# THE LINGUISTIC POSITION OF SOUTH-WESTERN NEW GUINEA 

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ARNHEM


LEIDEN
E. J. BRILL

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## STELLINGEN

De termen „ethnologie" en „culturele anthropologie" zijn niet synoniem.
II
De omschrijving van het begrip cultuur door Cl. Kluckhohn en W. H. Kelly : "By "culture" we mean those historically created selective processes which channel men's reactions both to internal and to external stimuli" (The concept of culture, opgenomen in R. Linton: The science of Man in the world crisis, 5 th impr. 1947) doet de invloed van de cultuurdragers op deze selectieve processen niet voldoende tot zijn recht komen.

## 111

Na het begrip cultuur gedefinieerd te hebben, zal het noodzakelijk zijn bij de uitleg te wijzen op de finaliteitsfactor, welke in de teleologische opvatting van de schepping besioten ligt.

## IV

Het zou aan de functionele ethnologie ten goede komen, wanneer de methodische regels, welke in haar literatuur te vinden zijn, bijeen werden gebracht.

## V

De kritiek van $N$. Söderblom op de argumentatie van W . Schmidt met betrekking tot een Hoogste Wezen in de culturen van Z. O. Australië is niet afdoende, daar zij aan de cultuurhistorische bewijsgronden van W . Schmidt te weinig aandacht schenkt. (Söderblom, Das Werden des Gottesglaubens, Kap. 4, S. 150, e.v.)

VI
Daar N. Söderblom aan de religie de ervaring van het ,heilige" (het numineuze) ten grondslag legt en hij dit numineuze karakter bij de „Urheber" niet aantreft, ziet hij in de "Urheber" geen theïstische trekken; W. Schmidt, die de religie ook van uit de causaliteitsgedachte benadert, kan daarom in de "Urheber" ook (mono) theisme ontdekken.

## VII

Een daad van „magie" veronderstelt in degene, die haar stelt, het bewustzijn, zich in verbinding te stellen met een macht welke in de sfeer van het numineuze ligt, en de opzet deze macht aan zich ondergeschikt te maken.

## VIII

Of bij een volk "magie" optreedt, hangt af van de vraag of dai volk een onderscheid maakt tussen de eigen krachten van de natuur en die van de numineuze geladenheid en van de vraag of dat volk zich het verschil bewust is tussen een houding van een ,zich onderwerpen aan" en een ,beheersen van" die numineuze machten.

## IX

Ten onrechte neemt Dr. J. van Baal in zijn dissertatie "Godsdienst en samenleving in Neder!andsch-Zuid-Nieuw-Guinea" (Leiden, 1934) een sterke samenhang aan tussen het Majo~, het Imo~ en het Rapa-ritueel.

## X

J. Verschueren m.s.c., heeft aangetoond, dat het voorkomen van een mensenoffer in de rituelen van de Marind-anim niet bewezen is. (Indonesië, 1g. 1, no. 5).

XI
Onder de thans bekende talen van Nederlands Zuid-West Nieuw Guinea zijn te onderscheiden talen, waarin vervoeging optreedt, en talen, waarin deze niet gevondent wordt.
XII

De talen van het vasteland van Nederlands Zuid-West Nieuw Guinea zijn op grond van de gevonden vervoeging te onderscheiden in talen met gepraefigeerde en talen met gesuffigeerde vervoeging.

## XIII

De talen van Noord Halmahera vertonen een sterke overeenkomst met die talen van Zuid-West Nieuw Guinea, waarin gepraefigeerde vervoeging aanwezig is.

## XIV

De pogingen om de taal, welke door de christelijke kerken in indonesië gebezigd werd, aan te passen aan het algemeen beschaafd Indonesisch, zijn van groot belang te achten.

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## BY

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# THE LINGUISTIC POSITION OF SOUTH-WESTERN NEW GUINEA 

> ACADEMISCH PROEFSCHRIFT TER VERKRIJGING VAN DE GRAAD VAN DOCTOR IN DE LETTEREN EN WIJSBEGEERTE AAN DE RIJKSUNIVERSITEIT TE UTRECHT OP GEZAG VAN DEN RECTOR MAGNIFICUS Dr. H. J. M. WEVE, HOOGLERAAR IN DE FACULTEIT DER GENEESKUNDE, VOLGENS BESLUIT VAN DE SENAAT DER UNIVERSITEIT TEGEN DE BEDENKINGEN VAN DE FACULTEIT VAN LETTEREN EN WIJSBEGEERTE TE VERDEDIGEN OP VRUDAG 7 JULI 1950, DES NAMIDDAGS TE 3 UUR


LEIDEN
E. J. BRILL

## Promotor: Prof. Dr. J. Gonda

To my father $\dagger$ and mother

## INTRODUCTION

Chesterton, describing in his „Autobiography" the development of his ideas against the background of his newly acquired conception of life, arrives in the last chapter at the following wise conclusion: ".... the aim of life is appreciation". ${ }^{1}$

When a student has finished his university career during which he was able, through contact with professors, lectures and fellow-students, to develop his ideas against the background of his own view of life, he feels inclined to draw the same conclusion: .... the aim of life is appreciation..., appreciation of all that was offered. Therefore, it is a matter of course that the writer of a thesis, with which he ends his university career, wants to give expression to his sincere appreciation of those who led him on and pointed out the way in his studies.

Professor Gonda, you know that I have always attended your lectures with great interest, first your lectures on Aryan philology and literature, then on the comparison of the Indonesian languages. But even more, I have always appreciated your readiness to help me in approaching the difficult problem I was confronted with, when comparing the languages of South Western New-Guinea. The tedious work of checking this kind of material, the short time in which you had to plod through each part of it, must have taken up many hours of your precious time. Your example of unflagging industry and activity is justly proverbial among your students. For this 1 thank you; 1 am very much obliged to you.
Professor Fischer, after taking my bachelor's degree, the study of primitive culture was my real object. Originally I intended to take my master's degree in this subject. In you I have always admired the lucid professor. Your argumentation was in itself of great and stimulating value. The discussion of the examination papers I had to write under your guidance, and the talks I was allowed to have with you, made me appreciate the religious man in you beside the scholar.

Professor Obbink, at first, it was strange for you and for me that I was introduced by you into the study of comparative religion. The way in which you always succeeded in placing the religious phenomena of the non-christian religions side by side with apparently analogous data in christianity, 1 always greatly appreciated. I also thank you for the many opportunities you gave me to compare notes, and for the honest but, on that account, not less cordial tone in which that was made possible by you.

Professor Vroklage, the Great War, which caused the closing of Utrecht University, enabled me to profit by your lectures given to future missiona-
ries at Nijmegen. The valuable exposition of the culture-historical method I got from you there, will be a help in later investigations and fieldwork in general. Your interest in my work has always been a great stimulus for me.

Professor Scharpé, the fairly early liberation of Belgium enabled me to resume under your guidance my studies which had unfortunately been interrupted. How many hours we spent together over the "Sanskrit-Reader" of the professor who guided both of us to our doctor's degrees. Yout instruction and cordial, Flemish hospitality have made the time, spent in Louvain, exceedingly fruitful and pleasant for me.

Professor Bosch, your interesting papers on Hindu-Javanese art have been considerable contributions to my great respect and love of Indonesian culture.

Dr. M. Emeis, I thank you for your kind help during my study of the Malay language so dear to you; and Father J. v. d. Berg, you know how much I appreciate your contribution to my knowledge of that language.

Among the good friends who helped me, I want to mention Dr. J. Wils, Professor of the University of Nijmegen, who so kindly guided my going through the principles of the science of phonetics.

My colleagues, the Fathers H. Geurtjens and P. Drabbe from whom I received the material, I shall mention presently. The Fathers J. Kuin, A. Vriens, and A. van Buuren I have to thank for making the text and the maps ready for the press; and Father J. Oudenhoven for correcting the proofs which was, in this case, a most exhausting task.


In the spring of 1948 Father P. Drabbe M.S.C. returned to Holland, after having been in the R. C. Mission of Dutch New-Guinea for more than thirty years. The government had requested him to go to Holland to prepare the publication of his linguistic work.

Father Drabbe arrived in the Tanembar-islands in 1915; there he studied the native languages. He published: Spraakkunst der Fordaatsche Taal ${ }^{2}$; Spraakkunst der Jamdeensche Taal ${ }^{3}$; Woordenboek der Fordaatsche Taalí; Woordenboek der Jamdeensche Taals; Beknopte Spraakkunst en korte Woordenlijst der Staroeëesche Taal ${ }^{6}$.

He came to Holland on leave in 1927 and spent his holidays studying ethnology. At the instigation of the late Professor J. van Eerde, he made a preparatory study and, back in Tanémbar, he wrote: „Het Leven van den Tanémbarees"'. In 1935 Father Drabbe was transferred to the Mimikadistrict of Dutch New-Guinea. Henceforth he has applied himself to the study of the various languages of South Western New-Guinea. Of some of them he wrote detailed grammars and of others he collected the chief elements. When Father Drabbe returned to Holland he had collected data of twenty-four languages and dialects. In Holland he made the grammars

H. GEURTJENS m.s.c.
R. C. Missionary in South-Western New Guinea.

P. DRABBE m.s.c.
R. C. Missionary in South-Western New Guinea.
ready for publication with the invaluable assistance of Professor Dr. J. Gonda. They will be published by the following Institutes:
I. Koninklijk Instituut voor Taal-, Land- en Volkenkunde, Den Haag, Holland. This Institute published already:

1) Bijzonderheden sit de Talen van Frederik-Hendrik-eiland: Kimaghama, Ndom en Riantana. Bijdragen tot de Taat-, Land- en Volkenkunde, Deel 105 (1949), afl. 1.
2) Aantekeningen over twee Talen in het Centraal Gebergte van Nederlands Nieuw Guinea: Ekari en Moni. Bijdragen tot de Taat-, Land- en Votkenkunde, Deel 105 (1949), afl. 4.
3) Twee Dialecten van de Awju-Taal. Bijdragen tot de Taal-, Land- en Volkenkunde, Deel 106 (1950) afl. 1.

It accepted to publish in the future:
Spraakkunst der Kamoro-Taal met drie Aanhangsels: I. Dialectische Verschillen, II. De Sémpan- en Asmat-talen. III. Woordenlijgt van Kamoro, Sémpan en Asmat.
II. Anthropos Institut; Posieux-Froideville, Kt Freiburg, Schweiz.

This Institute will publish under the general head: Talen en Dialecten van Zuid-West Nieuw-Guinea:

1) Aantekeningen over drie Talen tussen Mbian en Fly: Moraori, Jéi en Kanum.
2) Aantekeningen over drie Talen tussen Digul en Mbian: Jélmèk, Makléw en Mombum.
3) Gegevens over drie Talen met praefixale Vervoeging: Jaqaj, Marind Boven-Mbian, Marind Gawir en Boazi.
4) Spraakkunst van de Kati-Taal met aanhangsel over Dumut.

Father Drabbe's work had been preceded by a first attempt at recording one language of South Western New-Guinea, an attempt deserving special appreciation. We mean the linguistic work of Father H. Geurtjens M.S.C. He published: Spraakleer der Marindineesche Taal ${ }^{8}$ en MarindineeschNederlandsch Woordenboek ${ }^{9}$.

At the request of Father P. Drabbe and in appreciation of the spade work done by these two missionaries, and at the same time as a preparation for linguistic and ethnological investigations on the spot, we have tried to form an idea of the linguistic position of South-Western New Guinea, relying on the material of these two pioneers.

Father Drabbe's material excelled by the systematic way in which he worked up the philological phenomena observed by him. I was informed by Father Drabbe personally, that he has made notes of these languages as he heard them from the mouths of the native people themselves. He was used to take into his house young boys, who stayed with him for a very long time and who already had some knowledge of the Malay language, got at the schools of the missionaries, or through personat instruction fror

Father Drabbe himself. In the long run these informants got a growing understanding of what Drabbe wanted. Very often his results were checked by other missionaries, who made use of his transtations in their religious teaching. Father Geurfjens informed us that his first grammar was a result of collaboration with the Fathers J. van der Kolk and J. van der Kooy.

From this material we have made a choice. At the advice of Father Drabbe in languages of which more dialects were given, we chose one dialect, usually the dialect of which most data had been obtained. It has not been our intention to study the various languages themselves or the relation of the dialects of one language. The aim of this study is only to investigate the grammatical structure of the various types of languages in order to find cut if there are agreements and points of difference, and also to get at a preliminary survey of these quite unknown regions. Consequently we only made use of Father Geurtjens' grammar in so far as it showed points of comparison which could be put side by side with Father Drabbe's material.

Of some languages, Father Drabbe only studied the verb and sometimes only the tenses in detaii; in this case other elements of the grammar are discussed in so far as they are connected with the verb.


