THE NIMBORAN LANGUAGE

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THE NIMBORAN LANGUAGE

PHONOLOGY AND MORPHOLOGY





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PREFACE

During three years of linguistic research in Western New Guinea in the service of the Koninklijk Instituut voor Taal-, Land- en Volkenkunde (Royal Institute of Linguistics, Geography and Ethnology, The Hague), the writer had as his main task the study and analysis of a hitherto undescribed language. When the choice fell on the Nimboran language, it was not to be foreseen that this meant opening up a gold mine of linguistic data. Indeed, the investigations, though often slow and laborious, proved most rewarding. The amount of data was so overwhelming that remoulding them into a complete description required much time. Moreover, it was my wish to do more than just listing the facts. From the outset, I tried to undig the generative aspect of the linguistic structure. Therefore, the idea was not to compile a corpus of data which could be analysed later on, but to find out what role every element that was recorded could play in building new utterances. This meant that the description was to be made along new lines. It was only after years that I found the peace to complete this task. In the near future I hope to add a description of Nimboran syntax, some texts, and a vocabulary to the phonological and morphological parts, embodied in the present volume.

I owe a great debt of gratitude to the Koninklijk Instituut voor Taal-, Land- en Volkenkunde for both organizing the research and publishing the results, and to the former Government of Netherlands New Guinea and the Netherlands Organisation for the Advancement of Pure Research (Z.W.O.) for liberally subsidizing the project.

I am also deeply in debt to Dr. J. van Baal, then Governor of Netherlands New Guinea, whose sympathetic and interested attitude appeared most helpful, and to Mr. C. J. Grader and Dr. J. V. de Bruyn of the Bureau of Native Affairs (Kantoor voor Bevolkingszaken) who did very much in paving the way and taking charge of all sorts of practical arrangements. Much help was also given by the District-Officers, Dr. W. J. H. Kouwenhoven and Mr. E. van Voskuylen.

Warm thanks are also due to Dr. E. M. Uhlenbeck and Dr. H. Schultink for their important suggestions and constructive criticism of which, I hope, I have gratefully taken advantage.

It is impossible to mention the names of all those who in some way or other have been helpful. Above all, this is true for the Nimboran people whose assistance, willingness, hospitality, and patience were essential for the success of my work. I will hold them in grateful remembrance for the rest of my life.

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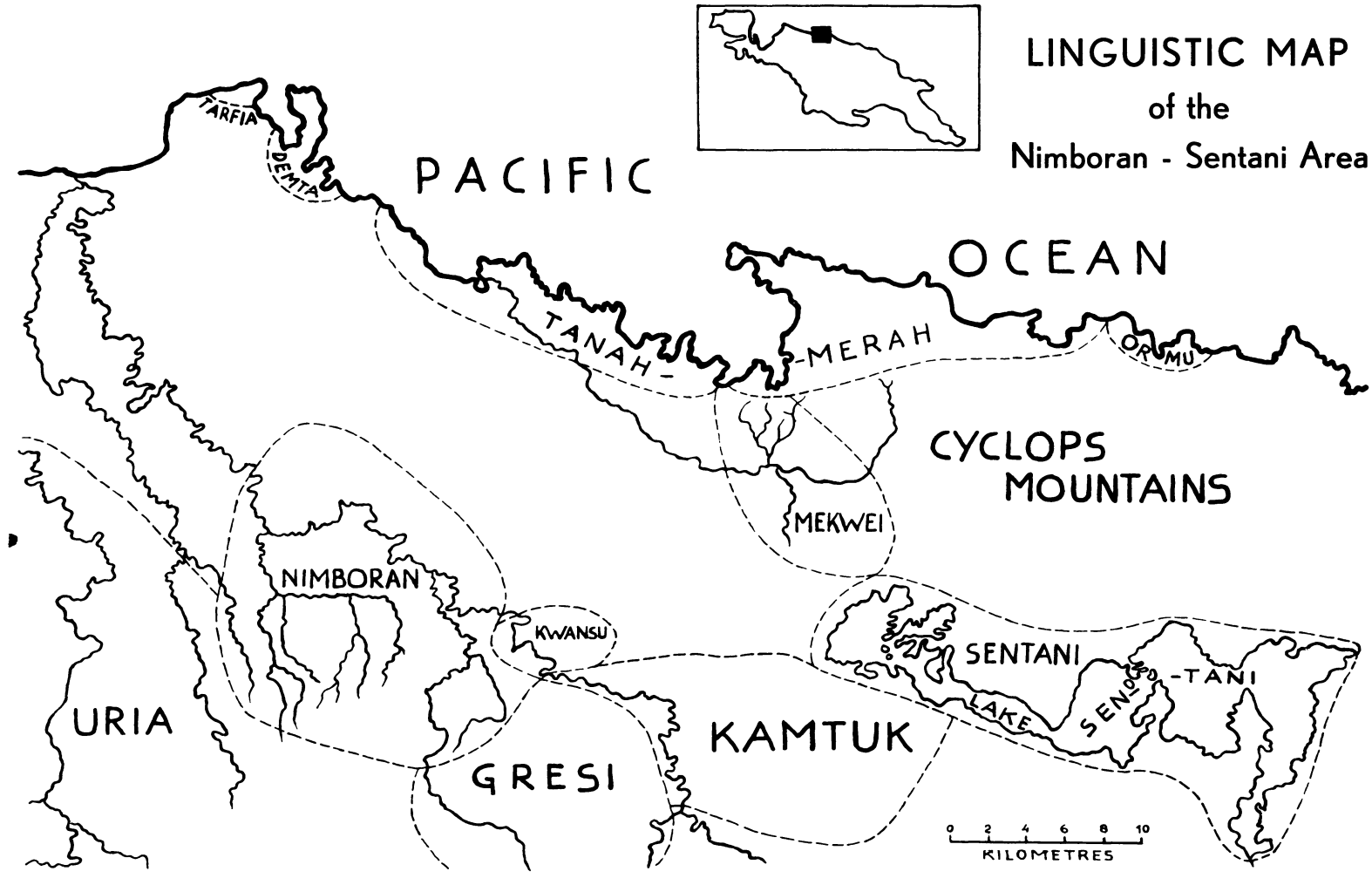
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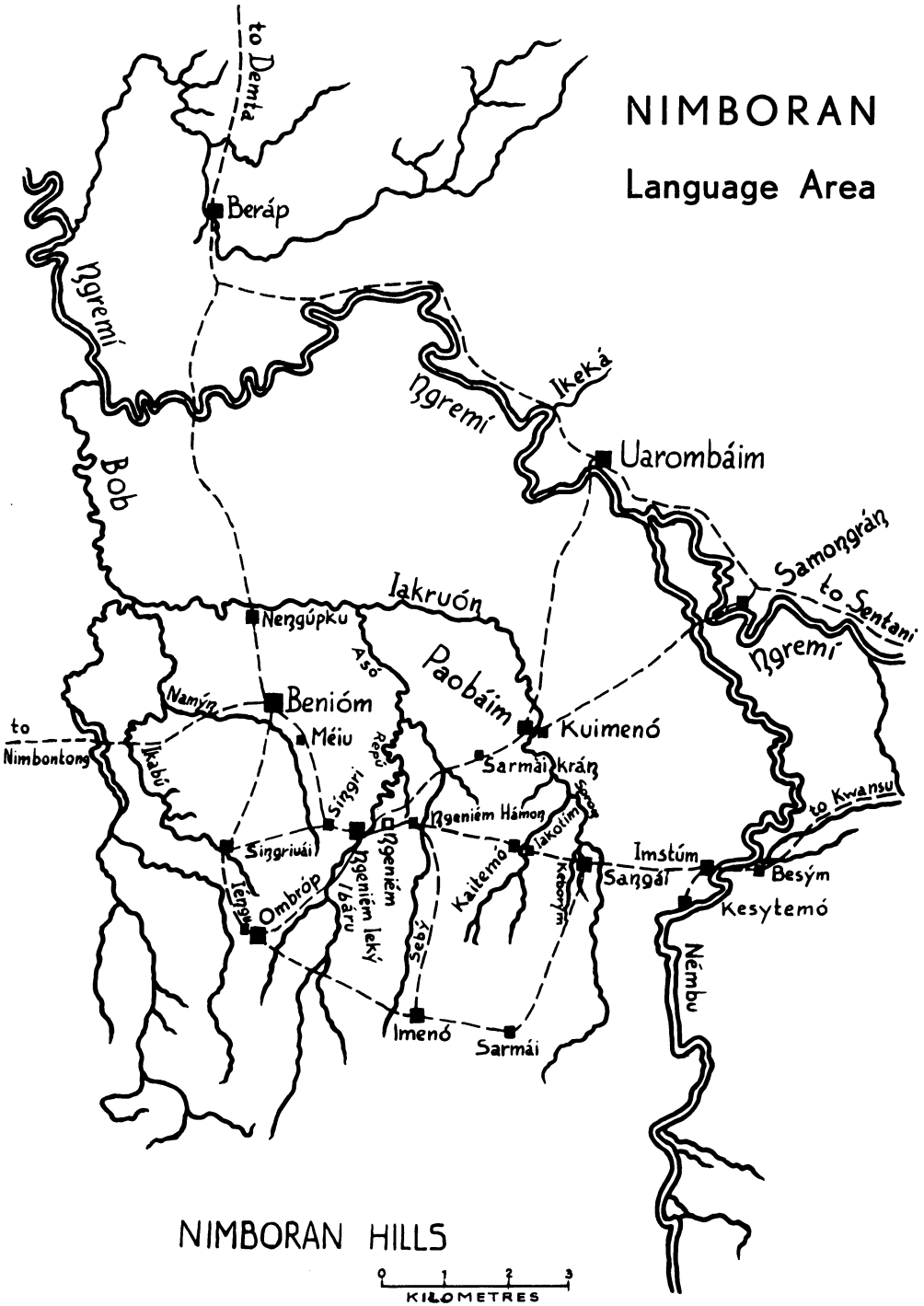
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MAP OF THE
NIMBORAN LANGUAGE AREA


LINGUISTIC MAP
of the
Nimboran - Sentani Area
TARFIA
DEMTA
PACIFIC
OCEAN
TANAH-MERAH
ORUMU
CYCLOPS
MOUNTAINS
MEKWEI
NIMBORAN
KWANSU
SENTANI
-TANI
LAKE
SENTANI
URIA
KAMTUK
GRESI
0 2 4 6 8 10
KILOMETRES


NIMBORAN
Language Area
to Dentse
Beráp
ŋgremí
ŋgremí
Ikeká
Uarombáim
Bob
Samoŋgráŋ
to Sentani
Iakruón
Nerŋgúpku
Aso
Paobáim
ŋgremí
Namýŋ
Benióm
Méiu
Kuimenó
to Nimbontong
Ikabú
Sarmai krán
Singri
Singriuái
ŋgeniém Hámoŋ
Kakolimá
to Kwansu
Imstúm
Besým
Kesytemó
Kailemá
Saŋgái
Ombróp
ŋgeniém Ieký
ŋgeniém Iáru
Sebý
Imenó
Sarmái
Némbu
NIMBORAN HILLS
0 1 2 3
KILOMETRES

INTRODUCTION

1. The Nimboran language and its speakers.

The Nimboran language, as it is commonly called, is spoken by some 3000 people who call themselves *nembruóŋ* or *nembruóuŋ* and live in a rather flat area in the basin of the *ŋgremí* river (*Grime* on the maps) and on the northern slopes of the hills south of that plain. This area lies west of Lake Sentani, not very far from the north coast of New Guinea.

After the second world war a number of Nimborans, for the greater part young people, gradually settled in Hollandia, the new capital of the then Netherlands territory, where they came to constitute an important group, consisting of several hundreds of people who kept alive the connections with their original country and always thought of their stay in town as being temporary.[1]

2. Surrounding languages and linguistic relationships.

The Nimboran language area is enclosed by the area of the Uria language in the west and south, by the Gresi area in the south-east, the language of the villages Kwansu and Bonggrang and the Kamtuk language in the east, by the Tanahmerah language in the north-east, and by the languages of Demta and Tarfia in the north.

Of all these languages only Tarfia does not show any relationship to Nimboran.[2] The closest relationships of Nimboran are those with the languages of Gresi, Kwansu-Bonggrang, Kamtuk and Mekwei (also called Menggwei). The last-mentioned language is spoken in a number of villages, lying between Sentani Lake and the north coast, and so is enclosed by the Sentani language and the Tanahmerah language which

[1] For a general introduction to the Nimboran people, their culture, and the problems, arising from the recent changes in their society, see: W. J. H. Kouwenhoven, Nimboran. A study of social change and social-economic development in a New Guinea society. Thesis Leiden, 1956. (especially Part I and II).

[2] The Tarfia language belongs to the great stock of Austronesian or Malayo-Polynesian languages. It stands closest to a group of languages, spoken in the coastal area of Sarmi.

is closely related to Sentani.[3] Nimboran, Kwansu-Bonggrang, Gresi, Kamtuk, and Mekwei constitute a close-knit linguistic subgroup; the speakers of these languages also show many common features in their cultures.

Of these languages Gresi and Kamtuk are most closely related. The position of the Kwansu-Bonggrang language may be said to be half way between these and Nimboran. The position of Mekwei within the subgroup is a bit more apart. So it might be said that the geographical position of these five languages is fairly reflective of their mutual relationships.

3. How the materials were collected.

The data for the present description were gathered in the years 1954 to 1957. In the following years from time to time incidental additions were made. The way of collecting data was based on the assumption that an accurate idea of the structure of a language can only be formed when the researcher has acquired a sufficient degree of mastery — both active and passive — of the language in question. This appeared to be an exacting and timetaking affair, but was most remunerative. However, even if the researcher learns to speak the language, he can ill dispense with the help of informants, because otherwise he might stand in jeopardy of describing not the language itself but only that part of it which he has learned to use. On the other hand mastering the language is a powerful means to the efficient use of informants.

During these years so many people served as informants for the research from which the present description has resulted, that it is impossible to mention all their names. But an exception must be made for Dina Napo, an adolescent girl, who was a daily collaborator for years. She proved to possess an outstanding intelligence and a natural gift for linguistic work which was not hampered by any preconceived theory which might have made it less easy for her to look upon her language with an open mind. Very soon she got a clear perception of the how and why of linguistic research and helped to think out means to discuss linguistic matters in her own language, showing great powers of invention in coining grammatical terms etc. Moreover, she had the sense not only to check up — in a crafty, subtle way — doubtful points with other informants, but also to be constantly in search for exceptions

[3] See: H. K. J. Cowan, Notes on Sentani Grammar. Oceania, XXI (1950—1951), p. 214 sq.

to the "rules", already established, and for proofs of the correctness or fallacy of preliminary conclusions (the latter case receiving her preferential consideration!).

Work with Dina and other informants in Hollandia was kept going and supplemented by the results of periodical visits to the Nimboran villages. During these stays usually no systematic procedures were followed and most of the attention was given to the unconstrained, free-and-easy, conversation of the villagers which always yielded points for further investigation. As a matter of fact, it would have been impossible without observation on the spot to form an accurate idea of the Nimboran people's environment, daily life, and culture and correspondingly of the words of their language and the contents of their conversation.

Although collecting traditional tales was not entirely neglected, the main object always was the study of the living language: detection of the rules according to which the Nimboran language is spoken.[4]

[4] There is only one publication giving information on the Nimboran language, viz.: G. Schneider, Proben der Nimboran-Sprache. Zeitschrift für Eingeborenen-Sprachen, XVIII (1927—1928), p. 128—140. We mention this here only as a matter of curiosity, as it is the result of superficial observation and so full of errors that it is of very little use.

PART ONE:

PHONOLOGY

I. THE WORD

Before proceeding to the description of the Nimboran speech-sounds and their functions, we have to discuss a term which — although a common notion in non-linguistic use — in many linguistic publications is either purposely avoided or used without any definition or discussion: the word. Our description is based on the standpoint that the Nimboran language has words as its smallest independent meaningful units. As this is not the place to set forth the theoretical backgrounds of this viewpoints, reference may be made to the existing literature.[1]

In general, the word, as a linguistic unit, is characterized by:

1. a fixed form, connected with a meaning,
2. isolability.

That a word has its own form and meaning, comes from its sign-value.[2] By "fixed form" we mean a set of specific sound-characteristics in a fixed order. Seeming exceptions to this rule will be dealt with separately (see esp. chapter VIII). The term "isolability" does not mean that every word may be used separately (i.e. as the only constituent of a sentence), but refers to the fact that words have the possibility of being separated from surrounding words, e.g. by the insertion of other words.

The assumption of the word, as a basic unit, neither denies the possibility of border-line cases, like the "sub-words", discussed in Ch. VII, 4, nor is in any way contradicted by the existence of such border-cases.

Phonological characteristics of words as such will be discussed in chapters III to VII.

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[1] Especially the comprehensive study by A. J. B. N. Reichling: Het woord. Een studie over de grondslag van taal en taalgebruik. Nijmegen, 1935. A review of the history of various theories on this subject is found in: Knud Togeby, Qu'est ce qu'un mot? Travaux du Cercle Linguistique de Copenhague, V (1949), p. 97—111.

[2] For a discussion of the problems, connected with the establishment of word-identity, see: H. Schultink, On Word-identity. Lingua XI (1962), p. 354—362.

II. THE PHONEMES

1. Nature and function of phonemes.

In the preceding chapter we stated that every word has its specific sound-form. These forms consist of sound-units which are called phonemes. Phonemes differ from each other in distinctive features; each phoneme may be considered as a bundle of such distinctive sound-features.

Phonemes are important means for the identification of word-forms through hearing. The determination of the role, played by any phoneme in the recognizability of a word-form, is conditioned by several factors, including the number of phonemes constituting the word,[3] the existence (or non-existence) of other words which show a certain degree of similarity in sound-form to the word in question, and the contribution to the recognizability offered by the context or the situation. In the practical use of language redundancy of means of identification is of quite common occurrence. The distinctive value of phonemes, their identificational function, reaches a maximum, when words are isolated from any context.[4]

So the distinctive value of phonemes does not stand out clearly under all circumstances. On the other hand not all phonemes are the same in this respect, as they appear to show differences in their possibilities of mutual combinability and in the places they can occupy in a word-form. Consequently, some phonemes have much more chance of showing their distinctive, identificational, value than other phonemes have. But the mere fact that a sound-unit's possibilities of occurrence are limited, need not be a reason for denying its phoneme-status. In the discussion of the separate phonemes we will come across some instances of this sort.

Our description of the phonetic characteristics of the phonemes will be limited to the way in which the sounds are produced.[5] Of course their identificational function is connected with their acoustical qualities but, as we are not able to make a description along these lines, we are forced to confine ourselves to the articulatory characteristics, as is indeed common practice.

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[3] "Word" is used here for "word-form"; this will be done regularly.

[4] For the problems connected with this, see: H. Mol and E. M. Uhlenbeck, Hearing and the concept of the phoneme. Lingua VIII (1959), p. 161—185.

[5] Much of the terminology used we owe to: Charles F. Hockett, A Manual of Phonology. Baltimore, 1955.

2. The system of the (segmental) phonemes in general outline.

The Nimboran language makes use of 6 vowel- and 12 consonant-phonemes.

The vowels are all unrounded and voiced.[6] They contrast in tongue height and tongue placement. They can be charted as follows:

	front	central	back
high	**i**	**y**	**u**
mid	**e**		**o**
low		**a**	

The consonants may contrast in:

1. presence or absence of voicing,
2. point of articulation,
3. shape of articulator,
4. impedance or exit type.

They can be charted as follows:

	bilabial	apico-dental	dorso-velar	glottal
voiceless stops	p	t	k	
voiced stops	b	d	g	
nasals (voiced)	m	n	ŋ	
fricatives (voiceless)		s		h
vibrant (voiced)		r		

3. Extra-systematical phonemes.

Outside this scheme are two sound-units, occurring only in interjections.[7] They are very limited in their occurrence, each of them found in one word only (and these words are very much limited in their use). These extra-systematical phonemes are:

1° voiced bilabial trill *β* which is rather prolonged, in *mbβ(:)asié* — a cry, used by hunters;
2° voiceless dorso-velar fricative *x* in *ax* — ah!

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[6] At least in normal speech, not in whispering and the like.
[7] Using the term "interjection" means an anticipation of the discussion of word-classes, to be given in the description of syntax.

III. DESCRIPTION OF THE VOWEL-PHONEMES

1. i.

i is a voiced high close front unrouded vocoid. It occurs word-initially, word-medially, and word-finally: *imýŋ* - face, *inióm* - middle, *daríb* - cold, *ki* - woman, *bedí* - old.

It is lowered to high open position

1° if immediately followed by the consonant-cluster *mb*: *brímbu* - a field-name, *nímbrouŋ* - squatting;

2° if not having an accent and being immediately followed by word-final *ŋ*: *násiŋ* - go away, *mániŋ* - not yet;

3° if immediately followed by a second *i* which has no accent [9]: *síi* - squeeze, *biiáb* - good.

Some speakers, very few in number, sometimes replace a word-final *i* which has no accent and is immediately preceded by *i* or *e,* by a voiced back dorso-velar stop [G] and actualize *náŋgrei* - three, as [naŋgreG], *iíi* - divide, as [iiG], etc.[10]

The contrastive value of *i* in opposition to other vowels and zero appears from the following instances [11]:

isíe - forest-hen	*esíe* - rain-drops
iári - casuarina-tree	*iáre* - source
kení - hearing	*kené* - liver
ki - woman	*ka* - out of the way there!
ŋgriŋ - draw	*ŋgraŋ* - bumble-fly
píe - scrotum	*páe* - mutually
hrim - dirty	*hrym* - companion
sib - place	*syb* - top

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[8] The concept of accent and the symbol for it (′) are introduced here. A discussion of the accent will be found in Ch. VII.

[9] This is contrary to Trubetzkoy's "4th rule", according to which two related sound-units, occurring in complementary distribution, may not be regarded as allophones of one phoneme, if they occur side by side (N. S. Trubetzkoy, Grundzüge der Phonologie, Prague, 1939, p. 46). The rightness of this rule has already been challenged by André Martinet (Bulletin de la Société de Linguistique de Paris, XLII, 1946, p. 32).

[10] Most speakers avoid this, because they regard it as an undignified imitation of the Gresi language which is closely related to Nimboran. However, it can be safely assumed that, historically, this final *i* developed from a consonant.

[11] Setting against each other words with minimal differences in sound-shape (minimal pairs) is common practice in phonological descriptions. In this way, however, words are placed in a very abnormal position (see: H. Mol and E. M. Uhlenbeck, o.c.).

dekíe - black	*dekýe* - kind of tree
pri - hit	*pro* - leaf
mení - other, some	*menó* - all
di - wood	*du* - child
hri - descend	*hru* - man
iári - casuarina-tree	*iáru* - shoulder
bái - spiral	*ba* - far
siá - praise	*sa* - tail
teniáŋ - appear	*tenáŋ* - true, right

2. *e.*

e is a voiced mid front unrounded vocoid, occurring word-initially, word-medially, and word-finally: *epíe* - tortoise, *kené* - liver, *bekéi* - rise.

It has some allophones, conditioned by its place in the word and by the surrounding phonemes.

If word-final, *e* is actualized as:

1° mid close front vocoid [e], if having an accent and not being immediately preceded by *y,* and also if not having an accent and being immediately preceded by an *a* which has an accent, e.g. *bre* - sago-beetle, *reké* - hot, *kié* - time, *káe* - where?, *kuáe* - hedge, fence, *benáe* - fat.

An exception is the *e* of the words *be* (here you are, etc.), *nde* (if, etc.), and *de* (of, etc.) which is usually actualized in mid open front position [ɛ].

2° mid central vocoid [ə], if immediately preceded by *y,* and also if it has no accent and is immediately preceded by *i,* having an accent, or by *u,* having an accent. E.g.: *yé* - meat, *dedýe* - inarticulate, *háye* - pepper, *kíe* - hand, *mensúe* - nose.

3° mid open front vocoid [ɛ] in all other cases, e.g.: *táne* - with, *háke* - torch.

If not word-final, the distribution of the allophones of *e* is:

1° mid open front vocoid [ɛ] in the following cases:

a. if it has an accent and is not immediately followed by word-final *y,* e.g.: *matéb* - afraid, *mési* - foot, leg, *ndéi* - root, *méuo* - in front, *kasbéuoŋ* - kind of prey-bird.

b. if immediately followed by *i* or word-medial *y,* e.g.: *keitré* - giant taro, *keirú* - barb, *neikáo* - narrow, *teyí* - jump, *meyosúo* - embarrassed, *ieyeníŋ* - caterpillar.

c. if immediately followed by a consonant or consonant-cluster which is immediately followed by *i* or *y*, e.g. *kebý* - hornbill, *mensý* - navel, *meŋgyéi* - tie together, *kekiá* - poignant (taste), *beŋgimýŋ* - triton-shell.
If the vowel which immediately follows the consonant or consonant-cluster is an *i* which bears an accent, the mid open front vocoid is in free variation with a low close front vocoid [æ], e.g.: *kení* - hearing, *kekí* - raw, *mentíŋ* - algae.

2° mid close front vocoid [e], if immediately preceded by *a*, e.g.: *benaeskáru* - a field-name, *imokáero* - a field-name.

3° mid central vocoid [ə] in all other environments, e.g.: *kebó* - net-bag, *méy* - cloud, *mendú* - skull, *ŋgetéy* - rub, *beŋgáŋ* - wasp, *ŋgátey* - tattoo-mark.

A relatively small number of speakers — the same as those having a similar pronunciation of the final *i* (see § 1) — actualize word-final *e*, if it has no accent and is immediately preceded by *y*, as a voiced back dorso-velar stop [G], e.g. [ŋgrɨG] for *ŋgrýe*.[12]

The contrastive value of *e* in opposition to other vowels and zero is shown by the following instances (for the opposition *e* - *i* see the examples in the final part of § 1):

me - mother	*ma* - hand it over!
dem - paddle	*dam* - eat
iéŋgy - name of a river	*iáŋgy* - turtle-dove
debúm - unripe	*dabúm* - joint between head and shaft of an arrow
téy - put down	*týe* - push
mensé - sister- or brother-in-law	*mensý* - navel
peb - peel	*pyb* - stab, stick
me - mother	*mo* - sago
máre - unconscious	*máro* - a clan-name
uéŋ - be slightly burned	*uóŋ* - bird's nest
iré - slanting	*irú* - bone dagger
iáre - source	*iáru* - shoulder
ndíe - this, that	*ndi* - dream
epíe - tortoise	*píe* - scrotum
keré - shoring-timber	*kre* - extinguish

[12] What has been said, in a foot-note to § 1, on a similar case with word-final *i*, applies also here.

3. *a.*

a is a voiced low central unrounded vocoid [a]: it occurs word-initially, word-medially, and word-finally: *apiáŋ* - stop up, *hrap* - shadow, *maréma* - soft.

It is slightly fronted and a bit prolonged, if it is the only vowel of a word and is followed by *m* or *b,* e.g. *tab* - path, road, *mab* - earth, *sam* - letter.

It is slightly backed [*a*], if word-final and having an accent, e.g. *sa* - tail, *tekuá* - side, *ba* - far.

It is actualized as voiced low back unrounded vocoid [ä], if immediately followed by an *o* which has an accent, e.g. *betaóitiu* - we pull out, *dekaóikam* - they tied together.

It is in free variation with a mid open alternant, if it precedes a vowel which has an accent, and is immediately followed by a consonant, e.g. *taŋgáŋ* - cord, *iamó* - house.

As examples for the opposition between *a* and *i* and *e* were already given in § 1 and § 2, we here give some instances of minimal pairs showing the opposition between *a* and *y, o, u,* and zero:

páe - mutually	*pýe* - set on fire
besám - unwilling	*besým* - village-name
ka - out of the way there!	*ky* - faeces
pra - cross over	*pro* - leaf
iáu - flying-fox	*ióu* - flat
densiáŋ - noon	*densióŋ* - little finger
ba - far	*bu* - water
dekáo - tie together	*dekúo* - enter
asó - name of a river	*usó* - tadpole
kauáe - choose	*kuáe* - wound
iamó - house	*imó* - bamboo

4. *y.*

y [13] is a rather tense voiced high close central unrounded vocoid [i], occurring word-initially, word-medially, and word-finally: *yé* - meat, *yésku* - female cuscus, *ŋyéi* - stir, *neŋgýb* - withered, *sy* - name, *debý* - heart.

Some speakers give the *y* a slightly backed articulation. As precisely the same speakers are distinguished by a typical articulation of the *u*

[13] The symbol *y* has been chosen quite arbitrarily and for practical reasons only.

(see § 6), these two facts are obviously connected. The number of these speakers can not be given; probably they are in a minority.

If *y* has an accent and is immediately followed by *i,* it is less tense and lowered to high open position, e.g. *ŋgetýidiu* - we shall rub, *ŋgedýikam* - they attached.

As examples for the opposition between *y* and *i, e,* and *a* were given in the §§ 1 to 3, we here only give instances of minimal pairs showing the opposition between *y* and *o, u,* and zero:

iý - bird	*ió* - we
kebý - hornbill	*kebó* - netbag
kyŋ - stoop	*koŋ* - set down
iáy - aunt, uncle	*iáo* - on guard
ky - faeces	*ku* - time, day
demýe - dead	*demúe* - stone
iáry - strong (wind)	*iáru* - shoulder
méy - cloud	*me* - mother
káy - a proper name	*ka* - out of the way there!
kryá - defecate	*kra* - hunt

5. *o.*

o is a voiced mid back unrounded vocoid, occurring word-initially, word-medially, and word-finally: *opámuŋ* - (at) first, *soŋ* - mosquito, *tebáo* - fry, bake, *kaiteró* - border.

The allophones of this phoneme are:

1° voiced mid close back unrounded vocoid [ë], if the *o* is word-final and has no accent, e.g. *mo* - sago, *bató* - wide, broad.

2° voiced mid open back unrounded vocoid, if the *o* has no accent and is immediately preceded by an *u* which has an accent, and also if the *o* has an accent and is immediately followed by a word-final consonant, e.g. *skúo* - crab, *ibúo* - pig, *utób* - star, *betóm* - freckle, mole.

3° voiced low close black unrounded vocoid, if the *o* is immediately followed by an *u* which is immediately followed by a word-final consonant, e.g. *iŋgóuŋ* - prickly, *nímbróuŋ* - squatting.

In all other environments there is free variation between the mid open and mid close allophones, e.g. *mámbrob* - tongue, *demápro* - malaria, *iŋgáo* - wash, *dipróki* - green, *kuotenáŋ* - little, few.

As the oppositions between *o* and *i, e, a,* and *y* were demonstrated in the §§ 1 to 4, we here give only some instances of minimal pairs showing the opposition between *o* and *u* and zero:

do - there	*du* - child
nom - sufficient, enough	*num* - know
iáo - on guard	*iáu* - flying-fox
búo - hang out	*bu* - water
iáuo - kind of frog	*iáu* - flying-fox

6. ***u.***

u is a voiced high close back unrounded vocoid [ï]; it occurs word-initially, word-medially, and word-finally: *uáb* - crawfish, *umíe* - crocodile, *kuirób* - lightning, *múo* - make, *nánteku* - day before yesterday.

u has a high open allophone, used — in all cases — by those speakers who are in the habit of using the backed allophone of *y* (see § 4).

A word-final *u* which has no accent and is immediately preceded by *o,* is actualized as voiced back dorso-velar stop [G] by a minority of speakers,[14] e.g. [spëG] for *spóu* - unloosen.

For examples for the opposition between *u* and other vowel-phonemes the reader is referred to §§ 1 to 5. The opposition between *u* and zero is apparent from minimal pairs like the following:

buá - beat	*ba* - far
iróu - kind of frog	*iró* - fill
ruóu - tell	*róu* - grasp
iuí - kind of fruit	*ií* - burn.

IV. DESCRIPTION OF THE CONSONANT-PHONEMES.

1. ***p.***

p is a voiceless bilabial stop, occurring word-initially, word-medially, and word-finally: *pum* - hole, *pro* - leaf, *krapó* - bad, *dipróki* - green, *pákrup* - lid, *némpo* - day after tomorrow.

The stop is in free variation with a voiceless bilabial fricative [p̲],

[14] These speakers are the same as those having the [G] as an allophone for word-final *i* and *e* (see § 1 and § 2). The remark made in footnote 10 to § 1 applies also here.

but not if it is word-final or if it is immedately preceded by *m* or *s*. Another case in which *p* can only be a stop, is found in those verbal forms in which final *b* of the root-morpheme concurs with an initial *p* of a morpheme; the resulting *p* is never actualized as a fricative in such a case (see for this: Part Two, II, 8).

If a word has a final *p* and syntactically is closely connected with an immediately following word and if the latter has an initial voiceless stop, the actualization of the *p* may be very lax so that it is scarcely audible, e.g. *kip tekýe* - charcoal.

The opposition between *p* and the other consonants and zero is apparent from the following instances:

pempéiŋ - tremble	*bembéiŋ* - mud
sip - blunt	*sib* - place
pab - chest	*mab* - earth
kyp - lime	*kym* - coconut
ipó - light (not heavy)	*imó* - bamboo
péi - pour out	*téi* - give
práo - occupy oneself	*tráo* - lift up
páe - mutually	*dáe* - small, little
páo - soggy soil	*náo* - break up
pum - hole	*num* - know
depýe - body hair	*dekýe* - kind of tree
pri - hit	*kri* - run away
po - will, must	*ŋo* - I
kip - fire	*kiŋ* - blood
peb - peel	*reb* - drink
iápi - field-name	*iári* - casuarina-tree
pyb - stab, stick	*syb* - top, tip
epíe - tortoise	*esíe* - raindrops
priŋ - (to) fly	*hriŋ* - worn
prym - wide	*hrym* - companion
piáŋgu - kind of snake	*iáŋgu* - turmeric
kip - fire	*ki* - woman
ipó - light (not heavy)	*ió* - we

2. *b*

b is a voiced bilabial stop; it occurs word-initially, word-medially, and word-finally: *býe* - canoe, *brub* - fold, *kib* - beat, *debúm* - unripe.

If word-final, *b* is always unreleased, or better: nasally released. In this position it may be voiceless; the formal opposition between *b* and *p* then lies in the difference of release, as word-final *p* normally is orally released.

If a word has final *b* and syntactically is closely connected with an immediately following word and if the latter has an initial consonant, the *b* may be very lax so that it is hardly audible, e.g. *beŋgíb dóuŋ* - salt (lit.: sea-kernel).

A small minority of speakers has a habit of actualizing word-final *b* as a voiced labio-velar stop with nasal release.

Opposition between *b* and the other consonants (except *p*, for which see the preceding §) and zero may be seen from the following instances:

bái - spiral	*mái* - inside
tob - scale	*tom* - sweet
ibúo - pig	*imúo* - kind of pigeon
bíe - open	*tíe* - grub
kebí - stomach	*ketí* - below
béiŋ - crooked	*déiŋ* - wing
kabó - field-name	*kadó* - voilà, there (is)
baŋ - broken	*naŋ* - louse
nu - sight	*bu* - water
bíe - open	*kíe* - hand
kebí - stomach	*kekí* - raw
báre - yourself	*ŋáre* - myself
hrub - suck	*hruŋ* - break, crush
bekéi - rise	*rekéi* - turn
bábu - grandfather	*báru* - dear
buŋ - wait	*suŋ* - dust
ibú - sleeping (arm, leg)	*isú* - shake
baió - name of a song	*haió* - kangaroo
bruŋ - lower end, bottom	*hruŋ* - break, crush
buá - beat	*uá* - kind of tree
syb - tip, top	*sy* - name

3. *m.*

m is a voiced bilabial nasal, occurring word-initially, word-medially, and word-finally, e.g. *máre* - unconscious, *demúe* - stone, *hambuáŋ* - tobacco, *mam* - cassowary, *pum* - hole.

If *m* is word-final and not immediately followed by a pause, it is not orally released.

The following minimal pairs may serve as examples for the opposition between *m* and other consonants (except *p* and *b*, for which see § 1 and § 2) and zero:

méndy - mouth	*téndy* - one
námu - presently	*nátu* - white bead
méy - cloud	*déy* - roast
demýe - dead	*dedýe* - whispering
miŋ - breast	*niŋ* - stand
umíe - crocodile	*uníe* - mythological name
mo - sago	*ko* - you
iamó - house	*iakó* - cheerful
mam - cassowary	*ŋaŋ* - open (mouth)
sum - faded	*suŋ* - dust
meŋgýe - flatus	*reŋgýe* - show
imó - bamboo	*iró* - fill
ma - hand (it) over!	*sa* - tail
kemýe - kind of lizard	*kesýe* - ghost
mení - other, some	*henί* - ill
máru - tie-beam	*háru* - kind of arrow
mái - inside	*ái* - scream
ŋguám - dizzy	*ŋguá* - wake up
imó - bamboo	*ió* - we

4. *t*.

t is a voiceless apico-dental stop; it occurs word-initially and word-medially, e.g. *tenáŋ* - right, true, *tetý* - fall off, *tym* - cough.

It is in free variation with voiceless lamino-alveolar stop [t^{v}], if immediately followed by *i*, e.g. *tíe* - grub. If this immediately following *i* has no accent and is immediately followed by a vowel, *t* may also be actualized as a voiceless lamino-domal stop [t^{v}], e.g. *peitiuá* - old man, *tetiyári* - name of a clan.

For instances of the opposition between *t* and bilabial consonants see the §§ 1 to 3; for the opposition between *t* and the other consonants and zero we give the following examples:

tekám - bead	*dekám* - step-ladder
mentíŋ - algae	*mendíŋ* - wall

ŋgetéy - rub	*ŋgedéy* - attach, fasten
témpo - after three days	*némpo* - day after tomorrow
ketí - below	*kení* - hearing
tebuá - short	*kebuá* - morning
iteká - blood-sucker	*ikeká* - name of a river
téi - give	*ŋéi* - tear, split
tekuám - jaw	*rekuám* - meat
betáo - pull out	*beráo* - flying stick (kind of locust)
téy - put, lay down	*séy* - dark
itú - scorpion	*isú* - shake
teŋgréiŋ - lead the way	*heŋgréiŋ* - thought
tréy - collapse	*hréy* - abduct, rape
tuóu - cut down	*uóu* - row
nátu - white bead	*náu* - warm

5. *d.*

d is a voiced apico-dental stop, occurring word-initially and word-medially, e.g. *desú* - weak, *ndi* - dream, *kudipró* - animal, *menduáb* - grasshopper.

It is in free variation with a voiced lamino-alveolar stop [dʸ], if it is immediately followed by *i*, e.g. *bedí* - old. If this immediately following *i* has no accent and is immediately followed by a vowel, the *d* may also be actualized as a voiced lamino-domal stop [ḍʸ], e.g. *dió* - gathering, *indiúŋ* - kind of arrow.

As examples for the opposition between *d* and bilabial consonants and *t* were given in the §§ 1 to 4, we here give some instances of minimal pairs for the opposition between *d* and the other consonants and zero:

derí - you will be	*nerí* - moss
dáo - give (many objects)	*náo* - break
dáe - small	*káe* - where?
di - wood	*ki* - woman
do - there	*ŋo* - I
dum - name of a mountain	*rum* - wooden fork
dam - eat	*sam* - letter
bedí - old	*besí* - neck
derím - he will be	*herím* - he will go
dréy - a kind of stone axe	*hréy* - rape

dió - gathering	*ió* - we
nánde - whose?	*náne* - who?
ndáo - feel	*náo* - break

6. *n.*

n is a voiced apico-dental nasal; it occurs word-initially, word-medially, and word-finally, e.g. *nándu* - yesterday, *kenái* - above, *ndien* - leaf-vein.

The occurrence of *n* in word-final position is limited to:

the clan-names *uáipon* and *uaisímon,*
the word *namuán* - two,
a number of words in which the final *n* is immediately preceded by the vowel-sequence *úe* or *íe,* e.g. *búen* - lean, *teiyíen* - kind of bird.

It is a remarkable fact that no minimal pairs are found for the opposition between *n* and *ŋ* in word-final position. Moreover, final *n* of foreign words which are borrowed by Nimboran is often replaced by *ŋ*, e.g. *sábuŋ* - soap, from Malay *sabun.*

Further, a form *uáipoŋ* occurs as a free alternant side by side with *uáipon.*

In view of all this there might be occasion to consider word-final *n* as an allophone of *ŋ* (or the reverse). This would mean that the opposition between *n* and *ŋ* is neutralized in word-final position. Against this are the following facts:

1° Mutual substitution of *n* and *ŋ* — also in word-final position — is felt by Nimboran speakers as the making of new words.
2° Only in the case of immediately preceding *úe* or *íe* the occurrence of word-final *n* would be environmentally conditioned.
3° Comparison of *namuán* with e.g. *hambuáŋ* (- tobacco) shows the two sound-units in equivalent environments.
4° The form *uáipoŋ* (side by side with *uáipon*) is undoubtedly a product of popular etymology: an attempt to invest this name with the meaning "see the sun" (*uái poŋ*).

For these reasons word-final *n* may best be regarded as a normal form of the phoneme *n,* although of limited occurence.

n is in free variation with a voiced lamino-alveolar nasal [n^{y}], if immediately followed by *i,* e.g. *mení* - other, some. The lamino-alveolar allophone always occurs, if the *n* is immediately followed by the lamino-

alveolar allophone of *t, d,* or *s* (see § 11), e.g. *mentiŋ* - algae, *ndíe* - this, that, *ánsiŋ* - come here!

If *n* is immediately followed by an *i* which has no accent and is immediately followed by a vowel, besides the lamino-alveolar allophone, already mentioned, also a voiced lamino-domal nasal [n̪ʳ] occurs in free variation, e.g. *mínie* - before, *inióm* - middle. The lamino-domal allophone always occurs, if *n* is immediately followed by the lamino-domal allophone of *t, d,* or *s* (see § 11), *intiým* - screen, cover, *indió* - mother, *insiúm* - mouse.

As examples for the opposition between *n* and the bilabial consonants, *t,* and *d* are given in the §§ 1 to 5, we here give some instances of minimal pairs, showing the opposition between *n* and the other consonants and zero:

nab - spirit	*kab* - game
manó - mythological name	*makó* - mode of procedure, custom
no - he, she, it, they	*ŋo* - I, we
naŋ - louse	*ŋaŋ* - open (mouth)
násiŋ - go away	*rásiŋ* - come into contact
heni - ill	*heri* - you will go
náo - break	*sáo* - chase away
nu - sight	*su* - walk on!
náku - yolk	*háku* - areca-nut
nandáŋ - theft	*handáŋ* - try
ndi - dream	*di* - wood
mensý - navel	*mesý* - small bead
náne - who?	*náe* - sale

7. *k.*

k is a voiceless dorso-velar stop, occuring word-initially and word-medially, e.g. *krom* - grindstone, *karéy* - quagmire, *báky* - dance, *keikáo* - narrow.

k is slightly fronted, if it immediately precedes *i* or *e,* e.g. *kekí* - raw, *kíe* - hand, *iakéy* - crumble.

Word-initial *k* may be rather lax, if the word in question is syntactically closely connected with the immediately preceding word and the latter has a final vowel, e.g. *di kekuýe* - bush, shrub.

As examples for the opposition between *k* and the bilabial and apico-dental consonants are found in the §§ 1 to 6, we here give some

minimal pairs, showing the opposition between *k* and the other consonants and zero:

príptemeŋkéty - I am repeatedly throwing here	*príptemeŋgéty* - I am repeatedly throwing below [15]
ko - you	*ŋo* - I, we
kaŋ - emaciated	*ŋaŋ* - open (mouth)
kekí - raw	*rekí* - ginger
takuáb - portion	*taruáb* - morning star
kib - beat	*sib* - place
koŋ - put	*soŋ* - mosquito
kení - hearing	*hení* - ill
krym - noise	*hrym* - friend
kuáb - bird's tail	*uáb* - crawfish
iáky - buttocks	*iáy* - uncle, aunt

8. *g*.

g is a voiced dorso-velar stop which is very much limited in its combinability with other phonemes. It is a bit fronted, if it is immediately followed by *e* or *i*, e.g. *ŋgesím* - roll up, *beŋgíb* - sea.

g only occurs

word-medially, preceded by *ŋ* or — less frequently — by *m*, e.g. *ŋgyŋ* - fall, *beŋgáŋ* - wasp, *damgóu* - yawn.
word-initially in *ge* which never occurs sentence-initially and also otherwise is limited in its possibilities of occurrence (see Ch. VIII, § 3).

The result of this limited occurrence of *g* is that minimal pairs, showing the opposition between *g* and any other consonant, are of extreme rarity. Instances of contrast in similar environment are more easily found, e.g. *néŋki* - his wife, *beŋgíb* - sea. An instance of opposition with zero is *ŋgaŋ* - construct (a wall), vs. *ŋaŋ* - open (mouth).

Yet there is no reason for the assumption that *g* is not a separate phoneme, for it does not occur in complementary distribution to any other speechsound and is not interchangeable with any other speechsound. This last statement seems to be contradictory to the fact that some verb-forms occur with *k* as well as with *g* without any difference

[15] For a difficulty with such cases of opposition between *k* and *g* in verb-forms, see § 8.

in meaning (instances of this are given in Part Two, Ch. II, § 44). These, however, must be regarded as different forms, as other verb-forms, fully comparable with those in question, have *g* but never have *k* (cf. the difference between forms of the 1st and those of the 3d Position-Category in the § mentioned above).[16]

9. *ŋ*.

ŋ is a voiced dorso-velar nasal; it occurs word-initially, word-medially, and word-finally, e.g. *ŋáre* - myself, *ŋgyŋ* - fall, *indioŋéirum* - Jew's harp.

It is fronted, if immediately followed by *i* or *e* or by a *k* or *g* which is fronted because of an immediately following front vowel (see § 7 and § 8), and also if word-final and immediately preceded by *i*, e.g. *ŋéi* - tear, rend, *ŋgíe* - resin, *ŋgesíŋ* - wipe off, *usíŋ* - say, *teŋgéiŋ* - cut.

If *ŋ* is word-final and the immediately preceding vowel is *a*, this *a* is nasalized [ã]. The same may happen to *o* or *u*, if immediately preceding a word-final *ŋ*, but then only as a free variant. With some speakers word-final *ŋ*, preceded by a nasalized vowel, is practically inaudible so that the *ŋ* is mainly represented by the nasalized quality of the preceding vowel. E.g. *taŋgáŋ* - string, *uráŋ* - long, *temúŋ* - remainder, *soŋ* - mosquito.

As the opposition between *ŋ* and other consonants has been discussed already in the preceding §§, we here give some instances of minimal pairs for the opposition between *ŋ* and *r, s, h,* and zero:

ŋo - I, we	*ro* - wash
ŋyéi - stir	*syéi* - kind of fibre
ŋaió - father	*haió* - kangaroo
baŋ - broken	*ba* - far
ŋuároŋ - fibrous husk of coconut	*uároŋ* - nail

10. *r*.

r is a voiced apico-alveolar vibrant; it occurs word-initially and word-medially, e.g. *karóŋ* - thorn, *ŋgraŋ* - bumble-fly, *kekruáb* - white, *reríŋ* - push, shove.

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[16] I.a. comparison with related languages makes it very plausible that *g* originally was only an allophone of *k*. But this is a historical question which can be very well left out of discussion here, because now the relation between *k* and *g* is different.

The allophones of *r* are:

1° voiced lateral apico-domal flap [l] in free variation with voiced apico-alveolar flap [ɽ], but with preference for the first, if immediately followed by *i, e,* or *y* and immediately preceded by *e, i,* or *h* and also if being word-initial and immediately followed by *e, i,* or *y*; e.g. *emberekáse* - maize, *herikenúm* - purple, *hri* - go down, *hrym* - friend, *iré* - slanting, sloped, *irýb* - camouflaged hunting-box in a tree, *reb* - drink.

2° voiced apico-alveolar flap [ɽ] in free variation with voiced apico-alveolar trill [r] in all other environments with preference for the flapped allophone, except if immediately preceded by *k* or *g* in which case the trilled allophone is preferred; e.g. *nárob* - rubbish, *hrap* - shadow, *iáre* - source, *priŋ* - fly, *krym* - sound, *pákrup* - lid, cover, *náŋgrei* - three.

As the opposition between *r* and all consonants other than *s* and *h* has been discussed in the §§ 1 to 9, here instances are given of minimal pairs for the opposition between *r* and *s, h,* and zero only:

ráo - sleep	*sáo* - drive away
irú - bone dagger	*isú* - shake
máre - unconscious	*máse* - vomit
ráye - a personal name	*háye* - 1° a (different!) personal name 2° red pepper
krúoráru - I will bury him (here)	*krúoháru* - I will bury (it, her) there
iáru - shoulder	*iáu* - flying-fox
ruóu - tell, inform	*uóu* - row

11. *s.*

s is a voiceless apico-dental grooved fricative (rill-spirant), occurring word-initially and word-medially, e.g. *sy* - name, *besám* - unwilling, *skiŋ* - ripe.

It is in free variation with voiceless lamino-alveolar grooved fricative [sʸ], if immediately followed by *i,* e.g. *besíb* - bend, and at the same time with voiceless lamino-domal grooved fricative [ʂʸ], if immediately followed by an *i* which has no accent and is immediately followed by a vowel, e.g. *densiáŋ* - noon, *insiúm* - mouse, *isiú* - shake.

As the relation between *s* and *h* will be discussed in the next § and the opposition between *s* and the other consonants was shown in the §§ 1 to 10, only the following examples are given here, demonstrating the opposition between *s* and zero:

siáŋ - young man	*iáŋ* - ask
skíe - deep	*kíe* - hand
spóu - undo	*póu* - blow
usó - tadpole	*uó* - nest

12. *h.*

h is a voiceless glottal fricative, occurring word-initially and — only in some verbal and pronominal forms and in some names — word-medially. If word-initial and immediately followed by *ŋ* or *n*, it may be actualized as a voiceless nasal of the same point of articulation as the following nasal, so [N̥] or [N] respectively; e.g. *hŋári* - bird of paradise, *hnaŋ* - louse, *hnum* - know.

But many speakers (probably even a majority) never pronounce word-initial *h* which is immediately followed by *ŋ*, *n*, or *r*, and say *ru* for *hru* - man, etc. Therefore one might say that these speakers have zero as an allophone of *h* in this environment. But this reasoning would do no justice to the fact that the speakers in question do not have any opposition between words like:

hnaŋ - louse,	and	*naŋ* - straddle-legged,
hno - a place-name,	and	*no* - he, she, they,
hráo - carry,	and	*ráo* - sleep,

so that for them these pairs of words are just homophonous forms, whereas an opposition between them does exist for the other speakers. In fact this a question of coexistence of an older[17] phase, in which there is opposition between *hŋ-* and *ŋ-*, between *hn-* and *n-*, and between *hr-* and *r-*, and a later phase, in which these oppositions do not exist, so that more homophonous words are found. The line, separating these two phases, lies in between individual speakers,[18]

[17] It is not without reluctance and only for want of better terms, that we introduce words like "older" and "later" here in our description. Still, we are fully convinced that, historically, these terms are right, all the evidence, produced by comparison with closely related languages, pointing in this direction.

[18] We got the impression that the older phase is found mostly with older speakers, but the dividing line between the two phases certainly does not coincide precisely with difference of age.

although it is certainly not beyond possibility that the same speakers use forms of both phases alternately.

As the opposition between *h* and the other consonants, except *s*, has been discussed in the §§ 1 to 10, it remains to speak of the opposition between *h* and *s* and that between *h* and zero.

As to the opposition between *h* and zero, just now we saw that in certain environments this opposition is not found with all speakers. The remaining cases of word-initial *h* are those in which *h* is immediately followed by a vowel. But words having initial *h*, immediately followed by *i*, *y*, or *u*,[19] do not occur, whereas words having initial *e*, *a*, or *o* are very few in number, so that the possibility for minimal pairs is extremely limited. The only instance found is that of *hámboŋ* - horn, and *ámboŋ* - Ambon, Ambonese (a loanword). Another proof for the existence of the opposition is given by the fact, that dropping an initial *h* (which is immediately followed by a vowel) may affect the recognizability of the word in question: the (non-existing) word "*áke*" would not be accepted by any speaker of Nimboran as being identical with *háke* - torch, but is felt to be different.

Instances of opposition between *h* and zero in word-medial position are found in verb-forms, e.g.

teŋgáŋháke - you knocked there *teŋgáŋáke* - you knocked below.

More intricate is the question of *s* and *h*. No minimal pairs are found showing the opposition between these consonants. And not only that, but some words having *s* occur side by side with words having the same meaning and the same form except for *h* instead of *s*. These cases are:

semíŋ and *hemíŋ* - food
sne and *hne* - breathless, panting
seŋgó and *heŋgó* - only
senáŋ and *henáŋ* - traditional, holy
so and *ho* - to, in regard to; also the pronominal forms corresponding to this,[20] e.g. *kómso* and *kómho* - to you.

a number of proper names, e.g.

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[19] An exception is the interjection *húi*. But there are more instances of interjections deviating from normal rules of phonological structure (see Ch. II, § 3, and Ch. VI, § 14).

[20] See Part Two, Ch. V, § 6.

sàmoŋgráŋ or *hàmoŋgráŋ* - name of a village
saŋgái or *haŋgái* - name of a village
sno or *hno* - name of an abandoned village
buserái or *buherái* - name of an old, magical bowl.

some verb-forms,[21], e.g.

ŋguásáku and *ŋguáháku* - I bit there.

These facts might give rise to the thought that *s* and *h* are not separate phonemes but only allophones of one phoneme. However, this is contradicted by the following facts:

1° It is impossible to give a rule in terms of environment for the occurence of *s* or *h*, as they occur in similar environments, e.g.

habáŋ - firm	*sabó* - ship
haió - kangaroo	*saiáŋgu* - rainy season.

2° Except in the cases, mentioned above, *s* and *h* are not interchangeable. One is not allowed to say "*ham*" instead of *sam* - letter, or "*sabúm*" instead of *habúm* - son, because Nimboran hearers would regard these as different words.

For these reasons it appears to be right to consider *h* and *s* as separate phonemes and treat the word-pairs, referred to above, as instances of word-alternants (for which see Ch. VIII).[22]

V. VOWEL-SEQUENCES

1. The mutual combinability of vowel-phonemes.

Sequences of two or more vowels are of frequent occurrence and show great variety. In principle, any vowel may immediately follow any vowel, with the following exceptions:

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[21] See Part Two, Ch. II, § 15 and § 25, and Ch. III, § 2 and § 8.

[22] Historically, however, *s* and *h* are not inconnected. There is evidence showing that not very long ago they were conditioned allophones of one and the same phoneme, as it is still the case in some languages, related to Nimboran. But this may very well be left out of account in a description of the language as it is now.

1° A sequence of two identical vowels is only possible with the high vowels; so *ii, yy,* and *uu* are possible, whereas *ee, aa,* and *oo* do not occur.
2° Sequences of two mid vowels (*eo* or *oe*) do not occur.
3° *y* can not immediately follow *o.*
4° Sequences of more than five vowels are not found.

In the following §§ instances of the various vowel-sequences will be given, arranged under the heading of their first vowel.

