho
Loloda		topoko		liara	a'o
Tobelo	kaweli	topoko	duma	liara	ao
Pagu		topok	dutumal	tobak	asa
Modole	awili +	topo'o	hi'ito +	toba'a	ahaha
Tobaru	tibako	ruju	tila (ta)	tobaka	asa
Sahu	wako	taji	hitomo	idala	gasa
Waioli	=	= + surono	=	=	=
Ternate	poi	topo	witou	naro	gasa
Tidore	foi	tofa	ito	naro	gosa
W. Makian	wako	taji	utu	toga	tege
E. Makian	yeit + tiba'o	tusa	rújuk + tila	tógal	yat
AA/Ht English Indones.	313 rub $\sqrt{gosok}$	314 scratch $\sqrt{cakar}$	315 swell $\sqrt{gembung} +$	316 walk $\sqrt{jalan}$	321/218 stand $\sqrt{diri}$
Galela	ese	rago	ðobo	tagi	oko
Loloda	iwiti		jobo	tagi	oko
Tobelo	ehe	ragoho	þoboho	tagi, oiki	oko
Pagu	ese		yobos	tagi	tekos
Modole	iwili	horoma +	yoboho	tagi	o'o +
Tobaru	i'iti	ragoso	yoboso	tagi	oko
Sahu	iwiti	ware	roboso	tagi	te'oso
Waioli	=	=	=	=	=
Ternate	ese	garo	lebang	pergi	koko
Tidore	ese	koyako	yobo	tagi	koko
W. Makian	sikat	garos	rama	sagal	sosu
E. Makian	sikat	garis + aragoso	ndola + bengkak	tagil	wosal + go'onu

(9)

AA/Ht English Indones.	322/23 sit duduk	324 lie √baring	325/98 sleep tidur	328/4 eat makan	329/136 drink minum
Galela	tamie	dadu	kiolo(*k)	odo(*m)	udo(*m)
Loloda	gogere	idu	kioloko	ojomo	udomo
Tobelo	gogerekū	dadu	kiooko	oŷomo	okere
Pagu	gogel	idu	kiolok	oyom	okel
Modole	gogere	idu	idu	odomo	o'ele
Tobaru	gogere	idu	idu	odomo	okere
Sahu	tirini	dangono	otu	oromo	o'e
Waioli	=	=	ngidu	=	=
Ternate	tego	bidi-bidi	hotu	oho	oke
Tidore	torine	tango	otu	oyo	yuru
W. Makian	totoroso	bola-bola	tifi	fajou	bebé
E. Makian	batalon	habbaik	tuli	hon	imin
AA/Ht English Indones.	335 rotten √busuk	337/130 fly terbang	338 swim √renang	339 float timbul	341 split √sobek
Galela	baka, padede	soso(*r)	tobo(*ng)	bawo	raca
Loloda	torou	soro	tobongo		roka
Tobelo	torou	hoho	tiboko	ahini	belaka
Pagu		solo	tobong		pelak
Modole	torou+	hoho	tobo	bao	racang
Tobaru	dorou	soso	tobongo	baoro	etongo
Sahu	cira	soloro	sasa	baolo	acingi
Waioli	=	=	=	=	=
Ternate	ira	soro	tobo	copú	aci
Tidore	jira	soro	koyafo	ruru	yaci
W. Makian	sa	tagar	galof	yarin	labe
E. Makian	lekat + bounu	nopa	yos	myâring	ganas
AA/Ht English Indones.	345 roast √bakar	346 boil √masak	349 kill √bunuh	350 tie √ikat	353/239 sew √jahit
Galela	tupu	sakahī	tooma	piriku	uri(*t)
Loloda	tupuku	sakai	toma	pilikuru	uriti
Tobelo	tuhuku	hakai	toma	ŷikutu	uriti
Pagu	tuuk	sakai	toma, oma	piliku	dingi
Modole	tuu'u	ha'ai	toma, oma	puhu'u	dini
Tobaru	tuuku	sakai	tooma, oma	pusuku	uriti
Sahu	taudu	sa'ai	pongolo	piri'u	dini
Waioli	= + tu'u +	=	omara	=	=
Ternate	hoku	cirum	koru	deso	din
Tidore	fufu	ngan	koru	kone	din
W. Makian	sao	isa	kuba	bali	aki
E. Makian	magésai + gobu	ngohon	pun	lika	beit