The division of our thesis is as follows:

1) In Part I we describe the various linguistic phenomena, which we want to compare in Part Il. The description is rather concise, because the grammars and notes of Drabbe will be published as well. The contents of each chapter are:
section 1: Name and Territory of the language;
section 2: Nouns (special attention is paid to the expression of the possessive relation);
section 3: Pronouns;
section 4: Numerals;
section 5: Verbs (a distinction is made, if possible, between verbal and nominal predicates);
section 6: Linking-elements (cf. list of terms to be given presently). The order in which the languages are discussed, is geographical, starting from the district of the Marind-language (cf. Language-Map), going into western direction as far as Frederik-Hendrik-island; again starting from the Australian border and proceeding into western direction etc. We chose this sequence in order to avoid any grouping of languages which would anticipate on the results of our examination.
2) Part II contains the comparison of the languages described in Part I; we examine the various ways in which the grammatical categories, occurring in these languages, are expressed and state the agreements and points
of difference between them. Then, by sorting out these agreements and points of difference, we try to fix which languages belong together, which do not, in order to get the language-pattern of South-Western New Guinea. In a concluding chapter we compare briefly the results of our examination with the data of the literature with regard to New Guinea and the surrounding islands. In this way the languages of S. W. N. Guinea are given their place in a much larger area.

While chosing our terminology, we tried on the one hand to describe the linguistic data of the region as closely as possible, on the other hand to deviate as tittle as possible from the traditional terms. In case the usual terminology is based on special functions of special languages, we preferred a paraphrase. The following terms may want some explanation:
a) Linking-element: in cases where the usual terminology has the term "preposition" or "conjunction" and studies about Papuan languages use the term "postpositions", we have the term "linking-elements". By linking-elements we mean those phonemes which occur in our material after words or clauses, and indicate the function of these words in the sentence or of these clauses in the compound sentence. Because these languages have not been sufficiently examined to discriminate with certainty the categories of postpositions, conjunctions, ligatures, subject-indicators etc., we collected these phonemes under the term "linking-elements".
b) Base: in case the usual terminology has "stem", we use the term "base", because the term "stem" implies the idea of inflection or conjugation; but there are languages in this region which have no inflection or conjugation. Therefore, a term was required applicable to forms capable of conjugation or not. We distinguish between a "primary base" and a "secondary base" in case a non-conjugated base (primary) and a conjugated base (secondary) are combined and form one predicate.
c) Indices: describing the predicate formations of these languages we use a system of symbols which indicate the various functions of the various vowels or consonants preceding or following the base. Capitals refer to the various parts of the sentence, small letters indicate the representations of the parts of the sentence in the predicate:
$S$ indicates the subject of the sentence; $s$ (subject-index) refers to the subject as represented in the predicate;
R indicates the object of the sentence or those adjuncts related to the verb which in English, for instance, are called prepositional adjuncts of instrumentality, direction etc.; $\mathbf{r}$ (relation-index) refers in the predicate to the object or the adjuncts related to the verb. Here we want to state emphatically that, in this study, we use the terms "object" and "relation" indiscriminately, because, according to Drabbe, the relation-index in these lan-
guages often refers to parts of the sentence, which in our Western languages are not only indicated by a direct or indirect object, but also by groups of words preceded by a preposition. It was often not clear in the different languages whether the relation-index pointed to a direct or indirect object, or also to other relations. Therefore we chose the name "relation-index", which indicates sometimes the object, sometimes the relations in the predicate;
$B$ indicates the base underlying the predicate formation; B1 indicates a primary base; B2 represents the secondary base;
n indicates the number of subject or object in so far as this number is expressed in the predicate (number-index);
1 indicates ligature, which in some languages is found between parts of conjugated forms;
a indicates those elements in the conjugation which express the aspect of the process (aspect-index);
$m$ indicates those elements of conjugated forms which express the mood of the process (mood-index);
t indicates those elements of conjugated forms which express the tense of the process (tense-index);
Sometimes these indices may be combined:
$\mathrm{t} / \mathrm{s}$ means that the elements which indicate subject, express the tense at the same time;
$\mathrm{a} / \mathrm{s}$ means that the same elements which indicate the subject, express the aspect at the same time;
$\mathrm{m} / \mathrm{s}$ means that the same elements which indicate the subject, express the $\operatorname{mood}$ at the same time.
In translations the second person singular is indicated by "thou" and "thee" merely in order to distinguish between singular and plural "you".

The weak point in the material of Father Drabbe is the lack of a phonetic transcription. Father Drabbe made his grammars in behalf of his fellow missionaries, who were able to hear the pronunciation of a word from the native speakers themselves. In spite of the fact that we had advantage of having Father Drabbe at our side when working up his data, we have not been able to give a consistent system of phonetic symbols, because in many cases even Father himself could not possibly state the exact pronunciation. We should not forget that he had brought back the material of 24 languages and dialects in the form of grammars and notes. Together with him, we drew up a list of symbols which we use in the description of the languages we compared. It is Drabbe's opinion that these languages contain sounds which are intermediate between the various classes and distinctions of sounds familiar to us. Drabbe has checked all the details of Part I and
indicated the stress marks. This notation is not meant to be the last word in connection with pitch, accent etc.
a all variations between French avoir and English task;
$\bar{a}$ the same vowels but strikingly lengthened;
$\dot{e}$ all variations between English pit and French the;
e the same vowels strikingly lengthened;
$\dot{e}$ all variations between Engiish there and English bad;
e the same vowels but strikingly lengthened;
$e$ all variations between the two vowels of English mother;
$i$ the vowel of French si;
o all variations between English November and English not;
$\ddot{o}$ all variations between German böse and French peur;
$u$ all variations between English mood and English put;
ia the vowel of French but.
When a vowel is followed immediately by the same vowel ( $a a, e e, i i$ etc.) a slight aspiration is heard between these two. Diphthongizations of the above vowels either as falling or rising diphthongs occur; here we give only some examples:
$a^{e}$ vowel $a$ plus semiconsonantal $\dot{e}$;
$a^{\circ}$ vowel a plus semiconsonantal $o$;
© semticonsonantal $i$ plus vowel $o$;
-a semiconsonantal o plus vowel $a$.
Consonant symbols requiring an explanation:
$d$ in Kimaghama has a mid position between $d$ and $t ; d$ in $d j$ is a voiced dental stop;
dj either a combination of the sounds $d$ and $j$ or a diagraph representing one sound;
$g$ initial sound of English get;
gh slightly voiced velar fricative; note: in Boazi a retracted variation occurs:
$j$ initial sound of English yes; note: in Kati the symbol may represent an affricate, e.g. English jail, church;
$k$ initial sound of English cat; note: in Kamoro and Kati the sound is between a stop and a fricative, and may be slightly voiced; in Kati when final, it is an explosionless palatal stop, except when the following word opens with a vowel sound;
$n g$ final sound of English king;
$q$ in Boazi a strongly retracted velar stop, in Jaqa ${ }^{2}$ combined with a scraping sound;
$t$ in Kati slightly voiced, and explosionless when final; in jaqa between a stop and a fricative;
$t j$ cf. French tiens;
$v$ in Kimaghama pronounced bilabially;
a indication of vowel-nasalization;
$\ddagger$ this symbol stands for vowels varying according to different functions of the word;
.... (dots) indicate elements not yet explained;
a a bold lettertype indicates stress.
Although we do not discuss the phonological items of these languages, we want to point out one particular phenomenon occurring in the Kamorolanguage, because this feature is also found in several other languages of this territory and is worth paying attention to in subsequent investigations. In the Kamoro language there seems to exist a systematic use of interdependent vowels and diphthongs in the various successive parts of verbs when conjugated. The same phenomenon is shown in word-derivation and wordformation.

The facts, noticed by Drabbe, suggest that the vowels and diphthongs should be divided into two groups: 1) $a, \dot{e}, \dot{e}, o, a^{\dot{e}}, a^{\dot{e}}, a^{\circ},{ }^{\circ} a,{ }^{6} 0,{ }^{t} 0$; 2) $i, u, a^{i}, a^{u}, o^{i}, o^{u}$. In the neighbourhood of one of the vowels or diphthongs of either group we always find one of the vowels or diphthongs of the same group. This phenomenon, which we should like to call "vowel-harmonization', has not yet been analysed in detail.

## NOTES

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## FIRST PART

## CHAPTER I

## MARIND-LANGUAGE

## Section 1. Name and Territory.

The tanguage is called the Marind-language after the native speakers who called themselves Marind anim. This name may possibly be explained as meaning: the people of the river Maro (Maro-ind). ${ }^{1}$ They live between the Isle of Frederik-Hendrik and the Australian border along the seashore and along the rivers Bulaka, Mbian and Kumbe. In this area several dialects are spoken, viz. the Gawir, the Upper-Mbian, the Sangase and the Imoz. ${ }^{2}$ The language of the Marind has been described by father H. Geurtjens for the first time; father P. Drabbe made a new examination of the two dialects Gawir and Upper-Mbian; we analyse the Gawir-dialect in this chapter.

## Section 2. Nouns.

1) Number may be indicated in different ways:
a) there are nouns that show vocalic change; the vowel indicating the plural is mostly $i$; e.g. āném, "man"; $\bar{a} n i m$, "men". When the sound $i$ occurs in the singular, the plural may be formed by a: amnanggib, "young man"; amnangga, "young men";"
b) most nouns have their number indicated by concord i.e. by a plural form of the accompanying adjective, pronoun or linking-element; hazés, "smooth" is in the plural hazis; té, "this" has in the plural ti; rék has in the plural rik. ${ }^{4}$ This two ways to form a plural occur only in names of men and animals; names of plants, trees and all lifeless things have only one form in the singular and the plural, and are followed by the verb in the singular. ${ }^{\text {s }}$
2) In the singular of words indicating men and animals a sex-distinction is expressed by vocalic change either in the noun itself or in the accompanying words, e.g. wananggib, "son", wananggub, "daughter"; hazés, "smooth" is mascuiine; hazus is the feminine; té, "this" is masculine; $t u$ is feminine; rék, "from" is masculine; ruk is feminine. ${ }^{6}$ When speaking about animals the sex is not considered, the words are feminine (gender). In the words indicating plants, trees and lifeless things the vocalic change occurs in the accompanying words, e.g. hazés, "smooth" is found here as hazas; té "this" as to (gender).
3) There are several ways to indicate relations between nouns: ${ }^{7}$
a) two nouns may form a compound word, in which the first constituent qualifies the second, e.g. dég-āném, "bushnative"; the compound character of these two nouns is proved from the fact that the two nouns cannot be separated by a third element; according to the stress-pattern Drabbe suggests that the first constituent always bears the stress;
b) two nouns may form a phrase; the first indicates the possessor and the second noun the possession; this construction occurs mostly in names of relatives, e.g. Kodwa zib, "Kodwa's son";
c) a linking-element following the noun may be used to express various relations, e.g, miz basik nanggo, "bow pigs for", i.e. "a bow used in shooting pigs"; annim-ènd namakad, "men of things", i.e. "things of other people".

## Section 3. Pronouns.

|  | Set I | Set Il | Set III |
| :--- | :--- | :--- | :--- |
| 1p.s. | nok | nohan | $n$ |
| 1 p. pl. | nok | nohan | $n$ |
| 2 p.s. | oh | oohan | $h$ |
| 2 p.p. | eoh | eohan | $h$ |
| 3p. masc. | anép |  | $e ́$ |
| 3p.s. fem. | anap |  | $u$ |
| 3p.p. | anip |  | $i / e ́$ |

Explanation to the table:
The first set contains the personal pronoun occurring as subject or object in a sentence; ${ }^{8}$ the second set consists of forms which either by themselves or followed by the linking-element end indicate a possessive relation, e.g. nohan namakad, "my things"; nohan ènd namakad, "me of things" i.e. "my things"; ${ }^{8}$ the third set is composed of prefixes occurring before names of relatives indicating a possessive relation, e.g. n-avai, "my father". ${ }^{10}$ The sets show a close resemblance in their soundsystem. Geurtjens says that the forms of set II have been derived from set I by the addition of the element han. The forms of 3 p . in set I are reduced by Geurtjens to the demonstrative pronoun; the forms occur, however, as ordinary personal pronouns. Instead of the possessive forms of 3 p . (set II) the linking-element ènd occurs following the personal pronoun, e.g. anép-énd, "him of" i.e. "of him", which element is also found after the personal pronoun of 1 and 2 p . When the reflexive character is to be expressed, the subject-form of the personal pronoun is used preceded by zoda "self"; zoda nok mano-kipärud, "self me I shall bind", i.e. "I shall bind myself"."