2. Vowel-sequences beginning with *i.*

(*ii*) *tríi* - break, *ií* - burn, *iníim* - new.
(*iii*) *iíi* - distribute.
(*iie*) *siíe* - blister, *iniíe* - father.
(*iia*) *biiáb* - good.
(*ie*) *ienó* - village, *kíe* - hand, *tebíe* - mention, *temíen* - big, *kieróm* - toy, *kié* - time.
(*iei*) *iéi* - poignant (taste).
(*ieyi*) *iéyi* - name of a clan.
(*ieye*) *ieyenín* - caterpillar.
(*ieuo*) *iniéuo* - relative on one's mother's side.
(*iy*) *iý* - bird, *itiymbí* - kind of bat, *mániym* - point, tip.
(*iyi*) *iyindáŋ* - name of a river.
(*iye*) *iyé* - wave, signal.
(*iya*) *tendiyám* - alike, *krendiyá* - entangled.
(*ia*) *iám* - over, finished, *iakó* - gay, *siá* - praise, *némia* - his (her, their) mother.
(*iai*) *ŋgiái* - name of a clan.
(*iay*) *iáy* - aunt, uncle.
(*iau*) *iáu* - flying-fox, *iáuŋ* - name of a clan.
(*iaua*) *iauá* - grown-up, big.
(*iauuo*) *iauúo* - personal name.
(*iauo*) *iáuo* - kind of frog, *iauóŋ* - kind of yellow bead.
(*iao*) *iáo* - on guard, *tekiáo* - break open, *itiaokrú* - mythological name.
(*iu*) *iú* - get away!, *insiúm* - mouse, *iumurú* - name of a hill.
(*iui*) *iuí* - kind of fruit.
(*iua*) *iuárom* - dry soil, *mensiuá* - whistling.
(*iuai*) *siŋgriuái* - name of a village.

(*iuo*) *pásiuo* - hoe.
(*io*) *ió* - we, *densióŋ* - little finger, *indioŋéirum* - Jew's harp.
(*ioia*) *nióiam* - half.
(*iou*) *ióu* - flat.

3. **Vowel-sequences beginning with** *e*.

(*ei*) *préi* - sow, *bembéiŋ* - mud, *náŋgrei* - three, *keikáo* - narrow.
(*eiu*) *méiu* - name of a village.
(*ey*) *iakéy* - crumble, *ŋgatéy* - tattoo-mark.
(*eyi*) *teyí* - jump.
(*eyie*) *teyíen* - kind of bird.
(*eyo*) *meyosúo* - self-conscious.
(*ea*) *meám* - a field-name, *iambeápdi* - name of a clan.
(*eue*) *méue* - forehead, *béue* - personal name.
(*eua*) *kapeuám* - kind of snake.
(*euo*) *méuo* - in front, *kasbéuoŋ* - kind of prey-bird.

4. **Vowel-sequences beginning with** *y*.

(*yi*) *ŋgetýitiu* - we rub.
(*yia*) *nensyiáb* - family-group of the husband.
(*yio*) *yío* - personal name, *yiódi* - name of a kind of tobacco.
(*ye*) *tekýe* - charcoal, *usyéb* - bandicoot, *yé* - meat, *namýene* - to whom?.
(*yei*) *takryéi* - quarrel, *tyéiŋ* - even out.
(*yy*) *yý* - rise again.
(*ya*) *ýa* - select, *yá* - a field-name, *kamsyári* - mythological name.
(*yua*) *yuá* - for to seek.
(*yue*) *yué* - for to wave.

5. **Vowel-sequences beginning with** *a*.

(*ai*) *bái* - spiral, *kaiteró* - outside, *práisi* - charm, magic.
(*aii*) *káiin* - cloth.
(*aia*) *daiáb* - fin, *uansáia* - kind of white bead.
(*aiao*) *kaiáo* - personal name.
(*aio*) *ndaió* - mother, *haió* - kangaroo.
(*ae*) *dáe* - small, *benaeskáru* - a field-name.
(*ay*) *dáyŋ* - hard, *káy* - a personal name.
(*aye*) *háye* - red pepper, *ráye* - a personal name.
(*ayei*) *tayéi* - unearth.

(*au*) *kenáu* - sitting, *sáum* - kind of tree.
(*aue*) *dauém* - insolent.
(*auei*) *sundauéiŋ* - kind of bird.
(*auy*) *kauydú* - kind of bird, *traŋkáuy* - kind of small bird.
(*aua*) *tauá* - look back, *bauakróŋ* - mythological name.
(*auai*) *tauái* - wooden spoon.
(*auae*) *kauáe* - select.
(*auao*) *kauáo* - friar bird.
(*auue*) (*skiá*) *tauúe* - joint (burst of laughter).
(*auuo*) *kauúo* - sky, *hauúo* - personal name.
(*auo*) *mindauó* - kind of small shell, *nauóŋ* - light, clear, *táuo* - kind of green or blue bead.
(*ao*) *kráo* - sweep, *maokrí* - mythological name.
(*aoi*) *dekaóitiu* - we bind together, *kraóikam* - they demolished.

6. **Vowel-sequences beginning with** *u*.

(*ui*) *húi* - ow! o dear!, *uíb* - kind of root-crop, *kuísu* - earthquake, *kuirób* - lightning.
(*uie*) *uaruiéri* - mythological name.
(*uia*) *kuiám* - time of the day, *uía* - kind of tree.
(*uio*) *uió* - personal name.
(*ue*) *demúe* - stone, *takuém* - crooked, *uendí* - tomorrow, *temakué* - kind of vegetable.
(*uei*) *iakuéi* - mountain apple (Eugenia), *teŋguéiŋ* - belly.
(*ueia*) *ueiáŋ* - kind of small parrot, lory.
(*uey*) *uéy* - name of a (mythological) village.
(*uye*) (*di*) *kekuýe* - shrub.
(*ua*) *uároŋ* - nail, *banéiŋguaŋ* - spider, *kebuá* - morning, *tabúa* - source.
(*uai*) *uái* - sun, *ŋguáiŋ* - turbid, *uaipuá* - worm.
(*uaiua*) *uaiuári* - mythological name.
(*uae*) *kuáe* - wound, *kuáebu* - field-name.
(*uau*) *uáu* - rasp, *menduáu* - kind of bird.
(*uauy*) *uauý* - take along.
(*uao*) *ŋgruáo* - string (leaves).
(*uu*) *uúŋ* - fan.
(*uuo*) *uúo* - thing, goods, *uuó* - for to plant, dibble.
(*uuou*) *uuóu* - for to paddle.
(*uo*) *kamtúo* - cheek, *uó* - bird's nest, *tákuo* - shell, *iáŋuoŋ* - personal name.

(*uoi*) *uóitiu* - we row, *tuóikam* - they cut down.
(*uou*) *kuóu* - faded, withered, *nembruóuŋ* - Nimboran, *uouprí* - mythological name.

7. Vowel-sequences beginning with *o*.

(*oi*) *dói* - money.
(*oii*) *iaŋgodemóiib* - dwarf.
(*oia*) *demoiáku* - war-medicine, *maroiáb* - name of a garden.
(*oa*) *oá* - name of a river, *iroá* - ulcer, sore, *kontroási* - field-name.
(*oai*) *tamtoái* - kind of bamboo, *moáib* - name of a river.
(*ou*) *póu* - blow, *tróuŋ* - bud, sprout, *nímbrouŋ* - squatting.
(*oue*) *próuem* - pick-axe.
(*oua*) *brouári* - mythological name.

VI. CONSONANT-SEQUENCES

1. The mutual combinability of consonants.

The mutual combinability of the consonant-phonemes is much more limited than that of the vowel-phonemes. With some consonants only a few combinations occur, whereas others, e.g. *m* and *n* appear to have more possibilities. Concerning the occurrence or non-occurrence of consonant-sequences there are only three general rules, applying to all consonants. These rules are:

1° a consonant-sequence can never be word-final.
2° sequences of more than three consonants do not occur; the only exception is *hngr* (see below, § 13).[23]
3° a sequence of two identical consonants does not occur. Consequently in all polymorphematic words, in which such a sequence could be expected on account of the constituent morphemes, only one consonant is found (for instances of this see Part Two).

As with these three negative rules not everything is said, we still have to survey the various consonant-sequences found. They will be arranged under the heading of the first consonant.

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[23] But this exception is not found with all speakers (see Ch. IV, § 12).

2. **Consonant-sequences beginning with** *p*.

p can be immediately followed by *t, k, r,* or *s*.

pt occurs only word-medially in verb-forms, e.g. *péptu* - I peel.

pk occurs only word-medially in verb-forms, e.g. *prípkum* - she threw.

pkr occurs only word-medially in verb-forms, e.g. *kyépkresántum* - they two wave from there to here.

pr occurs word-initially and word-medially, e.g. *próuŋ* - splinter, *uáiprom* - kingfisher.

pr may be immediately preceded by *m* (see § 4) or by *s* (see § 12).

ps occurs only word-medially, mainly in verb-forms, e.g. *brúpsáke* - you folded there, *iapsenáŋ* - name of a clan.

psk occurs only word-medially, mainly in verb-forms, e.g. *kípskátam* - he beats there repeatedly, *kúpskiŋ* - heart.

3. **Consonant-sequences beginning with** *b*.

b can be immediately followed by any other consonant, except *p* or *g*.

bm occurs only word-medially in verb-forms, e.g. *príbmambetám* - you and I throw up from here.

bt occurs only word-medially in verb-forms; preferably it is replaced by *pt*, e.g. *brúbte* - you fold (more frequently: *brúpte*).

bd occurs only word-medially in verb-forms, e.g. *besíbdu* - I will bend.

bn occurs only word-medially in verb-forms, e.g. *pýbnákam* - he pricked far away.

bk occurs only word-medially in verb-forms and is preferably replaced by *pk*, e.g. *pýbkum* - she pricked (more frequently: *pýpkum*).

bŋ occurs only word-medially in verb-forms, e.g. *pébŋáke* - you peeled below.

br occurs word-initially and word-medially, e.g. *brob* - sweet, *bebruibám* - heron.

br can be immediately preceded by *m* (see § 4).

bs occurs only word-medially in verb-forms; it is preferably replaced by *ps*, e.g. *kíbsáku* - I hit there (more frequently: *kípsáku*).

bh occurs only word-medially in verb-forms, e.g. *pýbháre* - you will prick there.

4. **Consonant-sequences beginning with** *m*.

m can be immediately followed by any other consonant.

mp occurs only word-medially, e.g. *némpo* - day after tomorrow, *pempéiŋ* - tremble.

mpr occurs only word-medially, e.g. *suámpriŋ* - ant, *pempriáŋ* - sprawl.

mb occurs word-initially and word-medially, e.g. *mbáreiŋ* - loin-cloth, *nembíe* - wind.

mbr occurs word-initially and word-medially, e.g. *mbriŋ* - hinterland, *mámbrob* - tongue.

mt occurs only word-medially, e.g. *kamtúo* - cheek, *tamtoái* - kind of bamboo.

md occurs only word-medially, e.g. *demamdó* - grandchild, *sámdu* - I shall put into.

mn occurs only word-medially in verb-forms, e.g. *dámnákam* - he ate far away.

mk occurs only word-medially, mainly in verb-forms, e.g. *krebémku* - a field-name, *dámku* - I ate.

mkr occurs only word-medially in verb-forms, e.g. *kýmkrekátam* - they will burn repeatedly.

mg occurs only word-medially, mainly in verb-forms, e.g. *ŋguátemgétim* - he is biting repeatedly, *damgóu* - yawn.

mŋ occurs only word-medially in verb-forms, e.g. *dámŋáku* - I ate below.

mŋg occurs only word-medially in verb-forms, e.g. *príptemŋgéki* - you were throwing repeatedly below.

mr occurs only word-medially, mainly in verb-forms, e.g. *dámratúm* - it is eaten, *amríka* - America, American.

ms occurs only word-medially, e.g. *demsíŋ* - uncooked, *iámsoŋ* - kind of fruit (artocarpus integra).

mst occurs only word-medially, e.g. *imstúm* - name of a village.

msk occurs only word-medially in verb-forms, e.g. *dámskákam* - he ate there repeatedly.

mh occurs only word-medially in polymorphematic words, e.g. *dámháru* - I will eat there, *ŋámho* - to me, to us.

5. Consonant-sequences beginning with *t*.

t can be immediately followed only by *r*.

tr occurs word-initially and word-medially, e.g. *traŋ* - call, *keitré* - giant taro.

tr can be immediately preceded by *n* (see § 7).

6. **Consonant-sequences beginning with *d*.**

d can be immediately followed only by *r*.

dr occurs word-initially and word-medially, e.g. *dróu* - bath, *sukudréi* - kind of bird.
dr can be immediately preceded by *n* (see § 7).

7. **Consonant-sequences beginning with *n*.**

n can be immediately followed by *t*, *d*, or *s*.

nt occurs only word-medially, e.g. *nánteku* - day before yesterday, *mentíŋ* - algae.
ntr occurs only word-medially, e.g. *dantrú* - kind of tree, *kontroási* - a field-name.
nd occurs word-initially and word-medially, e.g. *ndop* - aching, *kandóuŋ* - hip.
ndr occurs only word-medially, e.g. *méndro* - flag.
ns occurs only word-medially, e.g. *densiáŋ* - noon, *mensúe* - nose.
nsk occurs only word-medially, e.g. *nénskiŋ* - older brother, *inskúo* - fowling-arrow.
nsr occurs only word-medially, e.g. *insríŋ* - frown.

8. **Consonant-sequences beginning with *k*.**

k can be immediately followed only by *r*.

kr occurs word-initially and word-medially, e.g. *krým* - noise, *kakrá* - dead.
kr can be immediately preceded by *p* (see § 2), by *m* (see § 4), by *ŋ* (see § 10), and by *s* (see § 12).

9. **Consonant-sequences beginning with *g*.**

g can be immediately followed by *r*, but as this occurs only if the *g* is immediately preceded by *ŋ*, this case will be mentioned in the next §.

10. **Consonant-sequences beginning with *ŋ*.**

ŋ can be immediately followed by any other consonant except *m*.

ŋp occurs only word-medially in verb-forms, but is is preferably replaced by *mp*, e.g. *ŋgrúŋpu* - I hung up (more frequently: *ŋgrúmpu*).
ŋb occurs only word-medially in verb-forms. Preferably it is replaced

by *mb*, e.g. *ŋgrúŋbáru* - I will hang up above (more frequently: *ŋgrúmbáru*).

ŋt occurs only word-medially in verb-forms; it is preferably replaced by *nt*, e.g. *ŋgrúŋtu* - I hang up (more frequently: *ŋgrúntu*).

ŋd occurs only word-medially in verb-forms and is preferably replaced by *nd*, e.g. *ŋgrúŋdu* - I will hang up (more frequently: *ŋgrúndu*).

ŋn occurs only word-medially, e.g. *miŋnánteku* - three days ago.

ŋk occurs only word-medially, e.g. *heniŋkenó* - what?, *néŋki* - his wife.

ŋkr occurs only word-medially, e.g. *uáŋkru* - a field-name.

ŋg occurs word-initially and word-medially, e.g. *ŋgéiŋ* - forget, *dáŋgu* - near.

ŋg can be immediately preceded by *m* (see § 4) or by *h* (see § 13).

ŋgr occurs word-initially and word-medially, e.g. *ŋgraŋ* - bumble-fly, *dúŋgriŋ* - frog.

ŋgr can be immediately preceded by *h* (see § 13).

ŋr occurs only word-medially, e.g. *namáŋreb* - shallow, *suáŋrátu* - I pour upon him.

ŋs occurs only word-medially in verb-forms; it is preferably replaced by *ns*, e.g. *ŋgrúŋsáru* - I will hang up there (more frequently: *ŋgrúnsáru*).

ŋsk occurs only word-medially in verb-forms; preferably it is replaced by *nsk*, e.g. *teŋgáŋskátam* - he knocks there repeatedly (more frequently: *teŋgánskátam*).

ŋh occurs only word-medially in verb-forms, e.g. *teŋgáŋhákam* - he knocked there.

11. Consonant-sequences beginning with *r*.

r can be immediately followed by *m*, *t*, or *n*. None of these sequences occurs very frequently.

rm occurs only word-medially, e.g. *sarmái* - name of a village.

rt occurs only word-medially, e.g. *kuartakuém* - kind of grass.

rn occurs only word-medially, e.g. *ornániŋ* - sweet-potato.

12. Consonant-sequences beginning with *s*.

s can be immediately followed by *p*, *b*, *m*, *t*, *n*, or *k*. It may immediately precede *r*, but only if the *s* is immediately preceded by *n* (see § 7).

sp occurs only word-initially, e.g. *spóu* - unloosen.

spr occurs only word-initially, e.g. *sproŋ* - name of a river.

sb occurs word-initially and word-medially, e.g. *sbi* - sago-basket, *kasbéuoŋ* - kind of big prey-bird.
sm occurs only word-medially, e.g. *kasmándo* - name of a clan.
st occurs only word-medially, e.g. *pésta* - feast (loan-word).
st can be immediately preceded by *m* (see § 4).
sn occurs only word-initially, e.g. *sne* - breathless, panting, *sno* - name of an abandoned village.
sk occurs word-initially and word-medially, e.g. *skom* - bread-fruit, *yésku* - female cuscus.
sk can be immediately preceded by *p* (see § 2), by *m* (see § 4), by *n* see § 7), or by *ŋ* (see § 10).
skr occurs only word-initially, e.g. *skréy* - shake.
sr occurs only if *n* immediately precedes (see § 7).

13. Consonant-sequences beginning with *h*.

h can be immediately followed by *n*, *ŋ*, or *r* (but cf. what was said about this in Ch. IV, § 12). Consonant-sequences beginning with *h* occur only word-initially.

hn, e.g. *hnaŋ* - louse, *hnum* - know.
hŋ, e.g. *hŋári* - bird of paradise.
hŋg, e.g. *hŋgi* - name of a village.
hŋgr, e.g. *hŋgri* - name of a village.
hr, e.g. *hrap* - shadow, *hri* - descend.

14. Extra-systematical consonant-sequence.

In Ch. II, § 3, is discussed the occurrence — under very limited conditions — of extra-systematical phonemes. Under similar conditions, viz. only in an interjection, a consonant-sequence is found as the only constituent of a word: *st* - a cry for shooing away dogs or poultry. As here the *s* is sustained longer than usual, (s:t) would be a more accurate spelling.

VII. THE ACCENT

1. Description of the accent.

The accent is a quality of vowels and consists of a pitch, higher than that of the other vowel(s) of the same word, usually combined with a higher degree of loudness (stress). As this higher degree of loudness is not always heard, it apparently is less essential than the

high pitch is, but the stress is observable in the majority of cases and therefore it must be mentioned here.

The symbol we use for the accent in writing is an acute (′) over the vowel that has the accent.

Most words have one and only one accent; exceptions to this rule will be discussed separately below. If a word contains only one vowel, this vowel can be said to have an accent, although this only appears from comparison with the pitch (and loudness) of the vowels of surrounding words, if any.[24] So in a word there usually is one vowel, and that always the same, which has the accent. However, there is no rule by which the place of the accent in all words is determined.[25]

2. The structural function of the accent.

The structural function of the accent includes:

1° distinctive value for words. This only applies to plurivocalic words, because in these the place of the accent is as distinctive as the character and order of the constituent phonemes are. This distinctive value is, once more, most clearly demonstrated by minimal pairs, in this case pairs of words consisting of the same phonemes in the same order but different in the place of their accent. Out of the — relatively few — cases of such minimal pairs we give the following instances:

kíe - hand	*kié* - time
míre - ourselves	*meré* - kind of fruit
síe - citronella grass	*sié* - twist
tébu - silent	*tebú* - (cigarette-)stub.

2° distinguishing the word as such. As the place of the accent in the word-form is not determined by the word-form itself, the accent can not act as a real border-marker. But from the number of accentuated vowels in an utterance the hearer obtains an idea of the number of words in the utterance. The contribution made by the accent to the recognition of the number of words is impaired by the existence of words, having two accents, and of words, having no accent, but not as seriously as one might expect

[24] In the case of words having only one vowel there is no need for indicating the accent in writing.

[25] This is the reason why we indicate the accent with all plurivocalic words in writing.

because of the polymorphematic character of the former and the small number and limited possibilities of combination (syntactical valence) of the latter.[26]

3° the rôle played by the accent in the intonational patterns of word-groups. This will be discussed in the description of the syntax.

3. Words having two accents.

The words which have two accented vowels may be classified in three groups:

1° verb-forms. Most verb-forms have one accent on a vowel of the root-morpheme and one on a vowel of some other morpheme.[27] The first accent, which we call secondary accent, consists of a pitch which is less high than that of the second, which we call the primary accent; but primary and secondary accent may change places.[28] The place of the accents in verb-forms will be discussed in the morphological part of our description. In our writing system we indicate both accents in the same way, e.g. *prípsántam* - he throws from there to here.

2° proper names. Some proper names, having more than two vowels, may have — apart from the fixed, primary, accent a secondary accent on a certain vowel, preceding the vowel which has the primary accent. In these cases the two accents are not interchangeable. The secondary accent may be absent; this usually is the case in fast speech. In writing, this secondary accent will be indicated with a grave accent (`), e.g. *masàtekáte* - mythological name, *hàmoŋgreintýŋ* - a field-name, *hàmongráŋ* - name of a village.

3° the word *sámsám*. In this word, which means "slow, in order", the two vowels are equally accentuated so that formally it corresponds with a repeated word like *kendó kendó* - quick (!). But *sámsám* can not be called such a repeated word, as a simple form *sam* does not occur.[29]

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[26] Therefore, it is impossible to use the accent for the distinction of the word in Nimboran. Cf. what is said about this by Joseph H. Greenberg in his "Essays in Linguistics", Chigaco, 1957, esp. p. 31—32.

[27] For the terms "morpheme" and "root-morpheme", see Part Two, Ch. I.

[28] See Part Two, Ch. II, § 9.

[29] A word *sam* really exists but its meaning is totally different so that it hardly can be connected with *sámsám*.

It may be said that all words, having two accents, constitute border cases between single words and groups, consisting of two separate words. This view is supported by the fact that consonant-sequences, which are not found elsewhere, occur in many such words as morpheme-junction-markers (see Ch. VI, §§ 2, 3, 4 and 10). They are treated here as words because of their inseparability.

4. Words without an accent.

Some words, which are, syntactically, closely connected with the immediately preceding or following word, do not have an accent. As the resulting word-group constitutes a border-case between one word and two words, the accentless words may be called "sub-words".[30] These sub-words are:

pe, the accentless alternant [31] of *po* - must, can. *pe* is closely connected with the immediately following word, e.g. *no pe tapóu* - he must (can) help, *pe to* - it must (can) indeed!.

me, the accentless alternant of *mái* - already. It is closely connected with the immediately following word, e.g. *me skiŋ* - already ripe, *me iám* - already finished.

ne - to, and its alternants: *ŋe, me,* and *nié.* These may be without accent and then constitute a close-knit group with the immediately preceding word; e.g. *iamó ne* - to the house, *dekám ne* or *dekám me* - to the ladder, *kenái ne* or *kenái nie* - upward, *mendíŋ ne* or *mendíŋ ŋe* - to the wall.

Attention must be drawn to the fact that in this case the accentless sub-words are free variants of normally accented forms.

ta, the accentless alternant of *to* - indeed. It is closely connected with the immediately preceding word, e.g. *iám ta* - finished!.

VIII. WORD-ALTERNANTS

1. Partly homophonous synonyms.

A number of word-pairs are found, the members of which are slightly different in form but identical in meaning, in other words: partly homophonous synonyms. Those cases of partly homophonous synonyms, which do not show any systematical feature, either in their

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[30] This, in our opinion very felicitous, term we owe to E. M. Uhlenbeck.

[31] For a discussion of word-alternants, see the next chapter.

formal differences, or in the use of their members, need not be discussed here, as there is no connection [32] between their resemblance of their forms and the identity of their meaning. They will be found in the dictionary. Just by way of illustration, some examples are given here:

dekuám and *rekuám* - meat
neikáo and *keikáo* - narrow
bróuŋye and *bróuŋgye* - cuscus
meré and *méro* - kind of red dye
mínie and *míŋgie* - before, formerly
ŋgetáŋ and *ŋgetám* - a mythological name
neŋgýe and *reŋgýe* - show
kieténdy and *skieténdy* - all, always
rebýe and *bebýe* - kind of venomous snake.

The remaining cases, which are discussed in this chapter, fall into three groups:

1° speed-alternants. These are pairs of words one member of which is used in fast speech only.

2° conditioned alternants. These are pairs of words of which one member occurs only in a certain syntactical or phonemical environment.

3° free alternants. In these pairs of words the members do not show any regularity in their use but their formal differences are found in more than one case and so they are parallel in their formal characteristics.

2. Speed-alternants.

In fast speech words containing four or more vowels may be replaced by forms differing from them in the absence of one or more vowels. In the shorter form, which we call allegro alternant, only those vowels may be absent which in the fuller form, for which we use the term lento alternant, [33] have no accent and are not immediately followed by another vowel. The possibility of the formation of allegro alternants is given by the number of vowels in a word. It

[32] Of course, this connection is meant in a synchronical sense. Historical connections are left out of discussion here.

[33] Hocket uses the terms "clarity-norms" and "frequency-norms". See: Charles F. Hockett, A Manual of Phonology, Baltimore, 1955, p. 220—221.

is a productive operation, in contradistinction to the cases to be discussed in § 3 and § 4. Among those words whose form admits of the formation of allegro alternants, many verb-forms are found, because of their complicated morphological structure, e.g. *príbnŋgátu,* allegro form of *príbeneŋgátu* - I throw repeatedly from below to above; *prípkrebdú,* allegro alternant of *prípkrebedú* - we two will throw up from here. The first example shows that in allegro alternants consonant-clusters may occur which are never found in lento forms.

3. Conditioned word-alternants.

Conditioned alternants occur only under certain conditions; these conditions are either syntactical environment or phonemical environment.

Syntactical environment in the form of close syntactic connection with an immediately following word is the condition for the occurrence of

me, alternant of *mái* - already (see Ch. VII, § 4). *mái* is not possible in the same position.

pe, alternant of *po* - can, must (see Ch. VII, § 4). In the same position *po* is also possible, so the variation is free, although there is some preference for *pe.*

Syntactical environment in the form of close syntactic connection with the immediately preceding word is the condition for the occurrence of:

ta, free variant of *to* - indeed (see Ch. VII, § 4).

Phonemically conditioned, i.e. conditioned by the phonemes of the immediately preceding word, is the occurrence of:

dié, alternant of *de* - of. *dié* occurs, as a free variant, only if the immediately preceding word has final *i,* e.g. *ki dié* (or *ki de*) - of the woman, *uái dié* (or *uái de*) - of the sun.

ge and *gué,* alternants of *be* - as to. *ge* and *gué* occur, as free variants of *be,* only if the immediately preceding word has a final *ŋ* or a final *u* which is immediately preceded by a vowel, e.g. *reráu ge, reráu gué,* or *reráu be* - as to the gnashing; *taŋgáŋ ge, taŋgáŋ gué,* or *taŋgáŋ be* - as to the cord.

nié, me, and *ŋe,* free variants of *ne* - to.

nié (or *nie*) may occur only if the immediately preceding word has final *i*.
me may occur only if the immediately preceding word has final *m*.
ŋe occurs only if the immediately preceding word has final *ŋ*.
For examples see Ch. VII, § 4.

4. Free alternants.

Among the free alternants, as defined in § 1, we reckon the following:

a. Those with interchange of word-initial *h* and *s*, enumerated in Ch. IV, § 12.

b. Those with interchange of word-initial *h* and *se-*. These are: *hremé* and *seremé* - song; *hremái* and *seremái* - name of a village.

c. Those with interchange of word-initial *h* and *si-*. These are:
hŋgri and *síŋgri* - name of a village,
hŋgriuái and *sìŋgriuái* - name of a village,
hŋgi and *síŋgi* - name of a former village.

d. Those with interchange of word-final *o* and *a*. These are:
1° all words having final *o* or *a*, immediately preceded by an *u* having an accent, e.g. *haprúo* and *haprúa* - betel-vine (Piper betle), *kemúo* and *kemúa* - pit.
2° *kebó* and *kebá* - string-bag.
3° the adapted loan-words *médio* and *média* - table, and *tíko* and *tíka* - mat (see Ch. IX, § 3).
For *ta*, alternant of *to*, see § 3 and also Ch. VII, § 4.

e. Those with interchange of *a* and *e*. These are:
kabí and *kebí* - traditional feast,[34]
ŋáre and *ŋére* - myself, ourselves,
báre and *bére* - yourself,
náre and *nére* - himself, herself, itself,
máre and *mére* - ourselves,
saremái and *seremái* - name of a village,
nambruóŋ and *nembruóŋ* - Nimboran.

f. Those with interchange of *i* and nil. These are:
handiáŋ and *handáŋ* - try,
inióiam and *nióiam* - half,
iŋgiámbu and *iŋgámbu* - head,
isiú and *isú* - shake,

[34] But: *kabí* (not *kebí*!) - frying-pan;
kebí (not *kabí*!) - stomach.

máise (bu) and *máse (bu)* - saliva,
práisi and *prási* - charm, magic,
néimbu and *némbu* - name of a river,
indioŋgráŋ and *ndioŋgráŋ* - name of a clan,
iyé and *yé* - wave, beckon,
maniým and *maným* - point, tip,
iniéuo and *niéuo* - relative on one's mother's side,
iŋgeniém, ŋgeniém, and *iŋgeném* - place-name,
míŋgie and *míŋge* - before.

g. Those with interchange of *u* and nil. These are:
buásom and *básom* - stirring-rod, pestle,
(heŋgéiŋ) prentóuŋ and *(heŋgéiŋ) prentóŋ* - knife,
uŋgý and *ŋgy* - drum,
práu and *pra* - cross,
puáe and *páe* - mutually,
uŋgúo and *ŋgúo* - disappear.

h. Those with metathesis of *r*. These are:
kakróu and *krakóu* - cover,
hraké and *hakré* - kind of tree,
hakrerým and *hrakerým* - name of a river.

Needless to say that these lists may be incomplete.

IX. LOAN-WORDS

1. Foreign influence on Nimboran vocabulary.

In Nimboran, as in most languages, borrowing words from other languages is an important means for enriching the vocabulary. Especially in recent times, foreign cultural influence has been the cause of many words being borrowed. The most important lending language is the lingua franca, which is used — with some regional variants — in the coastal areas of western New Guinea. This language we call New Guinea Malay (NGM), for want of a better term. This NGM is not very much different from Bahasa Indonesia, the national language of Indonesia, so that in many cases the question, if a word was borrowed from NGM or from Indonesian, is utterly senseless. For words, borrowed by Nimboran from other languages — among which in the first place Dutch must be mentioned —, NGM often, but not always, served as an intermediary. As Indonesian/Malay was introduced in primary education already years ago, every Nimboran-

speaker has a certain knowledge of this language and borrows words from it freely, not only in high-flown speech-making and in technical statements, but also in everyday conversation. Especially among the younger generation, garnishing the language with Malay/Indonesian words is an established custom, even in those cases in which original Nimboran words would be as good or even better.

2. Adapted and unadapted loan-words.

It is not surprising that foreign words, used in Nimboran speech, often show forms which do not fit in with the Nimboran phonological system. Indeed, these words are still regarded as foreign. Therefore, they may be left out of our description and it also is not feasible to include them in a dictionary as their number is indefinite.

The case is different, if the form of a foreign word is adapted to the structure of Nimboran and so loses the outward characteristics of its origin. An examination of this process of adaptation may deepen our insight into the phonological structure of Nimboran and that is why a special chapter is devoted to loan-words and also why especially adapted forms receive attention.

As adaptation of foreign forms is a process, progressing in time, words in different stages of adaptation can be found at the same time. Even different stages of adaptation of the same word can occur simultaneously. Moreover, the process of adaptation may sometimes go in different directions, so that the result may be more than one adapted form. Instances of this will be found below.

3. Characteristics of adapted loan-words.

The phonetic structure of a foreign word may be such that adaptation brings about only phonetic changes, i.e. the phonemes are actualized in the Nimboran way. This is the case with e.g.

benáŋ - thread (Mal. *benang*).[35]
téroŋ - egg-fruit (Solanum spp.). The NGM form *térong* probably comes from Javanese, as the Indonesian word is *terung*.
bauáŋ - onion (Mal. *bawang*).
káiin - cloth (Mal. *kain*).

[35] Words from other languages are given here in their usual spelling. The spelling of NGM words is based on the official orthography of the Bahasa Indonesia, difference in word-structure being taken into account. With the indication Mal. (Malay) is meant: Indonesian plus NGM.

pésta - feast (Indon. *pésta,* NGM *fésta*).
pepáia - pawpaw (Indon. *pepaja*).
pandái - shotgun, rifle. This word, originally Spanish, must have come from one of the languages of eastern Indonesia. The final *i* makes it probable that the Biak language served as an intermediary.
spátu, sepátu - shoe. Of these two forms, probably the former is NGM *spatu* and the latter Indon. *sepatu.*[36]
kítap - book (Mal. *kitab*).[37]
kásbi - manioc (NGM *kasbi*).

The *u* of Mal. words is often replaced by Nimboran *y*. This may be due to the phonetic difference between rounded Mal. *u* and the unrounded *u* of Nimboran. E.g. *sýsy* - milk (Mal. *susu*).

Maybe in the same circumstance the cause is to be found of the change of *o* of some Mal. words into *u,* e.g. *prup* - cork (NGM *prop*). But the reverse is also found, e.g. *báŋko* - bank (Mal. *bangku*).

Change of *k* into *g* is found in *semáŋga* - watermelon (Citrullus vulgaris) (Mal. *semangka*).

The lamino-alveolars are usually "analysed" to apico-dentals plus following *i,* e.g.

kásiaŋ - legume (Mal. *katjang*).
siepátu - shoe (NGM *tjepatu*).
ensié - sir (used to address a Chinese) NGM *éntjé,* Indon. *entjik*).
média, médio - table (Mal. *medja*).
(*úndy*) *rádio* - kind of banana (Mal. (*pisang*) *radja*).
bánia - many (Mal. *banjak*).
mínia (but also *mína*) - oil (Mal. *minjak*).

The last two examples show that original final *k* is lost. This appears to be the rule, e.g. *bre* - tin (Dutch *blik*); *bébe* - duck (Mal. *bébék*).

Word-final *s* or *t* of foreign words is usually retained, a final *e* being added, e.g.

káse - coffin (NGM *kas,* from Dutch *kast*).
kertáse, kratáse - paper (Mal. *kertas*).
tomáte, temáte - tomato (Dutch *tomaat*).

[36] In Nimboran these two words act as speed-alternants.
[37] For a proper understanding it is pointed out that written word-final *b* is pronounced as *p* in Indonesian and NGM.

Exceptional are

addition of final *i* in *nanási* - pine-apple (Mal. *nanas*);
loss of final *s* in *bra* - rice (NGM *bras*);
loss of final *t* in *dói* - money (Mal. *duit*). It is possible that these three words did not come directly from Mal., so that some other language, which served as an intermediary, is responsible for the irregularity of the changes.

Final *n* of foreign words usually becomes *ŋ*, e.g.

ámboŋ - Ambon, Ambonese, from *Ambon*,
nípuŋ - Japan, Japanese, from *Nipon*,
mentímuŋ - cucumber (Indon. *mentimun*),[38]
sábuŋ, but also *sábun* - soap (Mal. *sabun*).

Final *r* is lost through adaptation, e.g.

háma - hammer (Dutch *hamer*),
émbe - Indonesian, Asian (Biak *amber* - non-white foreigner),
uáke - kind of song (Bonggo *waker*),[39]
róbo - tencents piece (NGM *lopor*),
tíko, tíka - mat (Mal. *tikar*),
dámo - resin (Mal. *damar*).

Word-initial or word-medial *l* becomes *r*, e.g.

rábu - pumpkin (Mal. *labu*),
súriŋ - flute (Mal. *suling*),
meríte - soldier (Mal. *melitér*, from Dutch *militair*),
bránda - Dutch (NGM *Blanda*).

Word-final *l* is lost, except if immediately preceded by *i* or *o*, as *-il* becomes *-ie* and *-ol* becomes *-uo*, e.g.

répe - spoon (Dutch *lepel*),
pinsíe - pencil (Mal. *pensil*),
betúo - bottle (Mal. *botol*),
pásiuo - pick (Mal. *patjol*).

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[38] This is a clear case of a word borrowed from Indonesian; the NGM equivalent is *ketimun*.

[39] Bonggo is an Austronesian (Malayo-Polynesian) language, spoken in the coastal area east of Sarmi, north-west of Nimboran.

Immediately before a stop a homorganic nasal may arise, e.g.

taríngy - flour (Mal. *terigu*),

ngam - chewing-gum (English *gum*),

temánte, tománte - tomato (Dutch *tomaat* or Mal. *tomat*).

Above we already came across the forms *temáte* and *tomáte;* in this case different ways af adaptation gave rise to four alternants.

In some cases the changes are less simple than those discussed above. *tusé,* used in the expression *undúo tusé* - cat, can be traced back to the word *tusa* which is found in eastern Indonesian languages, but this leaves unexplained the change of final *a* into *e*.[40]

The words *ŋgrátru* and *ŋgratúe* both mean "tractor, bulldozer, road-grader". However, it is uncertain if the model was *tractor* or *grader*. It is not beyond possibility that the two words blended into one.

Besides *bendéra* - flag (Mal. *bendéra*), an alternant *méndro* exists, which is used particularly by the aged and is regarded as ridiculous by the young people, more versed in Malay. Likewise especially used by the older people is *aríŋgy* as an alternant of *harimíŋgu* - week, Sunday (Mal. *hari minggu*).

There are more instances of adaption making one word out of what was originally two, as is the case in *harimíŋgu,* e.g. *tuáŋgry* - teacher (Mal. *tuan guru* - Mister teacher).

In some cases popular etymology caused formal deviations. So for "co-operative", instead of a form which could be expected from Mal. *koprasi* like *koprási,* the expression *kym prási,* literally meaning "coconut magic",[41] came into use.

Of the two alternant words for "maize", *ièmbrokáse* and *èmberekáse,* some people think the latter is more correct, as they interpret it with NGM *ambéri kasi* - foreigners gave it.[42]

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[40] There is another expression *áiam tusé,* used as an abusive term for women. The explanation, given by some informants, that its original meaning was "duck", does not seem to be very reliable.

[41] This is closely connected with the fact that the Nimboran people think of means to modern development first of all as magical means for procuring wealth.

[42] It is not easy to see what the real history of this word must have been. It is rather certain that the first part of it is the word *amber* - foreigner. Most probably it came, by a long route, from one of the languages of the Geelvink Bay area. Wondama, an Austronesian language in that area, has as an equivalent *pas-amber* - litt. foreign rice. That the constituent parts of the expression changed places on the way from an Austronesian to a non-Austronesian language, is easily accounted for by syntactical rules, governing these languages. But the change of *p* into *k* remains unexplained, as long as we do not know more about the historical backgrounds.

PART TWO:

MORPHOLOGY

I. INTRODUCTION

1. Morphology: categories of form and meaning.

Morphology is concerned with those words which show a partial similarity in form and in meaning, in so far as their partial differences in form and meaning show a systematic character. As there appears to be a good deal of misunderstanding with regard to this matter, we have to enter, at least, into the basic principles.

In many languages, including Nimboran, groups of words are found which show a partial similarity in their forms and also have a common element in their meanings, whereas each of these words can be opposed to one or more other words from which they are differentiated by precisely the same formal and semantic element. Such groups we call morphological categories.[1] The formal feature(s), shared by the members of a category, need not be absolutely uniform but may show some variation, provided that this variation is defined by the phonemical shape of the word and, therefore, is predictable. If differences are found which are unpredictable, the words in question do not belong to one category.

2. Morphemes.

The formal characteristics, marking words as members of a category, we call morphemes. The use of this term is open to objections, as in many linguistic publications it is used in a meaning which we do not want to attach to it, viz. the meaning of a basic structural unit.

In this matter we share Uhlenbeck's view, that "a morpheme is merely a moment in a word".[2] Therefore, we would prefer to speak of "formal features marking members of a morphological category as such". But this would be a long-winded and cumbersome formula and so we will use the existing word "morpheme". However, we do this

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[1] Concerning the reality of the existence of categories as elements of linguistic structure and the possibility of studying and describing them, see: E. M. Uhlenbeck, Verb Structure in Javanese, in: For Roman Jakobson, The Hague, 1956, p. 568.

[2] E. M. Uhlenbeck, The study of wordclasses in Javanese, Lingua, III (1952), p. 332—354.

only with emphatic reference to our definition and without attaching to the term the idea of an independent linguistic unit.[3]

3. Morphological categories and syntactic valence.

Having mentioned the semantic element that is common to the members of a category, we now have to state this view more fully. For in certain cases the members of a category are distinguished from correlated words not so much by an element of meaning as by a difference in syntactic v a l e n c e.[4] By this term is meant: systematic combinability with other words; e.g., the English words *sings* and *singer* (in: *The man sings a song* and *The man is a good singer*) have different syntactic valence (and therefore are not interchangeable). As a common syntactic valence and a common element of meaning do not exclude each other — the latter is even usually found in combination with the former —, we may say that members of a category have in common: an element of form + an element of meaning and/or syntactic valence.

4. Morphological sets. Lexical and categoric meaning.

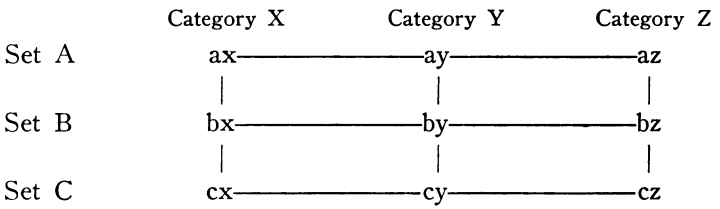
Words, belonging to different morphological categories but corresponding with each other in form and meaning, constitute a m o r p h o l o g i c a l s e t. The formal feature they have in common is a r o o t - m o r p h e m e.[5] The relations between members of a morphological set and those between members of a category are across each other:

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[3] For a discussion of this problem, see the article by Uhlenbeck, cited in the preceding foot-note, and also: H. Schultink, De morfologische valentie van het ongelede adjectief in modern Nederlands, Den Haag, 1962, p. 11. In Schultink's book a lucid exposition is given of the consequences of the principles, laid down in Uhlenbeck's article, for morphological research. As our methods are along the same lines, it is enough for us to state briefly the outlines and to refer the reader to these two authors. Needless to say that for the presentation given here only the present author is responsible.

[4] For this term see: A. W. de Groot, Structural Linguistics and Wordclasses, Lingua, I (1948), p. 437.

[5] Here the same terminological difficulty arises as was found with the term "morpheme" (§ 2). An expression like "basic morpheme" might have been used instead of "root-morpheme". Bloomfield's term "kernel" has to general a meaning and his term "stem" we prefer to use in a different, more specialized, meaning (cf. Language, p. 225 sqq.).



The semantic feature shared by the members of a morphological set we call the lexical meaning; its description belongs to the dictionary.[6] The semantic feature that is common to all members of a morphological category we call the categoric meaning. A fair statement of a categoric meaning is often far from being a simple matter, as the lexical meaning of the words in question may enter largely into the establishment of the categoric meaning. The short formulas we will use for indicating the categories are only meant as practical labels.[7] The term "categoric meaning" will be used here for the total, non- formal, value of membership of a category and so will also include the conception of syntactic valence, discussed in the preceding §. To avoid any misunderstanding, it must be added that the meaning of a polymorphematic word can not be said to be the sum total of lexical meaning plus categoric meaning(s); but these meanings are somehow represented in the total meaning of the word.

5. **Zero morphemes.**

As has been said before, the members of a morphological category show a common formal feature. This formal feature becomes apparent from the comparison with morphologically related words (co-members of morphological sets), belonging to other categories, e.g., English *worker* vs. *worked, walker* vs. *walked,* etc. In this example there is an opposition between words having one categoric morpheme (*-er*) and words with a different categoric morpheme.

However, in many cases the formal opposition is found in the presence of a certain formal feature in the one case and its absence in the other; e.g., English *work* and *walk* as opposed to *working* and

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[6] In our morphological description we will regularly add a translation to the words under discussion. This translation usually contains only a superficial indication of the lexical meaning. A more detailed description of the meanings will be found in the vocabulary in the second volume.

[7] Cf. what is said about this by Uhlenbeck, in his article, cited above, in For Roman Jakobson, p. 568.

walking. In such cases we may speak of a zero morpheme with those words which are characterized by the absence of a certain formal feature. It is clear that this is just another way of saying that a certain element of form is absent and that this absence determines the place of the word, or words, in question within the morphological framework of the language.

In our discussion of Nimboran morphology we will time and again come across cases which can be described with the term zero morpheme. In some cases we will even have to speak of zero root-morpheme.

6. Productivity.

A morphological category may be productive or improductive. If a category is improductive, new members can not normally be added, and, consequently, its members can be enumerated.

Productive categories, however, have no fixed number of members; they represent a procédé that may be extended over ever more words. Such productive procédés provide a speaker with the morphological means for forming new words, no matter wether he has heard these words being used by other speakers or not. Investigating the ways in which this is performed is the main subject of descriptive morphology.[8]

7. The limits of productivity.

What was said about the relative importance of productive categories in a morphological description does not mean that improductive categories could be disregarded. Improductive categories deserve full attention, first, because they meet the important criterion of categoric relations,[9] second, because of the effect many of them have on productive categories. For the existence of improductive categories is the chief barrier to unlimited application of productive procédés, as in the majority of cases a member of a productive category is not used, if its semantic "place" is occupied by a member of an improductive category. An improductive category can block the extension of a productive one only if both have the same categoric meaning.

In some cases a word is found having the same effect as a member of un improductive category. Such a word shows the same semantic

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[8] A comprehensive discussion of the problems of productivity vs. improductivity is given by Schultink, o.c., p. 36 sqq.

[9] Cf.. E. M. Uhlenbeck, Over woordvorming in het Javaans, Bijdragen tot de Taal-, Land- en Volkenkunde, CXI (1955), p. 306.

relationship to some other word — to which it may or may not be partly similar in shape — as is found between a member of a productive category and a corresponding word belonging to some other category, whereas the same difference in form is not found in combination with the same difference in meaning with any other pair of words. As such b l o c k a d i n g w o r d s mark the boundary of the sphere of operation of the productive categories in the same way as b l o c k a d i n g c a t e g o r i e s, we have to mention them in our morphological description.

No mention will be made of those cases in which a lexical meaning is incompatible with a categoric meaning. Such forms do not normally occur, but, at any rate, they are conceivable.

Between productive categories on the one side and semantically equivalent improductive categories (and ditto blockading words) on the other side a certain tension exists. In the case of Nimboran, this is apparent from the fact that born speakers of the language who lived outside their own community for a long time, say several years, display a tendancy to substitute (new) members of productive categories for members of improductive categories or blockading words. In this way, the character of the productive categories is clearly demonstrated.

8. Competitive forms.

But even by those people who speak their language correctly members of productive categories are sometimes used side by side with words belonging to improductive categories without any difference of use or meaning. Then the categories to which these words belong are in c o m p e t i t i o n. Occasionally, competition is found between improductive categories.

9. Morphological systems and their internal organization.

If morphological categories contain words belonging to the same morphological sets, there is a certain relationship between these categories. Such mutually related categories constitute a m o r p h o l o g i c a l s y s t e m. A morphological system may consist of many categories.

If categories, belonging to the same system, show opposition and, therefore, are mutually exclusive within one word, they are of the same o r d e r; categories, not showing opposition, are of different order. A word may be a member of more than one category but never belongs to two (or more) categories of the same order.

10. Suppletion.

In a few cases, a morphological set has members in only some of the categories of a system, another set, having the same lexical meaning, being found in the rest of the categories, so that these two sets replace each other in part of the categories. For such cases of mutually blockading morphological sets we use the term s u p p l e t i o n.

II. THE PRODUCTIVE CATEGORIES OF THE VERB-SYSTEM

1. Introduction.

The only extensive morphological system found in the Nimboran language is the verb-system.[10] Its productive categories will be described at length in this chapter. The improductive categories and the blockading words playing a part in this system will be discussed in Ch. III and Ch. IV.

2. The categories of the First Person and of the Second Person. The order of the categories of the Actor.

If we compare the following words:

ŋguádu - I will bite,
ŋguátu - I bite,
ŋguáku - I bit,
bekádu - I will kick,
bekátu - I kick,
bekáku - I kicked,
teŋgándu - I will knock,
teŋgántu - I knock,
teŋgáŋku - I knocked,
ŋgrúndu - I will hang up,
ŋgrúntu - I hang up,
ŋgrúŋku - I hung up,
uódu - I will dibble,
uótu - I dibble,
uóku - I dibbled,

with these:

ŋguáde - you will bite,
ŋguáte - you bite,
teŋgáŋke - you knocked,
ŋgrúnde - you will hang up,

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[10] Here, again, a wordclass-term is introduced without explanatory comment. Wordclasses will be discussed in the description of the syntax; until then only names for wordclasses will be used, for which we have chosen existing terms. This is done for practical reasons and in spite of the objections attaching to this use. Cf. what is said about this by Uhlenbeck, De systematiek der Javaanse telwoorden, Bijdragen tot de Taal-, Land- en Volkenkunde, CIX (1953), p. 342.

ŋguáke - you bit,
bekáde - you will kick,
bekáte - you kick,
bekáke - you kicked,
teŋgánde - you will knock,
teŋgánte - you knock,
ŋgrúnte - you hang up,
ŋgrúŋke - you hung up,
uóde - you will dibble,
uóte - you dibble,
uóke - you dibbled,

we see that each word of the first group can be put side by side with one of the second group, each of these pairs showing the same difference in form (final *u* vs. final *e*) and the same difference in meaning. The partial difference in meaning, appearing from the use of the words "I" and "you" in the translation, can be described more specifically as follows: in one case — that of the words having final *u* — the action [11] is attributed to the speaker as the actor; in the other case — that of the words having final *e* — the action is attributed to a singular person addressed, as the actor.

More examples can be found ad libitum; further investigation shows that the number of such forms is, in principle, unlimited. We have to do with productive categories whose members are characterized by the formal elements (morphemes) *-u* and *-e* respectively. We call them the category of the First Person (singular) and the category of the Second Person (singular).

They appear to be in opposition and are mutually exclusive; so they are of the same order which we will call the order of the Actor categories.

3. The category of the Third Person Masculine.

If we compare the words cited in § 2 with the following:

ŋguádam - he will bite,
ŋguátam - he bites,
ŋguákam - he bit,
bekádam - he will kick,
bekátam - he kicks,
bekákam - he kicked,
teŋgándam - he will knock,
teŋgántam - he knocks,
teŋgáŋkam - he knocked,
ŋgrúndam - he will hang up,
ŋgrúntam - he hangs up,
ŋgrúŋkam - he hung up,
uódam - he will dibble,
uótam - he dibbles,
uókam - he dibbled,

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[11] The term 'action" must be understood to mean: the meaning of verbs in general.

we meet with members of another productive category, the members of which are marked by the morpheme *-am*. The categoric meaning is: the action is attributed to a singular male being, not identical with the speaker or the person(s) adressed.

This category is in opposition with the two categories, already mentioned, and so is also of the order of the Actor categories. We call it the category of the Third Person Masculine.

4. The category of the Third Person Neutral.

If we compare the words, given in § 2 and § 3, with the following:

ŋguádum - she (it) will bite,
ŋguátum - she (it) bites,
ŋguákum - she (it) bit,
bekádum - she (it) will kick,
bekátum - she (it) kicks,
bekákum - she (it) kicked,
teŋgándum - she (it) will knock,
teŋgántum - she (it) knocks,
teŋgáŋkum - she (it) knocked,
ŋgrúndum - she (it) will hang up,
ŋgrúntum - she (it) hangs up,
ŋgrúŋkum - she (it) hung up,
uódum - she (it) will dibble,
uótum - she (it) dibbles,
uókum - she (it) dibbled,

we find them to be members of another productive category which has the morpheme *-um* and the categoric meaning of the attribution of the action to a singular actor, which is not of male sex and not identical with either the speaker or the person addressed. We call this the category of the Third Person Neutral. It is found to be in opposition with the categories belonging to the order of the Actor categories, so it is of that same order.

5. The categories of Future, Present, and Past.

The verb-forms, given in the §§ 2 to 4, show other oppositions than those already discussed, if we arrange them as follows:

ŋguádu - I will bite,
ŋguáde - you will bite,
ŋguádam - he will bite,
ŋguádum - she (it) will bite,

as opposed to:

ŋguátu - I bite,
ŋguáte - you bite,
ŋguátam - he bites,
ŋguátum - she (it) bites,

and also to:

ŋguáku - I bit,	*ŋguákam* - he bit,
ŋguáke - you bit,	*ŋguákum* - she (it) bit.

In the same way:

bekádu - I will kick,	*bekádam* - he will kick,
bekáde - you will kick,	*bekádum* - she (it) will kick,

are found in opposition with:

bekátu - I kick,	*bekátam* - he kicks,
bekáte - you kick,	*bekátum* - she (it) kicks,

and with:

bekáku - I kicked,	*bekákam* - he kicked,
bekáke - you kicked,	*bekákum* - she (it) kicked.

The same can be done with the rest of the given verb-forms. In this way, it appears that forms, having a formal element *-d-* immediately preceding the Actor morpheme and having as part of their meaning "the action will take place in the future, or begins in the present and will continue in the future, or takes place in the present and is directed towards the future", are opposed to forms which do not have this semantic element and are characterized by having *-t-* or *-k-* instead of the *-d-*. The words characterized by the morpheme *-d-* constitute a productive category which we call the category of the Future.

Further study of the use of Future forms shows that the given formula of the categoric meaning is not broad enough. Because forms of the Future category are often used to indicate that the actor intends or wants to perform the action, or that the speaker wants the action to take place. In the latter case, the meaning may be a command or a request.

The words, characterized by the morpheme *-t-* which immediately precedes the Actor morpheme, all show the semantic element "the action takes place in the present or is completed in the present". They constitute a category which, again, appears to be productive. This we call the category of the Present.

Sometimes, members of the Present category are also used when, strictly speaking, the action does not relate to the present, or is not

limited to the present. For Present forms are used in all those cases in which the time of the action is unimportant or is left out of account (in general statements and the like). So it might be said that, semantically, this category is characterized by the absence of a certain element of meaning and its members have reference to actions, not explicitly mentioned as belonging to either the future or the past.

The fact that many Present forms are formally characterized by a zero morpheme — as we shall see later on — may be said to be in accordance with this.

The words which are characterized by the morpheme *-k-* have in common the semantic feature "the action took place in the past". They appear to constitute a productive category which we call the category of the Past.

The categories of Present, Past, and Future are of the same order. This we call the order of the categories of Tense. That this order is different from that of the Actor categories appears from the fact that all verb-forms, given so far, belong to an Actor category as well as to a Tense category.