(10)

AA/Ht English Indones.	354 wash √cuci	355 wipe √hapus	361/209 cut √potong	366/34 work √kerja	379/195 dig √gali
Galela	boka	piki	lui(*t)	manara(*m)	puai(*t)
Loloda	wokala	sesara	luiti	manarama	waiti
Tobelo	hoka	hehara	luiti	manarama	haiti
Pagu	wokal	palis	luit	manarama	pait
Modole	wo'a +	paca +	oto +	rajanga +	paiti
Tobaru	woka	esaka	oto	manarama	paiti
Sahu	uju	pi'idi	taranga	manarama	paiti
Waioli	uju	=	= + tola'a	guino	=
Ternate	uju	ese (cf. 313)	tola	golaha	fai
Tidore	uju	paca, ese	tola	gahi munara	fai
W. Makian	uju	fisi dangi	tala	karjá	pai
E. Makian	was + bo'a	bum + wai'ili	hola + todang	mantap + karija	paik
AA/Ht English Indones.	380 flow √alir	384 fall jatuh	385 burn √nyala	386 blow √tiup	388 wet basah
Galela	uhi(*s)	dota	sora, songara	hoa	pesa
Loloda	uisi	tuere	songara		busa
Tobelo	uihi	otaka	hora, hongara	wuwo, wowo	pehaka
Pagu	wuis	tiwa	songa	wuak	pesak
Modole	uihi +	ota'a	loa	wuwu +	peha
Tobaru	uihi	yotaka	uku ya aimi	uwaka	pesaka
Sahu	uisi	eta'a	siru	hoa	busa
Waioli	= + sasolo	=	=	=	=
Ternate	uhi, bau (339)	doro	siru	hiyo	busa
Tidore	yuhu	peka	loho	iru	hobo
W. Makian	ufi	dare	lupa	udu	kaban
E. Makian	ol + wisi	mtat	mnol	nuho + wua'a	kabus
AA/Ht English Indones.	389/79 dry(v.) √jemur +	393/117 count √bilang +	397/5 die mati	398 live hidup	399 play √main
Galela	dudu(*ng)	eto(*ng)	sone(*ng)	oho	uule
Loloda	dudungu	etongo	sonenge	ango	ule
Tobelo	dudungu	etongo	honenge	wango	ule
Pagu	dudung	oim	soneng	wango	ule
Modole	dudungu	doimi	honenge +	wango +	ule
Tobaru	dudungu	doimi	songene	wango, oo	ule-ule
Sahu	ngonono	roimí	senenge	'ahu	bisa
Waioli	= + dadi	=	=	=	ma'i'o
Ternate	dadi	nyonyohi	sone	ahu	tonyiru
Tidore	dadi	wonge	sone	ahu	biso
W. Makian	neni	paingi	gei	bafo	wao
E. Makian	gamus + √kering	yohan + √hitung	mot + sonenge	hia + 'aulu	lalawa

(11)