## Section 4. Numerals.

There are only two genuine numerals: izäkod, "one"; ina $h$, "two"; the number three is expressed by two plus one, four by two plus two. Then hands and feet are used as means of counting. In this way one counts up to twenty. More than twenty is usually expressed by: much. The numerals may precede or follow the noun to which they belong. ${ }^{12}$

## Section 5. Verbs.

The usual word-order in a sentence is: subject (S) - object (R) predicate ( P ). Subject and object are represented in the predicate by a subject-index(s) and an object-index(r).

## I. VERBAL PREDICATES.

Our first task will be to analyse the various combinations of subject-, object-, tense-, mood- and aspect-indices which form all together the conjugation of a base. ${ }^{13}$

1) no kipärud, "I to bind"; s-B. Translation: "I bind". No is the subjectindex and represents the subject first person singular (1 p.s.); kipārud is the base, the bearer of the lexical meaning. The subject-indices are 1 p.s.: no or nak; 1 p. pl.: naké; 2 p.s.: o; 2 p. pl.: é; 3 p.s.: a or é; 3 p. pl.: én or $n$.
2) a) no-man, "I to come"; s-B;
b) naké-naham, "we to come"; s-B. Translation: a) "l come"; b) "we come". There are verbs that use different bases when a singular or when a plural subject precedes. In this case the plural indication in the subjectindex is sometimes omitted because the plural character is already expressed by the base. The occurrence of two bases in one paradigm is called ,suppletion".
3) nak-a-kiparrud, "I thee to bind"; s-r-B. Translation: "I bind thee". Nak is the subject-index of 1 p.s.; it is noteworthy that nak is used instead of $n o$ whenever this subject-index is immediately followed by other indices. ${ }^{14}$ The vowel $a$ is the object-index 2 p.s. Kipärad is the base. Subject- and relation-indices vary according to number and person; the base remains unchanged. The sequence is: subject-index (s) - objectindex (r) - base (B); s-r-B.
4) a) èvikèv, "to bear" with a singular subject and a singular object;
b) èvikav, "to bear" with a singular subject and a plural object;
c) révikèv, "to bear" with a plural subject and a singutar object;
d) révikav, "to bear" with a plural subject and a plural object.

Some bases have the number of subject and object expressed by a change in the base itself. We call this feature: "change for number in bases".
5) a) no-ha-sak, "I thee to beat"; s-r-B; the base is sak;
b) no-ka-ha-hib, "I thee to bind"; s-B(r-infix); the base is kahib;
c) no-h-ago-ha-b, "I thee to adopt"; s-r-B(r-infix); the base is agob;
d) no-hau-n, "I to take out myself"; s-B-r; the base is hau.

Translation: a) "I beat thee"; b) "I bind thee"; c) "I adopt thee"; d) "I take out myself".
We must distinguish two types of relation-indices:
a) the indices which may be separated from the base by a number- or moodindex and which link up with other indices (subject, tense, aspect, mood) in one combination preceding the base; these relation-indices are the following 1 p.s.: $n$; 1 p. pl.: né; 2 p.s.: $a ; 2$ p.pl.: $\dot{e} ; 3$ p.s.: $o$; 3 p.pl.: é;
b) the indices which are immediately attached to the base either as a prefix, an infix, a suffix to the base or as a prefix plus an infix; so we have the following table of these relation-indices:

|  | prefix | infix | pref.-infix | suffix |
| :--- | :--- | :--- | :--- | :--- |
| 1 p.s. | $n$ | $n$ | $n-n$ | $n$ |
| 1 p. pl. | $\dot{e} n$ | $\dot{e}-n$ | $\dot{e} n-n$ | $n$ |
| 2 p.s. | $h$ | $h$ | $h-h$ | $h$ |
| 2 p. pl. | $e ́$ or $i$ | $z$ | $\dot{e}-z$ | $z$ |
| 3p.s. | $o$ or $a$ |  | 0 | $a$ or ${ }^{\circ} a$ |
| 3 p. pl. | $\dot{e}$ or $i$ | $z$ | $\dot{e}-z$ | $z$ |

The other indices (subject, tense, aspect, mood) precede these indices which are never separated from the base.
Besides the relation-indices just mentioned, there are possessiveindices indicating the possessor 1 p.s.: namb; 1 p. pl.: nambé; 2 p.s.: amb; 2 p.pl.: émb; 3 p.s.: omb; 3 p.pl.: émb. Some bases always use these possessive-indices instead of the usual relation-indices, e.g. ndap-$a$-namb-gan, "future he mine to hear", i.e. "he will hear me". The use of these indices in the nominal predicate will be discussed in part III n. 4.
6) no-kipārud, "l to bind". The meaning of this formation is: "I bind" or "I bound" or "I bind usually".
In the indicative several indications of time and aspect can be distinguished; they are analysed in the following numbers. But time and aspect are not always expressed. Whenever time and aspect are sufficiently clear from the context or circumstances an indication of time and aspect by indices is thought of as superfluous and left out. ${ }^{15}$ This formation is consequently formally indifferent to time and aspect. This plain formation, only indicating subject and relation, occurs in all the cases treated in number $1-5$.

Before entering into the analysis of time- and aspect-indices we give a short survey of the usual subject- and object-indices to demonstrate the different ways of their combinations. The translation will be clear from the examples, rendered in the preceding numbers.
nak-a-kiparrud, " 1 thee to bind"; nak-é-kipārud, "I you or them to bind";
nak-o-kiparrud, "we thee to bind";
$n a k-e ́-k i p a ̄ r a d, " w e ~ y o u ~ o r ~ t h e m ~ t o ~ b i n d " ; ~$
nak-o-e-kipārud, "we him to bind";
o-na-kipārud, "thou me to bind";
o-né-kiparrad, "thou us to bind";
o-kipārud, "thou him to bind";
o-e-kiparrud, "thou them to bind";
e-na-kipārad, "you me to bind";
é-né-kipārud, "you us to bind";
c-o-kipārud, "you him to bind";
$\dot{e}$-kiparrud, "you them to bind";
a-na-kipärud, "he me to bind";
$a-n e ́-k i p a ̄ r u d$, "he us to bind";
a-kiparrud, "he thee to bind";
$a-k-k i p \bar{a} r u d$, "he yott or them to bind"; ${ }^{16}$
a-o-kipärud, "he him to bind";
én-na-kipārud, "the me to bind";'17
én-né-kipärud, "they us to bind";
$n$-a-kiparrud, "they thee to bind";
én-é-kipārud, "they you or them to bind";
$n$-o-kipärud, "they him to bind".
7) a) no-kipārud, "I to bind"; s-B;
b) nak-a-e-kiparrud, "we thee to bind"; s-r-n-B;
c) m-o-na-kiparrud, "present thou me to bind"; t-s-r-B;
d) tam-o- - -kipārud, "present thou them to bind"; t-s-r-B.

Translation: a) "I bind"; b) "we bind thee"; c) "thou bindst me"; d) "thou bindst them". In the present tense there is no tense-index for the 1 p . (zero-modification); in the 2 and 3 p . the consonant $m$ occurs as present-tense-index; $m$ is preceded by $t a-$ whenever the relationindex is of 3 p . The tense-index ( $t$ ) always precedes the subject-index. This formation shows a zero-modification indicating the aspect: the momentaneous character of the process.
8) a) no-d-kipārud, "I preterit to bind"; s-t-B;
b) naka-d-a-kipārud, "I preterit thee to bind"; s-t-r-B;
c) naka-d-a-é-kipārud, "we preterit thee plural to bind"; s-i-r-n-B;
d) $d-a-k i p a ̈ r u d$, "preterit he to bind"; t-s-B;
e) $a-d$ - $a$-kiparrud, "he preterit thee to bind"; s-t-r-B;
f) $a-d-e$-kipārud, "he preterit you to bind"; s-t-r-B;
g) $d$-én-na-kipărud, "preterit they me to bind"; t-s-r-B. Translation:
a) "I bound"; b) "I bound thee"; c) "we bound thee"; d) "he bound";
e) "he bound thee"; f) "he bound you"; g) "he bound me".

The tense-index is $d$ indicating a near past. In this combination the
rule for no or $n a k^{19}$ is not applied here, but if this tense-index is followed by another index, e.g. a relation- or a plural-index, then again nak is used. The place of the consonant $d$ is after the subject-index, except in the $3 \mathrm{p} . \mathrm{s}$. without following retation-index and in 3 p . pl. even if a relation-index follows, in which cases the tense-index precedes the sub-ject-index. It is interesting to note that the subject-index an changes into $e ́ n$, when the relation-index is a 1 p.s. or pl .
9) a) nd-aka-d-a-kipārud, "preterit I preterit thee to bind"; t2-s-t1-r-B;
b) nd-a-d-kiparrud, "preterit he preterit to bind"; t2-s-t1-B.

Transfation: a) "I bound thee"; b) "he bound". A second tense-index, sometimes added to the combinations mentioned under the preceding number and always placed before any other index, explicitly refers to a more distant past than the day of yesterday. When this second index occurs, the $n$ of nak does not occur and the tense-index $d$ follows the subject-index in the 3 p.s.
10) a) ma-no-kipārud, "future I to bind"; t-s-B;
b) ndam-o-kipārud, "future thou to bind"; t-s-B;
c) ndam-é-kipārud, "future you or he to bind"; t-s-B;
d) ndam-é-na-kipārud, "future you me to bind"; t-s-r-B;
e) ndap-a-na-kipārud, "future he me to bind"; t-s-r-B;
f) ndam-én-na-kipārud, "future they me to bind"; t-s-r-B. Translation: a) "I shall bind"; b) "thou wilt bind"; c) "he or you will bind"; d) "you will bind me"; e) "he will bind me"; f) "they will bind me"; In order to indicate the future the 1 p . gets the consonant $m$ as a tenseindex, the 2 and 3 p . the index ndam. The $3 \mathrm{p} . \mathrm{s}$. as well as 2 p . pl. has the subject-index $e$. The tense-index has the form ndap before bases having the relation-index not affixed ${ }^{20}$ whenever the tense-index is followed by another index. The 3 p . pl. has the subject-index in. In the future formation the tense-index always precedes the other indices. ${ }^{21}$
11) Besides the formations mentioned in ns. 7 to 10 , the three tenses can be expressed in a different way now to be explained.

1) a) ka-no-kipārud, "..... I to bind";
b) kaké-kipārud, "..... we to bind". Translation: a) "l bind"; b) "we bind". The sound $k$ precedes the formation mentioned in $n$. 1 (no$k i p a \bar{r} u d)$. This formation shows zero-modification indicating the present tense. Note that the $1 \mathrm{p} . \mathrm{pl}$. is kaké and not ka-naké.
2) a) ka-no-d-kipärud, "..... I preterit to bind";
b) $k$-aka-d-é-kipārud, "..... we preterit to bind". Translation: a) "I bound"; b) "we bound". Compare this formation with those of n. 8. The consonant $k$ is combined with the tense-index $d$.
3) a) $k a-m-o-k i p a \bar{r} u d$, "..... future 1 to bind, or ..... future thou to bind".
b) ka-p-a-kiparrud," ..... future I thee to bind, or ..... future he thee to bind";
c) ka-m-é-kipārud, "..... future you to bind, or ..... future he to bind".

Translation: a) "I shall bind or thou wilt bind"; b) "I shall bind thee, or he will bind thee"; c) "you will bind, or he will bind". In the future $o$ is used instead of no in 1 p.s., thus being identical with the form of the 2 p .s. As soon as another index follows the future-index, the tense-index is $p$ instead of $m$, but only in the 1 and $3 p$.; at the same time the subject-index is not found here so that the $1 \mathrm{p} . \mathrm{s}$. and 3 p .s. happen to be identical. Drabbe says in his notes: "I could not get a clear idea of the use of the $k$-formation". So we put some dots in the translation. Drabbe sums up two cases in which this formation is used:
a) after a preceding adjunct of place: éhé $k$-od-kipārud, "here thou preterit to bind". Translation: "thou boundst here"; b) in negative sentences of the present tense (cf. following number).
12)

b) mbat no-d-kiparrud, "not I preterit to bind";
c) mbat ma-no-kiparud, "not future I to bind";
d) mbat m-ak-a-kiparrud, "not future I thee to bind, or not future he thee to bind";
e) mbat mank-a-é-kipărud, "not future we thee plural to bind";
f) mbat m-o-na-kiparrud, "not future thou me to bind";
g) mbat $m$-e-kipãrud, "not future you to bind or not future he to bind";
h) mbat $m$-én-na-kipārud, "not future they me to bind".