6. **The category of the Recent Past.**

The Tense forms discussed in the preceding Section can be opposed to still other forms, e.g. *ŋguádu, ŋguátu,* and *ŋguáku* to *ŋguápu* - I bit. This word is formally characterized by the morpheme *-p-,* preceding the Actor morpheme, and its meaning shows the feature "the action took place in the past but not before yesterday". With precisely the same difference in meaning we find opposed to *ŋguáde, ŋguádam, ŋguádum,* etc., *ŋguápe, ŋguápam,* and *ŋguápum*; opposed to *bekádu* etc., *bekápu* etc.; opposed to *teŋgándu* etc., *teŋgámpu* etc.; opposed to *ŋgrúndu* etc., *ŋgrúmpu* etc.; opposed to *uódu* etc., *uópu* etc.

Again, we have to do with a productive category; we call it the category of the Recent Past. As it appears to be in opposition with Tense categories, it is of the same order.

To the description of the semantic value of the Recent Past category must be added that members of this category are also used for denoting actions, performed in a past more remote than the preceding day, this to indicate a difference of time in the past. Thus, in a narrative, told with verb-forms of the Past Tense, a form of the Recent Past may be introduced to refer to some event that happened at a time, later than that in which the rest of the story is set.

7. Morphonological variations.

Some of the words, discussed up to now, call for further consideration. For we see that in the cases of *teŋgáŋku, teŋgáŋke, teŋgáŋkam,* and *teŋgáŋkum,* as opposed to *teŋgámpu, teŋgámpe, teŋgámpam,* and *teŋgámpum,* as opposed to *teŋgántu, teŋgánte, teŋgántam,* and *teŋgántum,* and also to *teŋgándu, teŋgánde, teŋgándam,* and *teŋgándam*; and of *ŋgrúŋku* etc., as opposed to *ŋgrúmpu* etc., as opposed to *ŋgrúntu* etc., and *ŋgrúndu* etc., there is not only the difference of the consonant, acting as the morpheme of the Tense category, but also the immediately preceding nasal is different. This nasal consonant appears to be part of the root-morpheme. In those cases in which this consonant is word-final (we will come across these cases later on, in the §§ 46 and 47), it appears to be *ŋ*, e.g. *teŋgáŋ, ŋgruŋ*. Therefore, we take this *ŋ* as a norm and formulate the following rule: root-morpheme-final *ŋ* becomes *m* if, within the same word, it is immediately followed by *p*, and becomes *n* if, within the same word, it is immediately followed by *t* or *d*.[12] Occasionally, the *ŋ* is preserved before immediately following *p, t,* or *d,* e.g. *ŋgrúŋdu* instead of *ŋgrúndu*; but this is exceptional, the partial assimilation to homorganic nasal being the rule.

8. Other morphonological variations.

In contrast to the root-morphemes with final *ŋ*, all root-morphemes having final vowel remain unchanged in the forms discussed above. The same can be said of the root-morphemes having final *m*, like *sam* - put in between, found in forms like *sámdu, sámte, sámpam,* and *sámkum.* But the case of root-morphemes having final *b* is different. If immediately followed by *d*, this *b* remains unchanged but, if immediately followed by *t* or *k*, the *b* may be replaced by *p*. In these cases there seems to be no preference for either *p* or *b*.

So with the root-morphemes *pyb* - stab, *brub* - fold, *peb* - peel, and *besíb* - bend, we find the Future forms *pýbdu, brúbde, pébdam* and *besíbdam*, but the Present forms *pýbtu* and *pýptu, brúbte* and *brúpte, pébtam* and *péptam, besíbtum* and *besíptum*; and the Past forms *pýbku*

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[12] That here (and occasionally in other parts of this book) differences in forms are spoken of in terms of processes, must be seen as just a descriptive technique; cf. Eugene A. Nida, Morphology, 2nd ed., Ann Arbor, 1949, p. 21; Zellig S. Harris, Distributional Structure, Word, X (1954), p. 146 sqq.; E. M. Uhlenbeck, Over woordvorming in het Javaans, Bijdragen tot de Taal-, Land- en Volkenkunde, CXI (1955), p. 287.

and *pýpku, brúbke* and *brúpke, pébkam* and *pépkam, besíbkum* and *besípkum.*

The corresponding Recent Past forms appear to be *pýpu, brúpe, pépam,* and *besípum.* So we may say that root-morpheme-final *b* and an immediately following *p* are merged into a single *p.* To this must be added that this *p* always is a stop and that the fricative allophone which may occur anywhere else in intervocalic position, as a free variant, is not possible here (cf. Part One, Ch. IV, § 1).

9. The Second Position category. Two accents on verb-forms.

There are more forms to which the members of the Past category may be opposed, e.g.

ŋguábáku - I bit above, to *ŋguáku,*
ŋguábáke - you bit above, to *ŋguáke,*
ŋguábákam - he bit above, to *ŋguákam,*
ŋguábákum - she (it) bit above, to *ŋguákum.*

In the same way, we find *bekábáku* - I kicked above, etc., opposed to *bekáku* etc. and *uóbáku* - I dibbled above, etc., opposed to *uóku* etc.

Formally, these new forms show an element *-ba-* immediately preceding the Tense morpheme. Further, the vowel of this *-ba-* has an accent, just like one of the vowels of the root-morpheme. Semantically, these forms are characterized by the element "in a place within the speaker's sight but higher than that of the speaker".

The other forms, with which we compared them, lack both the *-ba-* and the semantic element, just described. It appears that this *-ba-* is the morpheme of a productive category which we call the Second Position category.

The occurrence of two accents in one word, as found with members of this category, has already been mentioned in Part One, Ch. VII, § 3. As we shall see later on, this is the case with the majority of the verb-forms. If a verb-form has two accents, one is on a vowel of the root-morpheme, the other is on a vowel of a categoric morpheme. Usually, the former is secundary and the latter a primary accent but a speaker may prefer to make the accent of the root-morpheme a primary one, which automatically causes the other accent to be secondary. This happens particularly if the lexical meaning is stressed, as is the case when two forms, differing in lexical meaning, are contrasted, e.g. *bekábáku kúo be, uóbáku* - I did not kick above, I dibbled above.

The occurrence of a second accent (if any) and its place in the word will be indicated for each of the verb-forms to be discussed.

10. The Third Position category.

The forms discussed in § 9 can be opposed to

ŋguáŋáku - I bit below,	*ŋguáŋákam* - he bit below,
ŋguáŋáke - you bit below,	*ŋguáŋákum* - she (it) bit below.

We also find *bekáŋáku* - I kicked below, etc., and *uóŋáku* - I dibbled below, etc.

Formally these forms are characterized by an element *-ŋa-*, immediately preceding the Tense morpheme and having an accent on its vowel. Semantically, they have in common the element 'in a place within the speaker's sight but lower than that of the speaker". They all belong to a category which appears to be capable of extension and, consequently, is productive. We call it the Third Position category.

11. The Fourth Position category.

To the forms discussed in § 9 and § 10 the following can be opposed:

ŋguásáku - I bit there,	*ŋguásákam* - he bit there,
ŋguásáke - you bit there,	*ŋguásákum* - she (it) bit there,

and also *bekásáku* - I kicked there, etc., and *uósáku* - I dibbled there, etc.

These words are characterized, formally, by the element *-sa-* which immediately precedes the Tense morpheme and has an accent on its vowel, and semantically by the element "in the place of the person addressed or in a place on the same level as the speaker's place but clearly opposed to it".

This category also appears to be productive; we call it the Fourth Position category.

12. The Fifth Position category.

Another category is found in the following forms which show contrast with those discussed in the §§ 9 to 11:

ŋguánáku - I bit far away,
ŋguánáke - you bit far away,
ŋguánákam - he bit far away,
ŋguánákum - she (it) bit far away,
bekánáku - I kicked far away, etc.,
uónáku - I dibbled for away, etc.

Their formal characteristic is the element *-na-* which precedes the Tense morpheme and has an accent on its vowel. Semantically, they are characterized by the element "in a place beyond the sight of the speaker (and the person addressed)". This category also is productive. We call it the Fifth Position category.

13. The First Position category as opposed to the others.

As the categories we came across in the §§ 9 to 12 show mutual opposition, they are of the same order which we call the order of the Position categories.

The forms which do not show a formal mark as to "position", e.g. *ŋguáku* etc., also have their place in this connection. Semantically, they are not as un-characterized as they seemed to be. A form like *ŋguáku,* if opposed to *ŋguábáku, ŋguáŋáku,* etc., has the meaning "I bit here" or — in a more general formula — it contains the semantic element "in the place where the speaker is". Therefore, these forms may be said to be members of a Position category with zero morpheme. We call this the First Position category. Members of this category are always used in those cases in which the place of the action in regard to the speaker's position is indefinite or does not play a rôle, e.g. in stories, general statements, and the like.

It must be observed that in some cases the lexical meaning of a morphological set asks for an ad hoc adaptation of the categoric meanings of the Position categories, as described in the §§ 9 to 13. E.g. in forms with the root-morpheme *kri-* (flee) or with the root-morpheme *uauý-* (take along) the position category does not denote the place where but the place from where the flight or the taking takes place.

14. Morphonological remarks in connection with the Position categories.

In § 7 we saw that, in certain cases, the root-morpheme varies according to the immediately following Tense morpheme. As the morphemes, characterizing the Second, Third, Fourth, and Fifth Position

category, precede the Tense morpheme and, therefore, may immediately follow the root-morpheme, we have to ascertain if changes in the phonemic shape of the root-morpheme occur also here.

It appears that root-morphemes having final vowel or final *m* do not show any change; but changes are found with root-morphemes having final *b* or *ŋ*. The deportment of root-morpheme-final *b* appears from the following instances:

pýbáku - I stabbed above,	*besíbŋáku* - I bent below,
brúbáku - I folded above,	*pýpsáku* or *pýbsáku* - I stabbed there,
pébaku - I peeled above,	*brúbsáku* or *brúpsáku* - I folded there,
besíbáku - I bent above,	etc.,
pýbŋáku - I stabbed below,	*pýbnáku* - I stabbed far away,
brúbŋáku - I folded below,	*brúbnáku* - I folded far away,
pébŋáku - I peeled below,	etc.

From these examples (to which many others might be added) we see that root-morpheme-final *b*:

remains unchanged if, within the word, it is immediately followed by *ŋ* or *n*;
is merged with a *b*, following immediately within the word, into one single *b*;
may be replaced by *p* or remain unchanged, if *s* follows immediately within the same word (free variation).

The behaviour of root-morpheme-final *ŋ* is shown by the following instances:

teŋgámbáku - I knocked above,	*teŋgánsáku* - I knocked there,
ŋgrúmbáku - I hung up above,	*ŋgrúnsáku* - I hung up there,
teŋgáŋáku - I knocked below,	*teŋgánáku* - I knocked far away,
ŋgrúŋáku - I hung up below,	*ŋgrúnáku* - I hung up far away.

From these examples it appears (and this receives confirmation by all similar cases) that root-morpheme-final *ŋ*:

is replaced by *m* if, within the word, it is immediately followed by *b*;
is replaced by *n* if *s* follows immediately within the same word;
is merged with a *ŋ*, following immediately within the word, into one single *ŋ*;

is merged with a *n*, following immediately within the same word, into a single *n*.

15. Future forms of the Second, Third, Fourth, and Fifth Position categories.

Opposed to the Future forms of the First Position category:

ŋguádu - I will bite (here),
ŋguáde - you will bite (here),
ŋguádam - he will bite (here),
ŋguádum - she (it) will bite (here),

we find

ŋguábáru - I will bite above,
ŋguábáre - you will bite above,
ŋguábáram - he will bite above,
ŋguábárum - she (it) will bite above.

Corresponding to

bekádu - I will kick (here), etc.,
teŋgándu - I will knock (here), etc.,
ŋgrúndu - I will hang up (here), etc.,
uódu - I will dibble (here), etc.,

we find

bekábáru - I will kick above, etc.,
teŋgámbáru - I will knock above, etc.,
ŋgrúmbáru - I will hang up above, etc.,
uóbáru - I will dibble above, etc.

The last-mentioned forms are members of the Second Position category. In the Third Position category we find as Future forms:

ŋguáŋáru - I will bite below, etc.,
bekáŋáru - I will kick below, etc.,
teŋgáŋáru - I will knock below, etc.,
ŋgrúŋáru - I will hang up below, etc.

As Future forms of the Fourth Position category we find:

ŋguásáru - I will bite there, etc.,
bekásáru - I will kick there, etc.,
teŋgánsáru - I will knock there, etc.,
ŋgrúnsáru - I will hang up there, etc.

In the Fifth Position category we find the Future forms:

ŋguánáru - I will bite far away, etc.,
bekánáru - I will kick far away, etc.,
teŋgánáru - I will knock far away, etc.,
ŋgrúnáru - I will hang up far away, etc.

All these forms follow the rules, so far established, except for the tense-morpheme which is *-r-* in all these forms instead of *-d-*. As this appears to be the case with all members of these Position categories, we state the rule that the morpheme, characterizing the Future category, is *-d-* in members of the First Position category and *-r-* in members of the Second, Third, Fourth, and Fifth Position categories.

Side by side with the forms of the Fourth Position category, e.g. *ŋguásáru* etc. and *ŋguásáku* etc., we find forms in which the *s* is replaced by *h* as free variants: *ŋguáháru, ŋguáháku* etc. But these *h*-alternants only occur if the consonant in question immediately follows the root-morpheme and immediately precedes a vowel which has an accent and is followed by at least one consonant which is not word-final. As we shall see later on, these conditions are usually fulfilled only in the Singular forms of Future and Past.

16. Present forms of the Second Position category.

To *ŋguábáru* - I will bite above, and *ŋguábáku* - I bit above, on the one side and to *ŋguátu* - I bite here, on the other side, there can be opposed *ŋguábáu* - I bite above. In the same way we find, opposed to *ŋguábare* - you will bite above, and *ŋguábáke* - you bit above, on the one hand to *ŋguáte* - you bite here, on the other hand, *ŋguábáe* - you bite above. It appears that these are Present forms of the Second Position category. A striking feature of these forms is the absence of any substantial element characterizing the tense category. In fact, the Present tense is marked here by the absence of any formal element in between the Position morpheme and the Actor morpheme. So we may say that in Present forms of the Second Position category (or: in Second Position forms of the Present tense category, which comes

to the same thing) the morpheme of the category of the Present is zero.

Less simple is the case of the corresponding Third Person forms. These are:

ŋguábám - he bites above,
ŋguábóm - she (it) bites above.

In these forms too the Present is characterized by a zero element but the sequence of the vowel of the Position morpheme *-ba-* and the vowel of the Actor morpheme, as we saw in the First and Second Person forms, is not found here. In the Third Person Masculine the combination *a* + *a* which might be expected here yields one single *a*. This is in accordance with the general rule of word-structure that, within a word, *a* is never immediately followed by *a* (cf. Part One, Ch. V, § 1). But there is no peremptory rule forcing the sequence *au* which one might expect in the Third Person Neutral form, to become *o*. So we have to accept this fact as a peculiarity of these verb-forms. It can be described in the formula: Second Position morpheme + immediately following Third Person Neutral morpheme = *-bóm.*[13] It remains to add that the accent, found with the First and Second Person forms of the Present and with all Singular forms of Future and Past, in the Third Person Masculine forms of the Present is on the *a* of *-bam* and in the Third Person Neutral forms of the Present is the *o* of *-bom* but may be absent in both cases (free variation). So we find as free alternants *ŋguábám* and *ŋguábam*, *ŋguábóm* and *ŋguábom*, etc.

Present forms of the Second Position category with other root-morphemes are in entire agreement with the *ŋguá*-forms described above, e.g.

bekábáu - I kick above,
bekábáe - you kick above,
bekábám, bekábam - he kicks above,
bekábóm, bekábom - she (it) kicks above,
uóbáu - I dibble above, etc.,
ŋgrúmbáu - I hang up above, etc.,
teŋgámbáu - I knock above, etc.

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[13] In cases like this Charles F. Hockett uses the term "portmanteau representation of a morpheme group" (Two models of grammatical description, Word, X (1954), p. 210—234, esp. p. 216). Because our basic principles (see Ch. I) are different from those of Hockett, we do not feel the need of such a term.

17. Present-Recent Past in the Second Position category.

The forms, discussed in § 16, all show a semantic element that was left out of consideration there. *ŋguábáu,* for instance, has — besides the meaning "I bite above" — the meaning "I bit above today or yesterday", in other words; this Second Position form corresponds with both *ŋguátu* and *ŋguápu* of the First Position category. This is the case with all forms, discussed in § 16 as Present forms. In the Second Position category the opposition between Present and Recent Past, as found with the forms of the First Position category, appears not to exist. Therefore, in the case of the Second Position forms we have to speak of a Present-Recent Past tense.

18. Present-Recent Past forms of the Third, Fourth, and Fifth Position categories.

In the Fourth and Fifth Position categories we find Present-Recent Past forms completely in accordance with those of the Second Position category, e.g.:

ŋguásám, ŋguásam - he bites (bit) (today, yesterday) there,
ŋguánóm, ŋguánom - she (it) bites (bit) far away.

But in the Third Position category we find the Present-Recent Past forms:

ŋguákeŋáu - I bite (bit) below,
ŋguákeŋáe - you bite (bit) below,
ŋguákeŋám - he bites (bit) below,
ŋguákeŋóm - she (it) bites (bit) below.

In these forms we see an element *-kena-* which, on the one hand, characterizes them as Third Position forms in opposition to Present-Recent Past forms of other Position categories, on the other hand, characterizes them as Present-Recent Past forms in opposition to Future and Past forms of the Third Position category (in the latter case in combination with zero preceding the Actor morpheme). Another peculiar feature is that the Third Person Masculine always has an accent on the *a* of *-keŋam* so that an alternant form without that accent does not occur. The same can be said of the accent on the *o* of *-keŋom* of the Third Person Neutral form. As free variants, forms are found for all four Persons having *n* instead of *ŋ* in the Position-Tense mor-

pheme, e.g. *ŋguákenáu,* free alternant of *ŋguákeŋáu.* But the alternants having *ŋ* appear to be much more frequently used than those with *n.*

Other instances of Present-Recent Past forms of the Third, the Fourth, and the Fifth Position categories are:

bekákeŋáu - I kick (kicked) below,
uókeŋáe - you dibble (dibbled) below,
ŋgrúnsám - he hangs (hung) up there,
teŋgánsóm - she knocks (knocked) there,
ŋgrúnáu - I hang (hung) up far away,
teŋgánóm - she knocks (knocked) far away.

19. **The Sixth Position category.**

In opposition to
príbdu - I will throw (here),
príbde - you will throw (here),
príbdam - he will throw (here),
príbdum - she (it) will throw (here),
príbáru - I will throw above, etc.,
príbŋáru - I will throw below, etc.,
prípsáru - I will throw there, etc.,
príbnáru - I will throw far awy, etc.,

we find:
príbedú - I will throw from here to above,
príbedé - you will throw from here to above,
príbedám - he will throw from here to above,
príbedúm - she (it) will throw from here to above.

Opposed to these last four forms we find:
príbetú - I throw from here to above,
príbeté - you throw from here to above,
príbetám - he throws from here to above,
príbetúm - she throws from here to above,

and:
príbepú - I threw (today, yesterday) from here to above,
príbepé - you threw (today, yesterday) from here to above,
príbepám - he threw (today, yesterday) from here to above,
príbepúm - she threw (today, yesterday) from here to above,

and:

príbekú - I threw from here to above,
príbeké - you threw from here to above,
príbekám - he threw from here to above,
príbekúm - she (it) threw from here to above.

These forms appear to be members of a productive category. They are marked by the formal element *-be-* which immediately precedes the Tense morpheme; semantically they are characterized by the element "from the speaker's place to a higher place within the speaker's sight". As to the formal side, it must be added that here the morpheme *-d-* is characteristic of the Future Tense forms and that the Present forms are marked by the morpheme *-t-*, just like what is found in the First Position forms. Moreover, all members of this category have an accent on the vowel of the Actor morpheme. This category we call the Sixth Position category.

In point of Tense categories, the members of the Sixth Position category are fully parallel to the forms of the First Position category, and not to the Second, Third, Fourth, and Fifth Position forms, as in the Sixth Position category separate Recent Past forms exist with Tense morpheme *-p-*.

20. **The Seventh Position category.**

To the forms discussed in § 19 the following can be opposed:

prípsedú - I will throw from here to there,
prípsedé - you will throw from here to there,
prípsedám - he will throw from here to there,
prípsedúm - she (it) will throw from here to there,
prípsetú - I throw from here to there, etc.,
prípsepú - I threw (today, yesterday) from here to there, etc.,
prípsekú - I threw from here to there, etc.

These forms belong to a productive category, the members of which are characterized by the formal element *-se-*, immediately preceding the Tense morpheme, and by the semantic element "from the speaker's place to the place of the person addressed or to another place within the speaker's sight, on the same level as the speaker's place, but clearly opposed to it". This category we call the Seventh Position category. The members of this category show a close similarity to the forms of

the Sixth Position category as they have an accent on the vowel of the Actor morpheme, the Future morpheme *-d-*, the Present morpheme *-t-*, and Recent Past as a separate Tense category, opposed also to the Present Tense, with the Tense morpheme *-p-*.

21. **The Eighth Position category.**

To the forms, discussed in § 19 and § 20, the following can be opposed:

pripsedý - I will throw down from here (i.e. from here to below),
pripsedí - you will throw down from here,
pripsedím - he will throw down from here,
pripsedým - she (it) will throw down from here,
pripsetý - I throw down from here,
pripseti - you throw down from here,
pripsetím - he throws down from here,
pripsetým - she (it) throws down from here,
pripsepý - I threw down from here (today, yesterday),
pripsepí - you threw down from here (today, yesterday),
pripsepím - he threw down from here (today, yesterday),
pripsepým - she (it) threw down from here (today, yesterday),
pripseký - I threw down from here,
pripseki - you threw down from here,
pripsekím - he threw down from here,
pripsekým - she (it) threw down from here.

These forms are different from those of the Seventh Position category by the vowels of the Actor morphemes. The morpheme of the First Person is *-y*, that of the Second Person is *-i*, that of the Third Person Masculine is *-im*, and that of the Third Person Neutral is *-ym*. This series of Actor morphemes — which we will come across again in other categories later on — we call the apophonic series.

The forms, cited above, appear to belong to a productive category. The members of this category are characterized formally by the element *-se-*, immediately preceding the Tense morpheme, and Actor morphemes of the apophonic series, semantically by the element "from the speaker's place to a lower place within the speaker's sight". We call this category the Eighth Position category.

Just like the forms of the Sixth and Seventh Position categories, the members of the Eighth Position category have an accent on the

vowel of the Actor morpheme. The Future morpheme in this category is *-d-*, the Present morpheme is *-t-*, and there is a separate Recent Past category with the Tense morpheme *-p-*.

22. The Ninth Position category.

To the forms, discussed in the §§ 19 to 21, can be opposed:

príbnedý - I will throw from here to far away,
príbnedí - you will throw from here to far away,
príbnedím - he will throw from here to far away,
príbnedým - she (it) will throw from here to far away,
príbnetý - I throw from here to far away, etc.,
príbnepý - I threw from here to far away (today, yesterday), etc.,
príbneký - I threw from here to far away, etc.

These forms belong to a productive category whose members are formally characterized by the element *-ne-*, immediately preceding the Tense morpheme, and Actor morphemes of the Apophonic series. Their common semantical element is "from the speaker's place to a place beyond the sight of the speaker (and the person addressed)". We call this category the Ninth Position category. In this category we again find an accent on the vowel of the Actor morpheme, *-d-* as the Future morpheme, *-t-* as the Present morpheme, a separate Recent Past category, and *-p-* as the Recent Past morpheme.

23. The Tenth Position category.

To the forms discussed in the §§ 19 to 22 can be opposed:

prípkendý - I will throw from above or from far away to here,
prípkendí - you will throw from above or from far away to here,
prípkendím - he will throw from above or from far away to here,
prípkendým - she (it) will throw from above or from far away to here,
prípkentý - I throw from above or from far away to here, etc.,
prípkempý - I threw (today, yesterday) from above or from far away to here, etc.,
prípkeŋký - I threw from above or from far away to here, etc.

Once more, we have found a productive category whose members are formally characterized by the element *-keŋ-*, immediately preceding the Tense morpheme, and the Apophonic series of Actor morphemes, and, semantically, by the element "from a place which is higher than the speaker's place or from a place outside the speaker's sight to the speaker's place". We call it the Tenth Position category.

Just like the forms of the Sixth, Seventh, Eighth, and Ninth Position categories, the members of the Tenth Position category have an accent on the vowel of the Actor morpheme. Other common characteristics of these categories are the form of the Future Tense morpheme, *-d-*, the form of the Present Tense morpheme, *-t-*, and the existence of a separate Recent Past category with the Tense morpheme *-p-*.

From the given examples it appears that the element, designated above by *-keŋ-*, is *-ken-* if immediately preceding *d* or *t* and *-kem-* if immediately followed by *p*.

24. **The Eleventh Position category.**

To the forms discussed in the §§ 19 to 23 the following can be opposed:

príbándu - I will throw from below to here,
príbánde - you will throw from below to here,
príbándam - he will throw from below to here,
príbándum - she (it) will throw from below to here,
príbántu - I throw from below to here,
etc.,
príbámpu - I threw (today, yesterday) from below to here,
etc.,
príbáŋku - I threw from below to here,
etc.

Those forms appear to belong to a productive category whose members are formally characterized by the element *-baŋ-*, having an accent on its vowel, immediately preceding the Tense morpheme, whereas they have in common the semantical element "from a lower place within the speaker's sight to the speaker's place". We call it the Eleventh Position category.

In this category too the morpheme of the Future Tense is *-d-*, the Present Tense morpheme is *-t-*, and there is a separate Recent Past category with the morpheme *-p-*. The morpheme of the Eleventh

Position category we have designated by *-baŋ-* but it is *-ban-* if immediately followed by *d* or *t* and *-bam-* if immediately preceding *p*, as is shown by the examples given above.

25. The Twelfth Position category.

To the forms discussed in the §§ 19 to 24 can be opposed:

prípsándu - I will throw from there to here,
prípsánde - you will throw from there to here,
prípsándam - he will throw from there to here,
prípsándum - she (it) will throw from there to here,
prípsántu - I throw from there to here,
etc.,
prípsámpu - I threw (today, yesterday) from there to here,
etc.,
prípsáŋku - I threw from there to here,
etc.

These forms appear to belong to a productive category. Its members are formally characterized by the element *-saŋ-* which has an accent on the *a* and immediately precedes the Tense morpheme. The semantical element they have in common is "from the place of the person addressed or from a place within the speaker's sight (and clearly opposed to the speaker's place) to the speaker's place".

In this category, too, the Future morpheme is *-d-*, the morpheme of the Present Tense is *-t-*, and there is a separate category of the Recent Past having *-p-* as Tense morpheme. As may be seen from the examples cited above, the morpheme of this category — which we call the Twelfth Position category — is *-sam-* if immediately preceding *p* and *-san-* if immediately followed by *d* or *t*.

In free variation with all these forms other forms are found having *h* instead of the *s* of the morpheme of this category (so *-haŋ-* etc.), e.g. *príbhándu* - I will throw from here to there. Such free variants, however, are only found with the Singular forms and never with Dual or Plural forms (to be discussed later on).

26. The Thirteenth Position category.

To the forms discussed in the §§ 19 tot 25 the following can be opposed:

príbenáru - I will throw from below, from there, or from far away to above,
príbenáre - you will throw from below (etc.) to above,
príbenáram - he will throw from below (etc.) to above,
príbenárum - she (it) will throw from below (etc.) to above,
príbenanáu - I throw (threw today, yesterday) from below (etc.) to above,
príbenanáe - you throw (threw today, yesterday) from below (etc.) to above,
príbenanám - he throws (threw today, yesterday) from below (etc.) to above,
príbenanóm - she (it) throws (threw today, yesterday) from below (etc.) to above,
príbenáku - I threw from below (etc.) to above,
príbenáke - you threw from below (etc.) to above,
príbenákam - he threw from below (etc.) to above,
príbenákum - she (it) threw from below (etc.) to above.

These forms belong to a productive category which we call the Thirteenth Position category. They are formally characterized by the element *-bena-* immediately preceding the Tense morpheme; the common element in their meaning is "from a place which is not the speaker's place to a place which is higher than the speaker's place".

The Tense morpheme of the Future forms is *-r-*. The *a* of the Position morpheme (*-bena-*) has an accent in the Future and Past Tense forms. In this Position category there is no opposition between Present and Recent Past forms but there is only one series of forms having both Recent Past and Present meaning, just like what we found in the Second, Third, Fourth, and Fifth Position categories. Another point of resemblance to these categories is the fact that the Tense morpheme is zero and that the combination of Position morpheme, zero Tense morpheme, and Actor morphemes results in analogous forms. Beside the forms of Future and Past, the Present-Recent Past forms of the Thirteenth Position category show the peculiarity of a slightly different form of the Position morpheme which is *-benana-* with an accent on the second *a* in the First Person, Second Person, and Third Person Masculine, and on the *o* in the Third Person Neutral.

27. The Fourteenth Position category.

To the forms discussed in the §§ 19 to 26 the following can be opposed:

prípsenáru - I will throw from below to there,
prípsenáre - you will throw from below to there,
prípsenáram - he will throw from below to there,
prípsenárum - she (it) will throw from below to there,
prípsenanáu - I throw (threw today, yesterday) from below to there,
prípsenanáe - you throw (threw today, yesterday) from below to there,
prípsenanám - he throws (threw today, yesterday) from below to there,
prípsenanóm - she (it) throws (threw today, yesterday) from below to there,
prípsenáku - I threw from below to there,
etc.

These forms appear to be members of a productive category. Formally, they are characterized by the element *-sena-*, in Future and Past forms, or *-senana-* in Present-Recent Past forms; their common element of meaning is "from a place, lower than that of the speaker, to the place of the person addressed or to a place which is clearly opposed to the speaker's place and within the speakers sight". This category we call the Fourteenth Position category. As to their formal characteristics, the members of this category are parallel to those of the Thirteenth Position category: the morpheme of the Future Tense is *-r-*, there is only one series of forms for Present and Recent Past with Tense morpheme zero, and there is an accent on the last vowel of the Position morpheme.

28. The Fifteenth Position category.

To the forms discussed in the §§ 19 to 27 the following can be opposed:

prípkenéry - I will throw from above, from below, or from there to far away,
prípkenéri - you will throw from above (etc.) to far away,
prípkenérim - he will throw from above (etc.) to far away,
prípkenérym - she (it) will throw from above (etc.) to far away,

prípkenenéy - I throw (threw today, yesterday) from above (etc.) to far away,
prípkenenéi - you throw (threw today, yesterday) from above (etc.) to far away,
prípkeneném - he throws (threw today, yesterday) from above (etc.) to far away,
prípkenenyém - she (it) throws (threw today, yesterday) from above (etc.) to far away,
prípkenéky - I threw from above (etc.) to far away,
etc.

These forms belong to a productive category whose members are formally characterized by the element *-kene-* in Future and Past forms and *-kenene-* in Present-Recent Past forms which immediately precedes the Tense morpheme (or the Actor morpheme, if the Tense morpheme is zero) and which has an accent on its last *e* and Actor morphemes of the Apophonic series. The common element of meaning is "from a place within the speaker's sight, but not the speaker's place, to a place outside the speaker's sight". We call this category the Fifteenth Position category.

As we saw above, this category too has one series of forms with zero Tense morpheme and both Present and Recent Past meaning. In the Third Person Masculine form of this series the *i* of the Actor morpheme in the corresponding Future and Past Tense forms is lacking. In the Third Person Neutral form of the Present-Recent Past series the vowel *y* of the Actor morpheme precedes the last *e* of the Position morpheme. These phenomena will be found with all Third Person forms with zero Tense morpheme and Actor morphemes of the Apophonic series.

29. **The Sixteenth Position category.**

To the forms discussed in the §§ 19 to 28 the following can be opposed:

prípsenéry - I will throw from there to below, from above to below, from far away to below, from above to there, or from far away to there.
prípsenéri - you will throw from there to below, etc.
prípsenérim - he will throw from there to below, etc.,
prípsenérym - she (it) will throw from there to below, etc.,

prípsenenéy - I throw (threw today, yesterday) from there to below, etc.,
prípsenenéi - you throw (threw) from there to below, etc.,
prípseneném - he throws (threw) from there to below, etc.,
prípsenenyém - she (it) throws (threw) from there to below, etc.,
prípsenéky - I threw from there to below, etc.,
etc.

These forms appear to be members of a productive category. Their formal characteristics are the element *-sene-* (in Future and Past Tense forms) or *-senene-* (in Present-Recent Past forms), having an accent on its last *e* and immediately preceding the Tense morpheme or, if the Tense morpheme is zero, the Actor morpheme, and Actor morphemes of the Apophonic series. Their common element of meaning is "from a place which is not the speaker's place to a place within the speaker's sight and lower than that of the speaker, or from a place, higher than that of the speaker or outside the speaker's sight, to the place of the person addressed or another place, within the speaker's sight, which is on the same level as the speaker's place but clearly opposed to it". We call this the Sixteenth Position category.

Future forms belonging to this category have *-r-* as their Tense morpheme. The Tense morpheme of the forms having both Present and Recent Past meaning is zero and in the Third Person Neutral and Third Person Masculine forms the same formal peculiarities are found as described in § 28 for the corresponding forms of the Fifteenth Position category.

30. Survey of the Position categories: two groups.

Looking back to what was stated above on the forms of the Position categories, we see that two groups are clearly visible. The first group is characterized by:

1. Future morpheme *-d-*;
2. Present morpheme *-t-*;
3. Recent Past morpheme *-p-*;
4. the existence of Present and Recent Past as separate Tense categories which also show mutual opposition.

To this first group belong the First, Sixth, Seventh, Eighth, Ninth, Tenth, Eleventh, and Twelfth Position categories.

The second group is distinguished from the first by:

1. Future morpheme *-r-*;
2. zero morpheme for Present - Recent Past;
3. the existence of one series of forms having both Present and Recent Past meaning.

To this second group belong the Second, Third, Fourth, Fifth, Thirteenth, Fourteenth, Fifteenth, and Sixteenth Position categories.

As far as meaning is concerned, it appears that all Position categories belonging to the first group have the semantic element "in, from, or to the speaker's place", whereas this element does not occur in the meaning of any of the Position categories belonging to the second group.

As to the place of the morphemes which characterize the Position categories, it was stated above that this is "immediately preceding the Tense morpheme". Naturally, something must be added for those forms which have zero Tense morpheme. There the place of the Position morpheme is "immediately preceding the Actor morpheme"; in the forms of the Third Person Masculine and the Third Person Neutral the formal peculiarities are found which are described in § 16 and § 28.

31. **The category of the First + Second Person Singular.**

To the forms described in §§ 2 to 18 the following can be opposed:

ŋguámandám - you and I will bite (here),
ŋguámantám - you and I bite (here),
ŋguámampám - you and I bit today or yesterday (here),
ŋguámaŋkám - you and I bit (here),
ŋguámambarám - you and I will bite above,
ŋguámambám - you and I bite (bit today or yesterday) above,
ŋguámambakám - you and I bit above,
ŋguámaŋarám - you and I will bite below,
ŋguámaŋkeŋám - you and I bite (bit today or yesterday) below,
ŋguámaŋakám - you and I bit below,
ŋguámansarám - you and I will bite there,
ŋguámansám - you and I bite (bit today or yesterday) there,
ŋguámansakám - you and I bit there,
ŋguámanarám - you and I will bite far away,
ŋguámanám - you and I bite (bit today or yesterday) far away,
ŋguámanakám - you and I bit far away.

The formal element, common to all these words, is found immediately preceding the Position morpheme or, if the latter is zero, immediately

preceding the Tense morpheme. This common element is *-man-* if immediately preceding *t, d* or *s, -mam-* if immediately followed by *p* or *b,* and *-maŋ-* if immediately followed by *k*; it appears to be *-maŋ-* together with the *ŋ of* the Third Position category and *-man-* together with the *n* of the Fifth Position category. Moreover, all these forms show the ending *-am* which is the same as the morpheme for the Third Person Masculine except for always having an accent, whereas in the forms of the Future and Past of the Second, Third, Fourth, and Fifth Position categories the Position morpheme has no accent. The combination of this *-am* with the Position morpheme in those forms in which the Tense morpheme is zero (Present - Recent Past forms of the Second, Third, Fourth, and Fifth Position categories) is the same as found in the corresponding forms of the Third Person Masculine.

The common semantical element in all these words, represented in the translation of the examples by "you and I", is more accurately described by the formula "the action is attributed to a singular person addressed and the speaker together as an actor".

All these forms appear to be members of a productive category which is of the order of the Actor categories. This category we call the category of the First + Second Person Singular.

In the same category we find:

bekámambarám - you and I will kick above,
teŋgámantám - you and I knock (here),
ŋgrúmansakám - you and I hung up there,
uómaŋkeŋám - you and I dibble (dibbled today or yesterday) below.

From the form *ŋgrúmansakám* it appears that root-morpheme-final *ŋ* reacts to an immediately following *m* in the same way as to immediately following *n* or *ŋ*: from the *-ŋ* and the *m-* results a single *-m-*.

To the forms discussed in the §§ 19 to 29 the following can be opposed:

príbmambedám - you and I will throw from here to above,
príbmambetám - you and I throw from here to above,
príbmambepám - you and I threw today or yesterday from here to above,
príbmambekám - you and I threw from here to above,
príbmansedám - you and I will throw from here to there,
príbmansetám - you and I throw from here to there,
príbmansepám - you and I threw today or yesterday from here to there,

príbmansekám - you and I threw from here to there,
príbmensedím - you and I will throw from here to below,
príbmensetím - you and I throw from here to below,
príbmensepím - you and I threw today or yesterday from here to below,
príbmensekím - you and I threw from here to below,
príbmenedím - you and I will throw from here to far away,
príbmenetím - you and I throw from here to far away,
príbmenepím - you and I threw today or yesterday from here to far away,
príbmenekím - you and I threw from here to far away,
príbmeŋkendím - you and I will throw from above or from far away to here,
príbmeŋkentím - you and I throw from above or from far away to here,
príbmeŋkempím - you and I threw today (etc.) from above or from far away to here,
príbmeŋkeŋkím - you and I threw from above or from far away to here,
príbmambandám - you and I will throw from below to here,
príbmambantám - you and I throw from below to here,
príbmambampám - you and I threw today (etc.) from below to here,
príbmambaŋkám - you and I threw from below to here,
príbmansandám - you and I will throw from there to here,
príbmansantám - you and I throw from there to here,
príbmansampám - you and I threw today (etc.) from there to here,
príbmansaŋkám - you and I threw from there to here,
príbmambenarám - you and I will throw from below to above, from there to above, from far away to above,
príbmambenanám - you and I throw (threw) from below to above (etc.)
príbmambenakám - you and I threw from below to above (etc.),
príbmansenarám - you and I will throw from below to there,
príbmansenanám - you and I throw (threw) from below to there,
príbmansenakám - you and I threw from below to there,
príbmeŋkenerím - you and I will throw from above to far away, from below to far away, from there to far away,
príbmeŋkeneném - you and I throw (threw) from above to far away (etc.),
príbmenkenekím - you and I threw from above to far away (etc.),

príbmenseneríim - you and I will throw from above to below, from there to below, from far away to below, from above to there, from far away to there,
príbmenseneném - you and I throw (threw) from above to below (etc.),
príbmenseneкím - you and I threw from above to below (etc.).

All these forms agree with what was stated above in this § about the First + Second Person Singular. Exceptional, however, are the forms of the Eighth, Ninth, Tenth, Fifteenth, and Sixteenth Position categories in which the formal element which precedes the Position morpheme is *-men-* or *-meŋ-* with the vowel *e* and not with the vowel *a* as is found elsewhere. This appears to have a direct connection with the fact that these Position categories have Actor morphemes of the Apophonic series. We may state as a general rule that verb morphemes which are no root-morphemes and have a vowel *a* in other forms change this *a* into *e* in forms with Actor morphemes of the Apophonic series. This rule is given in a wider formula than is suggested by the materials, given above, but its rightness will be confirmed time and again later on.

32. The category of the Dual in the Second to Sixteenth Position categories.

Opposed to:

ŋguábáru - I will bite above,
ŋguábáre - you will bite above,
ŋguábáram - he will bite above,
ŋguábárum - she will bite above,

we find:

ŋguákebáru - we two will bite above,
ŋguákebáre - you (two or more) will bite above,
ŋguákebáram - they two (male beings) will bite above,
ŋguákebárum - they two (not both male beings) will bite above.

The forms of the latter series have in common the element *-ke-* immediately following the root-morpheme and the semantical element of the duality of the actor. To this must be remarked that the form *ŋguákebáru* never can have the meaning "you and I will bite above" but exclusively has the meaning of the speaker and somebody (or something) else as an actor. To this must be added that the form *ŋguákebáre* not only has the meaning "you two will bite above" but

also "you (plural) will bite above". So in this case we find an extra meaning if compared with the other *-ke-* -forms. The meaning of *ŋguákebáram* is such that it can only be used if the actor consists of two male beings, whereas the form *ŋguákebárum* is used if the actor is dual, does not include the speaker or the person addressed, and does not consist of two persons of the male sex. Therefore, the actor of *ŋguákebárum* may be one male and one female being, two female beings, etc.

Precisely the same formal element combined with the same semantical characteristics are found with:

ŋguákebáu - we two bite (bit) above,
ŋguákebáke - you (two, plural) bit above,
ŋguákesáram - they two (male) will bite there,
ŋguákesóm - they two (not exclusively male) bite (bit) there,
ŋguákenáu - we two bite (bit) far away,
ŋguákekeŋáe - you (two or more) bite (bit) below,
ŋgrúŋkeŋákam - they two (male) hung up below,
teŋgáŋkebóm - they two (not excl. male) knock (knocked) above,
uókekeŋám - they two (male) dibble (dibbled) below,
prípkebekú - we two threw from here to above,
prípkesetí - you (two, more) throw from here to below,
prípkebaŋkám - they two (male) threw from below to here,
prípkebenanóm - they two (not excl. male) throw (threw) from below to above, from there to above, from far away to above,
prípkekenenyém - they two (not excl. male) throw from above to far away, from below to far away, from there to far away.

It is possible to add more examples ad infinitum, as the category to which they belong appears to be productive. We call this category the Dual category. Its members are in opposition with the forms discussed in the preceding §§. The latter constitute the category of the Singular whose formal characteristic is zero, except in the First + Second Person (see § 31) in which the morpheme *-maŋ-* marks not only the Person but also the number of the Actor.

As the Second Person Dual may also have the meaning of plurality of the actor, the categorical meaning of the Dual is best described as "not singular, not First or Third Person plural". But we keep the term "Dual", as this is the best fitting short term.

As the Singular category and the Dual category are in mutual opposition, they are of the same order which we call the order of the number of the actor.

33. **Dual forms of the First Position category.**

To the Dual forms of § 32 the following can be added:

ŋguákedú - we two will bite (here),
ŋguákedé - you (two or more) will bite (here),
ŋguákedám - they two (excl. male) will bite (here),
ŋguákedúm - they two (not excl. male) will bite (here),
ŋguáketú - we two bite (here),
ŋguáketé - you (two or more) bite (here),
ŋguáketám - they two (excl. male) bite (here),
ŋguáketúm - they two (not excl. male) bite (here),
ŋguákepú - we two bit (today or yesterday) (here),
ŋguákepé - you (two or more) bit (today etc.) (here),
ŋguákepám - they two (male) bit (today etc.) (here),
ŋguákepúm - they two (not excl. male) bit (today etc.) (here),
ŋguákekú - we two bit (here),
ŋguákeké - you (two or more) bit (here),
ŋguákekám - they two (male) bit (here),
ŋguákekúm - they two (not excl. male) bit (here).

If compared with the corresponding Singular forms, these forms, too, show the morpheme *-ke-*. But we also find an accent on the vowel of the Actor morpheme of each of them. There appears to be a rule saying that in Dual forms, corresponding with Singular forms which have an accent only on the root-morpheme, there is an accent on the vowel of the Actor morpheme.

34. **The First + Second Person Dual.**

Finally, we can add to the Dual forms of § 32 and § 33 the following:

ŋguákedám - we will bite (here),
ŋguáketám - we bite (here),
ŋguákepám - we bit (today or yesterday) (here),
ŋguákekám - we bit (here),
ŋguákebarám - we will bite above,
ŋguákebám - we bite (bit) above,

ŋguákebakám - we bit above,
ŋguákeŋarám - we will bite below,
ŋguákekeŋám - we bite (bit) below,
etc., etc.

The "we" in the given translations asks for further description. For the element of meaning involved is "singular speaker together with dual or plural person addressed" or "dual of plural speaker together with the person addressed (regardless of the latter's number)". The forms are similar to those of the Third Person Masculine Dual, as they have the Number morpheme *-ke-* and the Actor morpheme *-am,* but differ from them in many cases by always having an accent on the *a* of the Actor morpheme so that only in the First Position forms and in the Present - Recent Past forms of the other Position categories there is complete identity. The formal opposition with the First + Second Person Singular forms consists in the difference between the morpheme *-maŋ-* of the latter and the morpheme *-ke-* in the forms under discussion.

This, again, is a productive category which, because of its formal characteristics, must be added to the Actor categories of the Dual. We call it the category of the First + Second Person Dual.

The formal description given above also applies, m u t a t i s m u t a n d i s, to the First + Second Person Dual forms of the Sixth to Sixteenth Position categories, e.g.:

prípkebedám - we will throw from above to here,
prípkesetám - we throw from here to there,
prípkesepím - we threw (today or yesterday) from here to below,
prípkenekím - we threw from here to far away,
prípkekendím - we will throw from above to here or from far away to here,
prípkebantám - we throw from below to here,
prípkesampám - we threw (today or yesterday) from there to here,
prípkebenakám - we threw from below (etc.) to above,
prípkesenanám - we throw (threw) from below to there,
prípkekeneném - we throw (threw) from above (etc.) to far away,
prípkeseneném - we throw (threw) from above (etc.) to below (etc.).

35. **The Root-morpheme in the Dual and Singular forms.**

The formal relations between Singular and Dual forms of many

verbs is a bit more intricate than appears from the examples given in the §§ 32 to 34. For instance, we find, corresponding with the Dual forms:

dýkedu - we two will roast (here),
dýkedé - you (two or more) will roast (here),
etc.,

the Singular forms:

dýedu - I will roast (here),
dýede - you will roast (here),
dýedam - he will roast (here),
dýedum - she (it) will roast (here),
dýemandám - you and I will roast (here).

In other Position categories we find, corresponding with the Dual forms *dýkebáru* etc., *dýkeŋáru* etc., *dýkesáru* etc., *dýkenáru* etc., the Singular forms *dýebáru* etc., *dýeŋáru* etc., *dýesáru* etc., *dýenáru* etc. We see that in all Singular forms the root-morpheme is different from that found in the Dual forms, as it has the vowel-cluster *ýe* in the former and the single vowel *ý* in the latter. This appears to be a general rule for all verbs having, in the Dual forms, a root-morpheme ending in *-y*, e.g.:

ŋgýkedú - we two will split (here), etc., but
ŋgýedu - I will split (here), etc.;
hrýkedú - we two will scream (here), etc., but
hrýedu - I will scream (here), etc.;
hrýkedú - we two will abduct (here), etc., but
hrýedu - I will abduct (here), etc.

Because — as will be shown clearly in our further description — the form of the root-morpheme found in the Singular forms is much more limited in its possibilities of occurrence than the form found in the Dual forms, we take the latter as a norm for the root-morpheme.

The form of the root-morpheme occurring in Singular forms we call the Singular Stem of the root-morpheme. Wether a root-morpheme has a special Singular Stem or not, only depends from its phonemical structure. The rule appears to be: All root-morphemes have the same form in both Dual and Singular forms, except:

a. root-morphemes ending in *-ý*. These have a Singular Stem ending in *-ýe*. (See the instances given above).

b. root-morphemes ending in *-ýŋ*. These have a Singular Stem ending in *-ýeŋ*. E.g.:

dýŋkedú - we two will tie together (here),
dýendu - I will tie together (here),
kýŋkedú - we two will fling down (here),
kýendu - I will fling down (here),
dýŋkedú - we two will remember (here),
dýendu - I will remember (here),
pýŋkedú - we two will flatulate (here),
pýendu - I will flatulate (here).

c. root-morphemes ending in *-éy*. These have a Singular Stem ending in *-ýe*. E.g.:

kréykedú - we two will walk around in search (here),
krýedu - I will walk around in search (here),
ŋgedéykedú - we two will fasten (here),
ŋgedýedu - I will fasten (here),
ŋgréykedú - we two will press (here),
ŋgrýedu - I will press (here).

d. root-morphemes ending in *-áu*. These have a Singular Stem ending in *-uá*. E.g.:

páukedú - we two will wind (here),
puádu - I will wind (here),
ŋgedáukedú - we two will shave (here),
ŋgeduádu - I will shave (here).

e. root-morphemes ending in *-uáu*. These have a Singular Stem ending in *-uá*. E.g.:

kruáukedú - we two will begin (here),
kruádu - I will begin (here),
uáukedú - we two will grate (here),
uádu - I will grate (here).

f. root-morphemes ending in *-óu*. These having a Singular Stem ending in *-úo*. E.g.:

ŋgedóukedú - we two will draw (here),
ŋgedúodu - I will draw (here),
póukedú - we two will blow (here),
púodu - I will blow (here),
tróukedú - we two will look over (here),
trúodu - I will look over (here).

g. root-morphemes ending in *-uóu*. These have a Singular Stem ending in *-uá*. E.g.:

tuóukedú - we two will cut down (here),
tuádu - I will cut down (here),
uóukedú - we two will wash out (here),
uádu - I will wash out (here),
ŋguóukedú - we two will prepare (sago) (here),
ŋguádu - I will prepare (sago) (here).

h. root-morphemes ending in *-áo*. These have a Singular Stem ending in *-uá*. E.g.:

betáokedú - we two will pull out (here),
betuádu - I will pull out (here),
dekáokedú - we two will bind (here),
dekuádu - I will bind (here),
káokedú - we two will conceal (here),
kuádu - I will conceal (here).

j. root-morphemes ending in *-uáo*. These have a Singular Stem ending in *-uá*. E.g.:

ŋgruáokedú - we two will string (here),
ŋgruádu - I will string (here).

k. root-morphemes ending in *-áoŋ*. These have a Singular Stem ending in *-uáŋ*. E.g.:

sáoŋkedú - we two will water (here),
suándu - I will water (here),
káoŋkedú - we two will put (here),
kuándu - I will put (here).

l. root-morphemes ending in *-éi*. These have a Singular Stem ending in *-iá*. E.g.:

ŋéikedú - we two will tear (here),
ŋiádu - I will tear (here),
préikedú - we two will sow (here),
priádu - I will sow (here),
péikedú - we two will pour out (here),
piádu - I will pour out (here).

m. root-morphemes ending in *-éiŋ*. These have a Singular Stem ending in *-iáŋ*. E.g.:

teŋgéiŋkedú - we two will cut (here),
teŋgiándu - I will cut (here),
tenéiŋkedú - we two will peel (here),
teniándu - I will peel (here),
tenéiŋkedú - we two will appear (here),
teniándu - I will appear (here).

n. root-morphemes ending in *-yéi*. These have a Singular Stem ending in *-yá*. E.g.:

tekyéikedú - we two will crush (here),
tekyádu - I will crush (here),
ŋyéikedú - we two will stir (here),
ŋyádu - I will stir (here),
meŋgyéikedú - we two will tie together (here),
meŋgyádu - I will tie together (here).

If the *y* of *-yéi* of the root-morpheme is immediately preceded by a vowel, the Singular Stem ends in *-yiá*, e.g.:

tayéikedú - we two will dig up (here),
tayiádu - I will dig up (here).

o. root-morphemes ending in *-yéiŋ*. These have a Singular Stem ending in *-yáŋ*. E.g.:

tyéiŋkedú - we two will work (the ground) (here),
tyándu - I will work (the ground) (here).

p. root-morphemes ending in *-í*. These have a Singular Stem ending in *-íe*. E.g.:

dríkedú - we two will defecate (here),
dríedu - I will defecate (here).

q. root-morphemes ending in *-iŋ*. These have a Singular Stem ending in *-ieŋ*. E.g.:

ŋgríŋkedú - we two will pull (here),
ŋgríendu - I will pull (here),
tríŋkedú - we two will dig (here),
tríendu - I will dig (here),
ŋgesíŋkedú - we two will wipe off (here),
ŋgesíendu - I will wipe off (here).

r. root-morphemes ending in *-ii*. These have a Singular Stem ending in *-ie*. E.g.:

ríikedú - we two will pack (here),
ríedu - I will pack (here),
tríikedú - we two will break (here),
tríedu - I will break (here).

36. The category of the Plural.

Opposed to:
ŋguáku - I bit (here), and
ŋguákekú - we two bit (here), we find the form
ŋguáiku - we bit (here).

Opposed to:
ŋguákam - he bit (here), and
ŋguákekám - they two bit (here), we find
ŋguáikam - they bit (here).

In the same way we find in the Recent Past category, opposed to *ŋguápu* and *ŋguákepú*: *ŋguáipu* - we bit (here), and opposed to *ŋguápam* and *ŋguákepám*: *ŋguáipam* - they bit (here).

With the same semantical opposition we find opposed to:

ŋguádu and *ŋguákedú*: *ŋguáidiu*,
ŋguátu and *ŋguáketú*: *ŋguáitiu*,
ŋguádam and *ŋguákedám*: *ŋguáidiam*,
ŋguátam and *ŋguáketám*: *ŋguáitiam*,
ŋguábáru and *ŋguákebáru*: *ŋguáibáru*,
ŋguábáram and *ŋguákebáram*: *ŋguáibáram*,
ŋguábáu and *ŋguákebáu*: *ŋguáibáu*,

ŋguábám and *ŋguákebám*: *ŋguáibam*,
ŋguábáku and *ŋguákebáku*: *ŋguáibáku*,
ŋguábákam and *ŋguákebákam*: *ŋguáibákam*,
ŋguáŋáru and *ŋguákeŋáru*: *ŋguáiŋaru*,
ŋguáŋáram and *ŋguákeŋáram*: *ŋguáiŋáram*,
ŋguákeŋáu and *ŋguákekeŋáu*: *ŋguáikeŋáu*,
ŋguákeŋám and *ŋguákekeŋám*: *ŋguáikeŋám*,
ŋguáŋáku and *ŋguákeŋáku*: *ŋguáiŋáku*,
ŋguáŋákam and *ŋguákeŋákam*: *ŋguáiŋákam*,
ŋguásáru and *ŋguákesáru*: *ŋguáisiáru*,
ŋguásáram and *ŋguákesáram*: *ŋguáisiáram*,
ŋguásáu and *ŋguákesáu*: *ŋguáisiáu*,
ŋguásám and *ŋguákesám*: *ŋguáisiám*,
ŋguásáku and *ŋguákesáku*: *ŋguáisiáku*,
ŋguásákam and *ŋguákesákam*: *ŋguáisiákam*,
ŋguánáru and *ŋguákenáru*: *ŋguáiniáru*,
ŋguánáram and *ŋguákenáram*: *ŋguáiniáram*,
ŋguánáu and *ŋguákenáu*: *ŋguáiniáu*,
ŋguánám and *ŋguákenám*: *ŋguáiniám*,
ŋguánáku and *ŋguákenáku*: *ŋguáiniáku*,
ŋguánákam and *ŋguákenákam*: *ŋguáiniákam*.