AA/Ht English Indones.	403 fight √juang	409 think √pikir	412/62 come datang	418/121 give √beri	421/49 know tahu
Galela	kudubu	fikiri	bola	hike	nako
Loloda			suwutu	ike	nako
Tobelo	kudoti	toli	boa	ike	nako
Pagu			sapong	kula	nako
Modole	berjuang	pikiri	boa	ula	na'o
Tobaru	canga	kisiri	boa	kikula	nako
Sahu	'usaha	tibanga	sapolو	pula'a	waro
Waioli	=	tibang	ngadolо	=	=
Ternate	makutubu	fikir	kado	haka	waro
Tidore	makutubu	fikir	yado	toa	waro
W. Makian	faruju	fikir	podo	pe	wado
E. Makian		pikir	wom	otik	unak
AA/Ht English Indones.	426 not, no tidak	427/29 big besar	428 small kecil	433 thick tebal	434/219 thin tipis
Galela	-wa, upa	lamo(*k)	ece	kipiri(*n)	hina
Loloda	-wa, uwa	lamoko	ceceke	kipirini	ina
Tobelo	-ua, uha	amoko	eteki	pirini	ngina-ngina
Pagu	-ua, uwa	lamok	iti	pilin	
Modole	-wa, uwa	(y)amo'o	ete'e	pirini	ina
Tobaru	-ua, uwa	(y)amoko	cingoono	kipirini	ina
Sahu	-ua, awa	lamo'o	ceka	kupiringi	nginara
Waioli	=	=	=	=	=
Ternate	-uwa, afa	lamo	ici	kofiri	hina
Tidore	-uwa	lamo	kene	kofiri	hina
W. Makian	-yo	lamo	kaakú	komudu	fine-fine
E. Makian	-te	lollol	kutu	kamudu	nihis
AA/Ht English Indones.	435 heavy berat	448 round bulat	449/139 sharp tajam	450 dull tumpul	451 smooth licin
Galela	tubuso	pululu(*n)	doto	bongo	maahi
Loloda	tubuso		doto	agere	
Tobelo	tubuho	bululu(nu)	doto	ŷabo-ua	paakoro
Pagu	tobuso	pululun	doto		palakol
Modole	tubuho	pululu	doto+	poposo	ngutulu
Tobaru	tubuso	pululunu	doto	poposo	nousu
Sahu	tubuso	pululu	mangono	mangon-ua	pilijidi
Waioli	=	=	=	= (cf. 449)	jiji'idi
Ternate	haso	polulu	mango	mango-uwa	palisi
Tidore	haso	fululu	paha	paha-uwa	cai
W. Makian	posoi	boko-boko	mangot	gegele	rata
E. Makian	mapot	bakboka	nwata +mango	tatadi	matjahas

(12)

AA/Ht English Indones.	452 straight lurus	454 dirty kotor	455/144 long(1) panjang	455/188 long(2) lama	456/145 short pendek	
Galela	bolowo	pepeke	kuru(*t)	teka	timisi	
Loloda			kurutu	tekana	totiawo	
Tobelo	rikoto, rikitu	peke	kurutu	dekana	polulu, tipoko	
Pagu	boloot	pe'e	kulut	kilang	tipoko, soli	
Modole	bolo'a	pere'e	aulu	tao	tipo'o	
Tobaru	booto	faja	kakuru	dekana	tipoko	
Sahu	boloto	pece	ti'ara	ka'udu	boko'o	
Waioli	=	=	=	=	=	
Ternate	loa-loa	faja	gira	roro	podo	
Tidore	loa	faja	gira	suru	podo	
W. Makian	kaolo	gaji-gaji	yaó	golo	katoba	
E. Makian	maddodang	kabot	longan	mangáncō	pokat	
AA/Ht English Indones.	457 far (cf. 455) jauh	458 near dekat	459/191 wide lebar	460 narrow sempit	467 new baru	young muda
Galela	ku(r)*t)	dumu	ngoha(*t)	peneto	momuane	kiau
Loloda	kurutu	sebanga	ngoata			
Tobelo	kurutu	tigi	woata	peneto	hungi	giau
Pagu	kulut	soli	ngoat	peto		giyau
Modole	aui'a	tipo'ono	ngoata	peeto	hungi	giau
Tobaru	kurutika	sorino	yamo	pe'etoro	sungi	
Safu	kudutu	sebanga	rara	peletoro	sungi	
Waioli	=	=	=	rara-uwa	=	
Ternate	gudu	seba	lamo	luas-uwa	sungi	
Tidore	gulu	seba	lamo	sempit	sung	
W. Makian	golo	seba	lamo	kakú	dotopo	
E. Makian	nalou	dakin	loas	môtak	powo	
AA/Ht English Indones.	468 old tua, lama	470 full penuh	471 many banyak	472 few sedikit	485 good baik	
Galela	ngowo	wedo	dala	ucu	loha	
Loloda	pereki	omanga	ngoe	dewi, regu	loa	
Tobelo	pereki	omanga	woe	utu	oa	
Pagu	pereki	omang	lepe	utu	loa	
Modole	pere'i	omanga	lepe	bebeawa	owa	
Tobaru	ngowo	omanga	kudai	kaudaiwa	owa	
Sahu	ngowo	romanga	repe	cekaua	lalá	
Waioli	= + piri'i	=	=	=	= + laa	
Ternate	ngo	oma	dofu	cabú	laha	
Tidore	ngowo	yoma	dofu	kambú	laha	
W. Makian	dogolo	guma	pake	dootu	deminyá	
E. Makian	banbono + pereki	mhon	loci	kiti	hia	