Translation: a) "I do not bind"; b) "l did not bind"; c) "I shall not bind"; d) "I shall not bind thee or he will not bind thee"; e) "we shall not bind thee"; f) "thou wilt not bind me"; g) "you will not bind or he will not bind"; h) "they will not bind me". The negation is expressed in the present tense by putting mba before the $k$-formation. ${ }^{22}$ In the preterit mbat is put before the usual preterit formation. ${ }^{23}$ In the future tense mbat precedes the formation $t-s-r-B$. We already came across the tense-index $m$ in $n .10$, but here the consonant $m$ is used in all persons; the subject-index of $1 \mathrm{p} . \mathrm{pl}$. is manké.
13) Speaking about the present tense ${ }^{24}$ a zero-modification was already noticed pointing out the momentaneous aspect, as this plain formation contrasts with a formation indicating a durative aspect by a special index.
a) epa-no-kipārud, "continually I to bind"; a-s-B;
b) ip-ak-é-kipārud, "continually we to bind"; a-s-n-B. Translation:
a) "I am binding"; b) "we are binding". The aspect-index is $e p$ when the subject is in the singular and $i p$ when the subject is in the plural. The subject-, object- and tense-indices following ép or ip occur in the same form as they do after the $k$ of the $k$-formation; ${ }^{25}$ in the future, however, the tense-index is always $m$ or ndam; the index ndap is never found
14) an epanda-no-kipārud, "continually I to bind". Translation: "l keep binding". The formation seems to be an intensified form of the prece-
ding one. The 3 p.s. feminine gets anupanda, the plural is anipanda; Drabbe does not mention a feminine formation in the preceding number.
15) a) mènda-no-kipārud, "perfect I to bind"; a-s-B;
b) mènda-no-d-kipārud, "perfect I preterit to bind"; a-s-t-B.

Translation: a) "I have bound"; b) "it was in the past that I have bound". The first formation simply expresses the perfection of the process; the second one represents the same idea but emphasizes the fact that the process took place in the past. It should be noticed, however, that the second formation does not represent a perfect tense shifted back into the past. Both formations should be rendered in English by a perfect tense.
16) a) mènd-aka-b-kipārud, "perfect 1 present beginning to bind"; a1-a2/t-B;
b) mènd-an-um-kipārud, "perfect they preterit beginning to bind"; a1-s-a2/t-B;
c) mènd-pab-na-kipärud, "perfect future beginning they to bind"; a1-a2/t-s-B. Translation: a) "I have begun to bind"; b) "they had begun to bind"; c) "they will have begun to bind". Here mend adds the idea of perfection to a process represented as started to-day or in the past or in the future. So there are two aspect-indices: mènd as a perfective index (al) and another index representing the inchoative-aspect (a2). This second aspect-index is expressed by $b$ or $u m$ or $p a b^{26}$, which forms at the same time point out a difference of time. This second aspect-index follows the subject-index in present- and past-tense, but precedes the subject-index in the future. In the preterit the sub-ject-index of $2 \mathrm{p} . \mathrm{s}$. and $3 \mathrm{p} . \mathrm{s}$. does not occur. In the future the $1 \mathrm{p} . \mathrm{s}$. becomes mèndpaba or mèndkaba; the 1 p. pl. mèndpabé or mèndkabé. In the 2 p . the subject-index is inserted in the second aspect-index viz. between the $p$ and $b$ resulting in e.g. mèndpob and mèndpéb.
17) m-ak-i-kiparud, "future l again to bind or future we again to bind"; t-s-a-B;
$m-a k-i-a-\varepsilon-k i p \bar{a} r u d$, "future we again thee plural to bind"; $t-s-a-r-n-B$; ndam-o-n-i-kiparud, "future thou me again to bind"; t-s-r-a-B; ndam-o-i-o-kipārud, "future thou again him to bind"; t-s-a-r-B; ndap- $a-n-i-k i p a ̄ r u d$, "future he me again to bind"; $\mathrm{t}-\mathrm{s}-\mathrm{r}-\mathrm{a}-\mathrm{B}$; ndap-an-n-i-kipãrud, "future they me again to bind"; t-s-r-a-B; ndap-an-i-a-kipārud, "future they again thee to bind"; t-s-a-r-B. Translation: "I shall bind again.... etc.". The aspect-index is $i$ and expresses an iterative-aspect. ${ }^{27}$ Up till now it has proved to be impossible to formulate a rule about the position of this aspect-index. See the examples. This aspect-index is only found in future, ${ }^{28}$ imperative ${ }^{29}$ and prohibitive. ${ }^{30}$
18) There are formations in the same three tenses which express a process as attempted. This attempt, however, is expressed as a fact, so there is
fact-mood-(indicative). When dealing with the other moods we shall come across forms expressing a doubt of the speaker about the realization of the process, a doubt about the attempt itself. The index indicating the attempt is: iap or umiap, ${ }^{31}$ each index with its own set of forms in the three tenses. nak-iap-a-kiparrud, "I attempt thee to bind"; s-a-r-B; nak-ièp-a-kiparrud, "we attempt thee to bind"; s-a with n-infix-r-B; $m-u$-iap-na-kiparrud, "present thou attempt me to bind"; t-s-a-r-B; tam-a-iap-o-kiparrud, "present thou attempt him to bind"; t-s-a-r-B; m-i-iap-na-kipārud, "present you attempt me to bind"; t-s-a-r-B; m-iap-na-kipārud, "present he attempts me to bind"; t-a/s-r-B; $m$-an-ipa-na-kipārud, "present they attempt me to bind"; t-s-a-r-B. Translation: "I we, thou etc. attempt to bind thee or me...". These examples are all at the present tense. In the present the 1 p . shows a zero-modification as tense-index just as in the present indicative of the momentaneous aspect. The preterit has the usual $d$ : nak-d-iapkiparrud; but in 2 and 3 p . the consonant $m$ precedes this formation, the function of which sound has not yet been explained; the future gets $m$ or ndam or ndap. The 2 p . s. is ndam-u-iap-kiparrud instead of the formation ndam-o-iap-kiparud which we should expect; the $2 \mathrm{p} . \mathrm{pt}$. is ndam-i-iap-instead of ndam-é-iap-kipärud; in 3 p. s. the subject-index coincides with the aspect-index.
The aspect-index amiap is combined with the other indices as follows: in the present tense 1 p.s.: nakumiap-B; 1 p. pl.: nakumièp- $B$; 2 and 3 p.s. and pl. numiap- $B$; in the preterit: 1 p.s.: nakdumiap- $B$; 1 p. pl.: nakdumièp-B; 2 p.s.: odumiap-B; 2 p. pl.: édumiap-B; 3 p.s.: adumiap- $B$; 3 p. pl.: adnumiap- $B$; in the future: $1 \mathrm{p} . \mathrm{s}$ : makumiap- $B$; 1 p. pl.: makumièp-B; 2 p.s.: ndamumiap-B; 2 p. pl.: ndamiumiap- $B$; 3 p.s.: ndapumiap-B; 3 p. pl.: ndapnumiap-B.
19) izākod sa-no-kipārud, "once only I to bind". Translation: "l bind once only". This formation occurs with the forms we gave in the $k$-formation, but instead of $k$ the consonant $s$ is used. The $s$ is a kind of aspectindex indicating a restriction the process is subjected to, e.g. the process took place only once, or was executed by only one person or referred only to one person. This index occurs in all moods, tenses and aspects. ${ }^{32}$
20) (aha) m-ak-ind-umanav, "(house) future I to, to take myself"; t-s-local-index-B. Translation: "I shall go home". In this formation: $m$ is tenseindex; ak subject-index; ind local-index; umuv base having the relationindex: na as an infix. This index is found in all moods, tenses and aspects. ${ }^{33}$
21) mènd-ak-is-ivanon, "perfect I away to flee"; a-s-local-index-B. Translation: "I fled away". The index is points out a removal, an opposition or a separation, and may occur in all moods, tenses and aspects. ${ }^{34}$
22) m-aka-p-kipārud, "future 1 perhaps to bind"; t-s-m-B. Translation: "] shall perhaps bind". In all moods, tenses and aspects $p$ may be the final sound of a given combination of indices, with the connotation that the speaker expresses his opinion in a modest way. Sometimes this $p$ is weakened into a senseless affix. ${ }^{35}$
23) a) tama-bat-o-kipārud, "he perhaps him to bind"; s-m-r-B;
b) bat-na-kipärud, "perhaps they to bind"; m-s-B;
c) ndapa-bat-na-kiparud, "future perhaps they to bind"; t-m-s-B.

Translation: a) "he binds him perhaps"; b) "they bind perhaps"; c) "they will perhaps bind". The index bat indicates a doubt about the process expressed in the base. The position of this mood-index is always between subject-index and relation-index, if the two occur. In the $3 \mathrm{p} . \mathrm{pl}$. it precedes the subject-index when there is no tense-index, and follows the tense-index if a tense-index occurs. ${ }^{36}$
24) We now pass to the interrogative mood. ${ }^{37}$ Two kinds of questions must be distinguished: does the process, expressed by the base, take place or not (type I) and what is the manner in which the process takes place (type II),
A. In type I there are the following three formations:

1) a) naka-bat-a-kiparud $a^{e}$, "I perhaps thee to bind?" s-m1-r-B-m2;
b) mo-bat-kipārud oh ae, "thou perhaps to bind thou?" s-m1-B-personal pronoun-m2. Translation: a) "do I perhaps bind you?"; b) "dost thou perlaps bind?". The first mood-index is the same as the index mentioned in $n .23$; the second mood-index is added to the formation in the way of a question-mark. In the 2 p . the personal pronouns oh and eoh are always inserted between $B$ and m 2 .
2) a) apa-no-kipārud $a^{e}$, "? I to bind?"; m1-s-B-m2;
b) apa-no-d-kipārud $a^{e}$, "? I preterit to bind?"; ml-s-t-B-m2.

Translation a) "do I bind?"; b) "did I bind?". The interrogative index is ap, linked with the $k$-formation, but instead of $k$, ap is put. Only the present and preterit occur in this formation.
3) a) $\varepsilon k a-n o-k i p a \bar{a} n d a^{\mathrm{e}}$, "? I to bind?"; m1-s-B-m2;
b) éka-no-a-kipārud $a^{e}$, "? I preterit to bind?"; m1-s-t-B-m2;
c) ik-na-kiparttd $a^{e}$, "? they to bind?"; m1-s-B-m2. Translation: a) "do I bind?"; b) "did I bind?"; c) "did they bind?". The interrogativeindex is $e k$. The position and occurrence correspond to the index ap. It is noteworthy that the index $\dot{e} k$ changes for number: $\dot{e} k / i k$.
B. In type II the index is $s \neq b$; this index is combined in the present tense with 1) the plain formation mentioned in $n .6$, with 2 ) the $k$-formation (but $m$ occurs instead of $k$ ) and with 3) the $k$-formation. The meaning of $k$ or $m$ is not explained; therefore we put some dots ..... in the explanation. In the preterit $s \ddagger b$ is combined with the same three formations. The combination of $s \neq b$ with other indices is
very intricate. Usually the order s-m-B is maintained. Some examples:
a) ènd ak-sab-kipārud, "where 1 ? to bind"; interrogative-s-m-B;
b) ènda sob-kiparud, "where? thou? to bind"; interrogative-s (infix in $m$ )-B;
c) ènda $k$-aka-sab-kipärud, "where ..... I? to bind"; interrogative-.....-$\mathrm{s}-\mathrm{m}-\mathrm{B}$;
d) ènda m-aka-sab-kipārud, "where ..... I? to bind"; interrogative-.....-$\mathrm{s}-\mathrm{m}-\mathrm{B}$;
e) ènd $a k-s a-d a-b$ - $k i p a ̄ r u d$, "where I? preterit? to bind"; interrogative-$\mathrm{s}-\mathrm{m}$ (with t-infix)-B;
f) ènda s-o-da-b-kipärud, "where? thou preterit? to bind"; interroga-tive-m (with infix s and t)-B;
g) ènda $m$ - $\alpha k$-sa-da-b-kipārud, "where ..... I? preterit? to bind"; inter-rogative-.....-s-m(with t-infix)-B;
h) ènda $k$ - $a k$-sa-da-b-kipārud, "where ..... I? preterit? to bind"; inter-rogative-.....-s-m(with t-infix)-B. Translation: a) "where do I bind?"; b) "where dost thou bind?"; c) "where do I bind?"; d) "where do I bind?"; e) "where did I bind?"; f) "where didst thou bind?"; g) "where did I bind?"; h) "where did I bind?".
In the future $s \neq b$ is connected with the future form of the $k$-formation.
a) ènda kapasab-kipärud; "where shall I bind?";
b) ènda kamasob-kipārud; "where wilt thou bind?";
c) ènda kapasabana-kipārud; "where will they bind?".
25) mat- $\alpha-k i p a ̂ r u d$, "adhortative thee to bind"; m-r-B. Translation: "let me bind thee". This formation occurs only in the 1 p . The subject-index is not found (zero-modification). The signification of the index is adhortative.
26) a) ah-kiparrud, "imperative to bind"; m-B;
b) ah-kipārud-ém, "imperative to bind plural"; m1-B-m2. Transtation: a) "bind"; b) "bind". This formation occurs only in the 2 p. ; in the singular the index is $a h$, in the plural $a h$ combined with the suffix $e m$. The signification is imperative.
27) a) anam-kipārud, "optative to bind"; m-B;
b) anma-na-kipārud, "optative me to bind"; m-r-B;
c) anam-na-kipārud, "optative they to bind"; m-s-B;
d) anm-én-ta-kipārud, "optative they me to bind"; m-s-r-B.