In the same way, we find opposed to:

uódu and *uókedú*: *uóidiu* - we will dibble (here),
uódam and *uókedám*: *uóidiam* - they will dibble (here),
bekádu and *bekákedú*: *bekáidiu* - we will kick (here),
bekádam and *bekákedám*: *bekáidiam* - they will kick (here),
teŋgándu and *teŋgáŋkedú*: *teŋgáindiu* - we will knock (here),
teŋgándam and *teŋgáŋkedám*: *teŋgáindiam* - they will knock (here),
ŋgrúndu and *ŋgrúŋkedú*: *ŋgrúindiu* - we will hang up (here),
ŋgrúndam and *ŋgrúŋkedám*: *ŋgrúindiam* - they will hang up (here).

All the new forms, introduced here, appear to be members of a productive category. Formally, all members of this category are characterized by an *-i-* immediately following the last vowel of the root-morpheme, whereas, if the first vowel following the root-morpheme is immediately preceded by a consonant which is not velar, labial, or *r*, a second *i* is found in between that vowel and the preceding consonant. The semantical element common to all this words is "plurality of the actor". In the case of forms with the Actor mor-

pheme *-u* the meaning is "the action is attributed to the speaker and two or more others, not including the person(s) addressed, as an actor". In the case of forms having the actor morpheme *-am* the meaning is "the action is attributed to more than two persons or things in which neither the speaker(s) nor the person(s) addressed are included, as an actor". To this must be remarked that, unlike what was found with Singular and Dual forms, differences of sex do not play a role here. We call these forms First Person Plural and Third Person Plural respectively; the whole category to which they belong is called the Plural category. This category is in opposition with those of Singular and Dual and, therefore, is of the Order of the Number of the Actor.

37. The form of the root-morpheme in Plural forms.

Corresponding with *krýedu* - I will walk around in search (here), and *kréykedú* - we two will walk around in search (here), we find *krýidiu* - we will walk around in search (here). In this case the formal difference between the Plural form and the Singular and Dual forms is more than that described in § 36, as in the Plural form the *e* of the root-morpheme is lacking. Precisely the same is found not only in all other Plural forms of this verb but also in the Plural forms of all other verbs having in their Dual forms a root-morpheme ending in *-éy,* e.g.:

ŋgedéyketú - we two fasten (here),
ŋgedýitiu - we fasten here,
péykeŋákam - they two bailed below,
pýiŋákam - they bailed below,
ŋgetéykesám - they two (masc.) rub there,
ŋgetýisiam - they rub there.

It is clear that this peculiarity has something to do with the phonemical structure of the root-morpheme. As more peculiarities of this kind are found, the rule about the formal characteristics of the Plural category asks for an addition. It appears that the following rules must be added:

a. root-morphemes ending in *-éy* have *-ýi* in Plural forms. Examples are already given above.

b. root-morphemes ending in *-íe* have *-iéi* (with shifted accent) in Plural forms, e.g.:

biekedú - we two will open (here),
biéidiu - we will open (here),
siekedú - we two will twist (here),
siéidiu - we will twist (here).

c. root-morphemes ending in *-ýeŋ* have *-ýiŋ* in Plural forms, e.g.:

krýeŋkedú - we two will ring (here),
krýindiu - we will ring (here).

d. root-morphemes ending in *-ýe* have *-ýi* in Plural forms, e.g.:

týekedám - they two (masc.) will push (here),
týidiam - they will push (here).

e. root-morphemes ending in *-íi* have *-íi* in Plural forms, e.g.:

ríikedú - we two will pack (here),
ríidiu - we will pack (here).

f. root-morphemes ending in *-éi* have *-éi* in Plural forms, e.g.:

ŋéikedú - we two will tear (here),
ŋéidiu - we will tear (here),
préiketú - we two sow (here),
préitiu - we sow (here),
meŋgyéiketú - we two tie together (here),
meŋgyéitiu - we tie together (here).

g. root-morphemes ending in *-éiŋ* have *-éiŋ* in Plural forms, e.g.:

ŋgyéiŋketú - we two shake (here),
ŋgyéintiu - we shake (here),
teŋgéiŋketú - we two cut (here),
teŋgéintiu - we cut (here),
syéiŋketú - we two chop (here),
syéintiu - we chop (here).

h. root-morphemes ending in *-ái* have *-ái* in Plural forms, e.g.:

áiketú - we two shout (here),
áitiu - we shout (here).

j. root-morphemes ending in *-úo* have *-úi* in Plural forms, e.g.:

búoketú - we two hang out (here),
búitiu - we hang out (here),
neŋgúoketú - we two swallow (here),
neŋgúitiu - we swallow (here).

Root-morphemes ending in *-uó* follow the normal pattern, e.g.:

uóketú - we two row (here),
uóitiu - we row (here).

k. root-morphemes ending in *-áo* shift their accent and have *-aói* in Plural forms, e.g.:

betáoketú - we two pull out (here),
betaóitiu - we pull out (here),
dekáoketú - we two bind together (here),
dekaóitiu - we bind together (here),
kráoketú - we two demolish (here),
kraóitiu - we demolish (here).

l. root-morphemes ending in *-áoŋ* have *-aóiŋ*, with shift of accent, in Plural forms, e.g.:

sáoŋketú - we two water (here),
saóintiu - we water (here).

m. root-morphemes ending in *-óu* have *-ói* in Plural forms, e.g.:

póuketú - we two blow (here),
póitiu - we blow (here),
dróuketú - we two bath (here),
dróitiu - we bath (here),
tuóuketú - we two cut down (here),
tuóitiu - we cut down (here).

n. root-morphemes ending in *-áu* in which the *a* is not immediately preceded by *u* have *-ói* in Plural forms, e.g.:

páuketú - we two wind (here),
póitiu - we wind (here),
ŋgedáuketú - we two shave (here),
ŋgedóitiu - we shave (here).

o. root-morphemes ending in *-úáu* have *-uái* in Plural forms, e.g.:

uáuketú - we two grate (here),
uáitiu - we grate (here),
kruáuketú - we two begin (here),
kruáitiu - we begin (here).

p. root-morphemes ending in *-áb* have *-ái* in Plural forms, e.g.:

siápketú - we two pour out (here),
siáitiu - we pour out (here),
skápketú - we two squeeze (here),
skáitiu - we squeeze (here).

q. root-morphemes ending in *-éb* have *-éi* or *-éb* in Plural forms. The two forms are in free variation. E.g.:

pépketú - we two peel (here),
péitiu or *péptiu* - we peel (here).

r. root-morphemes ending in *-íb* have *-íi* or *-íb* in Plural forms. These two forms are in free variation. E.g.:

besípketú - we two bend (here),
besíitiu or *besíptiu* - we bend (here),
prípketú - we two throw (here),
príitiu or *príptiu* - we throw (here).

s. root-morphemes ending in *-ýb* have *-ýi* or *-ýib* in Plural forms. These two forms are in free variation. E.g.:

iýpketú - we two shut off (here),
iýitiu or *iýiptiu* - we shut off (here),
pýpketú - we two stab (here),
pýitiu or *pýiptiu* - we stab (here),
betýpketú - we two throw away (here),
betýitiu or *betýiptiu* - we throw away (here).

t. root-morphemes ending in *-úb* have *-úi* or *-úib* in Plural forms. These two forms are in free variation. E.g.:

brúpketú - we two fold (here),
brúitiu or *brúiptiu* - we fold (here),

hrúpketú - we two suck (here),
hrúitiu or *hrúiptiu* - we suck (here).

38. Plural forms of the Sixth to Sixteenth Position category.

In § 36 we saw the Plural forms of the First to Fifth Position category. The Plural forms found in the other Position categories appear to follow the same rules, e.g.:

(Sixth) *príibetú* - we throw from here to above,
(Seventh) *príisietú* - we throw from here to there,
(Eighth) *príisietím* - they throw from here to below,
(Ninth) *príinietím* - they throw from here to far away,
(Tenth) *príikentý* - we throw from above (from far away) to here,
(Eleventh) *príibántu* - we throw from below to here,
(Twelfth) *príisiántam* - they throw from there to here,
(Thirteenth) *príibenanáu* - we throw from below (etc.) to above,
(Fourteenth) *príisienanám* - they throw from below to there,
(Fifteenth) *príikenenéy* - we throw from above (etc.) to far away,
(Sixteenth) *príisieneném* - they throw from above to below (etc.).

However, there is one exception to this rule: side by side with the regular, predictable, forms of the Tenth Position category:

príikendý, príikendím,
príikentý, príikentím,
príikempý, príikempím,
príikeŋký, príikeŋkím,

there occur, as free variants, forms having an *i* immediately following the *k* of the Position morpheme:

príikiendý, príikiendím,
príikientý, príikientím,
príikiempý, príikiempím,
príikieŋký, príikieŋkím.

This is contradictory to the rule, as formulated in § 36.

39. Iterative forms of the First Position category.
The Iterative category and the Momentary category.

In opposition with the forms:

ŋguátu - I bite (here),
ŋguámantám - you and I bite (here),
ŋguáketú - we two bite (here),
ŋguáitiu - we bite (here),

(and other forms of the Present - First Position categories), we find:

ŋguákátu - I bite repeatedly (here),
ŋguámaŋkatám - you and I bite repeatedly (here),
ŋguákekátu - we two bite repeatedly (here),
ŋguáikátu - we bite repeatedly (here),
(etc.).

In the same way, we find opposed to *ŋguápu* - I bit (today, yesterday) (here), (etc.); *ŋguákápu* - I bit repeatedly (today, yesterday) (here), (etc.). And, opposed to *ŋguáku* - I bit (here), etc., there is *ŋguákáku* - I bit repeatedly (here), etc.

All these new forms constitute a productive category whose members are characterized by the formal element *-ka-* immediately preceding the Tense morpheme. The *a* of this *-ka-* has an accent, except in the First + Second Person forms which have an accent on the Actor morpheme.

The semantical element common to these words is "repeatedness of the action"; sometimes it may be described as "successiveness of the action" (if the actor is plural), e.g. *ŋguáikákam* - they bit repeatedly, or: they bit one after another.

This category we call the Iterative category.

Of course, the forms which are not formally characterized and are in opposition with the Iterative forms also constitute a category whose members have in common the semantical element "the action is continuous, uninterrupted, or confined to one moment". This we call the Momentary category.

No *ka-* -forms are found corresponding with the Future forms (without *-ka-*). So in the Iterative category, Tense categories are limited to Present, Recent Past, and Past.

40. Iterative forms of the other Position categories.

The members of the Iterative category belonging to Position categories other than the First show some peculiarities in their forms which will be treated here.

Opposed to:

ŋguábáku - I bit above,
ŋguákebáku - we two bit above,
ŋguáibáku - we bit above,
etc.

we find:

ŋguábekáku - I bit repeatedly above,
ŋguákebekáku - we two bit repeatedly above,
ŋguáibekáku - we bit repeatedly above,
etc.

We see that in the Iterative forms the morpheme of the Second Position category is *-be-*.

Just like the Momentary forms of the Position categories of the second group (see § 30) the corresponding Iterative forms show no opposition between Present and Recent Past. But the morpheme of the Present - Recent Past tense appears to be *-t-* in the Iterative forms (not zero like in the Momentary forms), e.g.:

ŋguábekátu - I bite (bit) repeatedly above,
ŋguámambekatám - you and I bite (bit) repeatedly above,
ŋguákebekátu - we two bite (bit) repeatedly above,
ŋguáibekátu - we bite (bit) repeatedly above.

The Iterative forms of the Third Position category are:

Present - Recent Past *ŋguáŋgátu* - I bite (bit) repeatedly below, etc.
Past tense *ŋguáŋgáku* - I bit repeatedly below, etc.

In these forms the Position morpheme is *-ŋ-*, whereas the Iterative morpheme is *-g-*.

The only formal peculiarity of the Iterative forms of the Fourth Position category is their Position morpheme which is *-s-*, e.g.:

ŋguáskátu - I bite (bit) repeatedly there,
ŋguáskáku - I bit repeatedly there.

The combination of the morphemes of the Iterative and of the Fifth

Position category appear to result in *-neŋga-* as the forms in question are:

ŋguáneŋgátu - I bite (bit) repeatedly far away,
ŋguáneŋgáku - I bit repeatedly far away,
etc.

The Iterative forms of the Sixth Position category do not show any peculiar features, e.g.:

príbekátu - I throw repeatedly from here to above,
príbekápu - I threw (today, yesterday) repeatedly from here to above,
príbekáku - I threw repeatedly from here to above.

They are the same as the corresponding forms of the Second Position category except for the forms with tense morpheme *-t-* having for the Sixth Position category only the meaning of the Present tense, as in this Position category there is a separate Recent Past tense.

The Iterative forms of the Seventh Position category are the same as those of the Fourth Position category, except for the existence of a separate Recent Past tense, e.g.:

prípskátu - I throw repeatedly from here to there,
prípskápu - I threw (today, yesterday) repeatedly from here to there,
prípskáku - I threw repeatedly from here to there.

In the Eighth Position category we find Iterative forms like:

prípskéty - I throw repeatedly from here to below,
príbmensketím - you and I throw repeatedly from here to below,
prípkeskéty - we two throw repeatedly from here to below,
príiskéty - we throw repeatedly from here to below,
prípsképy - I threw (today, yesterday) repeatedly from here to below,
prípskéky - I threw repeatedly from here to below,
etc.

We see that in all these forms the Iterative morpheme has the vowel *e*. This appears to be the case in all forms with Actor morphemes of the Apophonic series. In the Iterative forms as in the Momentary forms, the formal opposition between the Seventh and Eighth Position categories consists in difference of vowels only.

In the Ninth Position category we find Iterative forms like:

príbneŋgéty - I throw repeatedly from here to far away,
príbneŋgépy - I threw (today, yesterday) repeatedly from here to far away,
príbneŋgéky - I threw repeatedly from here to far away.

The difference between the Iterative forms of this Position category and those of the Fifth consists in different vowels and the existence of a separate Recent Past tense.

In the Tenth Position category we find Iterative forms like:

príŋgentý - I throw repeatedly from above (far away) to here,
príŋgempý - I threw (today, yesterday) repeatedly from above (far away) to here,
príŋgeŋký - I threw repeatedly from above (far away) to here,
etc.

In these forms the Iterative morpheme and the Position morpheme appear to result in the formal element *-ŋgeŋ-*. This element does not have an accent. Just as in the Momentary forms, there is always an accent on the Actor morpheme. A striking feature of the given examples is the absence of the final *-b* of the root-morpheme. The same is found in all Iterative Tenth Position forms of verbs that normally have their root-morpheme ending in *-b*, e.g.:

betýŋgentím - he throws away repeatedly from above to here,

if compared with the corresponding Momentary form:

betýpkentím - he throws away from above to here.

The rule appears to be that all root-morphemes which end in *-b* drop this *b* if they are immediately followed (within the word) by a consonant cluster beginning with a nasal.

As Iterative forms of the Eleventh Position category we find:

príbekántu - I throw repeatedly from below to here,
príbekámpu - I threw (today, yesterday) repeatedly from below to here,
príbekáŋku - I threw repeatedly from below to here,
etc.

On ground of these forms one might say that the element *-baŋ-* that in § 24 was indicated as the morpheme of the Eleventh Position category consist of an element *-ba-* (that behaves in precisely the same way as the morpheme of the Second Position category) and an element *-ŋ-* and that in the Iterative forms these two elements are separated by the Iterative morpheme. One might also say that the morpheme of the Iterative is infixed in the morpheme of the Position category.

A similar phenomenon is found with the Iterative forms of the Twelfth Position category, e.g.:

pípskántu - I throw repeatedly from there to here,
pípskámpu - I threw (today, yesterday) repeatedly from there to here,
pípskáŋku - I threw repeatedly from there to here,
etc.

Here the Position morpheme *-saŋ-* is split by the infixed Iterative morpheme.

The Iterative forms of the Thirteenth Position category are comparable with those of the Fifth Position category, e.g.:

píbeneŋgátu - I throw (threw) repeatedly from below (there, far away) to above,
píbeneŋgáku - I threw repeatedly from below (there, far away) to above.

The same can be said of the Iterative forms of the Fourteenth Position category, e.g.:

pípseneŋgátu - I throw (threw) repeatedly from below to there,
pípseneŋgáku - I threw repeatedly from below to there.

The same comparability in form with the Iterative forms of the Fifth Position category is found with the Iterative forms of the Fifteenth Position category, e.g.:

pípkeneŋgéty - I throw (threw) repeatedly from above (below, there) to far away,
pípkeneŋgéky - I threw repeatedly from above (below, there) to far away.

The *e*-variant, occurring here instead of the *a*-variant, is due to the

fact that the Actor morphemes are of the Apophonic series (cf. what is said about this with reference to the Eighth Position category in this §).

The Iterative forms of the Sixteenth Position category are fully comparable with those of the Fifteenth Position category, e.g.:

prípseneŋgéty - I throw (threw) repeatedly from above (there, far away) to below, from above (far away) to there,
prípseneŋgéky - I threw repeatedly from above to below, etc.

41. The Masculine Object category.

Opposed to the series:

suámbáru - I will water above,
etc.,
sáoŋkebáru - we two will water above,
etc.,
saóimbáru - we will water above,
etc.,

we find the series:

suáŋrebáru - I will water him above,
etc.,
sáoŋkrebáru - we two will water him above,
etc.,
saóiŋrebáru - we will water him above,
etc.

In the same way we find in other Tenses, as opposed to *suámbáu* etc. and *suámbáku* etc.:

suáŋrebáu - I water (watered) him above, etc.,
suáŋrebáku - I watered him above, etc.

In other Position categories, opposed to *suáŋáru* etc., *suáŋkeŋáu* etc., *suánsáru* etc., *suánáru* etc., we find:

suáŋreŋáru - I will water him below, etc.,
suáŋrekeŋáu - I water (watered) him below etc.,
suáŋresáru - I will water him there, etc.,
suáŋrenáru - I will water him far away, etc.

Here we find members of a productive category, formally marked by the element *-re-* which has its place immediately following the root-morpheme except in those forms which contain the Dual morpheme *-ke-* which then precedes the element *-re-* and takes the form *-k-*.

The common semantical element can be described as "the action is connected with an object, consisting of one or two male beings, not identical with the speaker or the person addressed". If the object is explicitly mentioned or not, does not make any difference for the use of these *-re-* -forms. We call this category the category of the Masculine Object.

The Masculine Object forms of the Sixth to Sixteenth Position categories answer fully to the description given above, e.g.:

príbrebedú - I will throw him from here to above,
príbreseté - you throw him from here to there,
príbresenanám - he throws (threw) him from below to there.

But the corresponding Momentary forms of the First Position category show some peculiarities:

suáŋráru - I will water him (here),
etc.,
suáŋremandám - you and I will water him (here),
etc.,
sáoŋkráru - we two will water him (here),
etc.,
saóiŋráru - we will water him (here),
etc.,
suáŋrátu - I water him (here),
etc.,
suáŋrápu - I watered him here (today, yesterday),
etc.,
suáŋráku - I watered him (here),
etc.

We see that the Masculine Object morpheme is *-ra-* with an accent on the *a*, if immediately preceding the Tense morpheme. In the case of Future forms the Tense morpheme is *-r-*.

The Masculine Object forms of the Iterative all follow the rule given above, e.g.:

suáŋrekátu - I water him repeatedly (here),
sáoŋkrebekáke - you (du.) watered him repeatedly above,
saóiŋreskátam - they water him there repeatedly,
príbreŋgentím - he throws him repeatedly from above to here.

42. The Plural Object category.

Opposed to the series:

suándu - I will water (here),
etc. etc.

and the series:

suáŋráru - I will water him (here),
etc. etc.

we find the following forms:

sáondáru - I will water them (here),
sáondáre - you will water them (here),
sáondáram - he will water them (here),
sáondárum - she (it) will water them (here),
sáondemandám - you and I will water them (here),
saóindiáru - we (we two) will water them (here),
saóindiáre - you (you two) will water them (here),
saóindiáram - they (they two, masc.) will water them (here),
saóindiárum - they two (non-masc.) will water them (here),
saóindiarám - you and I (you and we) will water them (here).

Opposed to:

suámbáru - I will water above,
etc.,
suáŋrebáru - I will water him above,
etc.,

we find:

sáondebáru - I will water them above,
etc.

For other Tenses and other Position categories we find:

sáondátu - I water them (here),
sáondebáu - I water (watered) them above,
sáondeŋáru - I will water them below,
sáondesáru - I will water them there,
sáondenáru - I will water them far away,
príbdebedú - I will throw them from here to above,
prípdesedú - I will throw them from here to there,
etc. etc.

There also are the corresponding Iterative forms:

sáondekátu - I water them repeatedly (here),
saóindiekátu - we (we two) water them repeatedly (here),
saóindiekáte - you (dual or plural) water them repeatedly (here),
saóindiekátam - they (they two, masc.) water them repeatedly (here),
saóindiekátum - they two (non-masc.) water them repeatedly (here),
saóindiekatám - you and I (you and we) water them repeatedly (here),
sáondebekátu - I water (watered) them repeatedly above,
sáondeŋgátu - I water (watered) them repeatedly below,
príbdeŋgentý - I throw them repeatedly from above to here,
etc.

All these new forms belong to a productive category whose members have in common the semantical element "the action is connected with a plural object". Formally, the members are characterized by an element *-de-* that immediately follows the root-morpheme and takes the form *-da-* whenever it is immediately followed by the Tense morpheme.

This category we call the Plural Object category. It is in opposition with the Masculine Object category and also with those verbal forms which are not marked as to object. These unmarked forms are used, if the speaker thinks the action connected with a singular or dual object which does not consist of one or two male beings, but also if the action is not thought being connected with any object. These unmarked forms constitute the category of the Unspecified Object.

The members of the Plural Object category ask for further discussion. The first striking fact about them is that with those verbs which have a special Singular stem for the Unspecified Object and Masculine Object forms (see § 35) this special form of the root-morpheme does not occur in Plural Object forms. Further, it must be observed that all non-Singular forms have the *-i-* which we came to know as Plural marker and also the special form of the root-

morpheme which belongs to Plural forms. However, as far as their meaning is concerned, they are no typical Plural Actor forms, as they may have the meaning of Dual Actor, in the case of the Third Person Neutral even exclusively so. In the Plural Object category there is no opposition between Dual and Plural of the Actor, except with the non-masculine Third Person for which there is a separate form having only Dual meaning, whereas there is only one form for both Third Person Plural (regardless of sex) and Third Person Dual Masculine.

As to the meaning of the members of the Plural Object category, is must be remarked that in case of a dual object (not including the speaker or the person addressed) the speaker has a free choice between forms of this category and those of the Unspecified Object or Masculine Object categories.

43. **The Durative category.**

To *príptu* - I throw (here), and all the other Present forms with root-morpheme *prib-* which we have seen in the preceding §§ the following forms can be opposed:

príptemtý - I am throwing (here),
príptemtí - you are throwing (here),
príptemtím - he is throwing (here),
príptemtým - she (it) is throwing (here),
príptementím - you and I are throwing (here),
príitiemtý - we (we two) are throwing (here),
príitiemtí - you (du., plur.) are throwing (here),
príitiemtím - they (they two, masc.) are throwing (here),
príitiemtým - they two (non-masc.) are throwing (here),
príitiemtím - you and I (you and we) are throwing (here),
príptembéy - I am throwing above,
etc.
príptemembém - you and I are throwing above,
príitiembéy - we (we two) are throwing above,
etc.,
príptemkeŋéy - I am throwing below,
etc.,
príptemséy - I am throwing there,
etc.,
príptemnéy - I am throwing far away,
etc.,

príptembetý - I am throwing from here to above,
etc.,
príptemsetý - I am throwing from here to there,
etc.,
príptemsetý - I am throwing from here to below,
etc.,
príptemnetý - I am throwing from here to far away,
etc.,
príptemkentý - I am throwing from above (from far away) to here,
etc.,
príptembénty - I am throwing from below to here,
etc.,
príptemsénty - I am throwing from there to here,
etc.,
príptembenenéy - I am throwing from below (there, far away) to
etc., above,
príptemsenenéy - I am throwing from below to there,
etc.,
príptemkenenéy - I am throwing from above (there, below) to far
etc., away,
príptemsenenéy - I am throwing from above (there, far away) to
etc. below, from above (far away) to there,

All these forms belong to a productive category whose members are characterized by the formal element *-tem-* which has its place immediately following the root-morpheme, and Actor morphemes of the Apophonic series. The semantical element they have in common is "the action continues". We call this category the Durative category.

In the Durative category there is no formal opposition between forms for dual Actor and those for Plural Actor, except for the Third Person Neutral, whereas all non-Singular forms are, formally, Plural forms, just like what we found in the Plural Object category. From forms like *sáontemtý* - I am watering (here), it appears that those verbs which have a special Singular stem in the Unspecified Object and Masculine Object category, do not show this special form of the root-morpheme in the Singular forms of the Durative. This also is parallel to what is found in the Plural Object category.

The Durative category is in opposition not only with the category of the Unspecified Object but also with the Masculine Object and Plural Object categories and, therefore, is of the same order. Though

this is seldom the case, an object may be mentioned in a sentence in which the predicate is a Durative form. This object, however, does not have any influence on the verb-form, in other words: Durative forms are indifferent to sex or number of the object.

It might be said that the Durative category is opposed to the whole group of non-Durative categories in which the opposition of the three object categories plays a role. But on purely formal grounds the Durative category can be seen in one line with the categories of Unspecified Object, Masculine Object, and Plural Object.

It must be observed that those Position categories whose mutual formal opposition in the categories of Unspecified, Masculine, and Plural Object consists only in the difference of the vowels of the Actor morphemes, lack this formal difference in the Durative forms, as these all have Actor morphemes of the Apophonic series. The result is that there is no formal difference between the Seventh and the Eighth or between the Fourteenth and the Sixteenth Position categories in the Durative forms.

In most cases also the forms of the First + Second Person and the Third Person Plural are the same, because all Actor morphemes have the accent, except those of the Eleventh and Twelfth Position categories in which this is only the case with First + Second Person forms. In these two Position categories there is a formal difference between the First + Second Person and Third Person Plural forms, e.g.:

príitiembéntim - they are throwing from below to here,
príitiembentím - you and we are throwing from below to here,
príitiemséntim - they are throwing from there to here,
príitiemsentím - you and we are throwing from there to here.

44. Iterative forms of the Durative.

Corresponding with the Durative forms of § 43 there are also Iterative forms:

príptemkéty - I am throwing repeatedly (here),
príptembekéty - I am throwing repeatedly above,
príptemŋgéty - I am throwing repeatedly below,
príptemskéty - I am throwing repeatedly there,
príptemneŋgéty - I am throwing repeatedly far away,
príptembekéty - I am throwing repeatedly from here to above,
príptemskéty - I am throwing repeatedly from here to there,

príptemskéty - I am throwing repeatedly from here to below,
príptemneŋgéty - I am throwing repeatedly from here to far away,
príptemŋkénty - I am throwing repeatedly from above (far away) to here,
príptembekénty - I am throwing repeatedly from below to here,
príptemskénty - I am throwing repeatedly from there to here,
príptembeneŋgéty - I am throwing repeatedly from below (there, far away) to above,
príptemseneŋgéty - I am throwing repeatedly from below to there,
príptemkeneŋgéty - I am throwing repeatedly from above (below, there) to far away,
príptemseneŋgéty - I am throwing repeatedly from above (there, far away) to below, from above (far away) to there.

These forms agree with what is said about Iterative forms in § 39 and § 40 and about Durative forms in § 43. Formally, here not only the Seventh and Eighth Position categories are identical, and the Fourteenth and the Sixteenth, but also the Second and Sixth, and the Fifth and Ninth.

As free variants for the forms given above forms are used in which the Durative morpheme is *-temeŋ-*, except for the First + Second Person Singular and for the Second, Sixth, and Fifteenth Position categories. These variants are:

First Position category: *príptemeŋkéty,* etc.,
Third Position category: *príptemeŋgéty,* etc.,
Fourth, Seventh and Eighth Position categories: *príptemenskéty,* etc.,
Fifth and Ninth Position categories: *príptemeneŋgéty,* etc.,
Tenth Position category: *príptemeŋkénty,* etc.,
Eleventh Position category: *príptemembekénty,* etc.,
Twelfth Position category: *príptemenskénty,* etc.
Thirteenth Position category: *príptemembeneŋgéty,* etc.,
Fourteenth and Sixteenth Position categories: *príptemenseneŋgéty,* etc.

Moreover, Durative Iterative forms of the Tenth and First Position categories may have *g* instead of the *k* of the Iterative morpheme, as free variants:

First Position category: *príptemgéty,* etc., or *príptemeŋgéty,* etc.,
Tenth Position category: *príptemgénty,* etc., or *príptemeŋgénty,* etc.

A form like *príptemeŋgéty* may have the meaning "I am throwing repeatedly (here)" (First Position category) but also "I am throwing repeatedly below" (Third Position category).

For the First and Tenth Position categories the *g*-variants are more frequently used than those with *-k-*.

45. **Tense categories in the Durative.**

Corresponding with the Present forms of the Iterative of the Durative we find Past tense forms: *príptemkéky* - I was throwing repeatedly (here), etc., and for the Position categories of the first group also Recent Past forms: *príptemképy* - I was (today, yesterday) throwing repeatedly (here), etc. But Future forms do not occur. Probably, to the Nimboran speakers' mind the categorial meaning of the Future is incompatible with that of the Durative.

In the Momentary of the Durative, however, we only find the series of forms which, in § 43, we came to know as Present forms. And Present forms they are, both formally and semantically, but a direct opposition with other Tenses is absent.

Maybe connected with this is the fact that in the semantical opposition between Momentary and Iterative forms of the Durative elements are found which do not occur with the corresponding non-Durative forms. First, the Momentary forms (of the Durative) also have the meaning of "continuation of an action in the future". The Present forms of the Iterative of the Durative, on the contrary, have the meaning "continuation in the present of an action, begun in the past", e.g.:

dámtemtý - I am eating (and will go on eating),
dámtemgéty - I am (still) eating (have not yet finished eating).

Probably connected with the absence of corresponding forms in the Momentary category is the fact that Past and Recent Past forms of the Iterative of the Durative can be used to denote a continual action in the past without any element of repetition being present.

46. **The category of the Infinitive.**

Opposed to:

ŋguádu - I will bite (here),
ŋguákebáu - we two bite above,
ŋguátemeŋgétim - he is biting repeatedly below,

and all other forms of this verb, discussed so far, we find:

ŋguá - 1° (to) bite, 2° bite!, 3° bitten.

There appears to exist a whole series of such forms, e.g.:

kiŋ - to pack, pack! packed.

Together, they constitute a productive category. Their formal mark is the absence of any categorial morpheme: they consist of a bare root-morpheme. The common semantical element is less easy to describe. It appears that some heterogeneous semantical elements are found side by side, distinguishable in the different cases in which the forms in question are used:

1° just the absence of all the other categorial meanings, in cases like:

no po ŋguá - he wants to bite,
ŋo ŋguá besám - I refuse to bite.

2° a curt order: *ŋguá* - bite! For a more polite order, a friendly request etc. the Second Person Future is used:

ŋguáde - please, bite! have the goodness to bite!

3° a state, caused by being submitted to the action, attributed to a noun:

ndíe hru me ŋguá - that man is already bitten,
hru ŋguá be ndíe - the bitten man is there.

This use is the same as that of adjectives, e.g.:

ndíe hru krapó - that man is bad,
hru krapó be ndíe - the bad man is there.

This category we call the category of the Infinitive.

The indifference of Infinitive forms in regard to the other categories is seemingly absent in cases like:

táo - to put many objects,
dáo - to give (take) many objects,
ráu - to roast many objects,
préi - to bring many objects,

as these could be thought to be connected with the Plural Object category. However, we must assume that these are Infinitives of verbs,

having the semantical element of "many objects" as part of their lexical meaning. In the cases of *táo, ráu,* and *préi* this becomes quite clear from other forms which, without being Plural Object forms, still possess the plural object-element in their meaning. The fact that *táo, dáo, ráu,* and *préi* and words, morphologically related to them, are used, by way of suppletion (see Ch. I, § 10), instead of the (non-existing) forms of the Plural Object category of *téy* - put, *téi* - take, give, *déy* (*dy*-) - roast, and a series of forms with zero root-morpheme to which belongs *rebedú* - I will bring from here to above, respectively, is not relevant, as the latter have no morphological connections with the first.

In the examples, cited above, the form of the Infinitive is the same as that of the root-morpheme in its combinations with the various morphemes but not the same as the special Singular or Plural stem, found with some root-morphemes. This appears to be the case with the great majority of Infinitive forms, e.g.:

neŋgá - to light (etc.),
teŋgáŋ - to knock (etc.),
sam - to put inbetween (etc.),
skýe - to smoke (etc.),
bíe - to open (etc.),
ŋgriŋ - to draw, trail (etc.),
teŋgéiŋ - to cut (etc.),
ŋgedéy - to fasten (etc.),
temýŋ - to stab (etc.),
uó - to dibble (etc.),
sebúo - to sew (etc.),
tráo - to lift (etc.),
dóu - to start (etc.),
hruŋ - to break (etc.),
siáb - to pour out (etc.),
peb - to peel (etc.),
pyb - to stick (etc.),
brub - to fold (etc.).

But in correspondence with root-morphemes, ending in *-í,* we find Infinitives with final *-íi,* e.g.:

dríkedú - we two will defecate (here),
dríi - to defecate (etc.).

Corresponding with root-morphemes, ending in *-ý* we find the Infinitives ending in *-éy,* e.g.:

dýkedú - we two will roast (here),
déy - to roast (etc.).

Corresponding with root-morphemes ending in *-ýeŋ* we find Infinitives ending in *-ýŋ,* e.g.:

krýeŋkedú - we two will ring (here),
kryŋ - to ring (etc.).

Corresponding with root-morphemes, ending in *-áoŋ*, we find Infinitives ending in *-óŋ*, e.g.

sáoŋkedú - we two will water (here),
soŋ - to water (etc.).

47. The category of the Final Infinitive.

Opposed to the Infinitive forms:

bíe - to open (etc.),
búo - to hang out (etc.),
múo - to make (etc.),
syéiŋ - to cut loose (etc.),

we find the following forms:

bebíe - in order to open,
bebúo - in order to hang out,
memúo - in order to make,
sesyéiŋ - in order to cut loose.

The latter forms belong to a productive category whose members are formally characterized by the reduplication of the initial consonant with the vowel *e* in between but, for the rest, are the same as the Infinitive, as described in the preceding §. The semantical element that is common to the members of this category is "the action is presented as goal, intention, or motive". An example is given here that may help to make clear the semantical opposition between this category and the Infinitive:

ndíe mái bíe kebári temíen - (this door open work big) it is a big job to open this door,
no iamó ne mái bebíe ho - he goes to the house to open the door.

This category we call the category of the Final Infinitive.

The peculiarities in form of some members of this category ask for a more detailed discussion.

A Final Infinitive, corresponding with an Infinitive with word-initial

consonant immediately followed by an *e* which is immediately followed by another consonant, has the same form as that Infinitive, e.g.

bekéi - 1° to rise, 2° in order to rise,
neŋgúo - 1° to swallow, 2° in order to swallow,
reŋgýe - 1° to show, 2° in order to show.

A Final Infinitive, corresponding with an Infinitive which has an initial stop or *s* immediately followed by a vowel which immediately precedes a nasal or a vowel which is immediately followed by a nasal, has the initial consonant of the Infinitive doubled with, in between, the vowel *e* immediately followed by a nasal homorganic to that consonant, e.g.

buŋ - to wait,	*bembúŋ* - in order to wait,
dyŋ - to tie together,	*dendýŋ* - in order to tie together,
dam - to eat,	*dendám* - in order to eat,
kiŋ - to crush,	*keŋkíŋ* - in order to crush,
soŋ - to water,	*sensóŋ* - in order to water,
teŋgáŋ - to knock,	*tenteŋgáŋ* - in order to knock,
tenéiŋ - to peel,	*tentenéiŋ* - in order to peel,
déiŋ - to stretch out oneself,	*dendéiŋ* - in order to stretch out oneself,
dóuŋ - to draw,	*dendóuŋ* - in order to draw.

If the initial consonant of an Infinitive is separated from a following nasal by more than two vowels, the doubled consonant of the corresponding Final Infinitive is separated by *e* without nasal, e.g.

syéiŋ - to cut loose,	*sesyéiŋ* - in order to cut loose,
tyćiŋ - to even out (ground),	*tetyéiŋ* - in order to even out.

If an Infinitive has an initial consonant-cluster, the corresponding Final Infinitive has reduplication of the first consonant only, e.g.

brub - to fold,	*bebrúb* - in order to fold,
drii - to defecate,	*dedrii* - in order to defecate,
prib - to throw,	*pepríb* - in order to throw,
práu - to dance,	*pepráu* - in order to dance,
spóu - to unloosen,	*sespóu* - in order to unloosen,
skab - to pinch,	*seskáb* - in order to pinch,
skréy - to shake,	*seskréy* - in order to shake,
tréy - to pursue,	*tetréy* - in order to pursue.

In accordance with the rule given above, the *e* in between the reduplicated consonant of the Final Infinitive is followed by a nasal homorganic to that consonant, if in the Infinitive the vowel, immediately following the initial consonant-cluster, is followed by a nasal, either directly or with only one vowel intervening, e.g.

kryŋ - to ring,	*keŋkrýŋ* - in order to ring,
triŋ - to dig,	*tentríŋ* - in order to dig,
skiŋ - to strangle,	*senskíŋ* - in order to strangle,
priŋ - to fly,	*pempríŋ* - in order to fly.

But if the first consonant of an initial cluster of and Infinitive is *ŋ*, the Final Infinitive has the whole cluster reduplicated, e.g.

ŋgedáu - to shave,	*ŋgeŋgedáu* - in order to shave,
ŋgedéy - to attach,	*ŋgeŋgedéy* - in order to attach,
ŋgréy - to press,	*ŋgreŋgréy* - in order to press.

If an Infinitive has initial *hr-*, the *h* is dropped and the *r* is reduplicated in the Final Infinitive, e.g.

hréy - to scream,	*reréy* - in order to scream,
hri - to go down,	*rerí* - in order to go down,
hrub - to suck,	*rerúb* - in order to suck,
hruŋ - to break,	*rerúŋ* - in order to break.

If an Infinitive has initial *a*, the corresponding Final Infinitive has the same form as the Infinitive, e.g.

ái - to shriek,	*ái* - in order to shriek,
apiáŋ - 1° to fill up, 2° in order to fill up.	

If an Infinitive has initial *i* immediately followed by a consonant, this *i* is doubled in the corresponding Final Infinitive, e.g.

iró - to fill,	*iiró* - in order to fill,
iŋgáo - to wash,	*iiŋgáo* - in order to wash,
isiú - to shake,	*iisiú* - in order tc shake.

If an Infinitive has initial *i* immediately followed by a vowel, this *i* is reduplicated with an *e* in between in the corresponding Final Infinitive, e.g.

iáo - to rub,	*ieiáo* - in order to rub,
iásiŋ - to bathe,	*ieiásiŋ* - in order to bathe.

If an Infinitive has initial *u,* this *u* is doubled in the corresponding Final Infinitive, except if the initial *u* of the Infinitive is immediately followed by a second *u* in which case the Final Infinitive has the same shape as the Infinitive, e.g.

uáu - to rasp,	*uuáu* - in order to rasp,
uó - to dibble,	*uuó* - in order to dibble,
uóu - to row,	*uuóu* - in order to row,
uúŋ - to weed,	*uúŋ* - in order to weed,
uúo - to answer,	*uúo* - in order to answer.

If an Infinitive has initial *y,* the corresponding Final Infinitive has an *u* immediately following this *y*, e.g.

yá - to look for,	*yuá* - in order to look for,
yé - to signal,	*yué* - in order to signal.

48. The First Secondary Verb Category.

Opposed to

biedum - she (it) will open (here),
bierárum - she (it) will open him (here),
biedárum - she (it) will open them (here),

we find the forms *biedarúm* and *bierarúm,* both meaning "she (it) will be opened (here), will (fall) open (here)".

And opposed to

krúodu - I will bury (here),
krúoráru - I will bury him (here),
króudáru - I will bury them (here),

we find

króurarú and *króudarú* - I will be buried (here).

What we have found appears to be a productive category which, on further investigation, shows the following possibilities of other forms:

króurarú or *króudarú* - I will be buried (here),
króuraré or *króudaré* - you will be buried (here),
króurarám or *króudarám* - he will be buried (here),
króurarúm or *króudarúm* - she (it) will be buried (here),
króudemandám - you and I will be buried (here),
króudiarú - we two will be buried (here),
króudiaré - you two will be buried (here),
króudiarám - they two (male) will be buried (here),
króudiarúm - they two (female) will be buried (here),
króukrarám - they two (inanimate things) will be buried (here),
króudiemandám - you and we will be buried (here),
króudiemándu - we will be buried (here),
króudiemánde - you (plur.) will be buried (here),
króudiarám - they (animate) will be buried (here),
króurarám - they (inanimate) will be buried (here).

In other Tense categories of the First Position category we find:

króuratú or *króudatú* - I am buried (here),
etc.,
króurapú or *króudapú* - I was buried (here) (today, yesterday),
etc.,
króurakú or *króudakú* - I was buried (here),
etc.

In the Second Position category:

króurebarú or *króudebarú* - I will be buried above,
króurebaré or *króudebaré* - you will be buried above,
króurebarám or *króudebarám* - he will be buried above,
króurebarúm or *króudebarúm* - she (it) will be buried above,
króudemambarám - you and I will be buried above,
króudiebarú - we two will be buried above,
króudiebaré - you two will be buried above,
króudiebarám - they two (male) will be buried above,
króudiebarúm - they two (female) will be buried above,
króukrebarám - they two (inanimate) will be buried above,
króudiemambarám - you and we will be buried above,
króudiemambáru - we will be buried above,
króudiemambáre - you (plur.) will be buried above,
króudiebarám - they (animate) will be buried above,
króurebarám - they (inanimate) will be buried above,

further:

króurebáu or *króudebáu* - I am (was) buried above,
etc.,
króurebakú or *króudebakú* - I was buried above,
etc.

In the Third Position category:

króureŋarú or *króudeŋarú* - I will be buried below,
etc.,
króurekeŋáu or *króudekeŋáu* - I am (was) buried below,
etc.,
króureŋakú or *króudeŋakú* - I was buried below,
etc.

In the Fourth Position category:

króuresarú or *króudesarú* - I will be buried there,
etc.,
króuresáu or *króudesáu* - I am (was) buried there,
etc.,
króuresakú or *króudesakú* - I was buried there,
etc.

In the Fifth Position category:

króurenarú or *króudenarú* - I will be buried far away,
etc.,
króurenáu or *króudenáu* - I am (was) buried far away,
etc.,
króurenakú or *króudenakú* - I was buried far away,
etc.

Forms of the Sixth to Sixteenth Position categories appear not to exist in this category, nor do Iterative forms.

Examination of these forms discloses the following facts:

1° the root-morpheme has always the shape of the Infinitive and never shows a special Singular or Plural stem;

2° the forms are all characterized by an element *-ra-* or *-da-* which is *-re-* or *-de-* resp., if not immediately preceding the Tense morpheme;

3° there are separate forms for inanimate actor in the Third Person Dual and Plural, and also for the Second Person Plural;

4° in the Singular, except for the First + Second Person, *ra-* and *da*-forms are in free variation but for the Third Person Inanimate Dual and the Third Person Inanimate Plural only *ra*-forms occur, whereas in all the other Persons of Dual and Plural only *da*-forms are found;

5° the First + Second Person Singular, the First + Second Person Dual (Plural), the First Person Plural, and the Second Person Plural always have an element *-maŋ-* preceding the Position morpheme, or the Tense morpheme resp.;

6° the Third Person Inanimate Dual is marked off against the corresponding Singular and Plural forms by the element *-k-* and the Actor morpheme *-ám,* but the Third Person Inanimate Plural is characterized by the Actor morpheme *-ám* only;

7° the other non-Singular forms are characterized by *-i-* but only following the *d* of the categorial morpheme and not in the root-morpheme;

8° the Future morpheme is always *-r-,* except if the element *-maŋ-* immediately precedes (then it is *-d-*);

9° the Actor morphemes have an accent in all forms, except those of the First Person Plural, the Second Person Plural, and of the First and Second Person Singular and Dual of the Present - Recent Past in the Second, Third, Fourth, and Fifth Position categories.

The semantical element, common to these forms, is "get into a state, caused by the action". They often are best translated with a passive construction.

This category shows another feature by which it is sharply divided from the Unspecified Object, Masculine Object, Plural Object, Durative, Infinitive, and Final Infinitive categories. The fact is that in this category also members are found which have no corresponding forms in the other categories, in other words: it has members which are outside the normal morphological system of the verb. The root-morphemes of such members are found to belong to a wordclass that will be discussed under Syntax and will be called the class of the Adjectives. This category opens, as it were, the possibility of making verbal forms from adjectives, e.g.

héni búen - meager body,
ŋo búendatú - I become meager,
hru iauá - a grown-up man,
no iauádakúm - she grew up.

In such cases the meaning is "get into the state (which is denoted by the lexical meaning)".

In § 46 we saw that Infinitives may have the function of adjectives. In other words, the Infinitive form is a means to make verbs into adjectives. As those members of the category in question which have corresponding forms in the verbal categories, enumerated above, always have the form of the Infinitive as the form of their root-morpheme, it may be said that the Infinitive is the connecting link between that category and the other categories. The other members which correspond with adjectives only make it clear that this has something to do with the adjectival function of the Infinitive.

For this reasons we call this category a Secondary verbal category and, as it is not the only one of this kind, we call it the First Secondary Verb Category.

There is one series of forms, belonging to this category, viz.

remédarú - I will change, become transformed (here),
etc., etc.,

the root-morpheme of which (*remé-*) is not found otherwise.

Moreover, all forms of this category occur with zero root-morpheme:

darú or *rarú* - I will become (here),
etc., etc.

The lexical meaning of this forms is "become".

49. The Second Secondary Verb Category.

Opposed to

bíerarú or *bíedarú* - I will be opened (here),

we find

bíererý or *bíederý* - I will be open(ed) (here).

Opposed to

batóratúm - it opens (intr.), it becomes wide,

we find

batóretým - it is open, is wide.

In the same way we find, corresponding with members of the First Secondary Verb category, forms different from them only in having Actors morphemes of the Apophonic series (and the form of other morphemes that goes with these Actor morphemes: *-de-* instead of *-da, -re-* instead of *-ra-,* etc.).

The common semantical element in these words is "to be in a state caused by the action", or "to be in a state (denoted by the lexical meaning)".

All these forms constitute a productive category which counts among its members words without corresponding forms in the categories of Unspecified Object, Masculine Object, Plural Object, Durative, Infinitive, and Final Infinitive, but whose root-morphemes are found among the adjectives. All what is said in § 48 about the connection of the First Secondary Verb Category with the adjective and the Infinitive also applies to this category. Therefore, we call it the Second Secondary Verb Category.

In this category a series of forms is found with zero root-morpheme and having the meaning "to be":

derý or *rerý* - I will be (here),
etc., etc.

Needless to say that in the Second Secondary Verb Category no Iterative forms and no forms of the Sixth to Sixteenth Position categories are found.

50. **The Third Secondary Verb Category.**

Side by side with the Third Person Inanimate Plural forms of the Second Secondary Verb Category, described in the preceding §, other forms are found having the same meaning but formally characterized by an element *-roŋ-* in the forms of the First, Second, and Third Position categories and *-rom-* in those of the Fourth and Fifth Position categories, and the Actor morpheme *-ym* which has an accent in First Position forms, whereas in forms of the other Position categories there is an accent on the Position morpheme, e.g.

bierondým - they (inanimate) will be open (here),
tríiroŋkeŋyém - they (inanimate) are broken (are in pieces) below,
ŋéiromsékym - they (inanimate) were torn there.

Forms for other Actors or Numbers are not found in this category which we call the Third Secondary Verb Category. In other respects the scope of its productivity is the same as that of the Second Secondary Verb Category to which the Third is only a competitional series, that is to say, for the Third Person Inanimate Plural only.

III. THE BLOCKADING CATEGORIES AND WORDS OF THE VERB-SYSTEM

1. Introduction.

In respect to their relations with productive categories, the improductive ones fall into two groups: those which have the same categorial meaning as a productive category, and those whose categorial meaning is not found with any productive category. Members of improductive categories of the first kind prevent a speaker from using the corresponding forms of the productive category with the same categorial meaning or limit the use of such forms (in case of competition). Therefore, we call them b l o c k a d i n g categories. The improductive categories of the second group do not limit the extension of the productive ones at all. They constitute, as it were, excrescences on the edge of the morphological system. We call them a d d i t i o n a l categories.

In the Nimboran verb-system a number of improductive categories of both kinds are found. The blockading categories will be discussed first, arranged under the headings of the categories which they blockade. After this the additional categories will pass under separate review.

2. Blockading categories of the Unspecified Object.

A. The category of the Apophonic series of Actor morphemes.

The members of this category have the same form as those of the productive series, except for having Actor morphemes of the Apophonic series and that form of the other morphemes that goes with such Actor

morphemes. In this category — like in all categories having Actor morphemes of the Apophonic series — there is no formal opposition between the Seventh and Eighth or between the Fourteenth and Sixteenth Position categories.

Members of this category are forms with the root-morphemes:

kiŋ- - gaze (*kiŋ-* also in Singular forms);
kyŋ- - stoop down (*kyŋ-* also in Singular forms);
tetý- - fall off (*tetý-* also in Singular forms); for this root-morpheme the Fifteenth Position category is blockaded by another category (see § 14);
ŋgyŋ- - fall (*ŋgyŋ-* also in Singular forms);
hri- - descend;
kaŋ- - emaciate;
uŋgúo- and *ŋgúo-* - appear together;
yý- - rise together;
iapóŋ - bathe; with this root-morpheme only forms for the Plural and the First + Second and Second Person Dual, with plural meaning only, are found; for all the other forms there is suppletion of forms with root-morphemes *iá-* or *i-*;
kri- - flee (*kri-* also in Singular forms); with this root-morpheme only Singular and Dual forms are found; for the Plural there is substitution of forms with root-morpheme *kry-*;
reb- - drink; the Plural forms are blocked by the *-de-* category (see below under *J.*);
uú- - answer; with this root-morpheme only Momentary forms of this category are found, the Iterative being blocked by the *-meŋ-* category (see under *B.*);
ka-; with this root-morpheme which never has an accent, only Third Person Neutral forms of the First Position category are found with the meaning "it is (was, will be)..." for statements of time, like seasons;
réi- - sleep; this root-morpheme has only Plural forms and First + Second and Second Person Dual forms, used only for plural actors; for the Singular and Dual forms there is suppletion of forms of the *-ta-* category with zero root-morpheme (see below under *K.*);
u- - say to; with this root-morpheme only Singular and Dual forms of the Momentary are found, the Plural being supplied by forms with root-morpheme *i-*; *u-* never has an accent;

i- - say to; with this root-morpheme which never has an accent only Plural and Iterative forms are found; suppletion for the Singular and Dual forms of the Momentary is given by forms with root-morpheme *u-* (see above).

Further, forms of this category are found for the Sixth, Seventh, and Thirteenth Position categories, having zero root-morpheme, in the First Person Plural prefixed *i-* and in the Third Person Plural prefixed *ke-*. Their lexical meaning is "go". They correspond with analogically built forms with normal Actor morphemes like:

sándu - I will go from there to here (I will come from there),
kebántam - they go from below to here (they come from below).

In the Sixth and Seventh Position categories there is an accent on the Position morpheme, except in the First + Second Person forms. If immediately preceded by the Position morpheme, the Future morpheme is *-r-*, e.g.

béry - I will go from here to above.

Side by side with the forms of the Seventh Position category free variants occur having initial *h* instead of *s*, e.g.

séti or *héti* - you go from here to there.

B. The *-meŋ-* category.

Members of this category are characterized by Actor morphemes of the Apophonic series and an element *-meŋ-* immediately preceding the Position morpheme or, if this is zero, the Tense morpheme or Iterative morpheme. This *-meŋ-* never has an accent so that the Actor morphemes of First Position forms all have an accent, e.g.

iámendý - I will ask (here),
tekúmentím - he meets (here),
pébmeŋkekeŋyém - they two (non-masc.) call names below,
uúimenskékim - they answered there repeatedly.

The First + Second Person forms of this category have only one element *-meŋ-* and so are the same as the corresponding forms of the category of the Apophonic series of Actor morphemes, e.g.

tekúmendím - you and I will meet (here).

The members of this category are forms with the following root-morphemes:

tekú- - meet;
iáŋ- - ask; in Plural forms this root-morpheme takes the form *iaŋí-*, e.g. *iaŋímendý* - we will ask (here);
peb- - call names; for this root-morpheme the First Position category is blocked by the *-ŋ-* category (see under *C.*);
uú- - answer; for this root-morpheme the Momentary is blocked by the category of the Apophonic series of Actor morphemes.

C. The *-ŋ-* category.

Members of this category are characterized by Actor morphemes of the Apophonic series and an element *-ŋ-* preceding the Position morpheme, or the Tense or Iterative morpheme respectively, e.g.

sándy - I will drive away (from here),
sáimbéry - we will drive away from above.

If a nasal precedes or follows immediately, the *-ŋ-* is fused with it and the result is a form identical with a member of the category of the Actor morphemes of the Apophonic series, e.g.

sámendím - you and I will drive away (from here),
sánéy - I drive (drove) away from far.

The members of this category are forms with the following root-morphemes:

sa- - drive away;
peb- - call names; only forms of the First Position category, the other Position categories being blocked by members of the *-meŋ-* category (see under *B.*);
try- - pursue, but no Dual forms of the Momentary, as for these forms of the productive category of the Unspecified Object are used; e.g. *trýkebáru* - we two will pursue above;
téi- - give to; in Singular forms this root-morpheme is *tíe-*.

With one root-morpheme some *-ŋ-* forms are found in which the

Actor morphemes are not of the Apophonic series: with the root-morpheme *hríi-* (copulate) the Singular forms of the Future of the First Position category of the Momentary are:

hriéndu - I will copulate (here),
hriéndi - you will copulate (here),
hriéndam - he will copulate (here),
hriéndum - she will copulate (here).

All other forms with this root-morpheme belong to the productive categories.

D. The *-pe-* category.

Members of this category are characterized by an element *-pe-* that always immediately follows the root-morpheme, except in Dual forms where it immediately follows the Dual morpheme *-ke-*.

The members of this category are forms with the root-morpheme *tóuŋ-* - rise to the surface, float to the surface, which is *tóiŋ-* in Plural forms, e.g.

tóumpebáŋke - you came to the surface from below to here,
tóuŋkepebenanám - they two (masc.) rise to the surface from there to above,
tóimpekátam - they come to the surface repeatedly (here).