(14)

AA/Ht English Indones.	188/11 ten sepuluh	189/12 twenty duapuluh	190 hundred seratus	
Galela	mogiowo(*k)	monohalo(*k)	ratu moi	
Loloda	mogioko	monahalo	ratusu moi	
Tobelo	ngimoi	monaoko	ratuhu moi	
Pagu	mogiok	monalok	latus' moi	
Modole	mogiowo	monao'o	ratu(s) moi	
Tobaru	mogiowoko	monaoko	ratus' moi	
Sahu	nyagimoi	nyagiromodidi	latusu moi	
Waioli	=	=	latusu rimoi	
Ternate	nyagimoi	nyagiromdidi	ratu moi	
Tidore	nyaboi	nyabalofo	ratu moi	
W. Makian	aunge	audengdeng	atus minye	
E. Makian	yohaso	yohalu	utin cō	
<hr/>				
AA/Ht English Indones.	227 I saya	228 you (sg.) anda	229 he (d)ia	230 she (d)ia
Galela	ngohi, to	ngona, no	una, wo	munā, mo
Loloda	ngoji, to	ngona, no	una, o	munā, mo
Tobelo	ngohi, to	ngona, no	unanga, wo	munanga, mo
Pagu	ngoi, to	ngona, no	unang, wo	munang, mo
Modole	ngoi, to	ngona, no	una, wo	munā, mo
Tobaru	ngoi, to	ngona, no	una, wo	munā, mo
Sahu	ngoi, to	ngana, no	una, wo	munā, mo
Waioli	= =	= =	= =	= =
Ternate	ngori, to	ngana, no	una, o	mina, mo
Tidore	ngori, to	ngona	una	mina
W. Makian	de	ni	me	me
E. Makian	yak	au	i	i
<hr/>				
AA/Ht English Indones.	231(1) we (ex.) kami	231(2) we (in.) kita	232 you (pl.) anda (pl.)	233 they mereka
Galela	ngomi, mi	ngone, po	ngini, ni	ona, yo
Loloda	ngomi, mi	ngone, wo	ngini, ni	onanga, jo
Tobelo	ngomi, mi	ngone, ho	ngini, ni	onanga, yo
Pagu	ngomi, mi	ngone, wo	ngini, ni	ana, yo
Modole	ngomi, miyo	ngone, po	ngini, niyo	ona naga, yo
Tobaru	ngomi, miyo	ngone, po	ngini, niyo	ona, yo
Sahu	ngomi, mi	ngene+, wo	ngini+, ni	âna, du
Waioli	= =	= =	= =	= =
Ternate	ngom, mi	ngone, fo	ngon, ni	ana, i
Tidore	ngom	ngone	ngon	ona
W. Makian	imi	ene	ini	eme
E. Makian	am	am	si, meu	si
		+ngomi	+âna	

(13)