Translation: a) "may he bind"; b) "may he bind me"; c) "may they bind"; d) "may they bind me". These formations express an optative mood in the 3 p . The index is anam.
28) Instead of the adhortative, optative and imperative mentioned in n .25 , 26, $27,{ }^{38}$ the future formations uttered with an imperative intonation can be used for orders. A future formation with the index of doubt $b a t{ }^{38}$ is more polite. Another possibility is: nda-kipārud, "adhortative, imperative or optative to bind"; nda-bat-kipārud, "adhortative, impera-
tive or optative to bind". To these formations of n. 25, 26, 27, the index of mood $p^{40}$ and the aspect-indices iap ${ }^{42}, i^{42}$ or $s^{43}$ may be added.
29) a) tomat-na-Kipārud, "not thou me to bind"; m/s-r-B;
b) tamat-na-kipārud, "not you me to bind"; m/s-r-B;
c) tapat-na-kipārud, "not he me to bind"; m/s-r-B;
d) tapt-én-na-kipārud, "not they me to bind"; m/s-s-r-B.

Translation: a) "thou, do not bind me"; b) "you, do not bind me"; c) "let him not bind me"; d) "let them not bind me". The prohibitiveindex of the $2 \mathrm{p} . \mathrm{s}$. is tomat; $2 \mathrm{p} . \mathrm{pl.:} \mathrm{tamat;} 3 \mathrm{p} . \mathrm{s} .:$ tapat; $3 \mathrm{p} . \mathrm{pl}$.: tapt. The distinction into persons is expressed by the different moodindices. In the 1 p . the negative form of the indicative future is used. ${ }^{44}$ The potential mood, mentioned by Geurtjens ${ }^{45}$ is not known to Drabbe. The form me occurs according to Drabbe only in the future when a negation precedes the formation: mbat mé-kipărud, "not future he to bind"; i.e. "he will not bind".
30) So far we came across simple sentences only. But compound sentences occur as well. The following construction is found: ndam-o-ka-kipãrud | jah |ma-no-man, "future thou first to bind | than | future I to come"; t1-s-t2-B | linking-element | t-s-B. Translation: "thou wilt bind first, then I shall come". In the protasis the process is represented as preceding the process of the apodosis. The index of precedence is $k,{ }^{40}$ and is put after the subject-index. The linking-element is jah.
31) a) mbai nok | naka-hat-kipărud, "thought I | I mood-index to bind"; B-personal pronoun | $\mathrm{s}-\mathrm{m}-\mathrm{B}$;
b) mbai oh maka t-a-kipārud, "thoughtst thou | I mood-index thee to bind"; B-personal pronoun | s-m-r-B. Translation: a) "I thought that I bound"; b) "thou thoughtst that I bound thee". The protasis: mbai nok consists of an unexplained combination of a base and a personal pronour and means according to Drabbe: I thought (preterit). The apodosis though present in form, is a preterit in meaning: 1 thought that I bound. The whole sentence is a suppositional mode of speaking. Moodindex is hat, when no other index occurs, but $t$ in combjnation with other indices. The same protasis may be combined with an apodosis in the preterit or future tense; then the respective meanings are: "I thought that I had bound"; and: "I thought that I should bind". 47
32) a-m-o-man épé |ma-no-kipārud, "mood-index future I to come linkingelement | future 1 to bind"; m-t-s-B-linking-element |t-s-B.
Translation: "if I shall come, I shall bind". The mood-index $a$ together with the future of the $k$-formation ${ }^{48}$ (in this case $a$ is used instead of $k$ ) and with the optional addition of épé the demonstrative pronoun used as a linking-element, make up a protasis in which an open condition is expressed. In the apodosis the plain future occurs. ${ }^{49}$ The whole sentence constitutes a conditional mood. ${ }^{50}$
33) a-no-man-u épé $\}$ mènd-aka-kipārud-u, "mood-index I to come mood-
index linking-element | aspect-index I to bind mood-index"; m1-s-B-m²-linking-element | a-s-B-m. This is a formation of a rejected condition, to be translated as: "If I should have come, I should have bound". In the protasis ano is put in the $1 \mathrm{p} . \mathrm{s}$. when no other indices appear, aka in combination with other indices. 1 p. pl.: aké; 2 p.s.: aho; 2 p. pl.: ahé; 3 p.s.: aha; 3 p. pl.: ahana. Mood-index is $u$ after the base. In the apodosis the index mend occurs and acts in the same way as the per-fective-index, ${ }^{51}$ but with addition of $u$.
34) When, however, the apodosis is negative, the following formation is used: $a$-no-kipārud-u épé | mbat-o-kipārud-u, "index I to bind index linking-element | negation thou to bind index; ml-s-B-m2-linking-element | negation-s-B-m. The protasis is as in $n$. 33 ; the apodosis is made up by the usual negation-index, put before the formation of 13 . 6 . It is rendered: "if I should have bound, thou wouldst not have bound". $a-k$-um-kipārud-u épé, "if I should have bound". Besides the formation of $n .33$ another formation also occurs, ${ }^{52}$ viz. instead of the formation mentioned in n . 33 , the protasis shows the infix $u m$ as a mood-index. So we get 1 p.s.: akum; 1 p. pl.: akumé-; 2 p.s. and pl. and 3 p.s.: ahum-; 3 p.pl:: anum. The relation-index is sometimes put before the affix $u m$, sometimes it follows this affix: ak-a-num: "I thee"; an-um: "thou me"; a-n-um-é: "he us".
36) a-mo-man épé, "when I shall come"; a-no-kipārud épé, "when I should have bound". The protasis of the formations of n. 32 and 33 may indicate time instead of condition; in that case the protasis of the formation given under n. 33 recurs without the index $u$.
37) Up till now we came across predicates of one base. But there are predicates with two bases as well. In that case we distinguish between a primary base (B1) i.e. the non conjugated base, mostly bearer of the meaning, and a secondary base (B2) with which all the indices are linked together (the conjugated base). The meaning of the secondary base $a$ will be indicated in section 5, part III, n. 2 . $k-a k-u m-n-\mathrm{a}$ man, " ..... 1-index-me-B2-to come"; ..... -s-a-r-B2-B1.
$k$-ak-um-é-n-a naham, " .....-we index plural me B2-to come"; .....-s-a-n-r-B2-B-;
$k$-ttm-h-a man, " ..... -index-thee B2-to come"; ..... -a-r-B2-B1.
Under number 16 the inchoative aspect was analysed. Besides the formation mentioned in that number, there is another formation the paradigm of which precedes this explanation. The transiation is: "I am already coming"; "thou art ..... etc." The 2 p . pl. is equivalent to the $3 \mathrm{p} . \mathrm{pl}$. The analysis of the first example runs: $k$ cf. $k$-formation ${ }^{53} a k$ is subject-index; $u m$ is aspect-index; $n$ is relation-index; $a$ is secondary base; man is primary base. It must be noticed that there is no subjectindex of the 2 and 3 p.s., perhaps through the influence of the aspectindex. There is a change for number in the base (in this example). The B2 has a reflexive character.
38) ka-no-n-a kipārud, .....-\$-r-B2-B1; k-o-h-a kipărud, .....-s-r-B2-B1.
The meaning of this form is: "I am used to bind"; "thou art etc.". This formation occurs in the present, preterit and future-tense, according to the $k$-formation, but with addition of a secondary base: $a$.

## II. NOMINAL PREDICATES.

1) jāba ka-no nok, "big present I l"; B-t-s-personal pronoun; jäba k-o oh, "big present thou thou"; B-t-s-personal pronoun; jāba $k$-a, "big present he"; B-t-s;
jā $b a$ no-d nok, "big I preterit I"; B-s-t-personal pronoun;
$j \mathrm{a} b a$ o-d oh, "big thou preterit thou"; B-s-t-personal pronoun;
$j a \bar{a} b a d$ - $a$, "big preterit he"; B-t-s;
jàba ma-no-n-in, "big future I me to become"; B1-t-s-r-B2;
$j a ̈ b a$ ndam-o-h-in, "big future thou thee to become"; B1-t-s-r-B2;
jāba ndam-éu-in, "big future he himself to become"; Bl-t-s-r-B2.
Translation: "] am big.... etc." In the formations which are now the object of our investigation, the bases are not preceded but followed by the indices, in contrast with the formations studied in the first part of this chapter. ${ }^{54}$ A present-index $k$ is found. This $k$, however, must not be confused with the so called $k$-formation. ${ }^{55}$ In our present examples no follows $k$ and is the usual subject-index, and as a new feature nok, the personal pronoun, occurs at the end of the formation. This pronoun is not used in the verbal formation, e.g. "I bind" is: no $k i p a \bar{r} u d$, and not: nok no kipārud. In the preterit the tense-index changes its position as usual. ${ }^{56}$ The future gets a secondary base with a reflexive character, viz. in.
2) kipārud-a ma-no-n-in, "to bind suffix future I me to become"; Bl-t-s-r-B2, Translation: "I shall be going to bind". In section 5 part I n. 13, we discussed the durative form of the present, preterit and future; the durative-aspect can also be expressed in future, viz. by a nominal predicate. The analysis is obvious: kipāruda is a nominal form derived from kipārud, ${ }^{57} m a$ is a future-index; no subject-index; $n$ is relationindex; in is a secondary base with reflexive character mentioned in the preceding number (II, n. 1).
3) enda-no nok, "present 1 I"; local-index-s - personal pronoun;
èndd-no-d nok, "present I preterit I"; local-index-s-t-personal pronoun;
ènda-m-o nok, "present future I I"; local-index-t-s-personal pronoun. Translation: "l am present"; "I was present"; "I shall be present"."To be present" is expressed rather in the same way as "to be big"; the tenseindex $k$ does not occur. The local-index is found after a noun indicating place as well: aha nda-no nok, i.e. "I am at home".

## IIf. SOME PECULIARITIES IN VERBS.

1) a-huja-na-v, "it to tremble me"; s-B having the relation-index as an infix, Translation: "it does me tremble, i.e. I shiver". In this formation the vowel $a$ is the subject-index of the 3 p.s.; the base is hujav; $n a$ is the relation-index 1 p.s. inserted in the base. The subject-index which occurs here is the 3 p . s. and is thought of as an impersonal subject. If we translate this sentence: "I shiver", we might say that in this formation the logical subject ( 1 p .) is indicated by the relation-index, while a formal subject occurs in the subject-index of the 3 p .s. In this language there are several bases which occur only with a subject-index of the 3 p.s., the first and the second person not appearing in connection with these bases. All cases, mentioned by Drabbe, have the meaning of: "to affect somebody, to take hold of somebody, to assail somebody". But Drabbe thinks it probable that some bases with other meanings get this formation as well.
2) a) bekai ka-no-n-a, "breathe ..... 1 me to do"; B1-.....-s-r-B2;
b) asi m-o-h-a, "sneeze ..... thou thee to do"; B1-.....-s-r-B2;
c) mbatav $k-\alpha-u$-in, "lie ..... he himself to do"; B1-.....-s-r-B2;
d) èna $k$ - $a$-n $a$-vara, "warmth present it me to do"; B1-t-s-r-B2.