E. The *-ra-* category.

The members of this category have the same form as those of the productive Masculine Object category but in use and meaning they are equal to the Unspecified Object category which they blockade, e.g.

krendiyárátum - it is entangled,
patiáirebáku - we held a pig-feast above.

The members of his category are:

forms with root-morpheme *krendiyá-* - become entangled;

forms with root-morpheme *patiá-* - hold a pig-feast;

forms with root-morpheme *tćy-* - tremble;

forms with root-morpheme *sýe-* - swim;

forms with root-morpheme *ro-* - tell, inform;

Singular forms with root-morpheme *ki-* - go, proceed;

Dual forms with root-morpheme *kiŋ-* - go, proceed;

forms with root-morpheme *kakrá-* - die; the Third Person Plural of the Future of the First Position category of the Momentary has the Tense morpheme *-d-*: *kakráirádam* - they will die (here);

forms with the root-morpheme *iíi-* - divide, which is unchanged also in Singular forms, e.g. *iíiráru* - I will divide (here); the Dual forms are in competition with members of the productive Unspecified Object category; for the First Person Plural no forms of the *-ra-* category are found with this root-morpheme so that for these the productive category is not blockaded;

Singular and Dual forms with root-morpheme *puŋ-* - come; these show the following deviations:

1° the *ŋ* of the root-morpheme is absent in the Singular forms, e.g. *púrebáku* - I came above, *púremaŋarám* - you and I will come below;

2° the Future forms of the First Position category, naturally except that of the First + Second Person Singular, are in competition with forms having Future morpheme *-d-*, e.g. *púráru* or *púrádu* - I will come (here);

3° the First + Second Person Dual and the Plural are not blocked; for these the normal forms of the productive Unspecified Object category are used;

4° *-ra-* forms of the Second Person Dual are used only for dual actors, whereas Second Person Dual forms of the productive category are used exclusively for plural actors, so that here a formal opposition exists between Second Person Dual and the Second Person Plural, e.g.

púŋkráre - you two will come (here),
púŋkedé - you (more than two) will come (here);

forms with root-morpheme *kri-* - build; the First Position forms are all in competition with forms of the productive category; in free variation with the Dual forms other forms are found having root-

morpheme *kríe-*, e.g. *kríkráru* or *kríekráru* - we two will build (here);

Iterative forms with root-morpheme *ty-* - hear, except for the First + Second Person Dual and the First Person Plural. For the Momentary there is suppletion of totally different forms (see under *K.*);

forms with zero root-morpheme; the Plural forms have a prefixed *i*; the Future morpheme is in the Singular forms of the First Position category *-d-*; there are three series of these:

1. forms of the Sixth to Sixteenth Position categories with lexical meaning "bring", e.g.

   rebedú - I will bring from here to above,
   irebekáŋku - we brought repeatedly from below to here;

2. forms of the First to Fifth Position categories with the lexical meaning "dream", e.g.

   iráram - they will dream (here),
   kreŋgáku - we two dreamed repeatedly below;

3. Iterative forms of the First to Fifth Position categories with the lexical meaning "laugh"; these constitute the suppletion for a verb with root-morpheme *kiá-* with which no Iterative forms are found; e.g.

   rekátu - I laugh repeatedly (here),
   ireskáku - we laughed there repeatedly.

Special mention must be made of the members of this category with the root-morpheme *káo-* which remains unchanged also in Singular forms. The corresponding Iterative forms have *ko-* as their root-morpheme, e.g. *kórekátu* - I hide myself repeatedly (here).

Remarkable is that the lexical meaning of these forms is "hide oneself", whereas a series of members of the productive category is found with identical root-morpheme but having the meaning "hide" (transitive!). It is obvious that there is some connection between these two series. This makes the *-ra-* category in this case an a d d i t i o n a l category.[14] Therefore, this case should have been discussed separately; this is not done here because of its limited scope.

[14] In cases like this Bloomfield (Language, p. 224) speaks of "over-differentiation". His conclusion that "this implies homonomy in the regular paradigms" is not endorsed here. Cf. Nida's criticism on this point (Eugene A. Nida, The identification of morphemes, Language, XXIV (1948), p. 414—441, esp. footnote 31 on p. 429).

F. The *-reŋ-* category.

Members of this category are characterized by Actor morphemes of the Apophonic series and an element *-reŋ-* that has no accent and immediately follows the root-morpheme, except in Dual forms where it immediately follows the Dual morpheme which then has the form *-k-*.

The only members of this category are forms with the root-morpheme *iánteŋ-* - show, teach, which in Plural forms has the form *iantéiŋ-* with shifted accent, e.g.

iánteŋrendý - I will show (here),
iánteŋkrembéy - we two teach above,
iantéiŋrenskéky - we taught there repeatedly.

G. The *-de-* (*-re-*) category.

Members of this category are characterized by an element which in Singular and Plural forms is *-de-* and immediately follows the root-morpheme but in Dual forms is *-re* and immediately follows the Dual morpheme which then is *-k-*. This element never has an accent so that an accent is found on the Actor morphemes of all Momentary forms of the First Position category, e.g.

apiándedú - I will fill up (here),
kauáidietám - they sort out (here),
kyépkresántum - they two (non-masc.) signal from there to here.

The members of this category are:

forms with the root-morphemes

apiáŋ- - fill up;
seŋguám- - chew;
kyéb- - signal;
kauáe- - sort out, select, which is *kauái-* in Plural forms;
rekéi- - turn, roll, which is unchanged also in Singular forms, e.g. *rekéidebáram* - he will turn above;
tekíe- - move to and fro (trans.), which is unchanged also in Plural forms, e.g. *tekíediekú* - we moved to and fro (here);
iyé- - signal, which is *iyí-* in Plural forms;
yé- - signal, which is *yí-* in Plural forms;
múo- - make, which is unchanged also in Plural forms, e.g. *múodiekeŋáu* - we make below;

uásiŋ- - pass, which is unchanged in Singular, Dual and Plural forms;

ŋgesím- - roll up, which is unchanged also in Plural forms; the Dual forms are in competition with forms of the productive category and the Plural forms are in competition with members of the *-da-* category (see under *H.*);

Singular and Plural forms with the root-morphemes

iró- - fill;

dóuŋ- - draw;

iakéy- - crumble, which is unchanged also in Plural forms, e.g. *iakéydietú* - we crumble (here);

for these three root-morphemes the Dual is not blockaded so that there forms of the productive category are used;

Singular forms with the root-morpheme *kre-* - extinguish; Dual and Plural are not blockaded for this root-morpheme so that for these members of the productive category are found.

H. The *-da-* category.

Members of this category show similarity to those of the Plural Object category both in their form and in the absence of a formal opposition between Dual and Plural so that in this case, too, we can speak of a Non-Singular category. Another similarity is the absence of a special form of the root-morpheme for Singular forms.

The members of this category are:

forms with the root-morphemes

dekúo- - enter;

rekíi- - wheel round, turn round;

kym- - burn, be burned, which is unchanged also in Non-Singular forms, e.g. *kýmdiátam* - they burn (here);

forms of the Sixth, Eleventh, Thirteenth, Fourteenth, and Fifteenth Position categories wtih the root-morpheme *bekéi-* - rise, for which the First to Fifth Position categories are blockaded by other categories that will be discussed below;

Plural forms with the root-morphemes

tenéiŋ- - peel;
tebá- - fry, bake;
dam- - eat, which is unchanged also in Plural forms;
For these three root-morphemes the Singular and Dual are not blockaded so that for these members of the Productive category are used. To the Plural forms of the *-da-* category belongs also that of the Second Person so that there is an opposition between this and the Second Person Dual, e.g.
tebáketé - you two bake (here),
tebáidiáte - you (plur.) bake (here),
dámkekeŋáe - you two eat below,
dámdiekeŋáe - you (plur.) eat below.
To this group belong also forms with root-morpheme *kib-* - beat, for which, however, in the First Position category also the First Person Plural is not blockaded so that for this forms of the productive category are used, e.g.
kíptiu - we beat (here),
kíbdiebáu - we beat above;

Plural forms, except those of the First Position category, with root-morpheme *betýb-* - throw away. For this root-morpheme the Singular, Dual, and in the First Position category also the Plural are not blockaded; the Second Person Non-Singular forms of the *-da-* category are used for plural actors only and are all found in competition with members of the productive category;

Non-Singular forms with the root-morpheme *kri-* - close, shut, the First, Second, and Third Person especially used for plural actors; Singular and Dual are not blockaded; for the First and Third Person Plural of the First Position category *-da-* forms are found in competition with members of the productive category;

Non-Singular forms with root-morpheme *re-* - put on (clothes), blockading only the Plural category; the other categories are blocked by the *-ta-* category (see under *K.*).

J. The *-de-* category.

Members of this category are characterized in the same way as those of the *-da-* category but have, in addition, Actor morphemes of the Apophonic series so that the marking element always has the vowel *e*.
The members of this category are:

forms with the root-morpheme *buŋ-* - wait;

forms with the root-morpheme *teŋgréiŋ-* - go in front, lead the way;

First, Second, and Third Person Non-Singular forms with root-morpheme *reb-* - drink, especially used for plural actors; all other forms are blockaded by the category of the Actor morphemes of the Apophonic series (see under *A.*);

forms with the root-morpheme *tekýˊ-* - place against something.
In this series separate forms for the Dual are found in which the characterizing element has the form *-re-* and immediately follows the Dual morpheme which is *k*, e.g.

tekýˊdéry - I will place (here),
tekýˊkréry - we two will place (here),
tekýˊidiéry - we will place (here).

K. The *-ta-* category.

Members of this category are characterized in the same way as those of the *-da-* category (see under *H.*), except for the consonant of the morpheme which is *t*.

The members of this category are:

forms with the root-morphemes

do- - give (many objects);
koŋ- - have a nightmare;
déiŋ- - stretch oneself;
pempriáŋ- - sprawl;
ra- - roast (many objects);
kryáˊ- - defecate;
tekím- - move, which is unchanged also in Non-Singular forms;
ngryéˊb- - cast the skin;
buŋ- - cast the skin;
pra- - cross; the Singular forms of the Future of the First Position category of the Momentary with this root-morpheme have *d* as their tense morpheme, e.g. *prátádu* - I will cross (here);

forms of the Sixth to Sixteenth Position categories with root-morpheme *keŋ-* - follow; for this root-morpheme the First to Fifth Position categories are blockaded by the *-teŋ-* category (see under *O.*);

Singular forms and Non-Singular forms — the latter only used for dual actors — with the root-morpheme *re-* - put on, for which the Plural is blocked by the *-da-* category (see under *H.*);

forms of the First to Fifth Position categories with zero root-morpheme and in the Non-Singular forms with prefixed *i,* having the lexical meaning "make cat's-cradles";

Momentary forms with zero root-morpheme and in the Non-Singular forms prefixed *i* with the meaning "hear"; the Iterative is supplied by members of the *-ra-* and the *-re-* categories with root-morpheme *ty-* (see under *E.* and *Y.*);

forms of the Sixth to Sixteenth Position categories with zero root-morpheme, having the lexical meaning "stretch out, extend (over a distance)";

Singular forms and Non-Singular forms, used only for dual actors, with zero root-morpheme and the Non-Singular forms with prefixed *i* with the lexical meaning "sleep"; the First Position category forms all have an accent on the Actor morpheme and the Future forms of the First Position category have *d* as their Tense morpheme, e.g. *tedú* - I will sleep (here). For the Plural there is suppletion of forms of the category of Actor morphemes of the Apophonic series with root-morpheme *réi-* (see under *A.*);

Singular forms of the Iterative with root-morpheme *priŋ-* - fly; all other forms are blockaded by the *-te-* category for this root-morpheme (see under *L.*).

L. The *-te-* category.

Members of this category have the same form as those of the *-ta-* category but have Actor morphemes of the Apophonic series. Consequently, the vowel of the characterizing element is always *e.*

The members of this category are:

forms with the root-morphemes

teyí- - jump;
uéŋ- - swing (on a swing), which in Non-Singular forms is *uíŋ-*;
priŋ- - be frightened, which is *priŋ-* also in Non-Singular forms;
priŋ- - fly, which is unchanged also in Non-Singular forms; Future forms of the First Position category all have an accent on the

Actor morpheme, e.g. *prínterý* - I will fly (here); the Singular of the Iterative is blocked for *priŋ-* by the *-ta-* category (see under *K.*);

niŋ- - stand, stand up, which is unchanged also in Non-Singular forms; for the Third Person Plural of the Future of the First Position category a form with *d* as its Tense morpheme is found as free variant, so *níntiédim* or *níntiérim* - they will stand (here);

bekíe- - run, which is *bekíe-* also in Non-Singular forms; the Future forms of the First Position category are in competition with forms having Tense morpheme *d* and an accent on the Actor morpheme, e.g. *bekíetedý* or *bekíetéry* - I will run (here);

Non-Singular forms with root-morpheme *krýi-* - flee; in the First Position forms there is an accent on the Actor morphemes and the Future morpheme is *d*; these forms are only used for plural actors and form the suppletion to forms with root-morpheme *kri-* (see under *A.*);

Non-Singular forms with zero root-morphemes and the lexical meaning "kiss"; in First Position forms there is always an accent on the Actor morpheme and the Future morpheme is *-d-*; the Singular is blockaded by the *-tem-* category (see under *W.*);

Third Person Neutral Singular forms of the Momentary forms with zero root-morpheme and the lexical meaning "be (present)"; in the First Position category there is always an accent on the Actor morpheme and the Future Morpheme is *-d-*; these forms are in competition with the corresponding forms of the Second Secondary Verb Category (see Ch. II, § 49).

M. The *-deŋ-* category.

Members of this category have the formal characteristics of both the *-de-* category and the *-ŋ-* category (see under *J.* and *C.*), e.g.

bekéidenséry - I will rise there,
dóbdiénty - we smell (here).

The members of this category are:

forms with the root-morphemes *isú-* and *isiú-*, both having the lexical meaning "shake" and both unchanged also in Non-Singular forms;

forms of the First to Fifth Position categories with the root-morpheme *bekéi-* - rise, for which the other Position categories are blockaded by the *-da-* category (see under *H.*);

First Position forms with root-morpheme *dob-* - smell; the other Position categories are blockaded by the *-demeŋ-* category (see under *R.*).

N. The *-deŋ-* (*-reŋ-*) category.

Members of this category have the characteristics of both the *-de-* (*-re-*) category (see under *G.*) and the *-ŋ-* category (see under *C.*) combined.

The members of this category are:

Momentary forms with the root-morphemes *neŋgý-* and *reŋgý-*, both having the lexical meaning "show, indicate"; for these two root-morphemes the Iterative is blockaded by the *-dem-*(*-rem-*) category (see under *U.*);

First Position forms with root-morphemes *iabý-* - gather (together); for this root-morpheme the other Position categories are blockaded by the *-dem-*(*-rem-*) category (see under *U.*).

E.g.

neŋgýedendý - I will show (here),
reŋgýkreŋkeŋéi - you (non-sing.) show below.

O. The *-teŋ-* category.

In the form of the members of this category the characteristics of the *-te-* category (see under *L.*) and the *-ŋ-* category (see under *C.*) are combined.

The members of this category are:

forms with the root-morpheme *brásiŋ-* - find, which is unchanged also in Non-Singular forms;

forms of the First to Fifth Position categories with root-morpheme *keŋ-* - follow; for this root-morpheme the other Position categories are blockaded by the *-ta-* category (see under *K.*).

P. The *-neŋ-* category.

The formal characteristics of this category are the same as those of the *-teŋ-* category (see under *O.*) except for the first consonant of its morpheme which is *n* instead of *t*.

Members of this category are Momentary forms of the First Position category with the root-morpheme *poŋ-* - see, which is *poŋ-* also in Non-Singular forms, e.g.

pónéndy - I will see (here),
póniéŋky - we (two) saw (here).

For this root-morpheme the other Position categories of the Momentary are blockaded by the *-nem-* category (see under *X.*) and the Iterative by the *-nemeŋ-* category (see under *S.*).

Q. The *-demeŋ-* (*-remeŋ-*) category.

In the form of the members of this category the characteristics of the *-de-* (*-re-*) category (see under *G.*) and those of the *-meŋ-* category (see under *B.*) are combined.

The only members of this category are forms with the root-morpheme *skiŋ-* - choke, which is *skiŋ-* also in Plural forms, e.g.

skíndemendý - I will choke (here),
skíŋkrementím - they two (masc.) choke (here),
skíndiemeŋékim - they choked below.

R. The *-demeŋ-* category.

In this category the formal characteristics of the *-de-* category (see under *J.*) and of the *-meŋ-* category (see under *B.*) are combined.

The members of this category are:

forms of the Second to Fifth Position categories with the root-morpheme *dob-* - smell, for which the First Position category is blockaded by the *-deŋ-* category (see under *M.*);

Iterative forms with the root-morpheme *skry-* - shake, for which the Momentary category is blockaded by the *-dem-* category (see under *V.*).

E.g.

dóbdiemembéy - we (two) smell above,
skrýdemeŋkétim - he shakes repeatedly (here).

S. The *-nemeŋ-* category.

Members of this category show the same formal characteristics as those of the *-demeŋ-* category (see under *R.*) except for the morpheme having *n* instead of *d*.

The members of this category are Iterative forms with the root-morpheme *poŋ-* - see, which is unchanged also in Non-Singular forms, e.g.

pónemeŋkéty - I see repeatedly (here),
póniemenskéky - we (we two) saw repeatedly there.

For this root-morpheme the Momentary is blocked by the *-neŋ-* category and the *-nem-* category (see under *P.* and *X.*).

T. The *-rem-* category.

Members of this category are characterized by Actor morphemes of the Apophonic series and by an element *-rem-* immediately following the root-morpheme, except in Dual forms where it immediately follows the Dual morpheme which then has the form *-k-*. If immediately followed by the morpheme of the Third, Fifth, or Ninth Position category, the form of the characterizing element is *-reme-*. In forms of the First Position category, except those of the First + Second Person, *-rem-* has an accent.

The members of this category are:

forms with the root-morphemes
yá- - seek,
traŋ- - call, which is *traŋ-* also in Plural forms,
kiŋ- - order; this root-morpheme is unchanged in Plural forms; in the Singular stem the *ŋ* may be dropped, so that it is *kie-* or *kieŋ-*;

Plural forms with root-morpheme *re-* - go, proceed; the Singular forms are supplied by root-morpheme *ki-* and the Dual by forms with root-morpheme *kiŋ-*, all of the *-ra-* category (see under *E.*).

Some examples:

kierémty or *kieŋrémty* - I order (here),
yákremeŋéri - you (two) will seek below,
tráŋremenékim - he (they) called far away.

U. The *-dem-* (*-rem-*) category.

Members of this category have the same form as those of the *-de-* (*-re-*) category with an *m* added to the characterizing element which in the Third, Fifth, and Ninth Position categories shows the same variation as *-rem-* of the preceding category (see under *T.*).

The members of this category are:

forms with the root-morphemes

uauý- - take along, which is unchanged also in Singular forms;

rekíi- - cheat, which is *rekí-* in Singular forms;

iabý- - gather (together), but not the forms of the First Position category, as this blockaded by the *-deŋ-* (*reŋ-*) category (see under *N.*);

Iterative forms with the root-morphemes *rengý-* and *nengý-*, both with the lexical meaning "show"; for these root-morphemes the Momentary is blockaded by the *-deŋ-* (*-reŋ-*) category (see under *N.*).

V. The *-dem-* category.

Members of this category have the same form as those of the *-de-* category (see under *J.*), except for the characterizing element being *-dem-* and showing a variation analogous to that of *-rem-* in the Third, Fifth, and Ninth Position categories (see under *T.*).

The members of this category are:

forms with the root morpheme *ŋgéiŋ-* - forget, and

Iterative forms with the root-morpheme *skry-* - shake, for which the Momentary is blockaded by the *-demeŋ-* category (see under *R.*).

Examples:

ŋgéindemeŋéky - I forgot below,

skrýidiémdi - you (two) will shake (here).

W. The *-tem-* category.

The members of this category show the same forms as those of the *-dem-* category, except for the characterizing element having *t* instead of *d*.

The members of this category are:

forms with the root-morpheme *muá-* - cock one's eye;

forms with the root-morpheme *ŋgry-* - know carnally;
Singular forms with zero root-morpheme and having the lexical meaning "kiss", e.g. *temtým* - she kisses (here). The Non-Singular is blockaded by the *-te-* category (see under *L.*).

X. The *-nem-* category.

Members of this category have the same forms as those of the *-dem-* category (see under *V.*) except for the characterizing element having *n* instead of *d*.

The members of this category are only Momentary forms (but not those of the First Position category) with the root-morpheme *poŋ-* - see, which is unchanged also in Non-Singular forms, e.g.

pónemséy - I see there,
póniemkeŋém - they see below.

For this root-morpheme the First Position category of the Momentary is blockaded by the *-neŋ-* category (see under *P.*) and the Iterative by the *-nemeŋ-* category (see under *S.*).

Y. The *-re-* category.

Members of this category have the same characteristics as those of the *-ra-* category but, in addition, have Actor morphemes of the Apophonic series. The only members of this category are Iterative forms with root-morpheme *ty-* - hear, but only for the First + Second Person Dual and the First Person Plural. The other Persons of the Iterative are blockaded by the *-ra-* category (see under *E.*), while for the Momentary there is suppletion of forms with zero root-morpheme of the *-ta-* category (see under *K.*).

3. Blockading categories of the Masculine Object.

A. The *-maŋ-* category.

Members of this category are characterized by an element *-maŋ-* immediately preceding the Position morpheme, except in First Position forms, as in the Momentary forms of the First Position category it precedes the Tense morpheme (and has an accent!) and in the Iterative forms of the First Position category immediately precedes the Iterative

morpheme. This element *-maŋ-* and the *-maŋ-* of the First + Second Person Singular result in only one *-maŋ-*.

Examples of members of this category are:

sámansáru - I will drive him from there,
dýŋkemaŋkátum - they two (non-masc.) remember him repeatedly,
tebáimáŋkam - they gave him a wife.

The members of this category are forms with the root-morphemes:

sa- - drive away;
peb- - call names;
try- - pursue;
práo - observe, which is *proá-* in Singular forms;
kiŋ- - crush, which is *kieŋ-* in Singular forms;
kiŋ- - tie up, which is *kieŋ-* in Singular forms;
tebá- - give a wife, arrange the marriage for;
skab- - pinch;
dyŋ- - remember;
téi- - give (one object) to, which is *tíe-* in Singular forms.

B. The *-meŋ-* category.

Members of this category show the same forms as those of the *-maŋ-* category except for their Actor morphemes which are of the Apophonic series. Consequently, the vowel of the characterizing element is *e*.

The members of this category are:

forms with the root-morphemes
uú- - answer;
iáŋ- - ask;
tekú- - meet;

Momentary forms with the root-morpheme *u-* that never has an accent and for which Plural forms have *i-*, also without accent, having the lexical meaning "tell, say to".

Examples:

tekúméndy - I will meet him (here),
iáŋkemembéi - you two ask him above,
uúimeŋékim - they answered him below.

C. The *-remaŋ-* category.

The members of this category have the same forms as those of the *-maŋ-* category (see under *A.*) but, in addition, have *-re-* preceding the element *-maŋ-*. Before this *-remaŋ-* the Dual morpheme is *-k-*.

The members of this category are forms with the root-morphemes:

kiŋ- - order,
ro- - tell,
traŋ- - call,
yá- - seek,
iánteŋ- - show, in which the *ŋ* is usually dropped in Singular and Plural forms,
puŋ- - marry (said of woman), the *ŋ* of which is usually dropped in Singular and Plural forms,

and forms with zero root-morphemes having the lexical meaning "dream (of)". The Plural forms of this last series have an *i* prefixed.

Some examples:

tráŋkremansákam - they two (masc.) called him there,
yáiremambáru - we will look for him above,
kíeremáŋku - I ordered him (here),
púremándam - she will marry him (here),
remántum - she dreams of him (here),
iremansáku - we dreamed of him there.

D. The *-demaŋ* (*-remaŋ-*) category.

Members of this category show the same forms as those of the *-remaŋ-* category; the only difference is found in the Singular and Plural forms where the characterizing element has *d* instead of *r*.

The members of this category are forms with the root-morphemes:

neŋgý- - show,
reŋgý- - show,
skiŋ- - choke,
uauý- - take along,
rekíi- - cheat,
ŋgéiŋ- - forget.

Some examples:

rekídemántam - he cheats him (here),
uaúýkremansenáru - we two will take him along from below to there,
skíndiemanákam - they strangled him far away.

E. The *-temaŋ-* category.

Members of this category are formally characterized by an element *-temaŋ-* immediately following the root-morpheme. In this category there is no opposition between Dual an Plural but there is one Non-Singular category, characterized by an *i* immediately after the *t* of *-temaŋ-* (and, if possible, an *i* after the last vowel of the root-morpheme). In the Singular forms no special Singular stem of the root-morpheme is found.

The members of this category are:

forms with the root-morphemes
kuá- - embrace,
keŋ- - follow,
brásiŋ- - find,
do- - give (many objects) to;

forms with zero root-morpheme and with the lexical meaning "hear"; the Plural forms have prefixed *i*;

Iterative forms with the root-morphemes
króu- - bury,
krakóu- - cover,
kakróu- - cover,
prib- - throw,
kib- - beat;

for these root-morphemes the Momentary is not blockaded so that for this category the forms of the Productive Masculine Object category are used.

Examples:

kuátemáŋkum - she embraced him (here),
kéintiemeŋkenéry - we will follow him from there (above, below) to far away,
kíptiemaŋgátam or *kíitiemaŋgátam* - they beat him repeatedly below,

temándu - I will hear him (here),
itiemambám - we hear him above,
temanskákum - she heard him there repeatedly.

The members of this category with the root-morpheme *téi-*, in Singular forms *tíe-*, deserve especial mention. They have the lexical meaning "give two objects to". There is some correspondence between these forms and those with identical root-morpheme belonging to the *-maŋ-* category (see under *A.*) and having the lexical meaning "give one object to". In fact these *-temaŋ-* forms constitute an Additional category and should be discussed separately. Because no parallel cases are found, they are treated here together with the other *-temaŋ-* forms.

F. The *-nemaŋ-* category.

The forms of the members of this category are the same as those of the *-temaŋ-* category, except for the characterizing element having *n* instead of *t*.

The only members of this category are forms with the root-morpheme *poŋ-* - see, e.g.

pónemántu - I see him (here),
póniemansáke - you (non-sing.) saw him there.

G. The *-demeŋ-* category.

Formally, the members of this category resemble those of the *-temaŋ-* category (see under *E.*) but they have Actor morphemes of the Apophonic series and the characterizing element has *d* instead of *t*.

The only members of this category are forms with the root-morpheme *buŋ-* - wait for; e.g.

búndeméndy - I will wait for him (here),
búindiemensékim - they waited for him there.

H. The *-dem-* (*-rem-*) category.

Members of this category show the same forms as those of the *-demaŋ-* (*-remaŋ-*) category (see under *D.*) except for their characterizing element being *-dem-*, in Dual forms *-rem-*.

The members of this category are forms with the root-morphemes:

yé- - signal,
iyé- - signal,
kyéb- - signal.

Some examples:

yédembedú - I will signal to him from here to above,
iyékremsetú - we two signal to him from here to there,
kyéidiembáŋkam - they signalled to him from below to here.

4. Blockading categories of the Plural Object.

A. The category of the shifted accent.

Members of this category have the same form as those of the productive Plural Object category except for having always an accent on the Actor morpheme. The Plural Object morpheme is always *-de-*. In the First Position category the Future morpheme is *-d-*.

The only members of this category are Momentary forms of the First Position category with the root-morpheme *iabý-* collect, gather; e.g.

iabýdedú - I will gather them (here),
iabýidiedé - you (non-sing.) will gather them (here).

For this root-morpheme the other Position categories and the Iterative of the First Position category are not blockaded so that for these members of the productive category are used.

B. The *-ta-* category.

The members of this category are the same in form as those of the productive category except for the consonant of the morpheme which is *t* instead of *d*.

To this category belong

forms with the root-morpheme *brásiŋ-* - find;

forms with the root-morpheme *prib-* - throw, all in competition with members of the productive Plural Object category;

forms with the root-morpheme *keŋ-* - follow, except those of the Sixth to Ninth Position categories, because these are blockaded by the *-teim-* category (see under *D.*);

Non-Singular forms with root-morpheme *dóu-* - follow, for which the Singular is not blockaded;

Non-Singular forms with the root-morpheme *koŋ-* - set, put, all in competition with members of the productive Plural Object category; for this root-morpheme the Singular is not blockaded.

Some examples:

brásintáku - I found them (here),
kéintiebánte - you (non-sing.) follow them from below to here,
kóindiebáru or *kóintiebáru* - we will put them above.

C. The category of the Actor morphemes of the Apophonic series.

Members of this category have the same forms as those of the productive Plural Object category but their Actor morphemes are of the Apophonic series. Consequently, the characterizing element always has the vowel *e*.

The members of this category are forms with the root-morpheme *reb-* - drink, e.g.

rébdéry - I will drink them (here),
rébdiesékim - they drank them there.

D. The *-teim-* category.

The forms of this category run closely parallel to those of the productive Plural Object category but their characterizing element is not *-da-* but *-teim-* and they all have Actor morphemes of the Apophonic series.

The only members of this category are forms of the Sixth to Ninth Position categories with the root-morpheme *keŋ-* - follow, for which the other Position categories are blockaded by the *-ta-* category (see under *B.*); e.g.

kénteimbedý - I will follow them from here to above,
kéintieimsetí - you (non-sing.) follow them from here to below (or to there).

E. The *-deŋ-* category.

Members of this category show the same forms as those of the *-teim-* category, except for the element characterizing them which is *-deŋ-*. The *i* which characterizes the Non-Singular forms has its place

immeditely after the *d* of this *-deŋ-* but not in forms of the Fourth and Fifth Position categories, because there it immediately follows the first consonant of the Position morpheme, whereas in Future and Present forms of the First Position category this *i* immediately follows the Tense morpheme.

Members of this category are only forms with the root-morpheme *buŋ-* - wait for, e.g.

búndéndy - I will wait for them (here),
búindéntiy - we wait for them (here),
búindiéŋky - we waited for them (here),
búindensiérim - they will wait for them there.

F. The *-diem-* category.

Members of this category have the same forms as those of the *-teim-* category (see under *D.*) but their characterizing element is *-diem-* which has the form *-dieme-* if it is immediately followed by the morpheme of the Third, Fifth, or Ninth Position category.

The members of this category are forms with the root-morpheme *uauý-* - take along, and Plural forms with the root-morpheme *dyŋ-* - remember, for which the Dual and Singular categories are blockaded by the *-riŋ-* category (see under *K.*). In the Momentary forms of the First Position category with root-morpheme *dyŋ-* the *e* of the element *-diem-* has an accent, e.g.

dýindiémdy - we will remember them (here).

But in the Momentary forms of the First Position category with root-morpheme *uauý-* their is an accent on the Actor morpheme, e.g.

uauýidiemký - we took them along from here.

The Non-Singular forms of Future and Present of the First Position category of the Momentary with the root-morpheme *uauý-* have an *i* immediately following the Tense morpheme, e.g.

uauýidiemdiý - we will take them along from here,
uauýidiemtiim - they take them along from here.

G. The *-nieŋ-* category.

The members of this category show the same forms as those of the

preceding one, except for their characterizing element being *-nieŋ-* instead of *-diem-*.

The members of this category are Momentary forms of the First Position category with the root-morpheme *poŋ-* - see. They have an accent on the *e* of *-nieŋ-* and the Non-Singular forms have *i* immediately following the Tense morpheme; e.g.

póniéŋky - I saw them (here),
póniéndiy - we will see them (here).

For this root-morpheme the other Position categories are blockaded by the *-niem-* category (see under *H.*).

H. The *-niem-* category.

Members of this category have precisely the same forms as those of the *-diem-* category (see under *F.*), except for the first consonant of the characterizing element being *n* instead of *d*. There happens to be no difference between Singular and Non-Singular forms of this category.

Members of this category are forms with the root-morpheme *poŋ-* - see, not including those of the Momentary of the First Position category which are blockaded by the *-nieŋ-* category (see under *G.*).
Examples:

póniemeŋéry - I (we) will see them below,
póniemsékim - he (they) saw them there.

J. The *-reŋ-* category.

Members of this category are formally identical with those of the *-reŋ-* category of the Unspecified Object (see § 2 under *F.*). Here we find separate categories of Dual and Plural. This is in striking contrast with the situation found in the Plural Object categories discussed sofar in this § and in the productive Plural Object category. In the Momentary forms of the First Position category the element *-reŋ-* has an accent and the Plural forms of Future and Present may have an *i* immediately preceding the Actor morpheme.

The members of this category are:

Momentary forms with the root-morphemes
kiŋ- - order,

traŋ- - call,
yá- - seek;

for these root-morphemes the Iterative is blockaded by the *-riŋ-* category (see under *K.*);

forms with the root-morpheme *iánteŋ-* - show, which are all in competition with members of the *-riŋ-* category (see under *K.*);

forms with zero root-morpheme, having the lexical meaning "dream (of)"; the Plural forms have a prefixed *i.*

Examples:

kíeréndy - I will order them (here),
tráŋkrembéki - you (plur., du.) called them above,
iréntiy - we dream of them (here).

K. The *-riŋ-* category.

In form, the members of this category are the same as those of the *-reŋ-* category (see under *J.*) except for the vowel of the characterizing element being *i* instead of *e.*

The members of this category are:

forms with the root-morpheme *sa-* - drive away;

forms with the root-morpheme *tapó-* - help;

Singular and Dual forms with the root-morpheme *dyŋ-* - remember; for this root-morpheme the Plural is blockaded by the *-diem-* category (see under *F.*);

Iterative forms with the root-morphemes
kiŋ- - order,
traŋ- - call,
yá- - seek;

for these three root-morphemes the Momentary is blockaded by the *-reŋ-* category (see under *J.*);

Iterative forms with the root-morpheme *ro-* - tell; for this root-morpheme the Momentary is blockaded by the *-reiŋ-* category (see under *O.*) and the *-rim-* category (see under *P.*);

forms with the root-morpheme *iántenŋ-* - show, all in competition with members of the *-renŋ-* category (see under *J.*);

Dual forms with the root-morphemes *iáŋ-* - ask, and *tekú-* - meet; for these root-morphemes the Singular and Plural are blockaded by the *-ŋ-* category (see under *N.*);

forms with the root-morphemes *try-* - pursue, and *téi-* - give (*tíe-* in Singular forms); these two series of forms show two peculiar features:

1. Momentary forms of Present and Future in the First Position category have an additional *i* immediately preceding the Actor morpheme;
2. all Plural forms have a *k* immediately preceding the element *-riŋ-*;

forms with the root-morpheme *peb-* - call names; these forms show the same peculiarities as mentioned for the forms with *try-* and *téi-* but, in addition, have in the Iterative an extra element *-meŋ-* immediately following *-riŋ-*.

Examples:

sáiríndiy - we will drive them away (from here),
tapókrimbéky - we two helped them above,
péikrimenskétim - they abuse them repeatedly there.

L. The *-diŋ-* category.

Members of this category have the same forms as those of the *-riŋ-* category (see under *K.*) except in the Singular and Plural, where the characterizing element has *d* instead of *r*. The Momentary forms of the First Position category have an accent on the Actor morpheme and those of Future and Present have an additional *i* immediately preceding the Actor morpheme.

The only members of this category are forms with the root-morpheme *rekii-* - cheat, e.g.

rekídindii - you (sing.) will cheat them (here),
rekíikrinséry - we two will cheat them there,
rekíidiiŋký - we cheated them (here).

M. The *-dim-* category.

The members of this category show the same forms as those of the *-diŋ-* category (see under *L.*) except for the characterizing element having *m* instead of *ŋ*. If immediately preceding the morpheme of the Third, Fifth, or Ninth Position category, the form of the characterizing element is *-dime-* in Singular and Plural forms or *-rime-* in Dual forms.

The members of this category are forms with the root-morphemes *iyé-, yé-,* and *kyéb-,* all having the lexical meaning "signal", e.g.

yédimbedí - you will signal them from here to above,
iyékrimenekŷ - we two signalled them from here to far away,
kyéidiimskénty - we signal them repeatedly from there to here.

N. The *-ŋ-* category.

Members of this category show the following formal characteristics:

1. all Actor morphemes are of the Apophonic series;
2. First + Second Person Singular forms have an element *-ke-* immediately following the root-morpheme;
3. except for the First + Second Person forms, there is no formal difference for the number of the Actor;
4. all forms are characterized by an element *-ŋ-* which in Momentary forms of the First Position category immediately precedes the Tense morpheme, in Iterative forms of the First Position category immediately precedes the Iterative morpheme, and in all other Position categories immediately precedes the Position morpheme;
5. all forms, except those of the First + Second Person Singular, have an *i* immediately following the last vowel of the root-morpheme, except with those root-morphemes which have a Plural stem without *i*;
6. all forms have an *i* immediately preceding the first vowel following either the root-morpheme or, in First + Second Person Singular forms, *-ke-,* if that vowel is preceded by *d, t, n,* or *s.*

The members of this category are:

forms with the root-morpheme *uú-* - answer;
forms with zero root-morpheme and with the lexical meaning "say to";
Singular and Plural forms with the root-morphemes *iáŋ-* - ask, and *tekú-* - meet; for these two root-morphemes the Dual is blockaded by the *-riŋ-* category (see under *K.*).

Some examples:

uúindiy - I (we) will answer them (here),
ianʒisiéki - you asked them there,
tekúkentiim - you and I meet them (here),
indiʒ́ - I (we) will say to them (here),
kementím - you and I say to them (here).

O. The *-reiŋ-* category.

Formally, the members of this category are identical with those of the *-reŋ-* category (see under *J.*) except for the characterizing element being *-reiŋ-* instead of *-reŋ-*.

The only members of this category are Momentary forms of the First Position category with the root-morpheme *ro-* - tell, e.g.

róréindiy - I will tell them (here),
rókréintiy - we two tell them (here),
róiréiŋkim - they told them (here).

For this root-morpheme the Iterative is blockaded by the *-riŋ-* category (see under *K.*) and the other Position categories of the Momentary by the *-rim-* category (see under *P.*).

P. The *-rim-* category.

The forms of the members of this category are the same as those of the *-riŋ-* category (see under *K.*) except for the characterizing element having *m* instead of *ŋ* and being *-rime-*, if immediately followed by the Position morpheme of the Third and Fifth Position categories.[15]

The members of this category are Momentary forms, but not those of the First Position category, with the root-morpheme *ro-* - tell. For this root-morpheme the First Position category of the Momentary is blockaded by the *-reiŋ-* category (see under *O.*) and the Iterative by the *-riŋ-* category (see under *K.*).

Q. The *-tiem-* category.

Members of this category are characterized by an element *-tiem-*;

[15] Theoretically, the Ninth Position category, too, should be mentioned here. But its categoric meaning is not compatible with the lexical meaning of the forms with the root-morpheme *ro-*, the only members of this category. Therefore, such Ninth Position forms are not found in actual practice.

for the rest their forms are the same as those of the *-teim-* category (see under *D.*). No *i* is added to the Non-Singular forms and, as the only members of this category are Momentary forms with the accentless root-morpheme *i-* - hear, which has the same form both in Singular and Non-Singular forms, there is no formal difference for the number of the Actor; e.g.

itiemséry - we (I) will hear them there,
itiemeŋéki - you heard them below.

5. **Blockading categories of the Singular.**

The blockading categories of the Singular consist of forms of Singular stems, deviating from the pattern described in Chapter II, § 35. They are discussed here, only in so far as their members belong to the productive categories of Unspecified Object, etc.; all the other cases are mentioned in §§ 2 to 4 of this chapter.

A. The category of the shifted accent.

The members of this category are different from those of the productive category in the place of the accent of the Singular stem, as this accent is on the vowel following that of the root-morpheme. This is the case with the following Singular stems:

kiéŋ-, root-morpheme *kiŋ-* - pack, wrap up;
kiéŋ-, root-morpheme *kiŋ-* - regret;
kiéŋ-, root-morpheme *kiŋ-* - bind, tie up;
kiéŋ-, root-morpheme *kiŋ-* - crush;
hrié-, root-morpheme *hríi-* - cohabitate;
temyéŋ-, root-morpheme *temýŋ-* - stab.

Examples:

kiéntu - I pack (here), (etc.),
temyéŋke - you (sing.) stabbed (here).

B. The *-uŋ-*, *-úeŋ-* category.

The members of this category have a Singular stem ending in *-úeŋ-*, corresponding with a root-morpheme ending in *-uŋ-*. These members are forms with the Singular stem *búeŋ-*, corresponding with the root-

morpheme *buŋ-* - pick off, and forms with the Singular stem *hrúeŋ-*, corresponding with the root-morpheme *hruŋ-* - break.

Examples:

búeŋáru - I will pick off below,
hrúente - you (sing.) break (here).

C. The *-áo-, -a-* category.

The members of this category have a Singular stem ending in *-a-*, corresponding with a root-morpheme ending in *-áo-*. The members of this category are forms with the Singular stem *iŋgá-*, corresponding with the root-morpheme *iŋgáo-* - wash, and forms with the Singular stem *teká-*, corresponding with the root-morpheme *tekáo-* - draw (water from a well, etc.).

Examples:

iŋgádu - I will wash (here),
tekáke - you drew (water) (here).

D. The *-áo-, -oá-* category.

The members of this category have a Singular stem ending in *-oá-*, whereas the corresponding root-morpheme ends in *-áo-*. These members are forms with the Singular stem *kroá-* (root-morpheme *kráo-* - demolish) and forms with the Singular stem *proá-* (root-morpheme *práo-* - observe), e.g.

kroábáram - he will demolish above,
proásóm - she observes there.

E. The *-o-, -úe-* category.

The members of this category have a Singular stem ending in *-úe-*, whereas the corresponding root-morpheme ends in *-ó-*. These members are forms with the Singular stem *rúe-*, corresponding with root-morpheme *ro-* - wash, e.g.

rúedu - I will wash (here),
rúekeŋám - he washes below.

F. The *-óu-, -oá-* category.

Members of this category have a Singular stem ending in *-oá-*, corresponding with a root-morpheme ending in *-óu-*. These members are forms with the Singular stem *noá-* (root-morpheme *nóu-* - break up) and forms with the Singular stem *droá-* (root-morpheme *dróu-* - bath). The latter are in competition with forms of the *-óu-, -ó-* category (see under *G.*).

Examples:

noáku - I broke up (here),
droáresáru - I will bath him there.

G. The *-óu-, -ó-* category.

Members of this category have a Singular stem ending in *-ó-*, whereas the corresponding root-morpheme ends in *-óu-*. These members are forms with the Singular stem *uó-* (root-morpheme *uóu-* - spit out) and forms with the Singular stem *dro-* (root-morpheme *dróu-* - bath). The latter forms are in competition with members of the *-óu-, -oá-* category (see under *F.*).

Examples:

uókam - he spit out (here),
droáresóm - or *dróresóm* - she bathes him there.

H. The identity category.

The members of this category have a singular stem, ending in *-yéiŋ-* which is identical with the root-morpheme. These members are forms with the Singular stems (root-morphemes) *syéiŋ-* - cut loose, and *ŋgyéiŋ-* - shake, e.g.

syéimbáru - I will cut loose above,
ŋgyéiŋkam - he shook (here).

6. The Dual category of the prefixed *k*.

The members of the only blockading category of the Dual are characterized by having a *k* prefixed to the root-morpheme instead of *-ke-* following it. This category we call the category of the prefixed *k*.

The members of this category are:

Unspecified Object forms of the First Position category with the root-morpheme *iá-* - bathe; the First + Second Person is not included and the Second Person forms are used for dual Actors only: e.g. *iádu* - I will bathe (here), but *kiádu* - we two will bathe (here);

Unspecified Object forms of the Second, Third, Fourth, and Fifth Position category, except for the First + Second Person, with the root-morpheme *i-* - bathe, which has no accent, e.g. *kibáke* - you two bathed above (cf. *ibáke* - you (sing.) bathed above); the Second Person forms are used only for dual Actors;

Unspecified Object forms with the root-morpheme which elsewhere is *u-* without an accent but in Dual forms is represented by *o-* and has an accent, but only in the Momentary forms of the First Position category; the lexical meaning is "say"; all these forms are in competition with members of the productive category, e.g.

kódy or *ukedý* - we two will say (here),
koberím or *ukeberím* - they two (masc.) will say above.

7. Blockading categories of the Plural.

The blockading categories of the Plural are all characterized by the form of the Plural stem of the root-morpheme, deviating from the pattern described in Chapter II, § 37. They are discussed here only in so far as their members belong to the productive categories of Unspecified Object, etc.; the others are mentioned in the §§ 2 to 4 of this chapter.

A. The *-óu-, -úi-* category.

The members of this category have a Plural stem ending in *-úi-*, corresponding with a root-morpheme ending in *-óu-*. These members are forms with the Plural stems:

krúi- (root-morpheme *króu-*) - sing;
krúi- (root-morpheme *króu-*) - bury;
kakrúi- (root-morpheme *kakróu-*) - cover;
krakúi- (root-morpheme *krakóu-*) - cover.

Examples:

krúitiu - we bury (or: sing) (here),
kakrúibákam or *krakúibákam* - they covered above.

B. The *-áo-, -ái-* category.

Members of this category have a Plural stem ending in *-ái-*, whereas the corresponding root-morpheme ends in *-áo-*. The members of this category are forms with the Plural stem *iŋgái-* (root-morpheme *iŋgáo-* - wash) and forms with the Plural stem *tekái-* (root-morpheme *tekáo-* - draw (water); e.g.

iŋgáidiu - we will wash (here),
tekáiŋákam - they drew (water) below.

C. The *-úo-* + *i* category.

Members of this category have a Plural stem ending in *-uói-*, corresponding with a root-morpheme ending in *-úo-*. These members are forms with the Plural stem *sebuói-* (root-morpheme *sebúo-* - sew) and with the Plural stem *spuói-* (root-morpheme *spúo-* - take off), e.g.

sebuóidiu - we will sew (here),
spuóisiám - they take off (clothes) there.

D. The *-iŋ-* category.

The members of this category have a Plural stem, ending in *-iŋ-*, which is formally identical with the root-morpheme. These members are forms with the stem *ŋgesíŋ-* - wipe off, e.g.

ŋgesíŋku - we wiped off (here),
ŋgesínsiáram - they will wipe off there.

E. The *-ýe-, -yéi-* category.

Members of this category have a plural stem ending in *-yéi-*, whereas the corresponding root-morpheme ands in *-ýe-*. The members of this category are forms with the Plural stem *skyéi-* root-morpheme *skýe-* - smoke) e.g.

skyéitiam - they smoke (here),
skyéiŋáku - we smoked below.

F. The *-íe-, -íi-* category.

The members of this category have a Plural stem ending in *-íi-*, whereas the corresponding root-morpheme ends in *-íe-*. These members are forms with the Plural stem *síi-* (root-morpheme *síe-* - squeeze), e.g.

síikam - they squeezed (here),
síibáru - we will squeeze above.

8. **Blockading category of the First + Second Person Dual.**

There is only one blockading category of the First + Second Person Dual. Its members have the same forms as those of the Productive category except for having an extra element *-maŋ-* (*-meŋ-* if followed by an Actor morpheme of the Apophonic series) which immediately precedes the Tense morpheme in Momentary forms of the First Position category, the Iterative morpheme in Iterative forms of the First Position category, and the Position morpheme in all the other forms; e.g. *hríkemendím* - you and we will descend (here) (cf. *hríkedú* - we two will descend here).

The members of this category are:

Unspecified Object forms with the root-morphemes
hri- - descend,
kaŋ- - emaciate,
ŋgyŋ - fall,
uú- - answer,
iapóŋ- - bathe,
kry- - flee,
teyí- - jump,
priŋ - be startled,
uéŋ- - swing,
niŋ- - stand up,
kryá- - defecate,
uásiŋ- - pass,
káo- - hide oneself,
sýe- - swim,
téy- - tremble,
kakrá- - die,
tóuŋ- - float, rise to the surface,
zero, with lexical meaning "go",
zero, with lexical meaning "dream" (cf. § 2, *E.*),
zero, with lexical meaning "make cat's-cradles" (cf. § 2, *K.*),
dekúo- - enter,
rekíi- - turn round, face about,
re- - put on (clothes),
réi - sleep;

Unspecified Object forms of the Second to Fifth Position categories with the root-morpheme *kri-* - flee;

Unspecified Object forms of the Sixth to Sixteenth Position categories with the root-morpheme *bekéi-* - rise, climb;

Momentary forms with zero root-morpheme and the lexical meaning "hear" (cf. § 2, *K.*);

Iterative forms of the Unspecified Object with the root-morphemes
ty- - hear many,
zero, with lexical meaning "laugh" (cf. § 2, *E.*);

Plural Object forms with the root-morphemes
iíi- - divide, distribute,
kri- - close, shut,
kib- - beat, hit,
tebá- - bake, fry;
the forms with the root-morphemes *kri-* and *tebá-* are in competition with members of the productive category.

9. Blockading category of the First Person Plural.

The members of the only blockading category of the First Person Plural differ from those of the productive category in the same way as the members of the blockading category of the First + Second Person Dual, i.e. in having the element *-maŋ-* (*meŋ-*), e.g. *hríméndy* - we will descend (here) (cf. *hrídy* - I will descend (here).

The members of this category are:

Unspecified Object forms with the root-morphemes
kry- - flee,
buŋ- - wait,
teŋgréiŋ- - lead the way,
teyí- - jump,
priŋ- - be startled,
uéŋ- - swing,
niŋ- - stand up,
úsiŋ- - pass,
tóuŋ- - float, rise to the surface,
dekúo- - enter,
rekíi- - turn round, face about,
re- - put on (clothes),

tekím- - move,
kryá- - defecate,
ái- - scream,
kaŋ- - emaciate,
ŋgyŋ- - fall,
uú- - answer,
réi- - sleep,
kakrá- - die,
téy- - tremble,
sýe- - swim,
zero, with lexical meaning "go",
zero, with lexical meaning "dream" (cf. § 2, *E.*),
zero, with lexical meaning "make cat's-cradles" (cf. § 2, *K.*);

Iterative forms of the Unspecified Object with the root-morphemes
ty- - hear many,
kiŋ- - gaze, stare,
zero, with lexical meaning "laugh" (cf. § 2, *E.*);

Momentary forms of the Unspecified Object with zero root-morpheme and the lexical meaning "hear" (cf. § 2, *K.*);

Unspecified Object forms of the Sixth to Sixteenth Position categories with the root-morpheme *bekéi-* - rise, climb.

10. **Blockading category of the Third Person Plural.**

There is only one blockading category of the Third Person Plural. Its members are characterized by the Actor morpheme *-um* (*-ym* if they belong to a category having Actor morphemes of the Apophonic series) and the Singular stem of the root-morpheme, so that their form is identical with that of the corresponding Third Person Neutral Singular.

The members of this category are Unspecified Object forms with the root-morphemes:

íi- - burn,
réi- - sleep,
iapóŋ- - bathe,
yý- - rise together,
patiá- - hold a pig-feast.

The forms with root-morpheme *patiá-* are in competition with members of the productive category.

Some examples:

yýkum - they rose together (here),
iíbérym - they will burn above,
iapuándum - they will bathe (here),
riátym - they sleep (here),
patiáresárum or *patiáiresáram* - they will hold a pig-feast there.

11. Blockading category of the Eighth Position.

The members of this category are characterized by a Position morpheme *sa-* that may have an accent and by having the common Actor morphemes instead of those of the Apophonic series. In the Future forms the Tense morpheme is *-r-*. The members of this category have zero root-morpheme and the lexical meaning "go". For the Singular forms free variants are found, having initial *h* instead of *s*. Examples:

kesáre - you two will go from here to below,
sátam or *hátam* - he goes from here to below.

12. Blockading category of the Ninth Position.

Members of this category are characterized by a Position morpheme *-na-* which may have an accent, and by the Actor morphemes not being of the Apophonic series. The morpheme of the Future is *-r-*.

The members of this category have zero root-morpheme and the lexical meaning "go", e.g.

náru - I will go from here to far away,
kenátum - they two go from here to far away.

13. Blockading category of the Tenth Position.

Members of this category differ from those of the productive category in having the common Actor morphemes instead of the Apophonic series. They have zero root-morpheme and the lexical meaning "go"; e.g.

kantám - he goes (comes) from above (far away) to here,
kekandú - we two will go from above (far away) to here.

14. Blockading category of the Fifteenth Position.

The members of this category are different from those of the

productive category only in having the common series of Actor morphemes instead of the Apophonic. They are forms with the root-morpheme *tetý-* - fall off, and forms with zero root-morpheme and the lexical meaning "go"; e.g.

kenáru - I will go from above (below, there) to far away,
tetýkenanóm - it falls from above (there) to far away.

15. **Blockading categories of the Infinitive.**

A. The *-áo* category.

Members of this category end in *-áo,* whereas the corresponding root-morpheme ends in *-á.* The members of this category are:

bekáo - kick,
hráo - to carry on the shoulder,
iáo - to rub,
kráo - to sweep,
ndáo - to feel,
sáo - to drive away,
táo - to put (many objects),
tebáo - to fry,
tebáo - to give a wife,
tekiáo - to break open, to burst.

B. The *-áu* category.

Members of this category end in *-áu,* whereas the corresponding root-morphemes end in *-á.* These members are:

káu - to vomit,
práu - to dance,
ráu - to roast (many things),
tráu - to make (a garden).

C. The *-ý* category.

The members of this category end in *-ý,* just like the corresponding root-morphemes. They are:

iabý - to gather,
teký - to put (against a wall, etc.),

uauý - to take along,
tetý - to fall off.

D. The *-i* category.

The members of this category end in *-i* and are identical in form with the corresponding root-morphemes. These members are:

kri - to flee,
hri - to descend,
ii - to burn,
teyi - to jump.

E. The *-óu* category.

Members of this category end in *-óu,* whereas the corresponding root-morphemes end in *-ó.* These members are:

damgóu - to yawn,
tapóu - to help,
uóu - to paddle.

F. The *-siŋ* category.

The members of this category are characterized by an element *-siŋ* immediately following the root-morpheme. These members are:

kánsiŋ - to put into the hair (root-morpheme *kaŋ-*),
iásiŋ - to bathe (root-morpheme *iá-*),
usíŋ - to say (root-morpheme *u-* without accent),
usíŋ - fall (rain) (root-morpheme *u-* without accent).

In some members, corresponding with verb-forms with zero root-morpheme, the place of the root-morpheme is occupied by the morpheme of the blockading Unspecified Object category to which those corresponding forms belong. This is the case with:

tásiŋ - to hear (see § 2, *K.*),
tásiŋ - to make cat's-cradles (see § 2, *K.*),
rásiŋ - to dream (see § 2, *E.*).