AA/Ht English Indones.	486/71 bad buruk	487 right benar	491 if kalau	497 and dan	215/122 brother saudara lalaki
Galela	torou	tero	náko-so	de	hira(*ng)†
Loloda	torou		nako	de	iranga
Tobelo	torou	tai	nako	de	hiranga
Pagu	tila	tero	nako	de	ilang
Modole	tiila+	goungu	mana'o	de	irang
Tobaru	torou	gongu	nákosó	de	iranga
Sahu	cira	tero	sa'álou	re	idanga
Waioli	=	=	=	=	idanga
Ternate	ira	tero	coba	se	hira
Tidore	jira	dahe	kalu	se	hira
W. Makian	sâ	de gou	kalo	lo	faya da at
E. Makian	lekat +tiisa	ntalai	polo	lo	damô mon
AA/Ht English Indones.	216/123 sister s. perempuan	179 one satu	180/7 two dua	181/8 three tiga	182/9 four empat
Galela	bira(*ng)†	moi	sinoto	saange	iha(*t)
Loloda	biranga	moi	sinoto	jange	joata
Tobelo	biranga	moi	hinoto	hange	iata
Pagu	bilang	moi	(lo)modidi	woange+	loat
Modole	birang	moi	modidi	haange	hoata
Tobaru	biranga	moi	modidi	saange	soata
Sahu	bidanga	rimoi	romodidi	roange	rata
Waioli	=	=	=	=	=
Ternate	fira	rimoi	romodidi	raange	raha
Tidore	fira	rimoi	malofo	range	raha
W. Makian	faya da papá	minye	medeng	yunge	fati
E. Makian	damô mapin	pso	plu	ptol +lomoange	phot
AA/Ht English Indones.	183/10 five lima	184 six enam	185 seven tujuh	186 eight delapan	187 nine sembilan
Galela	motoha	butanga	tumudingi	tupaange	siwo
Loloda	motoa	butanga	tumudingi	tuange	sio
Tobelo	motoa	butanga	tumidi	tuhange	sio
Pagu	motoa	butanga	tumudingi	tuange	siwo
Modole	motoa	butanga	tumudingi	tuangele	siwo
Tobaru	motoa	butanga	tumudingi	tuangere	sio
Sahu	romotoa	rarama	tumudingi	tuangele	siworo
Waioli	=	=	=	=	=
Ternate	romtoha	rara	tumdi	tufkange	sio
Tidore	ramtoha	rora	tumdi	tufkange	sio
W. Makian	mafoi	dami	tepedingi	tokbange	siwe
E. Makian	plim	pwonam	phit	pwat	psiwo

† see MATSUZAWA, this volume pp. 364.

(15)

AA/Ht English Indones.	461 hot panas	462 cold(1) dingin	463/170 warm hangat	464 cold(2) dingin	477/50 white putih
Galela	sahu(*k)	alo	sahu(*k)	mala(*t)	are(*s)
Loloda	sahu	alo	sahu	malata	arese
Tobelo	hauku		hauku	maata	arehe
Pagu	sauku		sauku	malat	ares
Modole	hau'u	midi(ng) +	boboreaso	maata	arehe
Tobaru	sauku	alo	boroaso	maata	arese
Sahu	sasa'u	alo	borohaso	malata	bubudo
Waioli	=	=	=	= + alo foloi	bubudana
Ternate	susahu	alo	borohaso +	alo foloi	bubudo
Tidore	sahu	alo	mariyasu	alo foloi	(bo)bulo
W. Makian	sasafo	gararo	(hesit.)	gararo	bulo
E. Makian	makowai	midin + alo	mamawol + sahu	(hesit.) (2)-water	bulang
AA/Ht English Indones.	478/25 black hitam	479 red merah	480 blue biru	481 green hijau	482 yellow kuning
Galela	taro(*m)	sawala	bisi	ijo	kurati
Loloda	taromo		biru		
Tobelo	taromo	dokara	bihi	biru	kurati
Pagu	talom +	kukulung	bis		
Modole	taromo	terebo'o	biru	ijo	'urati
Tobaru	taromo	tereboko	biru	ijo	kurati
Sahu	kokotu'u	kokolili	biru	ijo	bauru
Waioli	=	=	=	=	kudaci
Ternate	kokotu	roriha	biru	ijo	kuraci
Tidore	kotu	kohori	biru	ijo	kuraci
W. Makian	kekei	lolupa	biru	ijo	burei
E. Makian	kuda + kokotu	makot	biru	ijo	makninis