Translation: a) "I breathe"; b) "thou sneezest"; c) "he lies"; d) "I suffer by warmth". There are formations in which the primary and secondary bases form a set-phrase. Often the primary base does not occur as a noun or as verbal base by itself and the secondary base has a vague meaning to be translated in a different way according to the different primary bases. The examples a), b) and c) must not be considered as nominal predicates ${ }^{58}$ because the indices $k$ and $m$, represented in the explanation and the translation by some dots, are no tense-indices like $k$ is in the nominal predicate. The consonants $k$ and $m$ refer to the $k$-formation already familiar to us from section 5 part I, n. 11. The example d) is a set-phrase but occurs only in the 3 p. s..
3) The reflexive base $a$ together with the object-indices has: $n a$; $h a$; ${ }^{\circ} a$; ${ }^{\text {e }}$ a; the base ra becomes: navara, havara, ora, eavara; in this forms the element $v a$ is not yet explained; the bases nggat has: nanggat, hanggat, onggat and énggat; the base ai occurs only in the 3 p.s.; the base in has nith, hin, uin, in. The base in is found in a special future formation with a formal subject-index of the 3 p.s. ${ }^{59}$
 $j \bar{a} b a$ ndam-é-h-in, "big future it thou make"; i.e. "thou wilt become tall".
4) a) duèt ip-a-namb, "money present it mine"; S-t-s-possessive-index;
b) duèt ik-a-namb, "money present it mine"; S-t-s-possessive-index;
c) mbavak ip-a-na, "hair present it me"; S-t-s-r;
d) mbavak ik-a-na, "hair present it me"; S-i-s-r. Transfation: a) and b)
"I have money"; c) and d) "I have hair". Here are two present-indices
not yet mentioned: $i p$ and $i k$. The two former examples indicate the possessor by means of a possessive-index. This is the rule, but if the thing possessed is a part of the body, the possessor is indicated by means of the object-index. The formation is analogous to that of section 5 , part III n. 1.
5) nazum $k-a$, "my wife present she"; B-t-s. Translation: "my wife is here". If in a given formation names of relationships have their own possessorindication, these forms are put in the usual nominal formation.
6) a) dur $k-a n o k$, "shame present it l"; B-t-s-personal pronoun;
b) aha nok $k-a-n a m b$ épé, "bouse I present it mine that"; S-personal pronoun-t-s-demonstrative pronoun;
c) békai $k-a$ nok oh ai, "sympathy present it to me for thee to be"; B1-t-s-r2-rl-B2. Translation: a) "I am ashamed"; b) "that is my house"; c) "I Iove thee". These formations are unusual, but they occur.
7) There are some bases which show a very peculiar use of the relationindex. The relation-indices $n a, h a, o$, én and $e ́$ which are attached to the base, indicate not only the relation 1 p.s., 2 p.s., 3 p.s., 1 p. pl. and 2 or 3 p. plural, but also indicate relations in the following way: if the subject is 1 p . than $n a$ indicates relation 2 p . pl. or 3 p .; if the subject is 2 p . than $n a$ indicates a relation 3 p . Some examples: no-na-arin, "I you to call", i.e. "l call you; o-ha-arin, "thou him/them to call", i.e. "thou callst him/them".

## IV. OPTIONAL SUFFIXES.

Besides the use of tense-indices already mentioned, this language may indicate tense in still another way viz. by adding a suffix to the base. The suffixes do not occur without the piain tense-indices. As this way of fenseexpression has an optional character, we have so far omitted these suffixes in our examples in order not to complicate matters. We now add a survey of these tense-indicators, following the sequence of part I, II, III. According to Drabbe, attempts to systematize the use of the different suffixes have failed up till now.

Part $I$, n. 7) The present adds et, sometimes $a t$; to some irregular bases tat with loss of the final consonant of B ;
n. 8) and 9) preterit I and Il add $t i$ or $a t$, sometimes it is optional either at or $t i$; tat appears where it did in the cases given under n. 7) ;
n. 10) the future adds either $\dot{e}$ or moto; $\dot{e}$ is compulsory in the cases where according to n. 7), tat is obligatory;
$n$. 11) the $k$-formation adds in the present et; in the preterit $t i$; in the future $e ́$ or moto, but in the future negative only moto can be used;
n. 13) the durative aspect adds in the present $e f$; in the preterit $t i$; in the future moto;
n. 14) the intensified durative aspect adds: in the present $e t$; in the preterit $t i$; in the future made;
n. 15) the perfective aspect adds $a t$ or $t i$;
n. 16) the inchoative aspect adds in the three tenses either et or $t i$;
n. 17) the future of the iterative aspect adds moto;
n. 18) the expression of an attempt adds no suffix to the formations;
n. 19) the restriction occurs in the tenses with their own suffixes;
n. 20) and n. 21) the tenses have their own suffixes;
n. 22) cf. n. 20);
n. 24) the interrogative sentences type I have the plain tenses with their suffixes, type Il has no suffixes;
n. 30) the protasis has ef though the tense is the future;
n. 31) occurrence of suffixes is not clear;
n. 32) the conditional formation adds et though the tense is the future;
n. 33) cf. n. 32);
n. 37) and $n .38$ ) the secondary bases add no suffixes.

## Section 6. Linking-elements.

There are several linking-elements in this language. Some examples: nok-ènd, "me of"; i.e. "of me"; ènd indicates possession; wah-a évai-a, "his mother and his father and"; i.e. "his mother and his father"; a indicates a connection; Manggat-rék, "Manggat of"; i.e. "a member of the Mangat tribe"; to nanggo, "what because"; i.e. "why"; nanggo indicates the reason; ndamokipārud jah manoman," ${ }^{60}$ i.e. "thou wilt bind first, then shall I come". The element jah indicates that the two clauses belong together. Jah is put between the two clauses and may belong to the protasis as well as to the apodosis. ${ }^{61}$ The place of the linking-element is after the phrase or clause to be linked.

## NOTES.

1. Geurtjens H., m.s.c.: Marindi-neesch-Nederlandsch Woordenboek. Verhandelingen Koninkljjk Bataviaasch Genootschap van Kunsten en Wetenschappen, deel LXXI, 5e stuk: sub voce: Marind.
2. o.c. p. 4.
3. Geurtjens H., tm.s.c.: Spraakleer der Marindineesche Taal, Verhandelingen Koninklijk Bataviaasch Genootschap van Kunsten en Wetenschappen; deel LXVIII, 2e stuk, p. VIII.
4. o.c. p. 14 and 29: adjectives, tinkingelements, demonstrative pronouns.
5. o.c. p. 10 and Number. The occurrence of the singular formation is mentioned by Drabbe orally.
6. o.c. p. 9 and 14 .
7. o.c. p. 11 and 101.
8. o.c. p. 22.
9. o.c. Spraakleer p. 26.
10. o.c. p. 33.
11. This form is unknown to Geurtjens.
12. Geurtjens: Spraakleer p. 18.
13. o.c. p. 44 and 45.
14. cf. Section 5, part I, n. 8 where an exception is given.
15. Geurtjens: Spraakleer p. 47.
16. According to Geurtjens, the subjectindex 3 p.s. viz. a does not occur before a following vowel, o.c. p. 67.
17. The subject-index 3 p. pl.:en is unknown to Geurtjens. He writes: an$n a-k i p \bar{r} r u d$ and an-né-kipārud. In his Grammar Geurtjens gives, however, the form mén on o.c. p. 64.
18. o.c. p. 47.
19. cf. section 5, part 1, n. 3.
20. cf. section 5, part 1, n. 5.
21. Geurtjens discusses the tenses in his grammar p. 46.
22. o.c. p. 51, and 111. Geurtjens does not mention the $k$-formation.
23. cf. section 5, part I, n. 8.
24. cf. section 5, part 1, n. 7.
25. cf. section 5, part I, no. 11, under 1) and 2).
26. The aspect-index pab is not found by Geurtjens.
27. o.c. p. 60: iterativus.
28. cf. section 5, part 1, n. 10.
29. cf. section 5, part 1, n. 25-27.
30. cf. section 5, part I, no. 29.
31. The indices iap and umiap are unknown to Geurtjens.
32. Geurtjens: Spraakleer p. 60: exclusives.
33. о.с. p. 59.
34. o.c. p. 56.
35. Geurtjens suggests that the consonant $p$ indicates that the speaker expresses his opinion strongly.
36. o.c. p. 54.
37. o.c. p. 52.
38. o.c. p. 50 .
39. cf. section 5, part 1, n. 23.
40. cf. section 5, part 1, n. 22.
41. cf. section 5, part 1, n. 18.
42. cf. section 5, part I, n. 19.
43. cf. section 5, part I, n. 15.
44. cf. section 5, part I, n. 12.
45. Geurtjens: Spraakleer p. 55.
46. The index of precedence $k$ is unknown to Geurtjens.
47. Geurtjens does not mention this construction.
48. cf. section 5, part I, n. 11.
49. cf. section 5 , part I, n. 10.
50. Geurtjens: Spraakleer p. 49.
51. cf. section 5 , part 1 , n. 16 , first formation.
52. Geurtjens: Spraakleer p. 55.
53. cf. section 5, part 1, п. 11.
54. Geurtjens: Spraakleer p. 45.
55. cf. section 5, part J, n. 11.
56. cf. section 5, part I, 1. 8.
57. Geurtjens: Spraakleer p. 122.
58. cf. section 5, part II, n. 1.
59. cf, section 5, part III, n. I.
60. cf. section 5 , part I, n. 30.
61. Geurtjens says: jah belongs to the apodosis (Spraakleer p. 113).

## CHAPTER II

## MAKLEU-LANGUAGE

Section 1. Name and Territory.
Maklés is a village of 120 souls in all on the river Wèlbuti, which is an affluent of the Bulaka. Drabbe calls the language spoken by the people of that village, the Maklér-language.

Section 2. Nouns.
Relation between nouns are expressed as follows :
a) two nouns may form a compound in which the first element qualifies the second, e.g. milom-pali, "pig-tail";
b) a linking-element following the noun may be used to express various relations, e.g. jok akwa, "house to", i.e. "to the house"; jok bala, "house from", i.e. "from the house"; ébi bang uho, "house of door", i.e. "the door of the house". In names of relations ending in $a$ the element is not bang but ang and the final $a$ of the noun does not occur: nim-ang sokahakol, "father of knife", i.e. "the knife of the father".

Section 3. Pronouns.

Set 1

| 1 p.s. | ngöllo |
| :--- | :--- |
| 1 p.pt. | ngag |
| 2p.s. | obe |
| 2p.pl. | omlé |
| 3 p.s. | ib |
| 3 p.pl. | imel |

Set II
ngölèt
ngagol
awol
alét
ibel
imtél

Set 1 II
ngölang/ngglang
ngagang
awang
alang
ibang
imlang

Explanation to the table:
Set $\mathbf{l}$ contains the personal pronouns used as subject in the sentence; set II consists of personal pronouns occurring as relation, showing a contraction of the subject-form with the linking-element $l$; set HI consists of pronouns indicating a possessive-relation. The possessive forms are composed by contraction of a personal pronoun and the linking-element ang; they occur before or after the noun both adjectively or substantively: ngölang jai, "(what is) mine give him", ngölang a, "mine is it". When the possessive pronouns are combined with names of relatives the noun is followed by the suffix hé if the preceding possessive pronoun is $2 \mathrm{p} . \mathrm{s}$. or pl., and the noun is followed by the suffix bé if a possessive pronoun $3 \mathrm{p} . \mathrm{s}$. or pl . precedes, e.g. awang nima-hé émawa, "thy father has come".

## Section 4. Numerals.

There are only two numerals: mépola, "one"; inagé, "two". The numeral follows the word it belongs to.

## Section 5. Verbs.

The usual word-order is subject (S) - object (R) - predicate. Sometimes the relation is found after the predicate. The conjugation expresses tense, aspect, mood, person, number and in 3 p.s. gender of the subject. Dual formation occurs here in all persons. Only in some verbal bases the relation is indicated in the conjugation.

## I. VERBAL PREDICATES.

As it has seemed impossible so far to give a general list of subjectindices and to fix up rules about their combinations with the bases, we give a complete table of the different tenses of the base pös, "to jump"; the bases to which a relation-index is attached, will be analysed later on.

## Set I

1) 1 p.s.

1 p.d.
1 p.pl.
2 p.s.
2 p. d.
2 p. pl.
3 p.s.m.
3 p.s.f.
3 p.d.
3 p. pl.
ép-pös-oma
ep-ops-o
éma-pös
ép-pös-o
ép-ops-oga
èma-pös-woga
е́p-pös-o
ép-aps-o
ép-ops-o
éma-pös-wa
t-B-s;
t-B-s;
t/s-B;
$\mathrm{t}-\mathrm{B}-\mathrm{s}$;
t-B-s;
t-B-s:
t-B-s;
t-B-s;
t-B-s;
t-B-s;

## Set II

ma p-pös-oma
ma ops-o
ma ma-pös
$m a p-p o ̈ s-o$
ma p-ops-oga
ma ma-pös-woga
ma p-pös-o
ma p-aps-o
ma p-ops-o
ma ma-pös-wa

Set I consists of the formations expressing the present tense and the to-day preterit. The tense-index is $\dot{e} p$ in singular and dual, and $\dot{e} m a$ in plural forms; the index éma is in 1 p . pl. subject-index at the same time. Set II contains the same formations but with the addition of the nega-tion-index ma after which the initial $\dot{e}$ of the tense-index does not occur.
2) 1 p .