16. Blockading words for the Infinitive.

Words which occupy the place of an Infinitive (because of their

meaning), so that this place is blocked for a normal Infinitive form, but do not belong to a category, are the following:

uúo - to answer (cf. root-morpheme *uú-*),
hréi - to lay across (cf. root-morpheme *hre-*),
kéiŋ - to follow (cf. root-morpheme *keŋ-*),
ŋgýe - to cleave (cf. root-morpheme *ŋgy-*),
pýe - to light (a fire) (cf. root-morpheme *péy-*),
pýe - to swell (cf. root-morpheme *péy-*),
spóu - to take off (clothes) (cf. root-morpheme *spúo-*),
síi - to squeeze (cf. root-morpheme *síe-*),
teniáŋ - to appear, come out (cf. root-morpheme *tenéiŋ-*),
náo - to break up (cf. root-morpheme *nóu-*),
ruóu - to tell (cf. root-morpheme *ro-*),
dáo - to give (many objects) (cf. root-morpheme *do-*),
ráo - to sleep (cf. root-morpheme *réi-*).

17. Blockading category and a blockading word for the Final Infinitive.

The members of the only blockading category for the Final Infinitive are characterized by reduplication of the initial consonant, with the vowel *e* in between, in spite of this initial consonant (in the Infinitive) already being followed by an *e* without accent and immediately followed by another consonant.

The members of this category are:

bebesíb - in order to bend (Infinitive *besíb*),
bebetáo - in order to pull out (Infinitive *betáo*),
bebetýb - in order to throw away (Infinitive *betýb*),
dedekúo - in order to enter (Infinitive *dekúo*),
sesebúo - in order to sew (Infinitive *sebúo*),
tetebáo - in order to fry (Infinitive *tebáo*).

The place for a Final Infinitive corresponding with the Infinitive *usíŋ* - to say, is blockaded by the word *uensíŋ* - in order to say.

IV. THE ADDITIONAL CATEGORIES OF THE VERB-SYSTEM.

1. The Feminine Object category.

The members of this category are characterized in the same way as the corresponding Masculine Object forms but have, in addition, Actor morphemes of the Apophonic series. The categoric meaning is "the action is connected with an object, consisting of one or two beings of the female sex".

The members of this category are forms with the root-morphemes:

yé- - signal, *iyé-* - signal, *kyéb-* - signal, and *ŋgéiŋ-* - forget, corresponding with Masculine Object forms of the *-demaŋ-*, *remaŋ-* category (see § 3, *D.*);

ro- - tell, corresponding with Masculine Object forms of the *-remaŋ-* - category (see § 3, *C.*);

téi- - give, *do-* - give many objects, and forms with zero root-morpheme, having the lexical meaning "hear", corresponding with Masculine Object forms of the *-temaŋ-* category (see § 3, *E.*).

Some examples:

kyépkremembedý - we will signal her from here to above,
róiremembékim - they told her above,
tíetemeŋkeŋéy - I give her below,
dóitiemenséy - we give her there (many things),
temendím - you and I will hear her (here).

2. The category of the Second Person Plural.

Members of this category have the same formal characteristics as the corresponding forms of the Second Person Dual but, in addition, have an element *-maŋ-* (*meŋ-* if followed by an Actor morpheme of the Apophonic series) immediately preceding the Tense morpheme in Momentary forms of the First Position category, the Iterative morpheme in Iterative forms of the First Position category, and the Position morpheme in all the other forms. The categoric meaning is "the action is attributed to a plural person addressed, as the actor".

So we find *káŋkeméndi* - you (plur.) will emaciate, opposed to *káŋkedí* - you two will emaciate; *hríkemeŋkentí* - you (plur.) descend from above to here, opposed to *hríkekentí* - you two descend from above to here.

The members of this category are:

Unspecified Object forms with the root-morphemes
kry- - flee,
buŋ- - wait,
teŋgréiŋ- - lead the way,
teyí- - jump,
uéŋ- - swing,
priŋ- - be startled,
niŋ- - stand up,
uásiŋ- - pass,
tóuŋ- - float,
dekúo- - enter,
rekíi- - turn round,
re- - put on (clothes),
tekím- - move,
kryá- - defecate,
réi- - sleep,
uú- - answer,
ŋgyŋ- - fall,
kaŋ- - emaciate,
ái- - scream,
kakrá- - die,
téy- - tremble,
sýe- - swim;

Unspecified Object forms of the productive category with zero root-morpheme, having the lexical meaning "go";

Unspecified Object forms of the *-ra-* category (see § 2, *E.*) with zero root-morpheme, lexical meaning "dream";

Unspecified Object forms of the *-ta-* category (see § 2, *K.*) with zero root-morpheme, lexical meaning "make cat's-cradles";

Momentary forms of the *-ta-* category of the Unspecified Object (see § 2, *K.*) with zero root-morpheme, lexical meaning "hear";

Iterative forms of the Unspecified Object category with the root-morphemes *ty-* - hear many, and *kiŋ-* - gaze;

Iterative forms of the *-ra-* category of the Unspecified Object (see § 2, *E.*) with zero root-morpheme, lexical meaning "laugh";

Unspecified Object forms of the Sixth to Sixteenth Position categories with root-morpheme *bekei-* - rise, climb.

V. THE MORPHOLOGICAL SYSTEM OF THE PRONOUNS.

1. Introduction.

The morphological system of the pronouns consists of a limited number of categories. These categories can not be called productive, because the number of the root-morphemes with which they occur is also limited. These root-morphemes are:

ŋa- having the lexical meaning "I, we" (the person addressed never included),
ko- with the lexical meaning "you",
no- with the lexical meaning "he, she, it, they",
ió- with the lexical meaning "you and I, you and we",
naŋ- with the lexical meaning "who?".

The forms with the root-morpheme *ŋa-* bear a semantic relation to the First Person category of the verb-system, those with root-morpheme *ko-* to the Second Person category, those with *no-* to the Third Person categories, and those with *ió-* to the First + Second Person category. All categories of the pronoun-system are mutually exclusive; so they are of the same order.

2. The zero category.

Members of this category are characterized by having the form of the bare root-morpheme; their common semantical element is "absence of stress and of explicit syntactic relation". The members are *ko, no,* and *ió.* For the root-morpheme *ŋa-* this category is blockaded by the word *ŋo* - I, me, we, us.

3. The *-me* category.

The members of this category are characterized by the element *-me* which immediately follows the root-morpheme and has no accent. The semantical element common to them is "stress" or "serial relation", e.g.

ŋáme - I!, me!,
nóme, kóme, maría ne - she, and you, and Mary.

For the root-morpheme *naŋ-* this category is blockaded by the word *náne* - who?, and who?

4. The *-mbe* category.

The members of this category are characterized by an element *-mbe* which immediately follows the root-morpheme and has no accent. Their common element of meaning is "possession" (in a broad sense), e.g.

ŋámbe - of me, mine, my, of us, our, ours,
kómbe - of you, your, yours.

For the root-morpheme *naŋ-* this category is blockaded by the word *nánde* - whose?, of whom?

5. The *-mýene* category.

The members of this category are characterized by an element *-mýene* immediately following the root-morpheme. The *y* of this morpheme has the accent. The common element of meaning is "to, at", so that the members have the same syntactical valence as phrases consisting of a substantive and the postposition *ne,* like *iamó ne* - to the house, e.g.

ŋamýene - to me, to us,
namýene - to whom?

From the last example it appears that the final *ŋ* of the root-morpheme *naŋ-* reacts to a *m,* immediately following within the word, in the same way as the final *ŋ* of root-morphemes of verbs.

6. The *-mso* category.

The members of this category are characterized by a formal element *-mso* immediately following the root-morpheme and by the semantical element "towards, to". In free variation with them, forms are found having *h* instead of the *s* of the morpheme, e.g.

nómso or *nómho* - to him, to her, to it, to them,
kómso or *kómho* - to you.

For the root-morpheme *naŋ-* this category is blockaded by the words *náŋho* and *nánso,* both meaning "to whom?".

7. The *-msié* category.

The members of this category are characterized by an element *-msié* which immediately follows the root-morpheme and has the accent on its final vowel, and by the semantical element "from", e.g.

iomsié - from you and me, from you and us,
namsié - from whom?

VI. MORPHOLOGICAL CATEGORIES OF THE SUBSTANTIVE.

1. Introduction.

The morphological possibilities of substantives are so few that we can hardly speak of a morphological system. There are only two categories, neither of them productive. The number of their members is also very small.

2. The *ne-* category.

The members of this category are characterized by an element *ne-* which immediately precedes the root-morpheme and has the word-accent, if the root-morpheme has only one vowel. Their common element of meaning is "relationship to a person or persons other than the speaker and the person (or persons) addressed".

The members of this category are:

néru - her husband (cf. *hru* - man, husband),
nemensé - his (her, their) brother-in-law, his (her, their) sister-in-law (cf. *mensé* - brother-in-law, sister-in-law),
nemáse - his (her, their) son (cf. *beremáse* - your son, see § 3),
neŋgesíe - his (her, their) daughter (cf. *bereŋgesíe* - your daughter, see § 3),
néŋki - his wife (his, their wifes) (cf. *ki* - woman, wife).

The small number of members of the category makes it impossible to decide, in how far the forms *néru* and *néŋki* might be called irregular.

3. The *bere-* category.

The two members of this category have an element *bere-*, immediately preceding the root-morpheme, and the semantical element "relationship to the person (or persons) addressed". They are:

bereŋgesíe - your daughter (cf. *neŋgesíe* - his, her, or their daughter),
beremáse - your son (cf. *nemáse* - his, her, or their son).

So the forms corresponding with them are found in the *ne-* category (see § 2).

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TABLE OF VERB-FORMS

ROOT-MORPHEME	:	**ŋgedóu-**
SINGULAR STEM	:	**ŋgedúo-**
PLURAL STEM	:	**ŋgedói-**
INFINITIVE	:	**ŋgedóu**
FINAL INFINITIVE	:	**ŋgeŋgedóu**

N.B. No alternant forms are given in this table.

(I) **UNSPECIFIED OBJECT — MOMENTARY**

		1st Pos.	*2nd Pos.*	*3rd Pos.*	*4th Pos.*
Future					
Sing.	1	ŋgedúodu	ŋgedúobáru	ŋgedúoŋáru	ŋgedúosáru
	2	ŋgedúode	ŋgedúobáre	ŋgedúoŋáre	ŋgedúosáre
	3n.	ŋgedúodum	ŋgedúobárum	ŋgedúoŋárum	ŋgedúosárum
	3m.	ŋgedúodam	ŋgedúobáram	ŋgedúoŋáram	ŋgedúosáram
	1+2	ŋgedúomandám	ŋgedúomambarám	ŋgedúomaŋarám	ŋgedúomansarám
Dual	1	ŋgedóukedú	ŋgedóukebáru	ŋgedóukeŋáru	ŋgedóukesáru
	2	ŋgedóukedé	ŋgedóukebáre	ŋgedóukeŋáre	ŋgedóukesáre
	3n.	ŋgedóukedúm	ŋgedóukebárum	ŋgedóukeŋárum	ŋgedóukesárum
	3m.	ŋgedóukedám	ŋgedóukebáram	ŋgedóukeŋáram	ŋgedóukesáram
	1+2	ŋgedóukedám	ŋgedóukebarám	ŋgedóukeŋarám	ŋgedóukesarám
Plur.	1	ŋgedóidiu	ŋgedóibáru	ŋgedóiŋáru	ŋgedóisiáru
	3	ŋgedóidiam	ŋgedóibáram	ŋgedóiŋáram	ŋgedóisiáram
Present					
Sing.	1	ŋgedúotu	ŋgedúobáu	ŋgedúokeŋáu	ŋgedúosáu
	2	ŋgedúote	ŋgedúobáe	ŋgedúokeŋáe	ŋgedúosáe
	3n.	ŋgedúotum	ŋgedúobóm	ŋgedúokeŋóm	ŋgedúosóm
	3m.	ŋgedúotam	ŋgedúobám	ŋgedúokeŋám	ŋgedúosám
	1+2	ŋgedúomantám	ŋgedúomambám	ŋgedúomaŋkeŋám	ŋgedúomansám
Dual	1	ŋgedóuketú	ŋgedóukebáu	ŋgedóukekeŋáu	ŋgedóukesáu
	2	ŋgedóuketé	ŋgedóukebáe	ŋgedóukekeŋáe	ŋgedóukesáe
	3n.	ŋgedóuketúm	ŋgedóukebóm	ŋgedóukekeŋóm	ŋgedóukesóm
	3m.	ŋgedóuketám	ŋgedóukebám	ŋgedóukekeŋám	ŋgedóukesám
	1+2	ŋgedóuketám	ŋgedóukebám	ŋgedóukekeŋám	ŋgedóukesám
Plur.	1	ŋgedóitiu	ŋgedóibáu	ŋgedóikeŋáu	ŋgedóisiáu
	3	ŋgedóitiam	ŋgedóibám	ŋgedóikeŋám	ŋgedóisiám

Recent Past

Sing.	1	ŋgedúopu			
	2	ŋgedúope			
	3n.	ŋgedúopum	*Same*	*Same*	*Same*
	3m.	ŋgedúopam			
	1+2	ŋgedúomampám			
Dual	1	ŋgedóukepú	*as*	*as*	*as*
	2	ŋgedóukepé			
	3n.	ŋgedóukepúm			
	3m.	ŋgedóukepám	*Present*	*Present*	*Present*
	1+2	ŋgedóukepám			
Plur.	1	ŋgedóipu			
	3	ŋgedóipam			

Past

Sing.	1	ŋgedúoku	ŋgedúobáku	ŋgedúoŋáku	ŋgedúosáku
	2	ŋgedúoke	ŋgedúobáke	ŋgedúoŋáke	ŋgedúosáke
	3n.	ŋgedúokum	ŋgedúobákum	ŋgedúoŋákum	ŋgedúosákum
	3m.	ŋgedúokam	ŋgedúobákam	ŋgedúoŋákam	ŋgedúosákam
	1+2	ŋgedúomaŋkám	ŋgedúomambakám	ŋgedúomaŋakám	ŋgedúomansakám
Dual	1	ŋgedóukekú	ŋgedóukebáku	ŋgedóukeŋáku	ŋgedóukesáku
	2	ŋgedóukeké	ŋgedóukebáke	ŋgedóukeŋáke	ŋgedóukesáke
	3n.	ŋgedóukekúm	ŋgedóukebákum	ŋgedóukeŋákum	ŋgedóukesákum
	3m.	ŋgedóukekám	ŋgedóukebákam	ŋgedóukeŋákam	ŋgedóukesákam
	1+2	ŋgedóukekám	ŋgedóukebakám	ŋgedóukeŋakám	ŋgedóukesakám
Plur.	1	ŋgedóiku	ŋgedóibáku	ŋgedóiŋáku	ŋgedóisiáku
	3	ŋgedóikam	ŋgedóibákam	ŋgedóiŋákam	ŋgedóisiákam

(II) UNSPECIFIED OBJECT — MOMENTARY

		5th Pos.	*6th Pos.*	*7th Pos.*	*8th Pos.*
Future					
Sing.	1	ŋgedúonáru	ŋgedúobedú	ŋgedúosedú	ŋgedúosedý
	2	ŋgedúonáre	ŋgedúobedé	ŋgedúosedé	ŋgedúosedí
	3n.	ŋgedúonárum	ŋgedúobedúm	ŋgedúosedúm	ŋgedúosedým
	3m.	ŋgedúonáram	ŋgedúobedám	ŋgedúosedám	ŋgedúosedím
	1+2	ŋgedúomanarám	ŋgedúomambedám	ŋgedúomansedám	ŋgedúomensedím
Dual	1	ŋgedóukenáru	ŋgedóukebedú	ŋgedóukesedú	ŋgedóukesedý
	2	ŋgedóukenáre	ŋgedóukebedé	ŋgedóukesedé	ŋgedóukesedí
	3n.	ŋgedóukenárum	ŋgedóukebedúm	ŋgedóukesedúm	ŋgedóukesedým
	3m.	ŋgedóukenáram	ŋgedóukebedám	ŋgedóukesedám	ŋgedóukesedím
	1+2	ŋgedóukenarám	ŋgedóukebedám	ŋgedóukesedám	ŋgedóukesedím
Plur.	1	ŋgedóiniáru	ŋgedóibedú	ŋgedóisiedú	ŋgedóisiedý
	3	ŋgedóiniáram	ŋgedóibedám	ŋgedóisiedám	ŋgedóisiedím
Present					
Sing.	1	ŋgedúonáu	ŋgedúobetú	ŋgedúosetú	ŋgedúosetý
	2	ŋgedúonáe	ŋgedúobeté	ŋgedúoseté	ŋgedúosetí
	3n.	ŋgedúonóm	ŋgedúobetúm	ŋgedúosetúm	ŋgedúosetým
	3m.	ŋgedúonám	ŋgedúobetám	ŋgedúosetám	ŋgedúosetím
	1+2	ŋgedúomanám	ŋgedúomambetám	ŋgedúomansetám	ŋgedúomensetím
Dual	1	ŋgedóukenáu	ŋgedóukebetú	ŋgedóukesetú	ŋgedóukesetý
	2	ŋgedóukenáe	ŋgedóukebeté	ŋgedóukeseté	ŋgedóukesetí
	3n.	ŋgedóukenóm	ŋgedóukebetúm	ŋgedóukesetúm	ŋgedóukesetým
	3m.	ŋgedóukenám	ŋgedóukebetám	ŋgedóukesetám	ŋgedóukesetím
	1+2	ŋgedóukenám	ŋgedóukebetám	ŋgedóukesetám	ŋgedóukesetím
Plur.	1	ŋgedóiniáu	ŋgedóibetú	ŋgedóisietú	ŋgedóisietý
	3	ŋgedóiniám	ŋgedóibetám	ŋgedóisietám	ŋgedóisietím

Recent Past

Sing.	1		ŋgedúobepú	ŋgedúosepú	ŋgedúosepý
	2		ŋgedúobepé	ŋgedúosepé	ŋgedúosepí
	3n.	*Same*	ŋgedúobepúm	ŋgedúosepúm	ŋgedúosepým
	3m.		ŋgedúobepám	ŋgedúosepám	ŋgedúosepím
	1+2		ŋgedúomambepám	ŋgedúomansepám	ŋgedúomensepím
Dual	1	*as*	ŋgedóukebepú	ŋgedóukesepú	ŋgedóukesepý
	2		ŋgedóukebepé	ŋgedóukesepé	ŋgedóukesepí
	3n.		ŋgedóukebepúm	ŋgedóukesepúm	ŋgedóukesepým
	3m.	*Present*	ŋgedóukebepám	ŋgedóukesepám	ŋgedóukesepím
	1+2		ŋgedóukebepám	ŋgedóukesepám	ŋgedóukesepím
Plur.	1		ŋgedóibepú	ŋgedóisiepú	ŋgedóisiepý
	3		ŋgedóibepám	ŋgedóisiepám	ŋgedóisiepím

Past

Sing.	1	ŋgedúonáku	ŋgedúobekú	ŋgedúosekú	ŋgedúoseký
	2	ŋgedúonáke	ŋgedúobeké	ŋgedúoseké	ŋgedúoseki
	3n.	ŋgedúonákum	ŋgedúobekúm	ŋgedúosekúm	ŋgedúosekým
	3m.	ŋgedúonákam	ŋgedúobekám	ŋgedúosekám	ŋgedúosekím
	1+2	ŋgedúomanakám	ŋgedúomambekám	ŋgedúomansekám	ŋgedúomensekím
Dual	1	ŋgedóukenáku	ŋgedóukebekú	ŋgedóukesekú	ŋgedóukeseký
	2	ŋgedóukenáke	ŋgedóukebeké	ŋgedóukeseké	ŋgedóukeseki
	3n.	ŋgedóukenákum	ŋgedóukebekúm	ŋgedóukesekúm	ŋgedóukesekým
	3m.	ŋgedóukenákam	ŋgedóukebekám	ŋgedóukesekám	ŋgedóukesekím
	1+2	ŋgedóukenakám	ŋgedóukebekám	ŋgedóukesekám	ŋgedóukesekím
Plur.	1	ŋgedóiniáku	ŋgedóibekú	ŋgedóisiekú	ŋgedóisieký
	3	ŋgedóiniákam	ŋgedóibekám	ŋgedóisiekam	ŋgedóisiekím

		9th Pos.	*10th Pos.*	*11th Pos.*	*12th Pos.*
Future					
Sing.	1	ŋgedúonedý	ŋgedúokendý	ŋgedúobándu	ŋgedúosándu
	2	ŋgedúonedí	ŋgedúokendí	ŋgedúobánde	ŋgedúosánde
	3n.	ŋgedúonedým	ŋgedúokendým	ŋgedúobándum	ŋgedúosándum
	3m.	ŋgedúonedím	ŋgedúokendím	ŋgedúobándam	ŋgedúosándam
	1+2	ŋgedúomenedím	ŋgedúomeŋkendím	ŋgedúomambandám	ŋgedúomansandám
Dual	1	ŋgedóukenedý	ŋgedóukekendý	ŋgedóukebándu	ŋgedóukesándu
	2	ŋgedóukenedí	ŋgedóukekendí	ŋgedóukebánde	ŋgedóukesánde
	3n.	ŋgedóukenedým	ŋgedóukekendým	ŋgedóukebándum	ŋgedóukesándum
	3m.	ŋgedóukenedím	ŋgedóukekendím	ŋgedóukebándam	ŋgedóukesándam
	1+2	ŋgedóukenedím	ŋgedóukekendím	ŋgedóukebandám	ŋgedóukesandám
Plur.	1	ŋgedóiniedý	ŋgedóikendý	ŋgedóibándu	ŋgedóisiándu
	3	ŋgedóiniedím	ŋgedóikendím	ŋgedóibándam	ŋgedóisiándam
Present					
Sing.	1	ŋgedúonetý	ŋgedúokentý	ŋgedúobántu	ŋgedúosántu
	2	ŋgedúonetí	ŋgedúokentí	ŋgedúobánte	ŋgedúosánte
	3n.	ŋgedúonetým	ŋgedúokentým	ŋgedúobántum	ŋgedúosántum
	3m.	ŋgedúonetím	ŋgedúokentím	ŋgedúobántam	ŋgedúosántam
	1+2	ŋgedúomenetím	ŋgedúomeŋkentím	ŋgedúomambantám	ŋgedúomansantám
Dual	1	ŋgedóukenetý	ŋgedóukekentý	ŋgedóukebántu	ŋgedóukesántu
	2	ŋgedóukenetí	ŋgedóukekentí	ŋgedóukebánte	ŋgedóukesánte
	3n.	ŋgedóukenetým	ŋgedóukekentým	ŋgedóukebántum	ŋgedóukesántum
	3m.	ŋgedóukenetím	ŋgedóukekentím	ŋgedóukebántam	ŋgedóukesántam
	1+2	ŋgedóukenetím	ŋgedóukekentím	ŋgedóukebantám	ŋgedóukesantám
Plur.	1	ŋgedóinietý	ŋgedóikentý	ŋgedóibántu	ŋgedóisiántu
	3	ŋgedóinietím	ŋgedóikentím	ŋgedóibántam	ŋgedóisiántam

Recent Past

Sing.	1	ŋgedúonepy	ŋgedúokempý	ŋgedúobámpu	ŋgedúosámpu
	2	ŋgedúonepí	ŋgedúokempí	ŋgedúobámpe	ŋgedúosámpe
	3n.	ŋgedúonepým	ŋgedúokempým	ŋgedúobámpum	ŋgedúosámpum
	3m.	ŋgedúonepím	ŋgedúokempím	ŋgedúobámpam	ŋgedúosámpam
	1+2	ŋgedúomenepím	ŋgedúomeŋkempím	ŋgedúomambampám	ŋgedúomansampám
Dual	1	ŋgedóukenepý	ŋgedóukekempý	ŋgedóukebámpu	ŋgedóukesámpu
	2	ŋgedóukenepí	ŋgedóukekempí	ŋgedóukebámpe	ŋgedóukesámpe
	3n.	ŋgedóukenepým	ŋgedóukekempým	ŋgedóukebámpum	ŋgedóukesámpum
	3m.	ŋgedóukenepím	ŋgedóukekempím	ŋgedóukebámpam	ŋgedóukesámpam
	1+2	ŋgedóukenepím	ŋgedóukekempím	ŋgedóukebampám	ŋgedóukesampám
Plur.	1	ŋgedóiniepý	ŋgedóikempý	ŋgedóibámpu	ŋgedóisiámpu
	3	ŋgedóiniepím	ŋgedóikempím	ŋgedóibámpam	ŋgedóisiámpam

Past

Sing.	1	ŋgedúonekýŋ	ŋgedúokeŋkýŋ	ŋgedúobáŋku	ŋgedúosáŋku
	2	ŋgedúonekíŋ	ŋgedúokeŋkíŋ	ŋgedúobáŋke	ŋgedúosáŋke
	3n.	ŋgedúonekýmŋ	ŋgedúokeŋkýmŋ	ŋgedúobáŋkum	ŋgedúosáŋkum
	3m.	ŋgedúonekímŋ	ŋgedúokeŋkímŋ	ŋgedúobáŋkam	ŋgedúosáŋkam
	1+2	ŋgedúomenekímŋ	ŋgedúomeŋkeŋkímŋ	ŋgedúomambaŋkám	ŋgedúomansaŋkám
Dual	1	ŋgedóukenekýŋ	ŋgedóukekeŋkýŋ	ŋgedóukebáŋku	ŋgedóukesáŋku
	2	ŋgedóukenekíŋ	ŋgedóukekeŋkíŋ	ŋgedóukebáŋke	ŋgedóukesáŋke
	3n.	ŋgedóukenekýmŋ	ŋgedóukekeŋkýmŋ	ŋgedóukebáŋkum	ŋgedóukesáŋkum
	3m.	ŋgedóukenekímŋ	ŋgedóukekeŋkímŋ	ŋgedóukebáŋkam	ŋgedóukesáŋkam
	1+2	ŋgedóukenekímŋ	ŋgedóukekeŋkímŋ	ŋgedóukebaŋkám	ŋgedóukesaŋkám
Plur.	1	ŋgedóinieký	ŋgedóikeŋkýŋ	ŋgedóibáŋku	ŋgedóisiáŋku
	3	ŋgedóiniekímŋ	ŋgedóikeŋkímŋ	ŋgedóibáŋkam	ŋgedóisiáŋkam

		13th Pos.	*14th Pos.*	*15th Pos.*	*16th Pos.*
Future					
Sing.	1	ŋgedúobenáru	ŋgedúosenáru	ŋgedúokenéry	ŋgedúosenéry
	2	ŋgedúobenáre	ŋgedúosenáre	ŋgedúokenéri	ŋgedúosenéri
	3n.	ŋgedúobenárum	ŋgedúosenárum	ŋgedúokenérym	ŋgedúosenérym
	3m.	ŋgedúobenáram	ŋgedúosenáram	ŋgedúokenérim	ŋgedúosenérim
	1+2	ŋgedúomambenarám	ŋgedúomansenarám	ŋgedúomeŋkenerím	ŋgedúomensenerím
Dual	1	ŋgedóukebenáru	ŋgedóukesenáru	ŋgedóukekenéry	ŋgedóukesenéry
	2	ŋgedóukebanáre	ŋgedóukesenáre	ŋgedóukekenéri	ŋgedóukesenéri
	3n.	ŋgedóukebenárum	ŋgedóukesenárum	ŋgedóukekenérym	ŋgedóukesenérym
	3m.	ŋgedóukebenáram	ŋgedóukesenáram	ŋgedóukekenérim	ŋgedóukesenérim
	1+2	ŋgedóukebenarám	ŋgedóukesenarám	ŋgedóukekenerím	ŋgedóukesenerím
Plur.	1	ŋgedóibenáru	ŋgedóisienáru	ŋgedóikenéry	ŋgedóisienéry
	3	ŋgedóibenáram	ŋgedóisienáram	ŋgedóikenérim	ŋgedóisienérim
Present					
Sing.	1	ŋgedúobenanáu	ŋgedúosenanáu	ŋgedúokenenéy	ŋgedúosenenéy
	2	ŋgedúobenanáe	ŋgedúosenanáe	ŋgedúokenenéi	ŋgedúosenenéi
	3n.	ŋgedúobenanóm	ŋgedúosenanóm	ŋgedúokenenyém	ŋgedúosenenyém
	3m.	ŋgedúobenanám	ŋgedúosenanám	ŋgedúokeneném	ŋgedúoseneném
	1+2	ŋgedúomambenanám	ŋgedúomansenanám	ŋgedúomeŋkeneném	ŋgedúomenseneném
Dual	1	ŋgedóukebenanáu	ŋgedóukesenanáu	ŋgedóukekenenéy	ŋgedóukesenenéy
	2	ŋgedóukebenanáe	ŋgedóukesenanáe	ŋgedóukekenenéi	ŋgedóukesenenéi
	3n.	ŋgedóukebenanóm	ŋgedóukesenanóm	ŋgedóukekenenyém	ŋgedóukesenenyém
	3m.	ŋgedóukebenanám	ŋgedóukesenanám	ŋgedóukekeneném	ŋgedóukeseneném
	1+2	ŋgedóukebenanám	ŋgedóukesananám	ŋgedóukekeneném	ŋgedóukeseneném
Plur.	1	ŋgedóibenanáu	ŋgedóisienanáu	ŋgedóikenenéy	ŋgedóisienenéy
	3	ŋgedóibenanám	ŋgedóisienanám	ŋgedóikeneném	ŋgedóisieneném

Recent Past

Sing.	1				
	2				
	3n.	*Same*	*Same*	*Same*	*Same*
	3m.				
	1+2				
Dual	1	*as*	*as*	*as*	*as*
	2				
	3n.				
	3m.	*Present*	*Present*	*Present*	*Present*
	1+2				
Plur.	1				
	3				

Past

Sing.	1	ŋgedúobenáku	ŋgedúosenáku	ŋgedúokenéky	ŋgedúoseneky
	2	ŋgedúobenáke	ŋgedúosenáke	ŋgedúokenéki	ŋgedúoseneki
	3n.	ŋgedúobenákum	ŋgedúosenákum	ŋgedúokenékym	ŋgedúosenékym
	3m.	ŋgedúobenákam	ŋgedúosenákam	ŋgedúokenékim	ŋgedúosenékim
	1+2	ŋgedúomambenakám	ŋgedúomansenakám	ŋgedúomeŋkenekím	ŋgedúomensenekím
Dual	1	ŋgedóukebenáku	ŋgedóukesenáku	ŋgedóukekenéky	ŋgedóukeseneky
	2	ŋgedóukebenáke	ŋgedóukesenáke	ŋgedóukekenéki	ŋgedóukeseneki
	3n.	ŋgedóukebenákum	ŋgedóukesenákum	ŋgedóukekenékym	ŋgedóukesenékym
	3m.	ŋgedóukebenákam	ŋgedóukesenákam	ŋgedóukekenékim	ŋgedóukesenékim
	1+2	ŋgedóukebenakám	ŋgedóukesenakám	ŋgedóukekenekím	ŋgedóukesenekím
Plur.	1	ŋgedóibenáku	ŋgedóisienáku	ŋgedóikenéky	ŋgedóisieneky
	3	ŋgedóibenákam	ŋgedóisienákam	ŋgedóikenékim	ŋgedóisienékim

(I) **UNSPECIFIED OBJECT — ITERATIVE**

		1st Pos.	*2nd Pos.*	*3rd Pos.*	*4th Pos.*
Present					
Sing.	1	ŋgedúokátu	ŋgedúobekátu	ŋgedúoŋgátu	ŋgedúoskátu
	2	ŋgedúokáte	ŋgedúobekáte	ŋgedúoŋgáte	ŋgedúoskáte
	3n.	ŋgedúokátum	ŋgedúobekátum	ŋgedúoŋgátum	ŋgedúoskátum
	3m.	ŋgedúokátam	ŋgedúobekátam	ŋgedúoŋgátam	ŋgedúoskátam
	1+2	ŋgedúomaŋkatám	ŋgedúomambekatám	ŋgedúomaŋgatám	ŋgedúomanskatám
Dual	1	ŋgedóukekátu	ŋgedóukebekátu	ŋgedóukeŋgátu	ŋgedóukeskátu
	2	ŋgedóukekáte	ŋgedóukebekáte	ŋgedóukeŋgáte	ŋgedóukeskáte
	3n.	ŋgedóukekátum	ŋgedóukebekátum	ŋgedóukeŋgátum	ŋgedóukeskátum
	3m.	ŋgedóukekátam	ŋgedóukebakátam	ŋgedóukeŋgátam	ŋgedóukeskátam
	1+2	ŋgedóukekatám	ŋgedóukebekatám	ŋgedóukeŋgatám	ŋgedóukeskatám
Plur.	1	ŋgedóikátu	ŋgedóibekátu	ŋgedóiŋgátu	ŋgedóiskátu
	3	ŋgedóikátam	ŋgedóibekátam	ŋgedóiŋgátam	ŋgedóiskátam
Recent Past					
Sing.	1	ŋgedúokápu			
	2	ŋgedúokápe			
	3n.	ŋgedúokápum	*Same*	*Same*	*Same*
	3m.	ŋgedúokápam			
	1+2	ŋgedúomaŋkapám			
Dual	1	ŋgedóukekápu	*as*	*as*	*as*
	2	ŋgedóukekápe			
	3n.	ŋgedóukekápum			
	3m.	ŋgedóukekápam	*Present*	*Present*	*Present*
	1+2	ŋgedóukekapám			
Plur.	1	ŋgedóikápu			
	3	ŋgedóikápam			

Past

Sing.	1	ŋgedúokáku	ŋgedúobekáku	ŋgedúoŋgáku	ŋgedúoskáku
	2	ŋgedúokáke	ŋgedúobekáke	ŋgedúoŋgáke	ŋgedúoskáke
	3n.	ŋgedúokákum	ŋgedúobekákum	ŋgedúoŋgákum	ŋgedúoskákum
	3m.	ŋgedúokákam	ŋgedúobekákam	ŋgedúoŋgákam	ŋgedúoskákam
	1+2	ŋgedúomaŋkakám	ŋgedúomambekakám	ŋgedúomaŋgakám	ŋgedúomanskakám
Dual	1	ŋgedóukekáku	ŋgedóukebekáku	ŋgedóukeŋgáku	ŋgedóukeskáku
	2	ŋgedóukekáke	ŋgedóukebekáke	ŋgedóukeŋgáke	ŋgedóukeskáke
	3n.	ŋgedóukekákum	ŋgedóukebekákum	ŋgedóukeŋgákum	ŋgedóukeskákum
	3m.	ŋgedóukekákam	ŋgedóukebekákam	ŋgedóukeŋgákam	ŋgedóukeskákam
	1+2	ŋgedóukekakám	ŋgedóukebekakám	ŋgedóukeŋgakám	ŋgedóukeskakám
Plur.	1	ŋgedóikáku	ŋgedóibekáku	ŋgedóiŋgáku	ŋgedóiskáku
	3	ŋgedóikákam	ŋgedóibekákam	ŋgedóiŋgákam	ŋgedóiskákam

(II) UNSPECIFIED OBJECT — ITERATIVE

		5th Pos.	*6th Pos.*	*7th Pos.*	*8th Pos.*
Present					
Sing.	1	ŋgedúoneŋgátu	ŋgedúobekátu	ŋgedúoskátu	ŋgedúoskéty
	2	ŋgedúoneŋgáte	ŋgedúobekáte	ŋgedúoskáte	ŋgedúoskéti
	3n.	ŋgedúoneŋgátum	ŋgedúobekátum	ŋgedúoskátum	ŋgedúoskétym
	3m.	ŋgedúoneŋgátam	ŋgedúobekátam	ŋgedúoskátam	ŋgedúoskétim
	1+2	ŋgedúomaneŋgatám	ŋgedúomambekatám	ŋgedúomanskatám	ŋgedúomensketím
Dual	1	ŋgedóukeneŋgátu	ŋgedóukebekátu	ŋgedóukeskátu	ŋgedóukeskéty
	2	ŋgedóukeneŋgáte	ŋgedóukebekáte	ŋgedóukeskáte	ŋgedóukeskéti
	3n.	ŋgedóukeneŋgátum	ŋgedóukebekátum	ŋgedóukeskátum	ŋgedóukeskétym
	3m.	ŋgedóukeneŋgátam	ŋgedóukebekátam	ŋgedóukeskátam	ŋgedóukeskétim
	1+2	ŋgedóukeneŋgatám	ŋgedóukebekatám	ŋgedóukeskatám	ŋgedóukesketím
Plur.	1	ŋgedóinieŋgátu	ŋgedóibekátu	ŋgedóiskátu	ŋgedóiskéty
	3	ŋgedóinieŋgátam	ŋgedóibekátam	ŋgedóiskátam	ŋgedóiskétim
Recent Past					
Sing.	1		ŋgedúobekápu	ŋgedúoskápu	ŋgedúosképy
	2		ŋgedúobekápe	ŋgedúoskápe	ŋgedúosképi
	3n.	*Same*	ŋgedúobekápum	ŋgedúoskápum	ŋgedúosképym
	3m.		ŋgedúobekápam	ŋgedúoskápam	ŋgedúosképim
	1+2		ŋgedúomambekapám	ŋgedúomanskapám	ŋgedúomenskepím
Dual	1	*as*	ŋgedóukebekápu	ŋgedóukeskápu	ŋgedóukesképy
	2		ŋgedóukebekápe	ŋgedóukeskápe	ŋgedóukesképi
	3n.		ŋgedóukebekápum	ŋgedóukeskápum	ŋgedóukesképym
	3m.	*Present*	ŋgedóukebekápam	ŋgedóukeskápam	ŋgedóukesképim
	1+2		ŋgedóukebekapám	ŋgedóukeskapám	ŋgedóukeskepím
Plur.	1		ŋgedóibekápu	ŋgedóiskápu	ŋgedóisképy
	3		ŋgedóibekápam	ŋgedóiskápam	ŋgedóisképim

Past

Sing.	1	ŋgedúoneŋgáku	ŋgedúobekáku	ŋgedúoskáku	ŋgedúoskéky
	2	ŋgedúoneŋgáke	ŋgedúobekáke	ŋgedúoskáke	ŋgedúoskéki
	3n.	ŋgedúoneŋgákum	ŋgedúobekákum	ŋgedúoskákum	ŋgedúoskékym
	3m.	ŋgedúoneŋgákam	ŋgedúobekákam	ŋgedúoskákam	ŋgedúoskékim
	1+2	ŋgedúomaneŋgakám	ŋgedúomambekakám	ŋgedúosmanskakám	ŋgedúomenskekím
Dual	1	ŋgedóukeneŋgáku	ŋgedóukebekáku	ŋgedóukeskáku	ŋgedóukeskéky
	2	ŋgedóukeneŋgáke	ŋgedóukebekáke	ŋgedóukeskáke	ŋgedóukeskéki
	3n.	ŋgedóukeneŋgákum	ŋgedóukebekákum	ŋgedóukeskákum	ŋgedóukeskékym
	3m.	ŋgedóukeneŋgákam	ŋgedóukebekákam	ŋgedóukeskákam	ŋgedóukeskékim
	1+2	ŋgedóukeneŋgakám	ŋgedóukebekakám	ŋgedóukeskakám	ŋgedóukeskekím
Plur.	1	ŋgedóinieŋgáku	ŋgedóibekáku	ŋgedóiskáku	ŋgedóiskéky
	3	ŋgedóinieŋgákam	ŋgedóibekákam	ŋgedóiskákam	ŋgedóiskékim

(III) UNSPECIFIED OBJECT — ITERATIVE

		9th Pos.	*10th Pos.*	*11th Pos.*	*12th Pos.*
Present					
Sing.	1	ŋgedúoneŋgéty	ŋgedúoŋgentý	ŋgedúobekántu	ŋgedúoskántu
	2	ŋgedúoneŋgéti	ŋgedúoŋgentí	ŋgedúobekánte	ŋgedúoskánte
	3n.	ŋgedúoneŋgétym	ŋgedúoŋgentým	ŋgedúobekántum	ŋgedúoskántum
	3m.	ŋgedúoneŋgétim	ŋgedúoŋgentím	ŋgedúobekántam	ŋgedúoskántam
	1+2	ŋgedúomeneŋgetím	ŋgedúomeŋgentím	ŋgedúomambekantám	ŋgedúomanskantám
Dual	1	ŋgedóukeneŋgétu	ŋgedóukeŋgentý	ŋgedóukebekántu	ŋgedóukeskántu
	2	ŋgedóukeneŋgéti	ŋgedóukeŋgentí	ŋgedóukebekánte	ŋgedóukeskánte
	3n.	ŋgedóukeneŋgétym	ŋgedóukeŋgentým	ŋgedóukebekántum	ŋgedóukeskántum
	3m.	ŋgedóukeneŋgétim	ŋgedóukeŋgentím	ŋgedóukebekántam	ŋgedóukeskántam
	1+2	ŋgedóukeneŋgetím	ŋgedóukeŋgentím	ŋgedóukebekantám	ŋgedóukeskantám
Plur.	1	ŋgedóinieŋgéty	ŋgedóiŋgentý	ŋgedóibekántu	ŋgedóiskántu
	3	ŋgedóinieŋgétim	ŋgedóiŋgentím	ŋgedóibekántam	ŋgedóiskántam
Recent Past					
Sing.	1	ŋgedúoneŋgépy	ŋgedúoŋgempý	ŋgedúobekámpu	ŋgedúoskámpu
	2	ŋgedúoneŋgépi	ŋgedúoŋgempí	ŋgedúobekámpe	ŋgedúoskámpe
	3n.	ŋgedúoneŋgépym	ŋgedúoŋgempým	ŋgedúobekámpum	ŋgedúoskámpum
	3m.	ŋgedúoneŋgépim	ŋgedúoŋgempím	ŋgedúobekámpam	ŋgedúoskámpam
	1+2	ŋgedúomeneŋgepím	ŋgedúomeŋgempím	ŋgedúomambekampám	ŋgedúomanskampám
Dual	1	ŋgedóukeneŋgépy	ŋgedóukeŋgempý	ŋgedóukebekámpu	ŋgedóukeskámpu
	2	ŋgedóukeneŋgépi	ŋgedóukeŋgempí	ŋgedóukebekámpe	ŋgedóukeskámpe
	3n.	ŋgedóukeneŋgépym	ŋgedóukeŋgempým	ŋgedóukebekámpum	ŋgedóukeskámpum
	3m.	ŋgedóukeneŋgépim	ŋgedóukeŋgempím	ŋgedóukebekámpam	ŋgedóukeskámpam
	1+2	ŋgedóukeneŋgepím	ŋgedóukeŋgempím	ŋgedóukebekampám	ŋgedóukeskampám
Plur.	1	ŋgedóinieŋgépy	ŋgedóiŋgempý	ŋgedóibekámpu	ŋgedóiskámpu
	3	ŋgedóinieŋgépim	ŋgedóiŋgempím	ŋgedóibekámpam	ŋgedóiskámpam

Past

Sing.	1	ŋgedúoneŋgéky	ŋgedúoŋgeŋkýˊ	ŋgedúobekáŋku	ŋgedúoskáŋku
	2	ŋgedúoneŋgéki	ŋgedúoŋgeŋkí	ŋgedúobekáŋke	ŋgedúoskáŋke
	3n.	ŋgedúoneŋgékym	ŋgedúoŋgeŋkýˊm	ŋgedúobekáŋkum	ŋgedúoskáŋkum
	3m.	ŋgedúoneŋgékim	ŋgedúoŋgeŋkím	ŋgedúobekáŋkam	ŋgedúoskáŋkam
	1+2	ŋgedúomeneŋgekím	ŋgedúomeŋgeŋkím	ŋgedúomambekaŋkám	ŋgedúomanskaŋkám
Dual	1	ŋgedóukeneŋgéky	ŋgedóukeŋgeŋkýˊ	ŋgedóukebekáŋku	ŋgedóukeskáŋku
	2	ŋgedóukeneŋgéki	ŋgedóukeŋgeŋkí	ŋgedóukebekáŋke	ŋgedóukeskáŋke
	3n.	ŋgedóukeneŋgékym	ŋgedóukeŋgeŋkýˊm	ŋgedóukebekáŋkum	ŋgedóukeskáŋkum
	3m.	ŋgedóukeneŋgékim	ŋgedóukeŋgeŋkím	ŋgedóukebekáŋkam	ŋgedóukeskáŋkam
	1+2	ŋgedóukeneŋgekím	ŋgedóukeŋgeŋkím	ŋgedóukebekaŋkám	ŋgedóukeskaŋkám
Plur.	1	ŋgedóinieŋgéky	ŋgedóiŋgeŋkýˊ	ŋgedóibekáŋku	ŋgedóiskáŋku
	3	ŋgedóinieŋgékim	ŋgedóiŋgeŋkím	ŋgedóibekáŋkam	ŋgedóiskáŋkam

		13th Pos.	*14th Pos.*	*15th Pos.*	*16th Pos.*
Present					
Sing.	1	ŋgedúobeneŋgátu	ŋgedúoseneŋgátu	ŋgedúokeneŋgéty	ŋgedúoseneŋgéty
	2	ŋgedúobeneŋgáte	ŋgedúoseneŋgáte	ŋgedúokeneŋgéti	ŋgedúoseneŋgéti
	3n.	ŋgedúobeneŋgátum	ŋgedúoseneŋgátum	ŋgedúokeneŋgétym	ŋgedúoseneŋgétym
	3m.	ŋgedúobeneŋgátam	ŋgedúoseneŋgátam	ŋgedúokeneŋgétim	ŋgedúoseneŋgétim
	1+2	ŋgedúomambeneŋgatám	ŋgedúomanseneŋgatám	ŋgedúomeŋkeneŋgetím	ŋgedúomenseneŋgetím
Dual	1	ŋgedóukebeneŋgátu	ŋgedóukeseneŋgátu	ŋgedóukekeneŋgéty	ŋgedóukeseneŋgéty
	2	ŋgedóukebeneŋgáte	ŋgedóukeseneŋgáte	ŋgedóukekeneŋgéti	ŋgedóukeseneŋgéti
	3n.	ŋgedóukebeneŋgátum	ŋgedóukeseneŋgátum	ŋgedóukekeneŋgétym	ŋgedóukeseneŋgétym
	3m.	ŋgedóukebeneŋgátam	ŋgedóukeseneŋgátam	ŋgedóukekeneŋgétim	ŋgedóukeseneŋgétim
	1+2	ŋgedóukebeneŋgatám	ŋgedóukeseneŋgatám	ŋgedóukekeneŋgetim	ŋgedóukeseneŋgetím
Plur.	1	ŋgedóibeneŋgátu	ŋgedóisieneŋgátu	ŋgedóikeneŋgéty	ŋgedóisieneŋgéty
	3	ŋgedóibeneŋgátam	ŋgedóisieneŋgátam	ŋgedóikeneŋgétim	ŋgedóisieneŋgétim
Recent Past					
Sing.	1				
	2				
	3n.	*Same*	*Same*	*Same*	*Same*
	3m.				
	1+2				
Dual	1	*as*	*as*	*as*	*as*
	2				
	3n.				
	3m.	*Present*	*Present*	*Present*	*Present*
	1+2				
Plur.	1				
	3				

Past

Sing.	1	ŋgedúobeneŋgáku	ŋgedúoseneŋgáku	ŋgedúokeneŋgéky	ŋgedúoseneŋgéky
	2	ŋgedúobeneŋgáke	ŋgedúoseneŋgáke	ŋgedúokeneŋgéki	ŋgedúoseneŋgéki
	3n.	ŋgedúobeneŋgákum	ŋgedúoseneŋgákum	ŋgedúokeneŋgékym	ŋgedúoseneŋgékym
	3m.	ŋgedúobeneŋgákam	ŋgedúoseneŋgákam	ŋgedúokeneŋgékim	ŋgedúoseneŋgékim
	1+2	ŋgedúomambeneŋgakám	ŋgedúomanseneŋgakám	ŋgedúomeŋkeneŋgekím	ŋgedúomenseneŋgekím
Dual	1	ŋgedóukebeneŋgáku	ŋgedóukeseneŋgáku	ŋgedóukekeneŋgèky	ŋgedóukeseneŋgéky
	2	ŋgedóukebeneŋgáke	ŋgedóukeseneŋgáke	ŋgedóukekeneŋgéki	ŋgedóukeseneŋgéki
	3n.	ŋgedóukebeneŋgákum	ŋgedóukeseneŋgákum	ŋgedóukekeneŋgékym	ŋgedóukeseneŋgékym
	3m.	ŋgedóukebeneŋgákam	ŋgedóukeseneŋgákam	ŋgedóukekeneŋgékim	ŋgedóukeseneŋgékim
	1+2	ŋgedóukebeneŋgakám	ŋgedóukeseneŋgakám	ŋgedóukekeneŋgekím	ŋgedóukeseneŋgekím
Plur.	1	ŋgedóibeneŋgáku	ŋgedóisieneŋgáku	ŋgedóikeneŋgéky	ŋgedóisieneŋgéky
	3	ŋgedóibeneŋgákam	ŋgedóisieneŋgákam	ŋgedóikeneŋgékim	ŋgedóisieneŋgékim

(I) **MASCULINE OBJECT — MOMENTARY**

Future	*1st Pos.*	*2nd Pos.*	*3rd Pos.*	*4th Pos.*
Sing. 1	ŋgedúoráru	ŋgedúorebáru	ŋgedúoreŋáru	ŋgedúoresáru
2	ŋgedúoráre	ŋgedúorebáre	ŋgedúoreŋáre	ŋgedúoresáre
3n.	ŋgedúorárum	ŋgedúorebárum	ŋgedúoreŋárum	ŋgedúoresárum
3m.	ŋgedúoráram	ŋgedúorebáram	ŋgedúoreŋáram	ŋgedúoresáram
1+2	ŋgedúoremandám	ŋgedúoremambarám	ŋgedúoremaŋarám	ŋgedúoremansarám
Dual 1	ŋgedóukráru	ŋgedóukrebáru	ŋgedóukreŋáru	ŋgedóukresáru
2	ŋgedóukráre	ŋgedóukrebáre	ŋgedóukreŋáre	ŋgedóukresáre
3n.	ŋgedóukrárum	ŋgedóukrebárum	ŋgedóukreŋárum	ŋgedóukresárum
3m.	ŋgedóukráram	ŋgedóukrebáram	ŋgedóukreŋáram	ŋgedóukresáram
1+2	ŋgedóukrarám	ŋgedóukrebarám	ŋgedóukreŋarám	ŋgedóukresarám
Plur. 1	ŋgedóiráru	ŋgedóirebáru	ŋgedóireŋáru	ŋgedóiresáru
3	ŋgedóiráram	ŋgedóirebáram	ŋgedóireŋáram	ŋgedóiresáram
Present				
Sing. 1	ŋgedúorátu	ŋgedúorebáu	ŋgedúorekeŋáu	ŋgedúoresáu
2	ŋgedúoráte	ŋgedúorebáe	ŋgedúorekeŋáe	ŋgedúoresáe
3n.	ŋgedúorátum	ŋgedúorebóm	ŋgedúorekeŋóm	ŋgedúoresóm
3m.	ŋgedúorátam	ŋgedúorebám	ŋgedúorekeŋám	ŋgedúoresám
1+2	ŋgedúoremantám	ŋgedúoremambám	ŋgedúoremaŋkeŋám	ŋgedúoremansám
Dual 1	ŋgedóukrátu	ŋgedóukrebáu	ŋgedóukrekeŋáu	ŋgedóukresáu
2	ŋgedóukráte	ŋgedóukrebáe	ŋgedóukrekeŋáe	ŋgedóukresáe
3n.	ŋgedóukrátum	ŋgedóukrebóm	ŋgedóukrekeŋóm	ŋgedóukresóm
3m.	ŋgedóukrátam	ŋgedóukrebám	ŋgedóukrekeŋám	ŋgedóukresám
1+2	ŋgedóukratám	ŋgedóukrebám	ŋgedóukrekeŋám	ŋgedóukresám
Plur. 1	ŋgedóirátu	ŋgedóirebáu	ŋgedóirekeŋáu	ŋgedóiresáu
3	ŋgedóirátam	ŋgedóirebám	ŋgedóirekeŋám	ŋgedóiresám

Recent Past

Sing.	1	ŋgedúorápu			
	2	ŋgedúorápe			
	3n.	ŋgedúorápum	*Same*	*Same*	*Same*
	3m.	ŋgedúorápam			
	1+2	ŋgedúoremampám			
Dual	1	ŋgedóukrápu	*as*	*as*	*as*
	2	ŋgedóukrápe			
	3n.	ŋgedóuprápum			
	3m.	ŋgedóukrápam	*Present*	*Present*	*Present*
	1+2	ŋgedóukrapám			
Plur.	1	ŋgedóirápu			
	3	ŋgedóirápam			

Past

Sing.	1	ŋgedúoráku	ŋgedúorebáku	ŋgedúoreŋáku	ŋgedúoresáku
	2	ŋgedúoráke	ŋgedúorebáke	ŋgedúoreŋáke	ŋgedúoresáke
	3n.	ŋgedúorákum	ŋgedúorebákum	ŋgedúoreŋákum	ŋgedúoresákum
	3m.	ŋgedúorákam	ŋgedúorebákam	ŋgedúoreŋákam	ŋgedúoresákam
	1+2	ŋgedúoremaŋkám	ŋgedúoremambakám	ŋgedúoremaŋakám	ŋgedúoremansakám
Dual	1	ŋgedóukráku	ŋgedóukrebáku	ŋgedóukreŋáku	ŋgedóukresáku
	2	ŋgedóukráke	ŋgedóukrebáke	ŋgedóukreŋáke	ŋgedóukresáke
	3n.	ŋgedóukrákum	ŋgedóukrebákum	ŋgedóukreŋákum	ŋgedóukresákam
	3m.	ŋgedóukrákam	ŋgedóukrebákam	ŋgedóukreŋákam	ŋgedóukresákam
	1+2	ŋgedóukrakám	ŋgedóukrebakám	ŋgedóukreŋakám	ŋgedóukresakám
Plur.	1	ŋgedóiráku	ŋgedóirebáku	ŋgedóireŋáku	ŋgedóiresáku
	3	ŋgedóirákam	ŋgedóirebákam	ŋgedóireŋákam	ŋgedóiresákam