## VII. INDEX OF GALELA VOCABULARY.

Table 8. English-Galela Index of the 222 basic words

194 all	moi-moi	202 father	baba	leg → foot
497 and	de	294 fear	modo(*ng)	324 lie        dadu
91 animal	haiwani	65 feather	gogo	little → small
150 ash	gaapo	225 female	ngopedeka	398 live        oho
496 at	-ka, etc.	472 few	ucu	35 liver        gate
	bar → stick	403 fight	kudubu	455 long        kuru(*t)
21 back	dudu(*n)	151 fire	uku	87 louse        gani
128 bark	kahi	89 fish	nawo(*k)	224 male        yanau(*naur)
26 belley	poko(*r)	183 five	motoha	man → person, male
427 big	lamo(*k)	339 float	bawo	471 many        dala
63 bird	namo	380 flow	uh(i)(*s)	60 meat        lake(*m)
290 bite	goli	125 flower	leru	160 moon        ngoosa
478 black	taro(*m)	337 fly	soso(*r)	203 mother        awa, meme
44 blood	au(*n)	154 fog	rasa	136 mountain        tala
386 blow	hoa	33 foot	dohu	9 mouth        uru
45 bone	kobo(*ng)	182 four	iha(*t)	32 nail        gitipi(*r)
25 breast	susu	126 fruit	sopo(*k)	238 name        ronga
279 breathe	woma(*s)	470 full	wedo	460 narrow        peneto
215 brother	hira(*ng)	418 give	hike	458 near        dumu
385 burn	sora, songara	485 good	loha	18 neck        tolo
208 child	ngopa(*k)	121 grass	ngangaru	467 new        momuane, kiau (*sungi)
	claw → nail	481 green	ijo	
79 clothing	pakeang	37 guts	toto	171 night        putu
153 cloud	lobi	2 hair	hutu	187 nine        siwo
462 cold	alo	30 hand	gia(*m)	8 nose        ngunu(*ng)
412 come	bola	229 he	una	426 not        -wa, upa
393 count	eto(*ng)	1 head	sahe(*k)	468 old        ogowo
282 cry	ore(*s)	277 hear	ise(*n)	179 one        moi
361 cut	lui(*t)	36 heart	sininga	236 other        somoa
284 dance	selo	435 heavy	tubuso	path → way
163 day	wange	257 here	kanena	226 person        nyawa
397 die	sone(*ng)	298 hit	ngapo	399 play        uule
379 dig	puai(*t)	68 horn	tadu	pole → stick
454 dirty	pepeke	461 hot	sahu(*k)	309 pull        lia(*r)
94 dog	kaso	256 how	okia-so	308 push        hito
329 drink	udo(*m)	190 hundred	ratu moi	155 rain        muura
389 dry (v.)	dudu(*ng)	92 hunt(ing)	nihi, etc.	479 red        sawala
450 dull	bongo	199 husband	roka(*t)	267 right(kanan)        girina(*k)
148 dust → ash		227 I	ngohi	487 right (benar)        tero
7 ear	ngau(*k)	491 if	nako-so	135 river        selera
146 earth	tona(*k)	in → at		road → way
328 eat	odo(*m)	349 kill	tooma	123 root        ngutu(*k)
61 egg	boro	34 knee	puku	95 rope        gumi(*n)
186 eight	tupaange	421 know	nako	335 rotten        baka, padede
5 eye	lako	140 lake	talaga	448 round        pululu(*n)
384 fall	dota	291 laugh	dohe	313 rub        ese
457 far	kuru(*t)	124 leaf	soka	53 salt        gasi
43 fat	saki	266 left	gubali	147 sand        dowongi