2 p.s.
2 p. pl.
3 p.s.
3 p.s.f.
3 p. pl.

| éma-pös | t-B ; |
| :--- | :--- |
| éma-pös | t-B ; |
| éma-pös-woga | t-B-s; |
| éma-pös | t-B ; |
| éma-pös-ané | t-B-s; |
| éma-pös-wa | t-B-s; |

```
ma ma-pös
ma ba-pös
ma ma-pös-woga
ma ba-pös
ma ba-pös-ané
ma ba-pös-wa
```

These formations indicate the yesterdaympreterit; the tense-index is éma; special dual formations are not found. The singular has one form for the three persons with the exception of 3 p. fem., the same form ser-
ving as $1 \mathrm{p} . \mathrm{pl}$. In combination with the negation-index the tense-index is $m a$ or $b a$.
3) 1 p.s. émé-nga-pös-oma t1-t2-B-s; mabo nga-pös-oma

1 p.d.
1 p. pl.
2 p.s.
2 p. d.
2 p. pl.
3 p.s.m.
3 p.s.f.
3 p. d./pl.

| émé-ngap-ops-o | $\mathrm{t} 1-\mathrm{t} 2-\mathrm{B}-\mathrm{s} ;$ |
| :--- | :--- |
| émé-im-aps-a | $\mathrm{t} 1-\mathrm{t} 2-\mathrm{B}-\mathrm{s}$; |
| émé-nga-pös-o | $\mathrm{t} 1-\mathrm{t} 2-\mathrm{B}-\mathrm{s} ;$ |
| émé-ima-pös-a | $\mathrm{t} 1-\mathrm{t} 2-\mathrm{B}-\mathrm{s} ;$ |
| émé-ima-pös-aga | $\mathrm{t} 1-\mathrm{t} 2-\mathrm{B}-\mathrm{s} ;$ |
| émé-ips-a | $\mathrm{t} 1-\mathrm{t} 2-\mathrm{B}-\mathrm{s} ;$ |
| ém-a-pös-pu | $\mathrm{t} 1-\mathrm{t} 2-\mathrm{B}-\mathrm{s} ;$ |
| ém-o-pös-pu | $\mathrm{t} 1-\mathrm{t} 2-\mathrm{B}-\mathrm{s} ;$ |

mabo ngapo-pös-o
mabo im-aps-a
mabo nga-pös-o
mabo ima-pös-a
mabo ima-pös aga
mabo ips-a
mabo a-pös-pu
mabo o-pös-pu
The distant preterit gets a double tense-index; the first is identical in all persons viz. émé, except in $3 \mathrm{p} . \mathrm{s} . \mathrm{fem}$. and $3 \mathrm{p} . \mathrm{d} . / \mathrm{pl}$.: ém; the second is different in the different persons (cf. examples). The negation-index $m a$ is combined with a special tense-index bo.
4) 1 p.s. béma-pös-ka t-B-t/s; ma ma-pös-ka

1 p.d.
bio-pös-pa
$\mathrm{t}-\mathrm{B}-\mathrm{t} / \mathrm{s}$;
ma ma-pös-pa
1 p. pl.
2 p.s.
2 p. d.
2 p. pl.
3 p.s.m.
3 p.s.f.
3 p. d.
3 p. pl.
The future tense has as tense-indices béma, béba or bia according to the different persons or different number; in the negative formations the negation is $m a$ and the tense-index $m a$ in 1 p . and $b a$ in the other persons. The future tense is indicated by distinct subject-indices as well.
5) Besides these formations there are other future forms which express a durative aspect in a future tense.
1 p.: béma-pös-ba; 2 p.s.: béba-pös-am; 2 p. pl.: bia-pös-boga; 3 p.s.m.: béba-pös-bop; 3 p.s. f.: bia-pös-bopé; 3 p. pl.: bia-pös-bopa. The negative formations have the negation-index $m a$ and the tenseindex $m a$ in $1 \mathrm{p} ., b a$ in the other persons. The durative formation of the other tenses will be discussed further on.
3) a-pös-ka, "imperative to spring I"; m-B-s. Translation: "let me spring". The imperative mood shows the same formations as the future tenses mentioned in number 4 and 5 , except the prefix which in 1 p . and 3 p . is $a$, in 2 p . $a$.
7) The prohibitive is expressed by the use of the prohibitive-index ngangol which in the 1 p . may be replaced by ma if desired; the use of the prefixes may be seen best in a table; set I consists of momentaneous formations; set Il of durative ones:

## Set I

1 p.s.
1 p.d.
1 p. pl.
2 p.s.
2 p. d.
2 p. pl.
3 p.s.m.
3 p.s.f.
3 p. p. d.
3 p. pl.
nganggol ma-pös-ka
nganggol ma-pös-pa nganggol ba-pös-ba nganggol ba-pös nganggol a-pös-ga nganggol a-pös-boga nganggol ba-pös-p nganggol a-pös-pé nganggol a-pös-pa nganggol a-pös-bopa $\}$

## Set II

nganggol ma-pös-ba nganggol ba-pös-am nganggol a-pös-boga nganggol ba-pös-bop nganggol ba-pös-bopé
8) The relation is indicated either by the use of relation-indices or by suppletion of different bases. The relation-indices are $1 \mathrm{p} . \mathrm{s}$. and pl.: $n$; $2 \mathrm{p} . \mathrm{pl} .: l ; 3$ p.s. m.: $b$; in the other persons no index is found. The place of the indices is immediately before the base; after the index $b$ of 3 p.s.m. the initial consonant of the base does not occur (in the example mentioned by Drabbe viz. $h a$, "to see"). Drabbe has the following examples, taken from the future formation of the base $h a$, "to see"; béba- $n-h a-p$, "he will see me"; béba-ba-p, "he will see him"; béba-l-ha-p, "he will see you".
Suppletion of different bases according to different relations, is illustrated by Drabbe in the following combinaton of the bases: jém, used with a relation 1 p.s., 2 p.s., 3 p.s.fem.; to, with a relation 3 p.s.m.; um, with a relation 1 p. pl., 2 p. pl., 3 p. pl.; béba-jém-p, "he will illtreat thee"; béba-to-p, "he will illtreat him"; béba-ttm, "he will illtreat some people".
II. NOMINAL PREDICATES.

1) 1 p.s. hiting

1 p. d. hiting
$\begin{array}{ll}1 \text { p. pl. } & \text { hiting } \\ 2 \text { p.s. } & \text { hiting } \\ 2 \text { p.d. } & \text { hiting } \\ 2 \text { p.pl. } & \text { hiting } \\ \text { 3p.s.m. } & \text { hiting } \\ \text { 3p.s.f. } & \text { hiting } \\ \text { 3p.d. } & \text { hiting } \\ \text { 3p.pl. } & \text { hiting }\end{array}$

| Present | Preterit | Future |
| :--- | :--- | :--- |
| ém-ak | éi-maka | béma-ngaik-ka |
| ém-anggo | éi-mama | bia-ngaik-apa |
| ém-éb | éi-méba | béma-ngaik-ani |
| ém-én | éi-mna | béba-ngaik |
| ém-angoga | é-mangaga | bia-ngaik-ga |
| émé-boga | éi-mébaga | bia-ngaik-aga |
| a | éjokwa | béba-ngaik-ap |
| akané | akupu | bia-ngaik-p |
| ango | éi-ngwa | bia-ngaik-pa |
| aba | éi-ba | bia-ngaik-apa |

Translation: "I am small"; "I was small"; "I shall be small". The nominal predicate is a complex predicate in which the secondary base varies according to the different tenses. In the present the secondary base is $\dot{e m}$ in 1 p . and $2 \mathrm{p} . ; a$ ( $a k$ ? etc.) in 3 p .; in the preterit the secondary base is $e \dot{e}$; in the future $n g a^{i} k$, with addition of the futureindex mentioned in part I, n. 4.
2) Complex predicates are used to express the durative or habitual aspect. Such a complex predicate consists of a primary and a secondary base both derived from the same base. In the durative aspect the primary base is followed by a linking-element $l$ which element does not occur in the habitual aspect. The formations of the durative and habitual aspects are identical except for this linking-element $l$. So the durative aspect of the base pös is expressed by: pöswo-l mapös, "I am springing"; and the habitual: pöswo ma-pös, "I am used to spring". The linking-element $l$ occurring in the durative indicates according to Drabbe that the preceding part of the predicate is nominal. He translates: "to spring a spring" as indicating: "to be springing". The durative has special forms only in the present (which is to-day preterit, and yesterday preterit at the same time) and in the distant preterit; the future of the durative is analysed above in n . 5 . In the negative formations the element $l$ is not found. Set I contains the affirmative formations; set II the negative ones.

| Present. | Set I. | Set II |
| :---: | :---: | :---: |
| 1 p. | pöswo-l ma-pös | pöswo ma ma-pös |
| 2 p.s. | pöswo-l a-pös | pöswo ma ba-pös |
| 2 p. d. | pöswo-l ma-pös-woga | pöswo ma n-aps-oga |
| $2 \mathrm{p} . \mathrm{pl}$. | poswo-l ma-pos-woga | pöswo ma ma-pös-woga |
| 3 p.s.m. | pöswo-l a-pös | pöswo ma ba-pös |
| 3 p.s.f. | pöswo-l a-pös-ané | pöswo ma ba-pös-ané |
| $3 \mathrm{p} . \mathrm{d} . / \mathrm{pl}$. | pöswo-l a-pös-wa | pöswo ma ba-pös-wa |

Distant preterit:

| 1 p.s. | pöswo-l nga-pös-oma |  |
| :---: | :---: | :---: |
| 1 p.d. | pöswo-l ngap-ops-o | pöswo mabo ima-pös-a |
| $1 \mathrm{p} . \mathrm{pl}$. | pöswo-l im-aps-a |  |
| 2 p.s. | pöswo-l nga-pös-o | pöswo mabo i-pös-a |
| 2 p.d. | pöswo-l ima-pös-a | poswo mabo im-aps-aga |
| $2 \mathrm{p} . \mathrm{pl}$. | pöswo-l ima-pös-aga | роswo mabo im-aps-aga |
| 3 p.s.m. | pöswo-l ips-a | pöswo mabo ips-a |
| 3 p.s.f. | pöswo-l a-pös-pu | pöswo mabo a-pös-pu |
| 3 p.d./pl. | pöswo-l o-pös-pu. | pöswo mabo o-pös-pu |

The durative formation occurring in the imperative and prohibitive have been discussed above (part I, n. 6 and 7).

## III. SOME PECULIARITIES IN VERBS.

1) There are complex predicates which form a set phrase. The primary and secondary bases do not occur by themselves but their constant combination expresses a meaning, e.g. joha dusu, "to suffer by cold"; jä dohi, "to be thirsty".
2) The impersonal construction is used to express that something affects some person; the logical subject is indicated by a relation-index, e.g. onga béba-n-hi-p, B1-future tense-r-B2-s, "it makes me to be hungry", i.e. "I am hungry".

## Section 6. Linking-elements.

jok akwa, "house to" i.e. "to the house"; jok bala, "house from", i.e. "from the house"; some linking-elements are already familiar to us viz. ang indicating a possessive relation; $l$ expressing the object-function; the place is always after the word they belong to.

## CHAPTER III

## JÉLMĖK-LANGUAGE

## Section 1. Name and Territory.

In the region between the Digul and the Mbian on the river Wanam a little village Jèwajab is found. The people living in it call themselves Jélmèk. Drabbe gives this name to the language he studied there. With some dialectical variations the same language is spoken in the villages Woboju, Dudaling and Bibikem. The number of native speakers amounts to 350 souls.

## Section 2. Nouns.

There are several ways to indicate relations between nouns:
a) two nouns may form a compound; according to the meaning the first element qualifies the second, e.g. mia-noma, "coco-nut";
b) a linking-element following the noun may be used expressing various relations, e.g. ébi lén, "house in behalf of" i.e. "in behalf of the house"; èbi bèn, "house from" i.e. "from the house"; ida auk tokwakol, "father of knife", i.e. "the knife of the father"; übi milom baki, "tail pig of", i.e. "the tail of the pig".

Section 3. Pronouns.

|  | Set I | Set II | Set III | Set IV |
| :---: | :---: | :---: | :---: | :---: |
| 1 p.s. | ngöl | ngölèl | nglauk | nglaki |
| $1 \mathrm{p} . \mathrm{pl}$. | ngag | ngagol | $n g a^{4 \prime} k$ | $n g a^{u k i}$ |
| $2 \mathrm{p} . \mathrm{s}$. | $a^{4}$ | $a^{4} \mathrm{O}$ | $a^{a} a^{0} k$ | $a^{v} a^{v} k i$ |
| 2 p.pl. | èl | èlél | èla ${ }^{\text {a }}$ | ela ${ }^{\text {a }}$ i |
| $3 \mathrm{p} . \mathrm{s}$. | ${ }^{\text {e }}$ | ébi | éba'k | ébáki |
| 3 p. pl. | ém | émi | émauk | emauki |

Explanation to the table:
Set I contains the personal pronouns used as subject in the sentence; set II consists of the personal pronouns used as relation showing a contraction of the subject-forms with the linking-element $l$ or $i$.
Set III and IV comprehend forms which have the function of possessive pronouns but set III contains forms which, occurring adjectively, follow a noun that is subject in a sentence, and occurring substantively acts as
subject or nominal part of a predicate; set IV consists of forms that occurring adjectively precede the noun that is relation in a sentence, and occurring substantively acts as object, e.g. nglauk kom, "mine is it", i.e. "it is mine"; nglaki ngalime, "what is mine give", i.e. "give my things". The forms of set III and IV show contraction of the subject-form of the personal pronoun with the linking-elements $u k$ and $u k i$.