		5th Pos.	6th Pos.	7th Pos.	8th Pos.
Future					
Sing.	1	ŋgedúorenáru	ŋgedúorebedú	ŋgedúoresedú	ŋgedúoresedý
	2	ŋgedúorenáre	ŋgedúorebedé	ŋgedúoresedé	ŋgedúoresedí
	3n.	ŋgedúorenárum	ŋgedúorebedúm	ŋgedúoresedúm	ŋgedúoresedým
	3m.	ŋgedúorenáram	ŋgedúorebedám	ŋgedúoresedám	ŋgedúoresedím
	1+2	ŋgedúoremanarám	ŋgedúoremambedám	ŋgedúoremansedám	ŋgedúoremensedím
Dual	1	ŋgedóukrenáru	ŋgedóukrebedú	ŋgedóukresedú	ŋgedóukresedý
	2	ŋgedóukrenáre	ŋgedóukrebedé	ŋgedóukresedé	ŋgedóukresedí
	3n.	ŋgedóukrenárum	ŋgedóukrebedúm	ŋgedóukresedúm	ŋgedóukresedým
	3m.	ŋgedóukrenáram	ŋgredóukrebedám	ŋgedóukresedám	ŋgedóukresedím
	1+2	ŋgedóukrenarám	ŋgedóukrebedám	ŋgedóukresedám	ŋgedóukresedím
Plur.	1	ŋgedóirenáru	ŋgedóirebedú	ŋgedóiresedú	ŋgedóiresedý
	3	ŋgedóirenáram	ŋgedóirebedám	ŋgedóiresedám	ŋgedóiresedím
Present					
Sing.	1	ŋgedúorenáu	ŋgedúorebetú	ŋgedúoresetú	ŋgedúoresetý
	2	ŋgedúorenáe	ŋgedúorebeté	ŋgedúoreseté	ŋgedúoreseti
	3n.	ŋgedúorenóm	ŋgedúorebetúm	ŋgedúoresetúm	ŋgedúoresetým
	3m.	ŋgedúorenám	ŋgedúorebetám	ŋgedúoresetám	ŋgedúoresetím
	1+2	ŋgedúoremanám	ŋgedúoremambetám	ŋgedúoremansetám	ŋgedúoremensetím
Dual	1	ŋgedóukrenáu	ŋgedóukrebetú	ŋgedóukresetú	ŋgedóukresetý
	2	ŋgedóukrenáe	ŋgedóukrebeté	ŋgedóukreseté	ŋgedóukreseti
	3n.	ŋgedóukrenóm	ŋgedóukrebetúm	ŋgedóukresetúm	ŋgedóukresetým
	3m.	ŋgedóukrenám	ŋgedóukrebetám	ŋgedóukresetám	ŋgedóukresetím
	1+2	ŋgedóukrenám	ŋgedóukrebetám	ŋgedóukresetám	ŋgedóukresetím
Plur.	1	ŋgedóirenáu	ŋgedóirebetú	ŋgedóiresetú	ŋgedóiresetý
	3	ŋgedóirenám	ŋgedóirebetám	ŋgedóiresetám	ŋgedóiresetím

Recent Past

Sing.	1		ŋgedúorebepú	ŋgedúoresepú	ŋgedúoresepý
	2		ŋgedúorebepé	ŋgedúoresepé	ŋgedúoresepí
	3n.	*Same*	ŋgedúorebepúm	ŋgedúoresepúm	ŋgedúoresepým
	3m.		ŋgedúorebepám	ŋgedúoresepám	ŋgedúoresepím
	1+2		ŋgedúoremambepám	ŋgedúoremansepám	ŋgedúoremensepím
Dual	1	*as*	ŋgedóukrebepú	ŋgedóukresepú	ŋgedóukresepý
	2		ŋgedóukrebepé	ŋgedóukresepé	ŋgedóukresepí
	3n.		ŋgedóukrebepúm	ŋgedóukresepúm	ŋgedóukresepým
	3m.	*Present*	ŋgedóukrebepám	ŋgedóukresepám	ŋgedóukresepím
	1+2		ŋgedóukrebepám	ŋgedóupresepám	ŋgedóukresepím
Plur.	1		ŋgedóirebepú	ŋgedóiresepú	ŋgedóiresepý
	3		ŋgedóirebepám	ŋgedóiresepám	ŋgedóiresepím

Past

Sing.	1	ŋgedúorenáku	ŋgedúorebekú	ŋgedúoresekú	ŋgedúoreseký
	2	ŋgedúorenáke	ŋgedúorebeké	ŋgedúoreseké	ŋgedúoreseki
	3n.	ŋgedúorenákum	ŋgedúorebekúm	ŋgedúoresekúm	ŋgedúoresekým
	3m.	ŋgedúorenákam	ŋgedúorebekám	ŋgedúoresekám	ŋgedúoresekím
	1+2	ŋgedúoremanakám	ŋgedúoremambekám	ŋgedúoremansekám	ŋgedúoremensekím
Dual	1	ŋgedóukrenáku	ŋgedóukrebekú	ŋgedóukresekú	ŋgedóukreseký
	2	ŋgedóukrenáke	ŋgedóukrebeké	ŋgedóukreseké	ŋgedóukreseki
	3n.	ŋgedóukrenákum	ŋgedóukrebekúm	ŋgedóukresekúm	ŋgedóukresekým
	3m.	ŋgedóukrenákam	ŋgedóukrebekám	ŋgedóukresekám	ŋgedóukresekím
	1+2	ŋgedóukrenakám	ŋgedóukrebekám	ŋgedóukresekám	ŋgedóukresekím
Plur.	1	ŋgedóirenáku	ŋgedóirebekú	ŋgedóiresekú	ŋgedóireseký
	3	ŋgedóirenákam	ŋgedóirebekám	ŋgedóiresekám	ŋgedóiresekím

		9th Pos.	*10th Pos.*	*11th Pos.*	*12th Pos.*
Future					
Sing.	1	ŋgedúorenedý	ŋgedúorekendý	ŋgedúorebándu	ŋgedúoresándu
	2	ŋgedúorenedí	ŋgedúorekendí	ŋgedúorebánde	ŋgedúoresánde
	3n.	ŋgedúorenedým	ŋgedúorekendým	ŋgedúorebándum	ŋgedúoresándum
	3m.	ŋgedúorenedím	ŋgedúorekendím	ŋgedúorebándam	ŋgedúoresándam
	1+2	ŋgedúoremenedím	ŋgedúoremeŋkendím	ŋgedúoremambandám	ŋgedúoremansandám
Dual	1	ŋgedóukrenedý	ŋgedóukrekendý	ŋgedóukrebándu	ŋgedóukresándu
	2	ŋgedóukrenedí	ŋgedóukrekendí	ŋgedóukrebánde	ŋgedóukresánde
	3n.	ŋgedóukrenedým	ŋgedóukrekendým	ŋgedóukrebándum	ŋgedóukresándum
	3m.	ŋgedóukrenedím	ŋgedóukrekendím	ŋgedóukrebándam	ŋgedóukresándam
	1+2	ŋgedóukrenedím	ŋgedóukrekendím	ŋgedóukrebandám	ŋgedóukresandám
Plur.	1	ŋgedóirenedý	ŋgedóirekendý	ŋgedóirebándu	ŋgedóiresándu
	3	ŋgedóirenedím	ŋgedóirekendím	ŋgedóirebándam	ŋgedóiresándam
Present					
Sing.	1	ŋgedúorenetý	ŋgedúorekentý	ŋgedúorebántu	ŋgedúoresántu
	2	ŋgedúorenetí	ŋgedúorekentí	ŋgedúorebánte	ŋgedúoresánte
	3n.	ŋgedúorenetým	ŋgedúorekentým	ŋgedúorebántum	ŋgedúoresántum
	3m.	ŋgedúorenetím	ŋgedúorekentím	ŋgedúorebántam	ŋgedúoresántam
	1+2	ŋgedúoremenetím	ŋgedúoremeŋkentím	ŋgedúoremambantám	ŋgedúoremansantám
Dual	1	ŋgedóukrenetý	ŋgedóukrekentý	ŋgedóukrebántu	ŋgedóukresántu
	2	ŋgedóukrenetí	ŋgedóukrekentí	ŋgedóukrebánte	ŋgedóukresánte
	3n.	ŋgedóukrenetým	ŋgedóukrekentým	ŋgedóukrebántum	ŋgedóukresántum
	3m.	ŋgedóukrenetím	ŋgedóukrekentím	ŋgedóukrebántam	ŋgedóukresántam
	1+2	ŋgedóukrenetím	ŋgedóukrekentím	ŋgedóukrebantám	ŋgedóukresantám
Plur.	1	ŋgedóirenetý	ŋgedóirekentý	ŋgedóirebántu	ŋgedóiresántu
	3	ŋgedóirenetím	ŋgedóirekentím	ŋgedóirebántam	ŋgedóiresántam

Recent Past

Sing.	1	ŋgedúorenepý	ŋgedúorekempý	ŋgedúorebámpu	ŋgedúoresámpu
	2	ŋgedúorenepí	ŋgedúorekempí	ŋgedúorebámpe	ŋgedúoresámpe
	3n.	ŋgedúorenepým	ŋgedúorekempým	ŋgedúorebámpum	ŋgedúoresámpum
	3m.	ŋgedúorenepím	ŋgedúorekempím	ŋgedúorebámpam	ŋgedúoresámpam
	1+2	ŋgedúoremenepím	ŋgedúoremeŋkempím	ŋgedúoremambampám	ŋgedúoremansampám
Dual	1	ŋgedóukrenepý	ŋgedóukrekempý	ŋgedóukrebámpu	ŋgedóukresámpu
	2	ŋgedóukrenepí	ŋgedóukrekempí	ŋgedóukrebámpe	ŋgedóukresámpe
	3n.	ŋgedóukrenepým	ŋgedóukrekempým	ŋgedóukrebámpum	ŋgedóukresámpum
	3m.	ŋgedóukrenepím	ŋgedóukrekempím	ŋgedóukrebámpam	ŋgedóukresámpam
	1+2	ŋgedóukrenepím	ŋgedóukrekempím	ŋgedóukrebampám	ŋgedóukresampám
Plur.	1	ŋgedóirenepý	ŋgedóirekempý	ŋgedóirebámpu	ŋgedóiresámpu
	3	ŋgedóirenepím	ŋgedóirekempím	ŋgedóirebámpam	ŋgedóiresámpam

Past

Sing.	1	ŋgedúoreneký	ŋgedúorekeŋký	ŋgedúorebáŋku	ŋgedúoresáŋku
	2	ŋgedúorenekí	ŋgedúorekeŋkí	ŋgedúorebáŋke	ŋgedúoresáŋke
	3n.	ŋgedúorenekým	ŋgedúorekeŋkým	ŋgedúorebáŋkum	ŋgedúoresáŋkum
	3m.	ŋgedúorenekím	ŋgedúorekeŋkím	ŋgedúorebáŋkam	ŋgedúoresáŋkam
	1+2	ŋgedúoremenekím	ŋgedúoremeŋkeŋkím	ŋgedúoremambaŋkám	ŋgedúoremansaŋkám
Dual	1	ŋgedóukreneký	ŋgedóukrekeŋký	ŋgedóukrebáŋku	ŋgedóukresáŋku
	2	ŋgedóukrenekí	ŋgedóukrekeŋkí	ŋgedóukrebáŋke	ŋgedóukresáŋke
	3n.	ŋgedóukrenekým	ŋgedóukrekeŋkým	ŋgedóukrebáŋkum	ŋgedóukresáŋkum
	3m.	ŋgedóukrenekím	ŋgedóukrekeŋkím	ŋgedóukrebaŋkám	ŋgedóukresáŋkam
	1+2	ŋgedóukrenekím	ŋgedóukrekeŋkím	ŋgedóukrebáŋkam	ŋgedóukresaŋkám
Plur.	1	ŋgedóireneký	ŋgedóirekeŋký	ŋgedóirebáŋku	ŋgedóiresáŋku
	3	ŋgedóirenekím	ŋgedóirekeŋkím	ŋgedóirebáŋkam	ŋgedóiresáŋkam

(IV) MASCULINE OBJECT — MOMENTARY

		13th Pos.	*14th Pos.*	*15th Pos.*	*16th Pos.*
Future					
Sing.	1	ŋgedúorebenáru	ŋgedúoresenáru	ŋgedúorekenéry	ŋgedúoresenéry
	2	ŋgedúorebenáre	ŋgedúoresenáre	ŋgedúorekenéri	ŋgedúoresenéri
	3n.	ŋgedúorebenárum	ŋgedúoresenárum	ŋgedúorekenérym	ŋgedúoresenérym
	3m.	ŋgedúorebenáram	ŋgedúoresenáram	ŋgedúorekenérim	ŋgedúoresenérim
	1+2	ŋgedúoremambenarám	ŋgedúoremansenarám	ŋgedúoremeŋkenerím	ŋgedúoremensenerím
Dual	1	ŋgedóukrebenáru	ŋgedóukresenáru	ŋgedóukrekenéry	ŋgedóukresenéry
	2	ŋgedóukrebenáre	ŋgedóukresenáre	ŋgedóukrekenéri	ŋgedóukresenéri
	3n.	ŋgedóukrebenárum	ŋgedóukresenárum	ŋgedóukrekenérym	ŋgedóukresenérym
	3m.	ŋgedóukrebenáram	ŋgedóukresenáram	ŋgedóukrekenérim	ŋgedóukresenérim
	1+2	ŋgedóukrebenarám	ŋgedóukresenarám	ŋgedóukrekenerím	ŋgedóukresenerím
Plur.	1	ŋgedóirebenáru	ŋgedóiresenáru	ŋgedóirekenéry	ŋgedóiresenéry
	3	ŋgedóirebenáram	ŋgedóiresenáram	ŋgedóirekenérim	ŋgedóiresenérim
Present					
Sing.	1	ŋgedúorebenanáu	ŋgedúoresenanáu	ŋgedúorekenenéy	ŋgedúoresenenéy
	2	ŋgedúorebenanáe	ŋgedúoresenanáe	ŋgedúorekenenéi	ŋgedúoresenenéi
	3n.	ŋgedúorebenanóm	ŋgedúoresenanóm	ŋgedúorekenenyém	ŋgedúoresenenyém
	3m.	ŋgedúorebenanám	ŋgedúoresenanám	ŋgedúorekeneném	ŋgedúoreseneném
	1+2	ŋgedúoremambenanám	ŋgedúoremansenanám	ŋgedúoremeŋkeneném	ŋgedúoremenseneném
Dual	1	ŋgedóukrebenanáu	ŋgedóukresenanáu	ŋgedóukrekenenéy	ŋgedóukresenenéy
	2	ŋgedóukrebenanáe	ŋgedóukresenanáe	ŋgedóukrekenenéi	ŋgedóukresenenéi
	3n.	ŋgedóukrebenanóm	ŋgedóukresenanóm	ŋgedóukrekenenyém	ŋgedóukresenenyém
	3m.	ŋgedóukrebenanám	ŋgedóukresenanám	ŋgedóukrekeneném	ŋgedóukreseneném
	1+2	ŋgedóukrebenanám	ŋgedóukresenanám	ŋgedóukrekeneném	ŋgedóukreseneném
Plur.	1	ŋgedóirebenanáu	ŋgedóiresenanáu	ŋgedóirekenenéy	ŋgedóiresenéy
	3	ŋgedóirebenanám	ŋgedóiresenanám	ŋgedóirekeneném	ŋgedóireseneném

Recent	**Past**				
Sing.	1				
	2				
	3n.	*Same*	*Same*	*Same*	*Same*
	3m.				
	1+2				
Dual	1	*as*	*as*	*as*	*as*
	2				
	3n.				
	3m.	*Present*	*Present*	*Present*	*Present*
	1+2				
Plur.	1				
	3				
Past					
Sing.	1	ŋgedúorebenáku	ŋgedúoresenáku	ŋgedúorekenéky	ŋgedúoresenéky
	2	ŋgedúorebenáke	ŋgedúoresenáke	ŋgedúorekenéki	ŋgedúoresenéki
	3n.	ŋgedúorebenákum	ŋgedúoresenákum	ŋgedúorekenékym	ŋgedúoresenékym
	3m.	ŋgedúorebenákam	ŋgedúoresenákam	ŋgedúorekenékim	ŋgedúoresenékim
	1+2	ŋgedúoremambenakám	ŋgedúoremansenakám	ŋgedúoremeŋkenekím	ŋgedúoremensenekím
Dual	1	ŋgedóukrebenáku	ŋgedóukresenáku	ŋgedóukrekenéky	ŋgedóukresenéky
	2	ŋgedóukrebenáke	ŋgedóukresenáke	ŋgedóukrekenéki	ŋgedóukresenéki
	3n.	ŋgedóukrebenákum	ŋgedóukresenákum	ŋgedóukrekenékym	ŋgedóukresenékym
	3m.	ŋgedóukrebenákam	ŋgedóukresenákam	ŋgedóukrekenékim	ŋgedóukresenékim
	1+2	ŋgedóukrebenakám	ŋgedóukresenakám	ŋgedóukrekenekím	ŋgedóukresenekím
Plur.	1	ŋgedóirebenáku	ŋgedóiresenáku	ŋgedóirekenéky	ŋgedóiresenéky
	3	ŋgedóirebenákam	ŋgedóiresenákam	ŋgedóirekenékim	ŋgedóiresenékim

(I) **MASCULINE OBJECT — ITERATIVE**

		1st Pos.	*2nd Pos.*	*3rd Pos.*	*4th Pos.*
Present					
Sing.	1	ŋgedúorekátu	ŋgedúorebekátu	ŋgedúoreŋgátu	ŋgedúoreskátu
	2	ŋgedúorekáte	ŋgedúorebekáte	ŋgedúoreŋgáte	ŋgedúoreskáte
	3n.	ŋgedúorekátum	ŋgedúorebekátum	ŋgedúoreŋgátum	ŋgedúoreskátum
	3m.	ŋgedúorekátam	ŋgedúorebekátam	ŋgedúoreŋgátam	ŋgedúoreskátam
	1+2	ŋgedúoremaŋkatám	ŋgedúoremambekatám	ŋgedúoremaŋgatám	ŋgedúoremanskatám
Dual	1	ŋgedóukrekátu	ŋgedóukrebekátu	ŋgedóukreŋgátu	ŋgedóukreskátu
	2	ŋgedóukrekáte	ŋgedóukrebekáte	ŋgedóukreŋgáte	ŋgedóukreskáte
	3n.	ŋgedóukrekátum	ŋgedóukrebekátum	ŋgedóukreŋgátum	ŋgedóukreskátum
	3m.	ŋgedóukrekátam	ŋgedóukrebekátam	ŋgedóukreŋgátam	ŋgedóukreskátam
	1+2	ŋgedóukrekatám	ŋgedóukrebekatám	ŋgedóukreŋgatám	ŋgedóukreskatám
Plur.	1	ŋgedóirekátu	ŋgedóirebekátu	ŋgedóireŋgátu	ŋgedóireskátu
	3	ŋgedóirekátam	ŋgedóirebekátam	ŋgedóireŋgátam	ŋgedóireskátam
Recent Past					
Sing.	1	ŋgedúorekápu			
	2	ŋgedúorekápe			
	3n.	ŋgedúorekápum	*Same*	*Same*	*Same*
	3m.	ŋgedúorekápam			
	1+2	ŋgedúoremaŋkapám			
Dual	1	ŋgedóukrekápu	*as*	*as*	*as*
	2	ŋgedóukrekápe			
	3n.	ŋgedóukrekápum			
	3m.	ŋgedóukrekápam	*Present*	*Present*	*Present*
	1+2	ŋgedóukrekapám			
Plur.	1	ŋgedóirekápu			
	3	ŋgedóirekápam			

Past

Sing.	1	ŋgedúorekáku	ŋgedúorebekáku	ŋgedúoreŋgáku	ŋgedúoreskáku
	2	ŋgedúorekáke	ŋgedúorebekáke	ŋgedúoreŋgáke	ŋgedúoreskáke
	3n.	ŋgedúorekákum	ŋgedúorebekákum	ŋgedúoreŋgákum	ŋgedúoreskákum
	3m.	ŋgedúorekákam	ŋgedúorebekákam	ŋgedúoreŋgákam	ŋgedúoreskákam
	1+2	ŋgedúoremaŋkakám	ŋgedúoremambekakám	ŋgedúoremaŋgakám	ŋgedúoremanskakám
Dual	1	ŋgedóukrekáku	ŋgedóukrebekáku	ŋgedóukreŋgáku	ŋgedóukreskáku
	2	ŋgedóukrekáke	ŋgedóukrebekáke	ŋgedóukreŋgáke	ŋgedóukreskáke
	3n.	ŋgedóukrekákum	ŋgedóukrebekákum	ŋgedóukreŋgákum	ŋgedóukreskákum
	3m.	ŋgedóukrekákam	ŋgedóukrebekákam	ŋgedóukreŋgákam	ŋgedóukreskákam
	1+2	ŋgedóukrekakám	ŋgedóukrebekakám	ŋgedóukreŋgakám	ŋgedóukreskakám
Plur.	1	ŋgedóirekáku	ŋgedóirebekáku	ŋgedóireŋgáku	ŋgedóireskáku
	3	ŋgedóirekákam	ŋgedóirebekákam	ŋgedóireŋgákam	ŋgedóireskákam

		5th Pos.	*6th Pos.*	*7th Pos.*	*8th Pos.*
Present					
Sing.	1	ŋgedúoreneŋgátu	ŋgedúorebekátu	ŋgedúoreskátu	ŋgedúoreskéty
	2	ŋgedúoreneŋgáte	ŋgedúorebekáte	ŋgedúoreskáte	ŋgedúoreskéti
	3n.	ŋgedúoreneŋgátum	ŋgedúorebekátum	ŋgedúoreskátum	ŋgedúoreskétym
	3m.	ŋgedúoreneŋgátam	ŋgedúorebekátam	ŋgedúoreskátam	ŋgedúoreskétim
	1+2	ŋgedúoremaneŋgatám	ŋgedúoremambekatám	ŋgedúoremanskatám	ŋgedúoremensketím
Dual	1	ŋgedóukreneŋgátu	ŋgedóukrebekátu	ŋgedóukreskátu	ŋgedóukreskéty
	2	ŋgedóukreneŋgáte	ŋgedóukrebekáte	ŋgedóukreskáte	ŋgedóukreskéti
	3n.	ŋgedóukreneŋgátum	ŋgedóukrebekátum	ŋgedóukreskátum	ŋgedóukreskétym
	3m.	ŋgedóukreneŋgátam	ŋgedóukrebekátam	ŋgedóukreskátam	ŋgedóukreskétim
	1+2	ŋgedóukreneŋgatám	ŋgedóukrebekatám	ŋgedóukreskatám	ŋgedóukreskетím
Plur.	1	ŋgedóireneŋgátu	ŋgedóirebekátu	ŋgedóireskátu	ŋgedóireskéty
	3	ŋgedóireneŋgátam	ŋgedóirebekátam	ŋgedóireskátam	ŋgedóireskétim
Recent Past					
Sing.	1		ŋgedúorebekápu	ŋgedúoreskápu	ŋgedúoresképy
	2		ŋgedúorebekápe	ŋgedúoreskápe	ŋgedúoresképi
	3n.	*Same*	ŋgedúorebekápum	ŋgedúoreskápum	ŋgedúoresképym
	3m.		ŋgedúorebekápam	ŋgedúoreskápam	ŋgedúoresképim
	1+2		ŋgedúoremambekapám	ŋgedúoremanskapám	ŋgedúoremenskepím
Dual	1	*as*	ŋgedóukrebekápu	ŋgedóukreskápu	ŋgedóukresképy
	2		ŋgedóukrebekápe	ŋgedóukreskápe	ŋgedóukresképi
	3n.		ŋgedóukrebekápum	ŋgedóukreskápum	ŋgedóukresképym
	3m.	*Present*	ŋgedóukrebekápam	ŋgedóukreskápam	ŋgedóukresképim
	1+2		ŋgedóukrebekapám	ŋgedóukreskapám	ŋgedóukreskepím
Plur.	1		ŋgedóirebekápu	ŋgedóireskápu	ŋgedóiresképy
	3		ŋgedóirebekápam	ŋgedóireskápam	ŋgedóiresképim

Past

Sing.	1	ŋgedúorenenŋgáku	ŋgedúorebekáku	ŋgedúoreskáku	ŋgedúoreskéky
	2	ŋgedúorenenŋgáke	ŋgedúorebekáke	ŋgedúoreskáke	ŋgedúoreskéki
	3n.	ŋgedúorenenŋgákum	ŋgedúorebekákum	ŋgedúoreskákum	ŋgedúoreskékym
	3m.	ŋgedúorenenŋgákam	ŋgedúorebekákam	ŋgedúoreskákam	ŋgedúoreskékim
	1+2	ŋgedúoremanenŋgakám	ŋgedúoremambekakám	ŋgedúoremanskakám	ŋgedúoremenskekím
Dual	1	ŋgedóukrenenŋgáku	ŋgedóukrebekáku	ŋgedóukreskáku	ŋgedóukreskéky
	2	ŋgedóukrenenŋgáke	ŋgedóukrebekáke	ŋgedóukreskáke	ŋgedóukreskéki
	3n.	ŋgedóukrenenŋgákum	ŋgedóukrebekákum	ŋgedóukreskákum	ŋgedóukreskékym
	3m.	ŋgedóukrenenŋgákam	ŋgedóukrebekákam	ŋgedóukreskákam	ŋgedóukreskékim
	1+2	ŋgedóukrenenŋgakám	ŋgedóukrebekakám	ŋgedóukreskakám	ŋgedóukreskekím
Plur.	1	ŋgedóirenenŋgáku	ŋgedóirebekáku	ŋgedóireskáku	ŋgedóireskéky
	3	ŋgedóirenenŋgákam	ŋgedóirebekákam	ŋgedóireskákam	ŋgedóireskékim

		9th Pos.	*10th Pos.*	*11th Pos.*	*12th Pos.*
Present					
Sing.	1	ŋgedúorenenŋgéty	ŋgedúorenŋgentý	ŋgedúorebekántu	ŋgedúoreskántu
	2	ŋgedúorenenŋgéti	ŋgedúorenŋgentí	ŋgedúorebekánte	ŋgedúoreskánte
	3n.	ŋgedúorenenŋgétym	ŋgedúorenŋgentým	ŋgedúorebekántum	ŋgedúoreskántum
	3m.	ŋgedúorenenŋgétim	ŋgedúorenŋgentím	ŋgedúorebekántam	ŋgedúoreskántam
	1+2	ŋgedúoremenenŋgetím	ŋgedúoremenŋgentím	ŋgedúoremambekantám	ŋgedúoremanskantám
Dual	1	ŋgedóukrenenŋgéty	ŋgedóukrenŋgentý	ŋgedóukrebekántu	ŋgedóukreskántu
	2	ŋgedóukrenenŋgéti	ŋgedóukrenŋgentí	ŋgedóukrebekánte	ŋgedóukreskánte
	3n.	ŋgedóukrenenŋgétym	ŋgedóukrenŋgentým	ŋgedóukrebekántum	ŋgedóukreskántum
	3m.	ŋgedóukrenenŋgétim	ŋgedóukrenŋgentím	ŋgedóukrebekántam	ŋgedóukreskántam
	1+2	ŋgedóukrenenŋgetím	ŋgedóukrenŋgentím	ŋgedóukrebekantám	ŋgedóukreskantám
Plur.	1	ŋgedóirenenŋgéty	ŋgedóirenŋgentý	ŋgedóirebekántu	ŋgedóireskántu
	3	ŋgedóirenenŋgétim	ŋgedóirenŋgentím	ŋgedóirebekántam	ŋgedóireskántam
Recent Past					
Sing.	1	ŋgedúorenenŋgépy	ŋgedúorenŋgempý	ŋgedúorebekámpu	ŋgedúoreskámpu
	2	ŋgedúorenenŋgépi	ŋgedúorenŋgempí	ŋgedúorebekámpe	ŋgedúoreskámpe
	3n.	ŋgedúorenenŋgépym	ŋgedúorenŋgempým	ŋgedúorebekámpum	ŋgedúoreskámpum
	3m.	ŋgedúorenenŋgépim	ŋgedúorenŋgempím	ŋgedúorebekámpam	ŋgedúoreskámpam
	1+2	ŋgedúoremenenŋgepím	ŋgedúoremenŋgempím	ŋgedúoremambekampám	ŋgedúoremanskampám
Dual	1	ŋgedóukrenenŋgépy	ŋgedóukrenŋgempý	ŋgedóukrebekámpu	ŋgedóukreskámpu
	2	ŋgedóukrenenŋgépi	ŋgedóukrenŋgempí	ŋgedóukrebekámpe	ŋgedóukreskámpe
	3n.	ŋgedóukrenenŋgépym	ŋgedóukrenŋgempým	ŋgedóukrebekámpum	ŋgedóukreskámpum
	3m.	ŋgedóukrenenŋgépim	ŋgedóukrenŋgempím	ŋgedóukrebekámpam	ŋgedóukreskámpam
	1+2	ŋgedóukrenenŋgepím	ŋgedóukrenŋgempím	ŋgedóukrebekampám	ŋgedóukreskampám
Plur.	1	ŋgedóirenenŋgépy	ŋgedóirenŋgempý	ŋgedóirebekámpu	ŋgedóireskámpu
	3	ŋgedóirenenŋgépim	ŋgedóirenŋgempím	ŋgedóirebekámpam	ŋgedóireskámpam

Past

Sing.	1	ŋgedúorenenŋgéky	ŋgedúorenŋgenŋkýˊ	ŋgedúorebekáŋku	ŋgedúoreskáŋku
	2	ŋgedúorenenŋgéki	ŋgedúorenŋgenŋkí	ŋgedúorebekáŋke	ŋgedúoreskáŋke
	3n.	ŋgedúorenenŋgékym	ŋgedúorenŋgenŋkýˊm	ŋgedúorebekáŋkum	ŋgedúoreskáŋkum
	3m.	ŋgedúorenenŋgékim	ŋgedúorenŋgenŋkím	ŋgedúorebekáŋkam	ŋgedúoreskáŋkam
	1+2	ŋgedúoremenenŋgekím	ŋgedúoremenŋgenŋkím	ŋgedúoremambekaŋkám	ŋgedúoremanskaŋkám
Dual	1	ŋgedóukrenenŋgéky	ŋgedóukrenŋgenŋkýˊ	ŋgedóukrebekáŋku	ŋgedóukreskáŋku
	2	ŋgedóukrenenŋgéki	ŋgedóukrenŋgenŋkí	ŋgedóukrebekáŋke	ŋgedóukreskáŋke
	3n.	ŋgedóukrenenŋgékym	ŋgedóukrenŋgenŋkýˊm	ŋgedóukrebekáŋkum	ŋgedóukreskáŋkum
	3m.	ŋgedóukrenenŋgékim	ŋgedóukrenŋgenŋkím	ŋgedóukrebekáŋkam	ŋgedóukreskáŋkam
	1+2	ŋgedóukrenenŋgekím	ŋgedóukrenŋgenŋkím	ŋgedóukrebekaŋkám	ŋgedóukreskaŋkám
Plur.	1	ŋgedóirenenŋgéky	ŋgedóirenŋgenŋkýˊ	ŋgedóirebekáŋku	ŋgedóireskáŋku
	3	ŋgedoirenenŋgékim	ŋgedóirenŋgenŋkím	ŋgedóirebekáŋkam	ŋgedóireskáŋkam

		13th Pos.	*14th Pos.*	*15th Pos.*	*16th Pos.*
Present					
Sing.	1	ŋgedúorebeneŋgátu	ŋgedúoreseneŋgátu	ŋgedúorekeneŋgéty	ŋgedúoreseneŋgéty
	2	ŋgedúorebeneŋgáte	ŋgedúoreseneŋgáte	ŋgedúorekeneŋgéti	ŋgedúoreseneŋgéti
	3n.	ŋgedúorebeneŋgátum	ŋgedúoreseneŋgátum	ŋgedúorekeneŋgétym	ŋgedúoreseneŋgétym
	3m.	ŋgedúorebeneŋgátam	ŋgedúoreseneŋgátam	ŋgedúorekeneŋgétim	ŋgedúoreseneŋgétim
	1+2	ŋgedúoremambeneŋgatám	ŋgedúoremanseneŋgatám	ŋgedúoremeŋkeneŋgetím	ŋgedúoremenseneŋgetím
Dual	1	ŋgedóukrebeneŋgátu	ŋgedóukreseneŋgátu	ŋgedóukrekeneŋgéty	ŋgedóukreseneŋgéty
	2	ŋgedóukrebeneŋgáte	ŋgedóukreseneŋgáte	ŋgedóukrekeneŋgéti	ŋgedóukreseneŋgéti
	3n.	ŋgedóukrebeneŋgátum	ŋgedóukreseneŋgátum	ŋgedóukrekeneŋgétym	ŋgedóukreseneŋgéty
	3m.	ŋgedóukrebeneŋgátam	ŋgedóukreseneŋgátam	ŋgedóukrekeneŋgétim	ŋgedóukreseneŋgétim
	1+2	ŋgedóukrebeneŋgatám	ŋgedóukreseneŋgatám	ŋgedóukrekeneŋgetím	ŋgedóukreseneŋgetím
Plur.	1	ŋgedóirebeneŋgátu	ŋgedóireseneŋgátu	ŋgedóirekeneŋgéty	ŋgedóireseneŋgéty
	3	ŋgedóirebeneŋgátam	ŋgedóireseneŋgátam	ŋgedóirekeneŋgétim	ŋgedóireseneŋgétim
Recent Past					
Sing.	1				
	2				
	3n.	*Same*	*Same*	*Same*	*Same*
	3m.				
	1+2				
Dual	1	*as*	*as*	*as*	*as*
	2				
	3n.				
	3m.	*Present*	*Present*	*Present*	*Present*
	1+2				
Plur.	1				
	3				

Past

Sing.	1	ŋgedúorebeneŋgáku	ŋgedúoreseneŋgáku	ŋgedúorekeneŋgéky	ŋgedúoreseneŋgéky
	2	ŋgedúorebeneŋgáke	ŋgedúoreseneŋgáke	ŋgedúorekeneŋgéki	ŋgedúoreseneŋgéki
	3n.	ŋgedúorebeneŋgákum	ŋgedúoreseneŋgákum	ŋgedúorekeneŋgékym	ŋgedúoreseneŋgékym
	3m.	ŋgedúorebeneŋgákam	ŋgedúoreseneŋgákam	ŋgedúorekeneŋgékim	ŋgedúoreseneŋgékim
	1+2	ŋgedúoremambeneŋgakám	ŋgedúoremanseneŋgakám	ŋgedúoremeŋkeneŋgekím	ŋgedúoremenseneŋgekím
Dual	1	ŋgedóukrebeneŋgáku	ŋgedóukreseneŋgáku	ŋgedóukrekeneŋgéky	ŋgedóukreseneŋgéku
	2	ŋgedóukrebeneŋgáke	ŋgedóukreseneŋgáke	ŋgedóukrekeneŋgéki	ŋgedóukreseneŋgéki
	3n.	ŋgedóukrebeneŋgákum	ŋgedóukreseneŋgákum	ŋgedóukrekeneŋgékym	ŋgedóukreseneŋgékym
	3m.	ŋgedóukrebeneŋgákam	ŋgedóukreseneŋgákam	ŋgedóukrekeneŋgékim	ŋgedóukreseneŋgékim
	1+2	ŋgedóukrebeneŋgakám	ŋgedóukreseneŋgakám	ŋgedóukrekeneŋgekím	ŋgedóukreseneŋgekím
Plur.	1	ŋgedóirebeneŋgáku	ŋgedóireseneŋgáku	ŋgedóirekeneŋgéky	ŋgedóireseneŋgéky
	3	ŋgedóirebeneŋgákam	ŋgedóireseneŋgákam	ŋgedóirekeneŋgékim	ŋgedóireseneŋgékim

		1st Pos.	*2nd Pos.*	*3rd Pos.*	*4th Pos.*
Future					
Sing.	1	ŋgedóudáru	ŋgedóudebáru	ŋgedóudeŋáru	ŋgedóudesáru
	2	ŋgedóudáre	ŋgedóudebáre	ŋgedóudeŋáre	ŋgedóudesáre
	3n.	ŋgedóudárum	ŋgedóudebárum	ŋgedóudeŋárum	ŋgedóudesárum
	3m.	ŋgedóudáram	ŋgedóudebáram	ŋgedóudeŋáram	ŋgedóudesáram
	1+2	ŋgedóudemandám	ŋgedóudemambarám	ŋgedóudemaŋarám	ŋgedóudemansarám
Non-Sing.	1	ŋgedóidiáru	ŋgedóidiebáru	ŋgedóidieŋáru	ŋgedóidiesáru
	2	ŋgedóidiáre	ŋgedóidiebáre	ŋgedóidieŋáre	ŋgedóidiesáre
	3n.	ŋgedóidiárum	ŋgedóidiebárum	ŋgedóidieŋárum	ŋgedóidiesárum
	3m.	ŋgedóidiáram	ŋgedóidiebáram	ŋgedóidieŋáram	ŋgedóidiesáram
	1+2	ŋgedóidiarám	ŋgedóidiebarám	ŋgedóidieŋarám	ŋgedóidiesarám
Present					
Sing.	1	ŋgedóudátu	ŋgedóudebáu	ŋgedóudekeŋáu	ŋgedóudesáu
	2	ŋgedóudáte	ŋgedóudebáe	ŋgedóudekeŋáe	ŋgedóudesáe
	3n.	ŋgedóudátum	ŋgedóudebóm	ŋgedóudekeŋóm	ŋgedóudesóm
	3m.	ŋgedóudátam	ŋgedóudebám	ŋgedóudekeŋám	ŋgedóudesám
	1+2	ŋgedóudemantám	ŋgedóudemambám	ŋgedóudemaŋkeŋám	ŋgedóudemansám
Non-Sing.	1	ŋgedóidiátu	ŋgedóidiebáu	ŋgedóidiekeŋáu	ŋgedóidiesáu
	2	ŋgedóidiáte	ŋgedóidiebáe	ŋgedóidiekeŋáe	ŋgedóidiesáe
	3n.	ŋgedóidiátum	ŋgedóidiebóm	ŋgedóidiekeŋóm	ŋgedóidiesóm
	3m.	ŋgedóidiátam	ŋgedóidiebám	ŋgedóidiekeŋám	ŋgedóidiesám
	1+2	ŋgedóidiatám	ŋgedóidiebám	ŋgedóidiekeŋám	ŋgedóidiesám

Recent Past

Sing.	1	ŋgedóudápu			
	2	ŋgedóudápe	*Same*	*Same*	*Same*
	3n.	ŋgedóudápum			
	3m.	ŋgedóudápam			
	1+2	ŋgedóudemampám	*as*	*as*	*as*
Non-Sing.	1	ŋgedóidiápu			
	2	ŋgedóidiápe			
	3n.	ŋgedóidiápum	*Present*	*Present*	*Present*
	3m.	ŋgedóidiápam			
	1+2	ŋgedóidiapám			

Past

Sing.	1	ŋgedóudáku	ŋgedóudebáku	ŋgedóudeŋáku	ŋgedóudesáku
	2	ŋgedóudáke	ŋgedóudebáke	ŋgedóudeŋáke	ŋgedóudesáke
	3n.	ŋgedóudákum	ŋgedóudebákum	ŋgedóudeŋákum	ŋgedóudesákum
	3m.	ŋgedóudákam	ŋgedóudebákam	ŋgedóudeŋákam	ŋgedóudesákam
	1+2	ŋgedóudemaŋkám	ŋgedóudemambakám	ŋgedóudemaŋakám	ŋgedóudemansakám
Non-Sing.	1	ŋgedóidiáku	ŋgedóidiebáku	ŋgedóidieŋáku	ŋgedóidiesáku
	2	ŋgedóidiáke	ŋgedóidiebáke	ŋgedóidieŋáke	ŋgedóidiesáke
	3n.	ŋgedóidiákum	ŋgedóidiebákum	ŋgedóidieŋákum	ŋgedóidiesákum
	3m.	ŋgedóidiákam	ŋgedóidiebákam	ŋgedóidieŋákam	ŋgedóidiesákam
	1+2	ŋgedóidiakám	ŋgedóidiebakám	ŋgedóidieŋakám	ŋgedóidiesakám

		5th Pos.	*6th Pos.*	*7th Pos.*	*8th Pos.*
Future					
Sing.	1	ŋgedóudenáru	ŋgedóudebedú	ŋgedóudesedú	ŋgedóudesedý
	2	ŋgedóudenáre	ŋgedóudebedé	ŋgedóudesedé	ŋgedóudesedí
	3n.	ŋgedóudenárum	ŋgedóudebedúm	ŋgedóudesedúm	ŋgedóudesedým
	3m.	ŋgedóudenáram	ŋgedóudebedám	ŋgedóudesedám	ŋgedóudesedím
	1+2	ŋgedóudemanarám	ŋgedóudemambedám	ŋgedóudemansedám	ŋgedóudemensedím
Non-Sing.	1	ŋgedóidienáru	ŋgedóidiebedú	ŋgedóidiesedú	ŋgedóidiesedý
	2	ŋgedóidienáre	ŋgedóidiebedé	ŋgedóidiesedé	ŋgedóidiesedí
	3n.	ŋgedóidienárum	ŋgedóidiebedúm	ŋgedóidiesedúm	ŋgedóidiesedým
	3m.	ŋgedóidienáram	ŋgedóidiebedám	ŋgedóidiesedám	ŋgedóidiesedím
	1+2	ŋgedóidienarám	ŋgedóidiebedám	ŋgedóidiesedám	ŋgedóidiesedím
Present					
Sing.	1	ŋgedóudenáu	ŋgedóudebetú	ŋgedóudesetú	ŋgedóudesetý
	2	ŋgedóudenáe	ŋgedóudebeté	ŋgedóudeseté	ŋgedóudeseti
	3n.	ŋgedóudenóm	ŋgedóudebetúm	ŋgedóudesetúm	ŋgedóudesetým
	3m.	ŋgedóudenám	ŋgedóudebetám	ŋgedóudesetám	ŋgedóudesetím
	1+2	ŋgedóudemanám	ŋgedóudemambetám	ŋgedóudemansetám	ŋgedóudemensetím
Non-Sing.	1	ŋgedóidienáu	ŋgedóidiebetú	ŋgedóidiesetú	ŋgedóidiesetý
	2	ŋgedóidienáe	ŋgedóidiebeté	ŋgedóidieseté	ŋgedóidiesetí
	3n.	ŋgedóidienóm	ŋgedóidiebetúm	ŋgedóidiesetúm	ŋgedóidiesetým
	3m.	ŋgedóidienám	ŋgedóidiebetám	ŋgedóidiesetám	ŋgedóidiesetím
	1+2	ŋgedóidienám	ŋgedóidiebetám	ŋgedóidiesetám	ŋgedóidiesetím

Recent Past

Sing.	1		ŋgedóudebepú	ŋgedóudesepú	ŋgedóudesepý
	2	*Same*	ŋgedóudebepé	ŋgedóudesepé	ŋgedóudesepí
	3n.		ŋgedóudebepúm	ŋgedóudesepúm	ŋgedóudesepým
	3m.		ŋgedóudebepám	ŋgedóudesepám	ŋgedóudesepím
	1+2	*as*	ŋgedóudemambepám	ŋgedóudemansepám	ŋgedóudemensepím
Non-Sing.	1		ŋgedóidiebepú	ŋgedóidiesepú	ŋgedóidiesepý
	2		ŋgedóidiebepé	ŋgedóidiesepé	ŋgedóidiesepí
	3n.	*Present*	ŋgedóidiebepúm	ŋgedóidiesepúm	ŋgedóidiesepým
	3m.		ŋgedóidiebepám	ŋgedóidiesepám	ŋgedóidiesepím
	1+2		ŋgedóidiebepám	ŋgedóidiesepám	ŋgedóidiesepím

Past

Sing.	1	ŋgedóudenáku	ŋgedóudebekú	ŋgedóudesekú	ŋgedóudeseký
	2	ŋgedóudenáke	ŋgedóudebeké	ŋgedóudeseké	ŋgedóudeseki
	3n.	ŋgedóudenákum	ŋgedóudebekúm	ŋgedóudesekúm	ŋgedóudesekým
	3m.	ŋgedóudenákam	ŋgedóudebekám	ŋgedóudesekám	ŋgedóudesekím
	1+2	ŋgedóudemanakám	ŋgedóudemambekám	ŋgedóudemansekám	ŋgedóudemensekím
Non-Sing.	1	ŋgedóidienáku	ŋgedóidiebekú	ŋgedóidiesekú	ŋgedóidieseký
	2	ŋgedóidienáke	ŋgedóidiebeké	ŋgedóidieseké	ŋgedóidieseki
	3n.	ŋgedóidienákum	ŋgedóidiebekúm	ŋgedóidiesekúm	ŋgedóidiesekým
	3m.	ŋgedóidienákam	ŋgedóidiebekám	ŋgedóidiesekám	ŋgedóidiesekím
	1+2	ŋgedóidienakám	ŋgedóidiebekám	ŋgedóidiesekám	ŋgedóidiesekím

(III) PLURAL OBJECT — MOMENTARY

		9th Pos.	*10th Pos.*	*11th Pos.*	*12th Pos.*
Future					
Sing.	1	ŋgedóudenedý	ŋgedóudekendý	ŋgedóudebándu	ŋgedóudesándu
	2	ŋgedóudenedí	ŋgedóudekendí	ŋgedóudebánde	ŋgedóudesánde
	3n.	ŋgedóudenedým	ŋgedóudekendým	ŋgedóudebándum	ŋgedóudesándum
	3m.	ŋgedóudenedím	ŋgedóudekendím	ŋgedóudebándam	ŋgedóudesándam
	1+2	ŋgedóudemenedím	ŋgedóudemeŋkendím	ŋgedóudemambandám	ŋgedóudemansandám
Non-Sing.	1	ŋgedóidienedý	ŋgedóidiekendý	ŋgedóidiebándu	ŋgedóidiesándu
	2	ŋgedóidienedí	ŋgedóidiekendí	ŋgedóidiebánde	ŋgedóidiesánde
	3n.	ŋgedóidienedým	ŋgedóidiekendým	ŋgedóidiebándum	ŋgedóidiesándum
	3m.	ŋgedóidienedím	ŋgedóidiekendím	ŋgedóidiebándam	ŋgedóidiesándam
	1+2	ŋgedóidienedím	ŋgedóidiekendým	ŋgedóidiebandám	ŋgedóidiesandám
Present					
Sing.	1	ŋgedóudenetý	ŋgedóudekentý	ŋgedóudebántu	ŋgedóudesántu
	2	ŋgedóudenetí	ŋgedóudekentí	ŋgedóudebánte	ŋgedóudesánte
	3n.	ŋgedóudenetým	ŋgedóudekentým	ŋgedóudebántum	ŋgedóudesántum
	3m.	ŋgedóudenetím	ŋgedóudekentím	ŋgedóudebántam	ŋgedóudesántam
	1+2	ŋgedóudemenetím	ŋgedóudemeŋkentím	ŋgedóudemambantám	ŋgedóudemansantám
Non-Sing.	1	ŋgedóidienetý	ŋgedóidiekentý	ŋgedóidiebántu	ŋgedóidiesántu
	2	ŋgedóidienetí	ŋgedóidiekentí	ŋgedóidiebánte	ŋgedóidiesánte
	3n.	ŋgedóidienetým	ŋgedóidiekentým	ŋgedóidiebántum	ŋgedóidiesántum
	3m.	ŋgedóidienetím	ŋgedóidiekentím	ŋgedóidiebántam	ŋgedóidiesántam
	1+2	ŋgedóidienetím	ŋgedóidiekentím	ŋgedóidiebantám	ŋgedóidiesantám

Recent Past

Sing.	1	ŋgedóudenepý	ŋgedóudekempý	ŋgedóudebámpu	ŋgedóudesámpu
	2	ŋgedóudenepí	ŋgedóudekempí	ŋgedóudebámpe	ŋgedóudesámpe
	3n.	ŋgedóudenepým	ŋgedóudekempým	ŋgedóudebámpum	ŋgedóudesámpum
	3m.	ŋgedóudenepím	ŋgedóudekempím	ŋgedóudebámpam	ŋgedóudesámpam
	1+2	ŋgedóudemenepím	ŋgedóudemeŋkempím	ŋgedóudemambampám	ŋgedóudemansampám
Non-Sing.	1	ŋgedóidienepý	ŋgedóidiekempý	ŋgedóidiebámpu	ŋgedóidiesámpu
	2	ŋgedóidienepí	ŋgedóidiekempí	ŋgedóidiebámpe	ŋgedóidiesámpe
	3n.	ŋgedóidienepým	ŋgedóidiekempým	ŋgedóidiebámpum	ŋgedóidiesámpum
	3m.	ŋgedóidienepím	ŋgedóidiekempím	ŋgedóidiebámpam	ŋgedóidiesámpam
	1+2	ŋgedóidienepím	ŋgedóidiekempím	ŋgedóidiebampám	ŋgedóidiesampám

Past

Sing.	1	ŋgedóudenekýˀ	ŋgedóudekeŋkýˀ	ŋgedóudebáŋku	ŋgedóudesáŋku
	2	ŋgedóudenekíˀ	ŋgedóudekeŋkíˀ	ŋgedóudebáŋke	ŋgedóudesáŋke
	3n.	ŋgedóudenekýmˀ	ŋgedóudekeŋkýmˀ	ŋgedóudebáŋkum	ŋgedóudesáŋkum
	3m.	ŋgedóudenekímˀ	ŋgedóudekeŋkímˀ	ŋgedóudebáŋkam	ŋgedóudesáŋkam
	1+2	ŋgedóudemenekímˀ	ŋgedóudemeŋkeŋkímˀ	ŋgedóudemambaŋkámˀ	ŋgedóudemansaŋkámˀ
Non-Sing.	1	ŋgedóidienekýˀ	ŋgedóidiekeŋkýˀ	ŋgedóidiebaŋku	ŋgedóidiesáŋku
	2	ŋgedóidienekíˀ	ŋgedóidiekeŋkíˀ	ŋgedóidiebáŋke	ŋgedóidiesáŋke
	3n.	ŋgedóidienekýmˀ	ŋgedóidiekeŋkýmˀ	ŋgedóidiebáŋkum	ŋgedóidiesáŋkum
	3m.	ŋgedóidienekímˀ	ŋgedóidiekeŋkímˀ	ŋgedóidiebáŋkam	ŋgedóidiesáŋkam
	1+2	ŋgedóidienekímˀ	ŋgedóidiekeŋkímˀ	ŋgedóidiebaŋkámˀ	ŋgedóidiesaŋkámˀ

(IV) PLURAL OBJECT — MOMENTARY

		13th Pos.	*14th Pos.*	*15th Pos.*	*16th Pos.*
Future					
Sing.	1	ŋgedóudebenáru	ŋgedóudesenáru	ŋgedóudekenéry	ŋgedóudesenéry
	2	ŋgedóudebenáre	ŋgedóudesenáre	ŋgedóudekenéri	ŋgedóudesenéri
	3n.	ŋgedóudebanárum	ŋgedóudesenárum	ŋgedóudekenérym	ŋgedóudesenérym
	3m.	ŋgedóudebenáram	ŋgedóudesenáram	ŋgedóudekenérim	ŋgedóudesenérim
	1+2	ŋgedóudemanbenarám	ŋgedóudemansenarám	ŋgedóudemeŋkenerím	ŋgedóudemensenerím
Non-Sing.	1	ŋgedóidiebenáru	ŋgedóidiesenáru	ŋgedóidiekenéry	ŋgedóidiesenéry
	2	ŋgedóidiebenáre	ŋgedóidiesenáre	ŋgedóidiekenéri	ŋgedóidiesenéri
	3n.	ŋgedóidiebenárum	ŋgedóidiesenárum	ŋgedóidiekenérym	ŋgedóidiesenérym
	3m.	ŋgedóidiebenáram	ŋgedóidiesenáram	ŋgedóidiekenérim	ŋgedóidiesenérim
	1+2	ŋgedóidiebenarám	ŋgedóidiesenarám	ŋgedóidiekenerím	ŋgedóidiesenerím
Present					
Sing.	1	ŋgedóudebenanáu	ŋgedóudesenanáu	ŋgedóudekenenéy	ŋgedóudesenenéy
	2	ŋgedóudebenanáe	ŋgedóudesenanáe	ŋgedóudekenenéi	ŋgedóudesenenéi
	3n.	ŋgedóudebenanóm	ŋgedóudesenanóm	ŋgedóudekenenyém	ŋgedóudesenenyém
	3m.	ŋgedóudebenanám	ŋgedóudesenanám	ŋgedóudekeneném	ŋgedóudeseneném
	1+2	ŋgedóudemambenanám	ŋgedóudemansenanám	ŋgedóudemeŋkeneném	ŋgedóudemenseneném
Non-Sing.	1	ŋgedóidiebenanáu	ŋgedóidiesenanáu	ŋgedóidiekenenéy	ŋgedóidiesenenéy
	2	ŋgedóidiebenanáe	ŋgedóidiesenanáe	ŋgedóidiekenenéi	ŋgedóidiesenenéi
	3n.	ŋgedóidiebenanóm	ŋgedóidiesenanóm	ŋgedóidiekenenyém	ŋgedóidiesenenyém
	3m.	ŋgedóidiebenanám	ŋgedóidiesenanám	ŋgedóidiekeneném	ŋgedóidiseneném
	1+2	ŋgedóidiebenanám	ŋgedóidiesenanám	ŋgedóidiekeneném	ŋgedóidiseneném

Recent Past

Sing.	1				
	2	*Same*	*Same*	*Same*	*Same*
	3n.				
	3m.				
	1+2	*as*	*as*	*as*	*as*
Non-Sing.	1				
	2				
	3n.	*Present*	*Present*	*Present*	*Present*
	3m.				
	1+2				

Past

Sing.	1	ŋgedóudebenáku	ŋgedóudesenáku	ŋgedóudekenéky	ŋgedóudesenéky
	2	ŋgedóudebenáke	ŋgedóudesenáke	ŋgedóudekenéki	ŋgedóudesenéki
	3n.	ŋgedóudebenákum	ŋgedóudesenákum	ŋgedóudekenékym	ŋgedóudesenékym
	3m.	ŋgedóudebenákam	ŋgedóudesenákam	ŋgedóudekenékim	ŋgedóudesenékim
	1+2	ŋgedóudemambenakám	ŋgedóudemansenakám	ŋgedóudemeŋkenekím	ŋgedóudemensenekím
Non-Sing.	1	ŋgedóidiebenáku	ŋgedóidiesenáku	ŋgedóidiekenéky	ŋgedóidiesenéky
	2	ŋgedóidiebenáke	ŋgedóidiesenáke	ŋgedóidiekenéki	ŋgedóidiesenéki
	3n.	ŋgedóidiebenákum	ŋgedóidiesenákum	ŋgedóidiekenékym	ŋgedóidiesenékym
	3m.	ŋgedóidiebenákam	ŋgedóidiesenákam	ŋgedóidiekenékim	ŋgedóidiesenékim
	1+2	ŋgedóidiebenakám	ŋgedóidiesenakám	ŋgedóidiekenekím	ŋgedóidiesenekím

(I) **PLURAL OBJECT — ITERATIVE**

		1st Pos.	*2nd Pos.*	*3rd Pos.*	*4th Pos.*
Present					
Sing.	1	ŋgedóudekátu	ŋgedóudebekátu	ŋgedóudeŋgátu	ŋgedóudeskátu
	2	ŋgedóudekáte	ŋgedóudebekáte	ŋgedóudeŋgáte	ŋgedóudeskáte
	3n.	ŋgedóudekátum	ŋgedóudebekátum	ŋgedóudeŋgátum	ŋgedóudeskátum
	3m.	ŋgedóudekátam	ŋgedóudebekátam	ŋgedóudeŋgátam	ŋgedóudeskátam
	1+2	ŋgedóudemaŋkatám	ŋgedóudemambekatám	ŋgedóudemaŋgatám	ŋgedóudemanskatám
Non-Sing.	1	ŋgedóidiekátu	ŋgedóidiebekátu	ŋgedóidieŋgátu	ŋgedóidieskátu
	2	ŋgedóidiekáte	ŋgedóidiebekáte	ŋgedóidieŋgáte	ŋgedóidieskáte
	3n.	ŋgedóidiekátum	ŋgedóidiebekátum	ŋgedóidieŋgátum	ŋgedóidieskátum
	3m.	ŋgedóidiekátam	ŋgedóidiebekátam	ŋgedóidieŋgátam	ŋgedóidieskátam
	1+2	ŋgedóidiekatám	ŋgedóidiebekatám	ŋgedóidieŋgatám	ŋgedóidieskatám
Recent Past					
Sing.	1	ŋgedóudekápu			
	2	ŋgedóudekápe	*Same*	*Same*	*Same*
	3n.	ŋgedóudekápum			
	3m.	ŋgedóudekápam			
	1+2	ŋgedóudemaŋkapám	*as*	*as*	*as*
Non-Sing.	1	ŋgedóidiekápu			
	2	ŋgedóidiekápe			
	3n.	ŋgedóidiekápum	*Present*	*Present*	*Present*
	3m.	ŋgedóidiekápam			
	1+2	ŋgedóidiekapám			