280 say	temo	73 stick	tepi, didiki	463 warm	sahu(*k)
314 scratch	rago	145 stone	teto	354 wash	boka(*l)
141 sea	ngolo(*t)	452 straight	bolowo	143 water	ake(*r)
275 see	kelelo	287 suck	suyu	132 way	ngeko(*m)
127 seed	gisisi	159 sun	wange	231 we(ex.)	ngomi, mi-
185 seven	tumudingi	315 swell	dobo	231' we(in.)	ngone, po-
353 sew	uri(*t)	338 swim	tobo(*ng)	253 what	okia
449 sharp	doto	100 tail	pego	176 when	muruode
299 shoot	dupu(*k)	talk → speak		260 where	kiaka
456 short	timisi	188 ten	mogiworo(*k)	477 white	are(*s)
283 sing	nyani	(251) that	(ma) gena	237 who	nago
216 sister	bira(*ng)	258 there	kagena	459 wide	ngoha(*t)
322 sit	tamie	233 they	ona, yo-	200 wife	pedeka(*t)
184 six	butanga	433 thick	kipiri(*n)	152 wind	paro
38 skin	kahi	434 thin	hina	64 wing	golipupu
157 sky	dipa(*ng)	409 think	ngitu, fikiri	355 wipe	piki
325 sleep	kiolo(*k)	(249) this	(ma) nena	498 with	de, dede
428 small	ece	thou → you		woman → female	
278 smell	hame	181 three	saange	wood → tree	
149 smoke	dopo	303 throw	sariwi	130 woods	ponga(*n)
451 smooth	maahi	350 tie	piriku(*r)	366 work	manara(*m)
82 snake	nghihia	11 tongue	lade(*m)	83 worm	kalubati
195 some	ma nuka	13 tooth	ingi(*r)	ye → you (pl.)	
285 speak	bicara	118 tree, wood	gota	167 year	taun
76 spear	kamanu	189 twenty	monohalo(*k)	482 yellow	kurati
289 spit	hobi(*r)	180 two	sinoto	228 you (s.)	ngona, no-
321 stand	oko	288 vomit	nguna(*ng)	232 you (pl.)	ngini, ni-
162 star	ngoma	316 walk	tagi		

The following items are noted separately since their full implication is too complicated to emerge on a straightforward list:

73. 'Stick' (bar, pole) is distinguished by different words according to its use and material. Galela: tepi > depi; didiki [Baarda]. Tobelo: gogohara (to strike), tutukunu (walking-stick), dodipo (to pluck a fruit). Modole: rohe; jaga. Tobaru: roese, Sahu-Waioli: ate. Ternate: hate, jaga. Tidore: jaga. W. Makian: bake. E. Makian: lako.

92. 'Hunting' is expressed differently according to the tools used and whether or not a dog is involved, for example. Literally it may be expressed as "to do gun" or "to do dog" etc. Galela: diha (with dogs), roda (with a gun), kaukau (battue). Tobelo: niki (run after), nanamo (birds), (po)pedeke (frogs), limoro (with a gun), etc. Modole: aho (with dogs). Tobaru: roda. Sahu-Waioli: tioma. Ternate: buruburu (buru < pemburuan). Tidore: dode. W. Makian: fa sagusagu. E. Makian: tabal.

148. The item 'dust' is omitted, since 'dust' and 'ash' are the same in all NH languages except the following:

	'dust'	'ash'
Sahu	koroudu	itomo
Waioli	koroudu	uturu

496. The item 'at' (pada) is discussed separately since it varies remarkably as a locational/directional affixe in all mainland NH languages and in East and West Makian. Ternate and Tidore have "toma", but East Makian has no equivalent (see Yoshida this volume, pp. 19-88).

498. There is no difference between 'with' and 'and'. In addition, Tobelo and Tobaru use "dede" to mean 'with'.

234. There is no special form for the feminine 'they'.

Comments on each item will appear in later issues of the *Senri Ethnological Studies*.

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Martinus Nijhoff.

VBG=Verhandelingen van het Koninklijk Bataviaasch Genootschap van Kunsten en Wetenschappen, Batavia.

VKI=Verhandelingen het Koninklijk Instituut voor Taal-, Land- en Volkenkunde van Nederlandsch-Indië. Martinus Nijhoff.

ZES=Zeitschrift für Eingeborenen-Sprachen. Dietrich Reimer.

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