Past

Sing.	1	ŋgedóudekáku	ŋgedóudebekáku	ŋgedóudeŋgáku	ŋgedóudeskáku
	2	ŋgedóudekáke	ŋgedóudebekáke	ŋgedóudeŋgáke	ŋgedóudeskáke
	3n.	ŋgedóudekákum	ŋgedóudebekákum	ŋgedóudeŋgákum	ŋgedóudeskákum
	3m.	ŋgedóudekákam	ŋgedóudebekákam	ŋgedóudeŋgákam	ŋgedóudeskákam
	1+2	ŋgedóudemaŋkakám	ŋgedóudemambekakám	ŋgedóudemaŋgakám	ŋgedóudemanskakám
Non-Sing.	1	ŋgedóidiekáku	ŋgedóidiebekáku	ŋgedóidieŋgáku	ŋgedóidieskáku
	2	ŋgedóidiekáke	ŋgedóidiebekáke	ŋgedóidieŋgáke	ŋgedóidieskáke
	3n.	ŋgedóidiekákum	ŋgedóidiebekákum	ŋgedóidieŋgákum	ŋgedóidieskákum
	3m.	ŋgedóidiekákam	ŋgedóidiebekákam	ŋgedóidieŋgákam	ŋgedóidieskákam
	1+2	ŋgedóidiekakám	ŋgedóidiebekakám	ŋgedóidieŋgakám	ŋgedóidieskakám

(II) PLURAL OBJECT — ITERATIVE

		5th Pos.	*6th Pos.*	*7th Pos.*	*8th Pos.*
Present					
Sing.	1	ŋgedóudeneŋgátu	ŋgedóudebekátu	ŋgedóudeskátu	ŋgedóudeskéty
	2	ŋgedóudeneŋgáte	ŋgedóudebekáte	ŋgedóudeskáte	ŋgedóudeskéti
	3n.	ŋgedóudeneŋgátum	ŋgedóudebekátum	ŋgedóudeskátum	ŋgedóudeskétym
	3m.	ŋgedóudeneŋgátam	ŋgedóudebekátam	ŋgedóudeskátam	ŋgedóudeskétim
	1+2	ŋgedóudemaneŋgatám	ŋgedóudemambekatám	ŋgedóudemanskatám	ŋgedóudemensketím
Non-Sing.	1	ŋgedóidieneŋgátu	ŋgedóidiebekátu	ŋgedóidieskátu	ŋgedóidieskéty
	2	ŋgedóidieneŋgáte	ŋgedóidiebekáte	ŋgedóidieskáte	ŋgedóidieskéti
	3n.	ŋgedóidieneŋgátum	ŋgedóidiebekátum	ŋgedóidieskátum	ŋgedóidieskétym
	3m.	ŋgedóidieneŋgátam	ŋgedóidiebekátam	ŋgedóidieskátam	ŋgedóidieskétim
	1+2	ŋgedóidieneŋgatám	ŋgedóidiebekatám	ŋgedóidieskatám	ŋgedóidiesketím
Recent Past					
Sing.	1		ŋgedóudebekápu	ŋgedóudeskápu	ŋgedóudesképy
	2	*Same*	ŋgedóudebekápe	ŋgedóudeskápe	ŋgedóudesképi
	3n.		ŋgedóudebekápum	ŋgedóudeskápum	ŋgedóudesképym
	3m.		ŋgedóudebekápam	ŋgedóudeskápam	ŋgedóudesképim
	1+2	*as*	ŋgedóudemambekapám	ŋgedóudemanskapám	ŋgedóudemenskepím
Non-Sing.	1		ŋgedóidiebekápu	ŋgedóidieskápu	ŋgedóidiesképy
	2		ŋgedóidiebekápe	ŋgedóidieskápe	ŋgedóidiesképi
	3n.	*Present*	ŋgedóidiebekápum	ŋgedóidieskápum	ŋgedóidiesképym
	3m.		ŋgedóidiebekápam	ŋgedóidieskápam	ŋgedóidiesképim
	1+2		ŋgedóidiebekapám	ŋgedóidieskapám	ŋgedóidieskepím

Past

Sing.	1	ŋgedóudeneŋgáku	ŋgedóudebekáku	ŋgedóudeskáku	ŋgedóudeskéky
	2	ŋgedóudeneŋgáke	ŋgedóudebekáke	ŋgedóudeskáke	ŋgedóudeskéki
	3n.	ŋgedóudeneŋgákum	ŋgedóudebekákum	ŋgedóudeskákum	ŋgedóudeskékym
	3m.	ŋgedóudeneŋgákam	ŋgedóudebekákam	ŋgedóudeskákam	ŋgedóudeskékim
	1+2	ŋgedóudemaneŋgakám	ŋgedóudemambekakám	ŋgedóudemanskakám	ŋgedóudemenskekím
Non-Sing.	1	ŋgedóidieneŋgáku	ŋgedóidiebekáku	ŋgedóidieskáku	ŋgedóidieskéky
	2	ŋgedóidieneŋgáke	ŋgedóidiebekáke	ŋgedóidieskáke	ŋgedóidieskéki
	3n.	ŋgedóidieneneŋgákum	ŋgedóidiebekákum	ŋgedóidieskákum	ŋgedóidieskékym
	3m.	ŋgedóidieneŋgákam	ŋgedóidiebekákam	ŋgedóidieskákam	ŋgedóidieskékim
	1+2	ŋgedóidieneŋgakám	ŋgedóidiebekakám	ŋgedóidieskakám	ŋgedóidieskekím

(III) PLURAL OBJECT — ITERATIVE

		9th Pos.	*10th Pos.*	*11th Pos.*	*12th Pos.*
Present					
Sing.	1	ŋgedóudeneŋgéty	ŋgedóudeŋgentý	ŋgedóudebekántu	ŋgedóudeskántu
	2	ŋgedóudeneŋgéti	ŋgedóudeŋgentí	ŋgedóudebekánte	ŋgedóudeskánte
	3n.	ŋgedóudeneŋgétym	ŋgedóudeŋgentým	ŋgedóudebekántum	ŋgedóudeskántum
	3m.	ŋgedóudeneŋgétim	ŋgedóudeŋgentím	ŋgedóudebekántam	ŋgedóudeskántam
	1+2	ŋgedóudemeneŋgetím	ŋgedóudemeŋgentím	ŋgedóudemambekantám	ŋgedóudemanskantám
Non-Sing.	1	ŋgedóidieneŋgéty	ŋgedóidieŋgentý	ŋgedóidiebekántu	ŋgedóidieskántu
	2	ŋgedóidieneŋgéti	ŋgedóidieŋgentí	ŋgedóidiebekánte	ŋgedóidieskánte
	3n.	ŋgedóidieneŋgétym	ŋgedóidieŋgentým	ŋgedóidiebekántum	ŋgedóidieskántum
	3m.	ŋgedóidieneŋgétim	ŋgedóidieŋgentím	ŋgedóidiebekántam	ŋgedóidieskántam
	1+2	ŋgedóidieneŋgetím	ŋgedóidieŋgentím	ŋgedóidiebekantám	ŋgedóidieskantám
Recent Past					
Sing.	1	ŋgedóudeneŋgépy	ŋgedóudeŋgempý	ŋgedóudebekámpu	ŋgedóudeskámpu
	2	ŋgedóudeneŋgépi	ŋgedóudeŋgempí	ŋgedóudebekámpe	ŋgedóudeskámpe
	3n.	ŋgedóudeneŋgépym	ŋgedóudeŋgempým	ŋgedóudebekámpum	ŋgedóudeskámpum
	3m.	ŋgedóudeneŋgépim	ŋgedóudeŋgempím	ŋgedóudebekámpam	ŋgedoudeskámpam
	1+2	ŋgedóudemeneŋgepím	ŋgedóudemeŋgempím	ŋgedóudemambekampám	ŋgedóudemanskampám
Non-Sing.	1	ŋgedóidieneŋgépy	ŋgedóidieŋgempý	ŋgedóidiebekámpu	ŋgedóidieskámpu
	2	ŋgedóidieneŋgépi	ŋgedóidieŋgempí	ŋgedóidiebekámpe	ŋgedóidieskámpe
	3n.	ŋgedóidieneŋgépym	ŋgedóidieŋgempým	ŋgedóidiebekámpum	ŋgedóidieskámpum
	3m.	ŋgedóidieneŋgépim	ŋgedóidieŋgempím	ŋgedóidiebekámpam	ŋgedóidieskámpam
	1+2	ŋgedóidieneŋgepím	ŋgedóidieŋgempím	ŋgedóidiebekampám	ŋgedóidieskampám

Past

Sing.	1	ŋgedóudeneŋgéky	ŋgedóudeŋgeŋkýˊ	ŋgedóudebekáŋku	ŋgedóudeskáŋku
	2	ŋgedóudeneŋgéki	ŋgedóudeŋgeŋkí	ŋgedóudebekáŋke	ŋgedóudeskáŋke
	3n.	ŋgedóudeneŋgékym	ŋgedóudeŋgeŋkýˊm	ŋgedóudebekáŋkum	ŋgedóudeskáŋkum
	3m.	ŋgedóudeneŋgékim	ŋgedóudeŋgeŋkím	ŋgedóudebekáŋkam	ŋgedóudeskáŋkam
	1+2	ŋgedóudemeneŋgekím	ŋgedóudemeŋgeŋkím	ŋgedóudemambekaŋkám	ŋgedóudemanskaŋkám
Non-Sing.	1	ŋgedóidieneŋgéky	ŋgedóidieŋgeŋkýˊ	ŋgedóidiebekáŋku	ŋgedóidieskáŋku
	2	ŋgedóidieneŋgékim	ŋgedóidieŋgeŋkí	ŋgedóidiebekáŋke	ŋgedóidieskáŋke
	3n.	ŋgedóidieneŋgékym	ŋgedóidieŋgeŋkýˊm	ŋgedóidiebekáŋkum	ŋgedóidieskáŋkum
	3m.	ŋgedóidieneŋgékim	ŋgedóidieŋgeŋkím	ŋgedóidiebekáŋkam	ŋgedóidieskáŋkam
	1+2	ŋgedóidieneŋgekím	ŋgedóidieŋgeŋkím	ŋgedóidiebekaŋkám	ŋgedóidieskaŋkám

		13th Pos.	*14th Pos.*	*15th Pos.*	*16th Pos.*
Present					
Sing.	1	ŋgedóudebeneŋgátu	ŋgedóudeseneŋgátu	ŋgedóudekeneŋgéty	ŋgedóudeseneŋgéty
	2	ŋgedóudebeneŋgáte	ŋgedóudeseneŋgáte	ŋgedóudekeneŋgéti	ŋgedóudeseneŋgéti
	3n.	ŋgedóudebeneŋgátum	ŋgedóudeseneŋgátum	ŋgedóudekeneŋgétym	ŋgedóudeseneŋgétym
	3m.	ŋgedóudebeneŋgátam	ŋgedóudeseneŋgátam	ŋgedóudekeneŋgétim	ŋgedóudeseneŋgétim
	1+2	ŋgedóudemambeneŋgatám	ŋgedóudemanseneŋgatám	ŋgedóudemeŋkeneŋgetím	ŋgedóudemenseneŋgetím
Non-Sing.	1	ŋgedóidiebeneŋgátu	ŋgedóidieseneŋgátu	ŋgedóidiekeneŋgéty	ŋgedóidieseneŋgéty
	2	ŋgedóidiebeneŋgáte	ŋgedóidieseneŋgáte	ŋgedóidiekeneŋgéti	ŋgedóidieseneŋgéti
	3n.	ŋgedóidiebeneŋgátum	ŋgedóidieseneŋgátum	ŋgedóidiekeneŋgétym	ŋgedóidieseneŋgétym
	3m.	ŋgedóidiebeneŋgátam	ŋgedóidieseneŋgátam	ŋgedóidiekeneŋgétim	ŋgedóidieseneŋgétim
	1+2	ŋgedóidiebeneŋgatám	ŋgedóidieseneŋgatám	ŋgedóidiekeneŋgetím	ŋgedóidieseneŋgetím
Recent Past					
Sing.	1				
	2	*Same*	*Same*	*Same*	*Same*
	3n.				
	3m.				
	1+2	*as*	*as*	*as*	*as*
Non-Sing.	1				
	2				
	3n.	*Present*	*Present*	*Present*	*Present*
	3m.				
	1+2				

Past

Sing.	1	ŋgedóudebeneŋgáku	ŋgedóudeseneŋgáku	ŋgedóudekeneŋgéky	ŋgedóudeseneŋgéky
	2	ŋgedóudebeneŋgáke	ŋgedóudeseneŋgáke	ŋgedóudekeneŋgéki	ŋgedóudeseneŋgéki
	3n.	ŋgedóudebeneŋgákum	ŋgedóudeseneŋgákum	ŋgedóudekeneŋgékym	ŋgedóudeseneŋgékym
	3m.	ŋgedóudebeneŋgákam	ŋgedóudeseneŋgákam	ŋgedóudekeneŋgékim	ŋgedóudeseneŋgékim
	1+2	ŋgedóudemambeneŋgakám	ŋgedóudemanseneŋgakám	ŋgedóudemeŋkeneŋgekím	ŋgedóudemenseneŋgekím
Non-Sing.	1	ŋgedóidiebeneŋgáku	ŋgedóidieseneŋgáku	ŋgedóidiekeneŋgéky	ŋgedóidieseneŋgéky
	2	ŋgedóidiebeneŋgáke	ŋgedóidieseneŋgáke	ŋgedóidiekeneŋgéki	ŋgedóidieseneŋgéki
	3n.	ŋgedóidiebeneŋgákum	ŋgedóidieseneŋgákum	ŋgedóidiekeneŋgékym	ŋgedóidieseneŋgékym
	3m.	ŋgedóidiebeneŋgákam	ŋgedóidieseneŋgákam	ŋgedóidiekeneŋgékim	ŋgedóidieseneŋgékim
	1+2	ŋgedóidiebeneŋgakám	ŋgedóidieseneŋgakám	ŋgedóidiekeneŋgekím	ŋgedóidieseneŋgekím

(I) DURATIVE — MOMENTARY

		1st Pos.	*2nd Pos.*	*3rd Pos.*	*4th Pos.*
Present					
Sing.	1	ŋgedóutemtý	ŋgedóutembéy	ŋgedóutemkeŋéy	ŋgedóutemséy
	2	ŋgedóutemtí	ŋgedóutembéi	ŋgedóutemkeŋéi	ŋgedóutemséi
	3n.	ŋgedóutemtým	ŋgedóutembyém	ŋgedóutemkeŋyém	ŋgedóutemsyém
	3m.	ŋgedóutemtím	ŋgedóutembém	ŋgedóutemkeŋém	ŋgedóutemsém
	1+2	ŋgedóutementím	ŋgedóutemembém	ŋgedóutemeŋkeŋém	ŋgedóutemensém
Non-Sing.	1	ŋgedóitiemtý	ŋgedóitiembéy	ŋgedóitiemkeŋéy	ŋgedóitiemséy
	2	ŋgedóitiemtí	ŋgedóitiembéi	ŋgedóitiemkeŋéi	ŋgedóitiemséi
	3n.	ŋgedóitiemtým	ŋgedóitiembyém	ŋgedóitiemkeŋyém	ŋgedóitiemsyém
	3m.	ŋgedóitiemtím	ŋgedóitiembém	ŋgedóitiemkeŋém	ŋgedóitiemsém
	1+2	ŋgedóitiemtím	ŋgedóitiembém	ŋgedóitiemkeŋém	ŋgedóitiemsém

(I) DURATIVE — ITERATIVE

Present					
Sing.	1	ŋgedóutemkéty	ŋgedóutembekéty	ŋgedóutemŋgéty	ŋgedóutemskéty
	2	ŋgedóutemkéti	ŋgedóutembekéti	ŋgedóutemŋgéti	ŋgedóutemskéti
	3n.	ŋgedóutemkétym	ŋgedóutembekétym	ŋgedóutemŋgétym	ŋgedóutemskétym
	3m.	ŋgedóutemkétim	ŋgedóutembekétim	ŋgedóutemŋgétim	ŋgedóutemskétim
	1+2	ŋgedóutemeŋketím	ŋgedóutemembeketím	ŋgedóutemeŋgetím	ŋgedóutemensketím
Non-Sing.	1	ŋgedóitiemkéty	ŋgedóitiembekéty	ŋgedóitiemŋgéty	ŋgedóitiemskéty
	2	ŋgedóitiemkéti	ŋgedóitiembekéti	ŋgedóitiemŋgéti	ŋgedóitiemskéti
	3n.	ŋgedóitiemkétym	ŋgedóitiembekétym	ŋgedóitiemŋgétym	ŋgedóitiemskétym
	3m.	ŋgedóitiemkétim	ŋgedóitiembekétim	ŋgedóitiemŋgétim	ŋgedóitiemskétim
	1+2	ŋgedóitiemketím	ŋgedóitiembeketím	ŋgedóitiemŋgetím	ŋgedóitiemsketím

Recent Past

Sing.	1	ŋgedóutemképy			
	2	ŋgedóutemképi	*Same*	*Same*	*Same*
	3n.	ŋgedóutemképym			
	3m.	ŋgedóutemképim			
	1+2	ŋgedóutemeŋkepím	*as*	*as*	*as*
Non-Sing.	1	ŋgedóitiemképy			
	2	ŋgedóitiemképi			
	3n.	ŋgedóitiemképym	*Present*	*Present*	*Present*
	3m.	ŋgedóitiemképim			
	1+2	ŋgedóitiemkepím			

Past

Sing.	1	ŋgedóutemkéky	ŋgedóutembekéky	ŋgedóutemŋgéky	ŋgedóutemskéky
	2	ŋgedóutemkéki	ŋgedóutembekéki	ŋgedóutemŋgéki	ŋgedóutemskéki
	3n.	ŋgedóutemkékym	ŋgedóutembekékym	ŋgedóutemŋgékym	ŋgedóutemskékym
	3m.	ŋgedóutemkékim	ŋgedóutembekékim	ŋgedóutemŋgékim	ŋgedóutemskékim
	1+2	ŋgedóutemeŋkekím	ŋgedóutemembekekím	ŋgedóutemeŋgekím	ŋgedóutemenskekím
Non-Sing.	1	ŋgedóitiemkéky	ŋgedóitiembekéky	ŋgedóitiemŋgéky	ŋgedóitiemskéky
	2	ŋgedóitiemkéki	ŋgedóitiembekéki	ŋgedóitiemŋgéki	ŋgedóitiemskéki
	3n.	ŋgedóitiemkékym	ŋgedóitiembekékym	ŋgedóitiemŋgékym	ŋgedóitiemskékym
	3m.	ŋgedóitiemkékim	ŋgedóitiembekékim	ŋgedóitiemŋgékim	ŋgedóitiemskékim
	1+2	ŋgedóitiemkekím	ŋgedóitiembekekím	ŋgedóitiemŋgekím	ŋgedóitiemskekím

(II) DURATIVE — MOMENTARY

		5th Pos.	*6th Pos.*	*7th Pos.*	*8th Pos.*
Present					
Sing.	1	ŋgedóutemnéŋgéty	ŋgedóutembetý	ŋgedóutemsetý	ŋgedóutemsetý
	2	ŋgedóutemnéi	ŋgedóutembeti	ŋgedóutemseti	ŋgedóutemseti
	3n.	ŋgedóutemnyém	ŋgedóutembetým	ŋgedóutemsetým	ŋgedóutemsetým
	3m.	ŋgedóutemném	ŋgedóutembetím	ŋgedóutemsetím	ŋgedóutemsetím
	1+2	ŋgedóutemeném	ŋgedóutemembetím	ŋgedóutemensetím	ŋgedóutemensetím
Non-Sing.	1	ŋgedóitiemnéŋgéty	ŋgedóitiembetý	ŋgedóitiemsetý	ŋgedóitiemsetý
	2	ŋgedóitiemnéi	ŋgedóitiembeti	ŋgedóitiemseti	ŋgedóitiemseti
	3n.	ŋgedóitiemnyém	ŋgedóitiembetým	ŋgedóitiemsetým	ŋgedóitiemsetým
	3m.	ŋgedóitiemném	ŋgedóitiembetím	ŋgedóitiemsetím	ŋgedóitiemsetím
	1+2	ŋgedóitiemném	ŋgedóitiembetím	ŋgedóitiemsetím	ŋgedóitiemsetím

(II) DURATIVE — ITERATIVE

Present					
Sing.	1	ŋgedóutemneŋgéty	ŋgedóutembekéty	ŋgedóutemskéty	ŋgedóutemskéty
	2	ŋgedóutemneŋgéti	ŋgedóutembekéti	ŋgedóutemskéti	ŋgedóutemskéti
	3n.	ŋgedóutemneŋgétym	ŋgedóutembekétym	ŋgedóutemskétym	ŋgedóutemskétym
	3m.	ŋgedóutemneŋgétim	ŋgedóutembekétim	ŋgedóutemskétim	ŋgedóutemskétim
	1+2	ŋgedóutemeneŋgetím	ŋgedóutemembeketím	ŋgedóutemensketím	ŋgedóutemensketím
Non-Sing.	1	ŋgedóitiemneŋgéty	ŋgedóitiembekéty	ŋgedóitiemskéty	ŋgedóitiemskéty
	2	ŋgedóitiemneŋgéti	ŋgedóitiembekéti	ŋgedóitiemskéti	ŋgedóitiemskéti
	3n.	ŋgedóitiemneŋgétym	ŋgedóitiembekétym	ŋgedóitiemskétym	ŋgedóitiemskétym
	3m.	ŋgedóitiemneŋgétim	ŋgedóitiembekétim	ŋgedóitiemskétim	ŋgedóitiemskétim
	1+2	ŋgedóitiemneŋgetím	ŋgedóitiembeketím	ŋgedóitiemsketím	ŋgedóitiemsketím

Recent Past

Sing.	1		ŋgedóutembeképy	ŋgedóutemsképy	ŋgedóutemsképy
	2	*Same*	ŋgedóutembeképi	ŋgedóutemsképi	ŋgedóutemsképi
	3n.		ŋgedóutembeképym	ŋgedóutemsképym	ŋgedóutemsképym
	3m.		ŋgedóutembeképim	ŋgedóutemsképim	ŋgedóutemsképim
	1+2	*as*	ŋgedóutemembekepím	ŋgedóutemenskepím	ŋgedóutemenskepím
Non-Sing.	1		ŋgedóitiembeképy	ŋgedóitiemsképy	ŋgedóitiemsképy
	2		ŋgedóitiembeképi	ŋgedóitiemsképi	ŋgedóitiemsképi
	3n.	*Present*	ŋgedóitiembeképym	ŋgedóitiemsképym	ŋgedóitiemsképym
	3m.		ŋgedóitiembeképim	ŋgedóitiemsképim	ŋgedóitiemsképim
	1+2		ŋgedóitiembekepím	ŋgedóitiemskepím	ŋgedóitiemskepím

Past

Sing.	1	ŋgedóutemneŋgéky	ŋgedóutembekéky	ŋgedóutemskéky	ŋgedóutemskéky
	2	ŋgedóutemneŋgéki	ŋgedóutembekéki	ŋgedóutemskéki	ŋgedóutemskéki
	3n.	ŋgedóutemneŋgékym	ŋgedóutembekékym	ŋgedóutemskékym	ŋgedóutemskékym
	3m.	ŋgedóutemneŋgékim	ŋgedóutembekékim	ŋgedóutemskékim	ŋgedóutemskékim
	1+2	ŋgedóutemeneŋgekím	ŋgedóutemembekekím	ŋgedóutemenskekím	ŋgedóutemenskekím
Non-Sing.	1	ŋgedóitiemneŋgéky	ŋgedóitiembekéky	ŋgedóitiemskéky	ŋgedóitiemskéky
	2	ŋgedóitiemneŋgéki	ŋgedóitiembekéki	ŋgedóitiemskéki	ŋgedóitiemskéki
	3n.	ŋgedóitiemneŋgékym	ŋgedóitiembekékym	ŋgedóitiemskékym	ŋgedóitiemskékym
	3m.	ŋgedóitiemneŋgékim	ŋgedóitiembekékim	ŋgedóitiemskékim	ŋgedóitiemskékim
	1+2	ŋgedóitiemneŋgekím	ŋgedóitiembekekím	ŋgedóitiemskekím	ŋgedóitiemskekím

(III) DURATIVE — MOMENTARY

		9th Pos.	*10th Pos.*	*11th Pos.*	*12th Pos.*
Present					
Sing.	1	ŋgedóutemnetýˊ	ŋgedóutemkentýˊ	ŋgedóutembénty	ŋgedóutemsénty
	2	ŋgedóutemnetí	ŋgedóutemkentí	ŋgedóutembénti	ŋgedóutemsénti
	3n.	ŋgedóutemnetýˊm	ŋgedóutemkentýˊm	ŋgedóutembéntym	ŋgedóutemséntim
	3m.	ŋgedóutemnetím	ŋgedóutemkentím	ŋgedóutembéntim	ŋgedóutemséntym
	1+2	ŋgedóutemenetím	ŋgedóutemeŋkentím	ŋgedóutemembentím	ŋgedóutemensentím
Non-Sing.	1	ŋgedóitiemnetýˊ	ŋgedóitiemkentýˊ	ŋgedóitiembénty	ŋgedóitiemsénty
	2	ŋgedóitiemnetí	ŋgedóitiemkentí	ŋgedóitiembénti	ŋgedóitiemsénti
	3n.	ŋgedóitiemnetýˊm	ŋgedóitiemkentýˊm	ŋgedóitiembéntym	ŋgedóitiemséntym
	3m.	ŋgedóitiemnetím	ŋgedóitiemkentím	ŋgedóitiembéntim	ŋgedóitiemséntim
	1+2	ŋgedóitiemnetím	ŋgedóitiemkentím	ŋgedóitiembentím	ŋgedóitiemsentím

(III) DURATIVE — ITERATIVE

Present					
Sing.	1	ŋgedóutemneŋgéty	ŋgedóutemŋkénty	ŋgedóutembekénty	ŋgedóutemskénty
	2	ŋgedóutemneŋgéti	ŋgedóutemŋkénti	ŋgedóutembekénti	ŋgedóutemskénti
	3n.	ŋgedóutemneŋgétym	ŋgedóutemŋkéntym	ŋgedóutembekéntym	ŋgedóutemskéntym
	3m.	ŋgedóutemneŋgétim	ŋgedóutemŋkéntim	ŋgedóutembekéntim	ŋgedóutemskéntim
	1+2	ŋgedóutemeneŋgetím	ŋgedóutemeŋkentím	ŋgedóutemembekentím	ŋgedóutemenskentím
Non-Sing.	1	ŋgedóitiemneŋgéty	ŋgedóitiemŋkénty	ŋgedóitiembekénty	ŋgedóitiemskénty
	2	ŋgedóitiemneŋgéti	ŋgedóitiemŋkénti	ŋgedóitiembekénti	ŋgedóitiemskénti
	3n.	ŋgedóitiemneŋgétym	ŋgedóitiemŋkéntym	ŋgedóitiembekéntym	ŋgedóitiemskéntym
	3m.	ŋgedóitiemneŋgétim	ŋgedóitiemŋkéntim	ŋgedóitiembekéntim	ŋgedóitiemskéntim
	1+2	ŋgedóitiemneŋgetím	ŋgedóitiemŋkentím	ŋgedóitiembekentím	ŋgedóitiemskentím

Recent Past

Sing.	1	ŋgedóutemneŋgépy	ŋgedóutemŋkémpy	ŋgedóutembekémpy	ŋgedóutemskémpy
	2	ŋgedóutemneŋgépi	ŋgedóutemŋkémpi	ŋgedóutembekémpi	ŋgedóutemskémpi
	3n.	ŋgedóutemneŋgépym	ŋgedóutemŋkémpym	ŋgedóutembekémpym	ŋgedóutemskémpym
	3m.	ŋgedóutemneŋgépim	ŋgedóutemŋkémpim	ŋgedóutembekémpim	ŋgedóutemskémpim
	1+2	ŋgedóutemeneŋgepím	ŋgedóutemeŋkempím	ŋgedóutemembekempím	ŋgedóutemenskempím
Non-Sing.	1	ŋgedóitiemneŋgépy	ŋgedóitiemŋkémpy	ŋgedóitiembekémpy	ŋgedóitiemskémpy
	2	ŋgedóitiemneŋgépi	ŋgedóitiemŋkémpi	ŋgedóitiembekémpi	ŋgedóitiemskémpi
	3n.	ŋgedóitiemneŋgépym	ŋgedóitiemŋkémpym	ŋgedóitiembekémpym	ŋgedóitiemskémpym
	3m.	ŋgedóitiemneŋgépim	ŋgedóitiemŋkémpim	ŋgedóitiembekémpim	ŋgedóitiemskémpim
	1+2	ŋgedóitiemneŋgepím	ŋgedóitiemŋkempím	ŋgedóitiembekempím	ŋgedóitiemskempím

Past

Sing.	1	ŋgedóutemneŋgéky	ŋgedóutemŋkéŋky	ŋgedóutembekéŋky	ŋgedóutemskéŋky
	2	ŋgedóutemneŋgéki	ŋgedóutemŋkéŋki	ŋgedóutembekéŋki	ŋgedóutemskéŋki
	3n.	ŋgedóutemneŋgékym	ŋgedóutemŋkéŋkym	ŋgedóutembekéŋkym	ŋgedóutemskéŋkym
	3m.	ŋgedóutemneŋgékim	ŋgedóutemŋkéŋkim	ŋgedóutembekéŋkim	ŋgedóutemskéŋkim
	1+2	ŋgedóutemeneŋgekím	ŋgedóutemeŋkeŋkím	ŋgedóutemembekeŋkím	ŋgedóutemenskeŋkím
Non-Sing.	1	ŋgedóitiemneŋgéky	ŋgedóitiemŋkéŋky	ŋgedóitiembekéŋky	ŋgedóitiemskéŋky
	2	ŋgedóitiemneŋgéki	ŋgedóitiemŋkéŋki	ŋgedóitiembekéŋki	ŋgedóitiemskéŋki
	3n.	ŋgedóitiemneŋgékym	ŋgedóitiemŋkéŋkym	ŋgedóitiembekéŋkym	ŋgedóitiemskéŋkym
	3m.	ŋgedóitiemneŋgékim	ŋgedóitiemŋkéŋkim	ŋgedóitiembekéŋkim	ŋgedóitiemskéŋkim
	1+2	ŋgedóitiemneŋgekím	ŋgedóitiemŋkeŋkím	ŋgedóitiembekeŋkím	ŋgedóitiemskeŋkím

(IV) DURATIVE — MOMENTARY

		13th Pos.	*14th Pos.*	*15th Pos.*	*16th Pos.*
Present					
Sing.	1	ŋgedóutembenenéŋ	ŋgedóutemsenenéŋ	ŋgedóutemkenenéŋ	ŋgedóutemsenenéŋ
	2	ŋgedóutembenenéi	ŋgedóutemsenenéi	ŋgedóutemkenenéi	ŋgedóutemsenenéi
	3n.	ŋgedóutembenenyém	ŋgedóutemsenenyém	ŋgedóutemkenenyém	ŋgedóutemsenenyém
	3m.	ŋgedóutembeneném	ŋgedóutemseneném	ŋgedóutemkeneném	ŋgedóutemseneném
	1+2	ŋgedóutemembeneném	ŋgedóutemseneném	ŋgedóutemŋkeneném	ŋgedóutemseneném
Non-Sing.	1	ŋgedóitiembenenéŋ	ŋgedóitiemsenenéŋ	ŋgedóitiemkenenéŋ	ŋgedóitiemsenenéŋ
	2	ŋgedóitiembenenéi	ŋgedóitiemsenenéi	ŋgedóitiemkenenéi	ŋgedóitiemsenenéi
	3n.	ŋgedóitiembenenyém	ŋgedóitiemsenenyém	ŋgedóitiemkenenyém	ŋgedóitiemsenenyém
	3m.	ŋgedóitiembeneném	ŋgedóitiemseneném	ŋgedóitiemkeneném	ŋgedóitiemseneném
	1+2	ŋgedóitiembeneném	ŋgedóitiemseneném	ŋgedóitiemkeneném	ŋgedóitiemseneném

(IV) DURATIVE — ITERATIVE

Present					
Sing.	1	ŋgedóutembeneŋgéty	ŋgedóutemseneŋgéty	ŋgedóutemkeneŋgéty	ŋgedóutemseneŋgéty
	2	ŋgedóutembeneŋgéti	ŋgedóutemseneŋgéti	ŋgedóutemkeneŋgéti	ŋgedóutemseneŋgéti
	3n.	ŋgedóutembeneŋgétym	ŋgedóutemseneŋgétym	ŋgedóutemkeneŋgétym	ŋgedóutemseneŋgétym
	3m.	ŋgedóutembeneŋgétim	ŋgedóutemseneŋgétim	ŋgedóutemkeneŋgétim	ŋgedóutemseneŋgétim
	1+2	ŋgedóutemembeneŋgetím	ŋgedóutemseneŋgetím	ŋgedóutemŋkeneŋgetím	ŋgedóutemseneŋgetím
Non-Sing.	1	ŋgedóitiembeneŋgéty	ŋgedóitiemseneŋgéty	ŋgedóitiemkeneŋgéty	ŋgedóitiemseneŋgéty
	2	ŋgedóitiembeneŋgéti	ŋgedóitiemseneŋgéti	ŋgedóitiemkeneŋgéti	ŋgedóitiemseneŋgéti
	3n.	ŋgedóitiembeneŋgétym	ŋgedóitiemseneŋgétym	ŋgedóitiemkeneŋgétym	ŋgedóitiemseneŋgétym
	3m.	ŋgedóitiembeneŋgétim	ŋgedóitiemseneŋgétim	ŋgedóitiemkeneŋgétim	ŋgedóitiemseneŋgétim
	1+2	ŋgedóitiembeneŋgetím	ŋgedóitiemseneŋgetím	ŋgedóitiemkeneŋgetím	ŋgedóitiemseneŋgetím

Recent Past

Sing.	1				
	2	*Same*	*Same*	*Same*	*Same*
	3n.				
	3m.				
	1+2	*as*	*as*	*as*	*as*
Non-Sing.	1				
	2				
	3n.	*Present*	*Present*	*Present*	*Present*
	3m.				
	1+2				

Past

Sing.	1	ŋgedóutembeneŋgéky	ŋgedóutemseneŋgéky	ŋgedóutemkeneŋgéky	ŋgedóutemseneŋgéky
	2	ŋgedóutembeneŋgéki	ŋgedóutemseneŋgéki	ŋgedóutemkeneŋgéki	ŋgedóutemseneŋgéki
	3n.	ŋgedóutembeneŋgékym	ŋgedóutemseneŋgékym	ŋgedóutemkeneŋgékym	ŋgedóutemseneŋgékym
	3m.	ŋgedóutembeneŋgékim	ŋgedóutemseneŋgékim	ŋgedóutemkeneŋgékim	ŋgedóutemseneŋgékim
	1+2	ŋgedóutemembeneŋgekím	ŋgedóutemseneŋgekím	ŋgedóutemeŋkeneŋgekím	ŋgedóutemseneŋgekím
Non-Sing.	1	ŋgedóitiembeneŋgéky	ŋgedóitiemseneŋgéky	ŋgedóitiemkeneŋgéky	ŋgedóitiemseneŋgéky
	2	ŋgedóitiembeneŋgéki	ŋgedóitiemseneŋgéki	ŋgedóitiemkeneŋgéki	ŋgedóitiemseneŋgéki
	3n.	ŋgedóitiembeneŋgékym	ŋgedóitiemseneŋgékym	ŋgedóitiemkeneŋgékym	ŋgedóitiemseneŋgékym
	3m.	ŋgedóitiembeneŋgékim	ŋgedóitiemseneŋgékim	ŋgedóitiemkeneŋgékim	ŋgedóitiemseneŋgékim
	1+2	ŋgedóitiembeneŋgekím	ŋgedóitiemseneŋgekím	ŋgedóitiemkeneŋgekím	ŋgedóitiemseneŋgekím

FIRST SECONDARY VERB CATEGORY

		1st Pos.	*2nd Pos.*	*3rd Pos.*	*4th Pos.*	*5th Pos.*
Future						
Sing.	1	ŋgedóurarú	ŋgedóurebarú	ŋgedóureŋarú	ŋgedóuresarú	ŋgedóurenarú
	2	ŋgedóuraré	ŋgedóurebaré	ŋgedóureŋaré	ŋgedóuresaré	ŋgedóurenaré
	3n.	ŋgedóurarúm	ŋgedóurebarúm	ŋgedóureŋarúm	ŋgedóuresarúm	ŋgedóurenarúm
	3m.	ŋgedóurarám	ŋgedóurebarám	ŋgedóureŋarám	ŋgedóuresarám	ŋgedóurenarám
	1+2	ŋgedóudemandám	ŋgedóudemambarám	ŋgedóudemaŋarám	ŋgedóudemansarám	ŋgedóudemanarám
Dual	1	ŋgedóudiarú	ŋgedóudiebarú	ŋgedóudieŋarú	ŋgedóudiesarú	ŋgedóudienarú
	2	ŋgedóudiaré	ŋgedóudiebaré	ŋgedóudieŋaré	ŋgedóudiesaré	ŋgedóudienaré
	3fem.	ŋgedóudiarúm	ŋgedóudiebarúm	ŋgedóudieŋarúm	ŋgedóudiesarúm	ŋgedóudienarúm
	3m.	ŋgedóudiarám	ŋgedóudiebarám	ŋgedóudieŋarám	ŋgedóudiesarám	ŋgedóudienarám
	3inan.	ŋgedóukrarám	ŋgedóukrebarám	ŋgedóukreŋarám	ŋgedóukresarám	ŋgedóukrenarám
	1+2	ŋgedóudiemandám	ŋgedóudiemambarám	ŋgedóudiemaŋarám	ŋgedóudiemansarám	ŋgedóudiemanarám
Plur.	1	ŋgedóudiemándu	ŋgedóudiemambarú	ŋgedóudiemaŋarú	ŋgedóudiemansarú	ŋgedóudiemanarú
	2	ŋgedóudiemánde	ŋgedóudiemambaré	ŋgedóudiemaŋaré	ŋgedóudiemansaré	ŋgedóudiemanaré
	3anim.	ŋgedóudiarám	ŋgedóudiebarám	ŋgedóudieŋarám	ŋgedóudiesarám	ŋgedóudienarám
	3inan.	ŋgedóurarám	ŋgedóudebarám	ŋgedóureŋarám	ŋgedóuresarám	ŋgedóurenarám
Present						
Sing.	1	ŋgedóuratú	ŋgedóurebáu	ŋgedóurekeŋáu	ŋgedóuresáu	ŋgedóurenáu
	2	ŋgedóuraté	ŋgedóurebáe	ŋgedóurekeŋáe	ŋgedóuresáe	ŋgedóurenáe
	3n.	ŋgedóuratúm	ŋgedóurebóm	ŋgedóurekeŋóm	ŋgedóuresóm	ŋgedóurenóm
	3m.	ŋgedóuratám	ŋgedóurebám	ŋgedóurekeŋám	ŋgedóuresám	ŋgedóurenám
	1+2	ŋgedóudemantám	ŋgedóudemambám	ŋgedóudemaŋkeŋám	ŋgedóudemansám	ŋgedóudemanám
Dual	1	ŋgedóudiatú	ŋgedóudiebáu	ŋgedóudiekeŋáu	ŋgedóudiesáu	ŋgedóudienáu
	2	ŋgedóudiaté	ŋgedóudiebáe	ŋgedóudiekeŋáe	ŋgedóudiesáe	ŋgedóudienáe
	3fem.	ŋgedóudiatúm	ŋgedóudiebóm	ŋgedóudiekeŋóm	ŋgedóudiesóm	ŋgedóudienóm
	3m.	ŋgedóudiatám	ŋgedóudiebám	ŋgedóudiekeŋám	ŋgedóudiesám	ŋgedóudienám
	3inan.	ŋgedóukratám	ŋgedóukrebám	ŋgedóukrekeŋám	ŋgedóukresám	ŋgedóukrenám
	1+2	ŋgedóudiemantám	ŋgedóudiemambám	ŋgedóudiemaŋkeŋám	ŋgedóudiemansám	ŋgedóudiemanám
Plur.	1	ŋgedóudiemántu	ŋgedóudiemambáu	ŋgedóudiemaŋkeŋáu	ŋgedóudiemansáu	ŋgedóudiemanáu
	2	ŋgedóudiemánte	ŋgedóudiemambáe	ŋgedóudiemaŋkeŋáe	ŋgedóudiemansáe	ŋgedóudiemanáe
	3anim.	ŋgedóudiatám	ŋgedóudiebám	ŋgedóudiekeŋám	ŋgedóudiesám	ŋgedóudienám
	3inan.	ŋgedóuratám	ŋgedóurebám	ŋgedóurekeŋám	ŋgedóuresám	ŋgedóurenám

Recent Past

Sing.	1	ŋgedóurapú				
	2	ŋgedóurapé				
	3n.	ŋgedóurapúm				
	3m.	ŋgedóurapám				
	1+2	ŋgedóudemampám	*Same*	*Same*	*Same*	*Same*
Dual	1	ŋgedóudiapú				
	2	ŋgedóudiapé				
	3fem.	ŋgedóudiapúm	*as*	*as*	*as*	*as*
	3m.	ŋgedóudiapám				
	3inan.	ŋgedóukrapám				
	1+2	ŋgedóudiemampám	*Present*	*Present*	*Present*	*Present*
Plur.	1	ŋgedóudiemámpu				
	2	ŋgedóudiemámpe				
	3anim.	ŋgedóudiapám				
	3inan.	ŋgedóurapám				

Past

Sing.	1	ŋgedóurakú	ŋgedóurebakú	ŋgedóureŋakú	ŋgedóuresakú	ŋgedóurenakú
	2	ŋgedóuraké	ŋgedóurebaké	ŋgedóureŋaké	ŋgedóuresaké	ŋgedóurenaké
	3n.	ŋgedóurakúm	ŋgedóurebakúm	ŋgedóureŋakúm	ŋgedóuresakúm	ŋgedóurenakúm
	3m.	ŋgedóurakám	ŋgedóurebakám	ŋgedóureŋakám	ŋgedóuresakám	ŋgedóurenakám
	1+2	ŋgedóudemaŋkám	ŋgedóudemambakám	ŋgedóudemaŋakám	ŋgedóudemansakám	ŋgedóudemanakám
Dual	1	ŋgedóudiakú	ŋgedóudiebakú	ŋgedóudieŋakú	ŋgedóudiesakú	ŋgedóudienakú
	2	ŋgedóudiaké	ŋgedóudiebaké	ŋgedóudieŋaké	ŋgedóudiesaké	ŋgedóudienaké
	3fem.	ŋgedóudiakúm	ŋgedóudiebakúm	ŋgedóudieŋakúm	ŋgedóudiesakúm	ŋgedóudienakúm
	3m.	ŋgedóudiakám	ŋgedóudiebakám	ŋgedóudieŋakám	ŋgedóudiesakám	ŋgedóudienakám
	3inan.	ŋgedóukrakám	ŋgedóukrebakám	ŋgedóukreŋakám	ŋgedóukresakám	ŋgedóukrenakám
	1+2	ŋgedóudiemaŋkám	ŋgedóudiemambakám	ŋgedóudiemaŋakám	ŋgedóudiemansakám	ŋgedóudiemanakám
Plur.	1	ŋgedóudiemáŋku	ŋgedóudiemambakú	ŋgedóudiemaŋakú	ŋgedóudiemansakú	ŋgedóudiemanakú
	2	ŋgedóudiemáŋke	ŋgedóudiemambaké	ŋgedóudiemaŋaké	ŋgedóudiemansaké	ŋgedóudiemanaké
	3anim.	ŋgedóudiakám	ŋgedóudiebakám	ŋgedóudieŋakám	ŋgedóudiesakám	ŋgedóudienakám
	3inan.	ŋgedóurakám	ŋgedóurebakám	ŋgedóureŋakám	ŋgedóuresakám	ŋgedóurenakám

SECOND SECONDARY VERB CATEGORY

Future

		1st Pos.	*2nd Pos.*	*3rd Pos.*	*4th Pos.*	*5th Pos.*
Sing.	1	ŋgedóurerýŋ	ŋgedóurebeŋ́	ŋgedóureŋerýŋ	ŋgedóureseŋ́	ŋgedóurenerýŋ
	2	ŋgedóureríŋ	ŋgedóureberíŋ	ŋgedóureŋeríŋ	ŋgedóureseríŋ	ŋgedóureneríŋ
	3n.	ŋgedóurerýmŋ	ŋgedóurebeŋ́mŋ	ŋgedóureŋerýmŋ	ŋgedóureseŋ́mŋ	ŋgedóurenerýmŋ
	3m.	ŋgedóurerímŋ	ŋgedóurebeŋ́mŋ	ŋgedóureŋerímŋ	ŋgedóureserímŋ	ŋgedóurenerímŋ
	1+2	ŋgedóudemendímŋ	ŋgedóudememberímŋ	ŋgedóudemeŋerímŋ	ŋgedóudemenserímŋ	ŋgedóudemenerímŋ
Dual	1	ŋgedóudieŋ́	ŋgedóudiebeŋ́	ŋgedóudieŋerýŋ	ŋgedóudieseŋ́	ŋgedóudienerýŋ
	2	ŋgedóudieríŋ	ŋgedóudieberíŋ	ŋgedóudieŋeríŋ	ŋgedóudieseríŋ	ŋgedóudieneríŋ
	3fem.	ŋgedóudierýmŋ	ŋgedóudiebeŋ́mŋ	ŋgedóudieŋerýmŋ	ŋgedóudieseŋ́mŋ	ŋgedóudienerýmŋ
	3m.	ŋgedóudierímŋ	ŋgedóudiebeŋ́mŋ	ŋgedóudieŋerímŋ	ŋgedóudieserímŋ	ŋgedóudienerímŋ
	3inan.	ŋgedóukrerímŋ	ŋgedóukrebeŋ́mŋ	ŋgedóukreŋerímŋ	ŋgedóukreserímŋ	ŋgedóukrenerímŋ
	1+2	ŋgedóudiemendímŋ	ŋgedóudiememberímŋ	ŋgedóudiemeŋerímŋ	ŋgedóudiemenserímŋ	ŋgedóudiemenerímŋ
Plur.	1	ŋgedóudieméndy	ŋgedóudiemeberý	ŋgedóudiemeŋerý	ŋgedóudiemenseŋ́	ŋgedóudiemenerý
	2	ŋgedóudieméndiŋ	ŋgedóudiemeberíŋ	ŋgedóudiemeŋeríŋ	ŋgedóudiemenseríŋ	ŋgedóudiemeneríŋ
	3anim.	ŋgedóudierímŋ	ŋgedóudiebeŋ́mŋ	ŋgedóudieŋerímŋ	ŋgedóudieserímŋ	ŋgedóudienerímŋ
	3inan.	ŋgedóurerímŋ	ŋgedóurebeŋ́mŋ	ŋgedóureŋerímŋ	ŋgedóureserímŋ	ŋgedóurenerímŋ

Present

Sing.	1	ŋgedóuretý	ŋgedóurebéy	ŋgedóurekeŋéy	ŋgedóuresey	ŋgedóurenéy
	2	ŋgedóuretíŋ	ŋgedóurebéiŋ	ŋgedóurekeŋéiŋ	ŋgedóureséiŋ	ŋgedóurenéiŋ
	3n.	ŋgedóuretýmŋ	ŋgedóurebyémŋ	ŋgedóurekeŋyémŋ	ŋgedóuresyémŋ	ŋgedóurenyémŋ
	3m.	ŋgedóuretímŋ	ŋgedóurebémŋ	ŋgedóurekeŋémŋ	ŋgedóuresémŋ	ŋgedóureném
	1+2	ŋgedóudementímŋ	ŋgedóudemembémŋ	ŋgedóudemeŋkeŋémŋ	ŋgedóudemensémŋ	ŋgedóudemeném
Dual	1	ŋgedóudietý	ŋgedóudiebéy	ŋgedóudiekeŋéy	ŋgedóudiesey	ŋgedóudienéy
	2	ŋgedóudietíŋ	ŋgedóudiebéiŋ	ŋgedóudiekeŋéiŋ	ŋgedóudieséiŋ	ŋgedóudienéiŋ
	3fem.	ŋgedóudietýmŋ	ŋgedóudiebyémŋ	ŋgedóudiekeŋyémŋ	ŋgedóudiesyémŋ	ŋgedóudienyémŋ
	3m.	ŋgedóudietímŋ	ŋgedóudiebémŋ	ŋgedóudiekeŋémŋ	ŋgedóudiesémŋ	ŋgedóudieném
	3inan.	ŋgedóukretímŋ	ŋgedóukrebémŋ	ŋgedóukrekeŋémŋ	ŋgedóukresémŋ	ŋgedóukreném
	1+2	ŋgedóudiementímŋ	ŋgedóudiemembémŋ	ŋgedóudiemeŋkeŋémŋ	ŋgedóudiemensémŋ	ŋgedóudiemeném
Plur.	1	ŋgedóudiemény	ŋgedóudiemembéy	ŋgedóudiemeŋkeŋéy	ŋgedóudiemenséy	ŋgedóudiemenéy
	2	ŋgedóudieméntiŋ	ŋgedóudiemembéiŋ	ŋgedóudiemeŋkeŋéiŋ	ŋgedóudiemenséiŋ	ŋgedóudiemenéiŋ
	3anim.	ŋgedóudietímŋ	ŋgedóudiebémŋ	ŋgedóudiekeŋémŋ	ŋgedóudiesémŋ	ŋgedóudieném
	3inan.	ŋgedóuretímŋ	ŋgedóurebémŋ	ŋgedóurekeŋémŋ	ŋgedóuresémŋ	ŋgedóureném

Recent Past

Sing.	1	ŋgedóurepýˊ				
	2	ŋgedóurepíˊ				
	3n.	ŋgedóurepýˊm				
	3m.	ŋgedóurepíˊm				
	1+2	ŋgedóudemempíˊm	*Same*	*Same*	*Same*	*Same*
Dual	1	ŋgedóudiepýˊ				
	2	ŋgedóudiepíˊ				
	3fem.	ŋgedóudiepýˊm	*as*	*as*	*as*	*as*
	3m.	ŋgedóudiepíˊm				
	3inan.	ŋgedóukrepíˊm				
	1+2	ŋgedóudiemempíˊm	*Present*	*Present*	*Present*	*Present*
Plur.	1	ŋgedóudiemémpy				
	2	ŋgedóudiemémpi				
	3anim.	ŋgedóudiepíˊm				
	3inan.	ŋgedóurepíˊm				

Past

Sing.	1	ŋgedóurekýˊ	ŋgedóurebekýˊ	ŋgedóureŋekýˊ	ŋgedóuresekýˊ	ŋgedóureneký́
	2	ŋgedóurekiˊ	ŋgedóurebekiˊ	ŋgedóureŋekiˊ	ŋgedóuresekiˊ	ŋgedóurenekí
	3n.	ŋgedóurekýˊm	ŋgedóurebekýˊm	ŋgedóureŋekýˊm	ŋgedóuresekýˊm	ŋgedóurenekýˊm
	3m.	ŋgedóurekíˊm	ŋgedóurebekíˊm	ŋgedóureŋekíˊm	ŋgedóuresekíˊm	ŋgedóurenekíˊm
	1+2	ŋgedóudemeŋkíˊm	ŋgedóudemembekíˊm	ŋgedóudemeŋekíˊm	ŋgedóudemensekíˊm	ŋgedóudemenekíˊm
Dual	1	ŋgedóudiekýˊ	ŋgedóudiebekýˊ	ŋgedóudieŋekýˊ	ŋgedóudieseký́	ŋgedóudieneký́
	2	ŋgedóudiekiˊ	ŋgedóudiebekiˊ	ŋgedóudieŋekiˊ	ŋgedóudiesekí	ŋgedóudienekí
	3fem.	ŋgedóudiekýˊm	ŋgedóudiebekýˊm	ŋgedóudieŋekýˊm	ŋgedóudiesekýˊm	ŋgedóudienekýˊm
	3m.	ŋgedóudiekíˊm	ŋgedóudiebekíˊm	ŋgedóudieŋekíˊm	ŋgedóudiesekíˊm	ŋgedóudienekíˊm
	3inan.	ŋgedóukrekíˊm	ŋgedóukrebekíˊm	ŋgedóukreŋekíˊm	ŋgedóukresekíˊm	ŋgedóukrenekíˊm
	1+2	ŋgedóudiemeŋkíˊm	ŋgedóudiemembekíˊm	ŋgedóudiemeŋekíˊm	ŋgedóudiemensekíˊm	ŋgedóudiemenekíˊm
Plur.	1	ŋgedóudieméŋky	ŋgedóudiemembekýˊ	ŋgedóudiemeŋekýˊ	ŋgedóudiemenseký́	ŋgedóudiemeneký́
	2	ŋgedóudieméŋki	ŋgedóudiemembekiˊ	ŋgedóudiemeŋekiˊ	ŋgedóudiemensekí	ŋgedóudiemenekí
	3anim.	ŋgedóudiekíˊm	ŋgedóudiebekíˊm	ŋgedóudieŋekíˊm	ŋgedóudiesekíˊm	ŋgedóudienekíˊm
	3inan.	ŋgedóurekíˊm	ŋgedóurebekíˊm	ŋgedóureŋekíˊm	ŋgedóuresekíˊm	ŋgedóurenekíˊm

THIRD SECONDARY VERB CATEGORY

(Only Third Person Inanimate Plural)

	1st Pos.	*2nd Pos.*	*3rd Pos.*	*4th Pos.*	*5th Pos.*
Future	ŋgedóurondým	ŋgedóurombérym	ŋgedóuroŋérym	ŋgedóuromsérym	ŋgedóuromnérym
Present	ŋgedóurontým	ŋgedóurombyém	ŋgedóuroŋkeŋyém	ŋgedóuromsyém	ŋgedóuromnyém
Recent Past	ŋgedóurompým		*Same*	*as*	*Present*
Past	ŋgedóuroŋkým	ŋgedóurombékym	ŋgedóuroŋékym	ŋgedóuromsékym	ŋgedóuromnékym

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