## Section 4. Numerals.

There are numerals for one to five viz. ngktala, ina, mudém, ébédina and kédnkapo. The numerals are put after the word they belong to.

## Section 5. Verbs.

The sequence of the parts of the sentence is: subject (S) - indirectrelation (R2) - direct-relation (R1) - predicate (P). In the conjugation person and number of the subject, tense and mood may be expressed; some indices precede, others follow the base; relation-indices are not found.

## I. VERBAL PREDICATES.

1) $m e ̀-m \dot{e}$, "to break I ", B-t/s;
$m \dot{e}$, "to break we, thou, he, they", B;
$m \dot{e}-\mathrm{g} a$, "to break you", B-t/s. Translation: "I break" etc. In the present formation the tense-index is a zero-modification; subject-indices are 1 p.s.: $m e ; 2$ p. pl.: ga; in the other persons only the base is found.
2) $m \dot{e}-p-m a$, "to break preterit I ", B-t-s;
$m e ̀-p-\partial$, "to break preterit we, he, they", B-t-s;
$m \dot{e}-p-w \dot{e}$, "to break preterit thou", B-t-s;
mè-p-uga, "to break preterit you", B-t-s. Translation: "I broke" etc. The preterit formation gets as a tense-index $p$; subject-indices are: 1 p.s.: ma; 1 p. pl., 3 p.s. and pl. : $\ddot{o} ; 2$ p.s.: wè; 2 p. pl.: uga.
3) mè-ka, "to break fut. l ", B-t/s. Translation: "I shall break". In the future the subject-indices express at the same time the tense; 1 p. s.: $k a$; 1 p. pl. and 3 p.pl.: pè; 2 p.s.: zero; 2 p. pl.: gè; 3 p.s.: p.
4) In combination with the base ngoli, "to bear", we come across the following subject-indices, present tense 1 p.s.: ama; 1 p. pl., 2 p.s., 3 p.s., and pl.: a; 2 p.pl.: aga; past tense 1 p.s.: $m a$; 1 p. pl., 3 p.s., and pl.: $u$; 2 p.s.: ua; 2 p.pl.: uga; future tense 1 p.s.: ka; 1 p.pl. and 3 p. pl.: pa; 2 p.s.: zero; 2 p.pl.: go; 3 p.s.: $p$; this variation suggests that at some extent vowel-harmonization occurs in this language.
5) po-li-ama, "I to ask I", s2-B-st;
wo-li-poma, "I to ask preterit 1", s2-B-t-s1;
$a-l i-k a$, "fut. to ask I", t-B-s. Translation: "I ask"; "I asked"; "I shall ask". Besides the bases which occur in combination with subject-indices that follow the base, there are bases which have a second subject-index
prefixed to the base. These secondary indices are, in the present $1 \mathrm{p} . \mathrm{s}$.: po; 1 p. pl.: ko; 2 and 3 p.: ngö; in the preterit 1 p.s. and pl., 2 p. pl.: wo; 2 p.s.: ngö; 3 p.s.: wa; 3 p. pt.: $n g a$; in the future: the bases are preceded in all persons by the vowel $a$ which according to Drabbe is a tense-index.
6) There are several bases the conjugation of which differs from the formations mentioned in the preceding numbers. Drabbe gives e.g. the base $w \dot{e}$, "to come"; in the present a tense-index $k$ occurs and the subjectindices are 1 p.s.: gama; 1 p.pl.: ga; 2 p.s.: gaga; 2 p. pl.: ga; 3 p.s.: ga ; $3 \mathrm{p} . \mathrm{pl} .: \operatorname{gag} a$; in the preterit the prefixed indices are $1 \mathrm{p} . \mathrm{s} .:$ we; 1 p.pl.: pa; 2 p.s.: wé; 2 p.pl.: ka; 3 p.s.: $k ; 3$ p.pl.: $k e$; and in the future the prefixes are: $w \dot{e} ; a ; w \dot{e} ; a ; w \dot{e} ; a$. Also the subject-indices that follow the base, differ from those given in the preceding numbers; moreover suppletion of bases for number occurs in the preterit and the future.
7) mo me-mè, "negation to break I"; $m a^{\circ} m \grave{c}-p-m a$, "negation to break preterit 1 ";
mama ma-ka "negation to break future I". Translation: "I do not break"; "I did not break"; "I shall not break". The negation of a process is expressed by a negation-index which precedes the formation and varies according to the tenses. In the present the index is mo; in the preterit $m a^{\circ}$; in the future: mama.
8) $i$-mè- $\rho \ddot{0}$, "imperative to break imperative thou"; m1-B-m2;
$i-m \dot{e}-p o ̈-g e ́, ~ " i m p e r a t i v e ~ t o ~ b r e a k ~ i m p e r a t i v e ~ y o u " ; ~ m 1-B-m 2-s . ~$.
Translation: "break!". The imperative mood is expressed by the prefix $i$ and the suffix po. The subject-indices are 2 p.s.: zero; 2 p.pl.: gé. Some variations occurring in the mood-indices 2 p.s. are: suffix, not pö but put or mo; variations of the subject-index 2 p. pl.: not gé but go (pugo). The variation may be explained by vowel-harmonization.
9) iméba lipö, "prohibitive to give". Translation; "don't give". In the prohibitive formation the prefix of the imperative does not occur; the negationindex is iméba or ingéba.

## II. NOMINAL PREDICATES.

(tokwaköl) balo köm, "(knife) thick to be it"; (S)B1-B2t/s; wotök köd mjéiwa, "small ..... to be preterit thou", B1-.....B2t/s; mbala-mbalak köd (bia) ngajakpa, "big ..... (future) to be future they"; B1-.....(future)-B2t/s. Translation: "the knife is thick"; "thou wert small"; "they will be big". In the nominal predicate several bases occur in the function of secondary bases according to the various tenses and persons. In the present tense the forms are 1 p.s.: pamu; 1 p.pl.: pangou; 2 p.s.: kamöwè; 2 p. pl.: kangoga; 3 p.s.: köm; 3 p. pl.: ngapè. In the preterit the following forms are found 1 p.s.: mjéma; 2 p.s.: mjeiwa; 1 p.pl.:
ngwaima; 2 p.pl.: ngwaiga; 3 p.s.: mjei; 3 p. pl.: ngwai. In the future the forms are 1 p.s.: ngajaka; 1 p. pl.: ngajakpa; 2 p.s.: ngajak; 2 p. pl.: ngajakgo; 3 p. s.: ngajakop; 3 p. pl.: ngajakpa. In the second example the element köd occurs; it is always found after a nominal base ending in a $k$, while the function and the meaning are not clear. In the third example the nominal element shows a reduplication; repetition or reduplication occurs when the subject is in the plural. In the future the element bia may occur the meaning of which has not yet been explained.

## II. SOME PECULIARITIES IN VERBS.

1) wiok ku, "to lie"; wulo ka, "to spit"; complex predicates which form a set phrase, occur in this language.
2) The eventive construction which occurs in several other languages, especially to express that a person is affected by some process, is not indicated here by Drabbe.

## Section 6. Linking-elements.

ebi len, "house in behalf of", i.e. "in behalf of the house";
ébi bèn, "house from", i.e. "from the house away". Besides the linkingelements already familiar to us from the analysis of the possessive formations (section 3) and the relation-forms of the pronouns, we come across other elements always following the words they belong to.

## CHAPTER IV

## MOMBUM-LANGUAGE

## Section 1. Name and Territory.

The official name of "Frederik-Hendrik" island stands in reality for two islands which the natives call: Kolopom and Komolon. The smaller island is Komolom which is indicated by the name Mombum as well. In the island of Komolom one village and one tribe of 220 souls are found. Drabbe is not sure whether Mombum is the name of the tribe or of the village. He gave the name Mombum to the language spoken there.

## Section 2. Nouns.

The relation between nouns is indicated in the following way:
a) two nouns may form a compound; the first element qualifies the second, e.g. u-pi, "pig-tail";
b) two nouns form a phrase; the first indicates the possessor of the second, e.g. woköra irmèn, "house's upper part", i.e. "the upper part of the house"; this form is used to say: "on the top of the house";
c) two nouns separated by the possessive pronoun form a phrase; the first noun indicates the possessor, the second the possession, e.g. nimb ewe woköra, "father his house", i.e. "the house of the father";
d) a linking-element following the noun may be used expressing various relations, e.g. par $i$, "garden in", i.e. "in the garden"; woköra nggibko, "house out", i.e. "out of the house". A linking-element indicating a possessive relation does not occur.

## Section 3. Pronouns.

Set I. Set II. Set III.

| 1 p.s. | $n u$ | nè | $n{ }^{\text {e }}$ |
| :---: | :---: | :---: | :---: |
| $1 \mathrm{p} . \mathrm{pl}$. | num | numa | numwè |
| 2 p.s. | $j u$ | iwè | $i w{ }^{\text {c }}$ |
| $2 \mathrm{p} . \mathrm{pl}$. | jum | ima | imwè |
| $3 \mathrm{p} . \mathrm{s}$. |  | èwè | éwè ${ }^{t}$ |
| $3 \mathrm{p} . \mathrm{pl}$. | anemrè | anèmrè | anèmrè |

## Explanation to the table:

The pronouns are put together in one table because the forms are closely connected. Set I consists of the personal pronouns used as subject
in the sentence. Set II contains the pronouns indicating a possessive relation, showing a contraction of the subject-form (set I) with the linking-element $\dot{e}$ or $\alpha$. Set Ill is composed of the personal pronouns indicating other retations in the sentence. It seems to us that the constituents of set III took their origin from the forms mentioned in set II with the addition of the linkingelements ( $\dot{e}$ ) $i>\dot{e}^{i}$.

## Section 4. Numerals.

This language has only five genuine numerals viz.: tè, "one"; kumb, "two"; inis, "three"; arögh, "four"; ghupunumör, "five". The numbers six to ten are expressed by the prefix $m a$ followed by the numerals one to five, e.g. matè, "six". Drabbe suggests that the people use the fingers in counting, first of one hand, then of the other. The place of the numerals is after the word they belong to.

## Section 5. Verbs.

The sequence of the parts of the sentence is usually: subject ( S ) - indirect object (R2) - direct object (R1) - predicate (P), e.g. nagha nimb è ${ }^{i}$ wièngk kèmunumuri, "brother father for proah to make he", i.e. "brother makes a proah for father". The place of direct and indirect object may be interchanged. The subject is represented in the predicate by a subject-index. The subject-indices are: 1 p.s.: $u$ or $e^{u} ; 1$ and 2 p . pl.: om, èm or am; 2 p.s.: im or èm; 3 p.s.: $i$ or $\dot{e} ; 3$ p. pl.: $a, \dot{e}$ or $i$. A relation-index does not occur. But the plural number of the subject or the object may optionally be expressed by a plural-index ghebwe added to the base and preceding the other indices, e.g. nu éwè̀ iröw-èsir-u, "I shall beat him"; num éwè iröwè-ghèbw-èsir-am", "we shall beat him"; nu èwèi iröwè", "I beat him"; nu anèmré iröwè-ghébw-è , "I beat them". The indices indicating tense, mood, aspect and subject follow the base.

## I. VERBAL PREDICATES.

1) nuku-numur-u, "to eat present I"; B-t-s. Translation: "I eat". The present formation shows the tense-index numur; the subject-indices are: 1 p.s.: $u ; 1$ p. pl. and 2 p.pl.: om; 2 p.s.: im; 3 p.s.: $i ; 3$ p. pl.: $a$.
2) nuku-r-u, "to eat to-day preterit I"; B-t-s. Translation: "I ate to-day". The to-day preterit is indicated by the tense-index $r$. The subject-indices are the same as in the present, except I and 2 p . pl: am instead of $o m$.
3) nuku-è", "to eat yesterday preterit I"; B-t/s. Translation: "I ate yesterday". The yesterday preierit is expressed by distinct subject-indices 1 p.s.: $\dot{e}^{u} ; 1$ p.pl., 2 p.s. and 2 p.pl.: èm; 3 p.s. and pl.: $\dot{e}$.
4) nuku-agha-u, "to eat remote preterit I"; B-t-s. Translation: "I ate". The formation indicating a remote preterit shows as tense-index agha which is followed by the subject-indices 1 p.s.: $u ; 1$ p.pl., 2 p.s. and 2 p.pl.:
m; 3 p.s. and pl.: i. In the 3 p. pl. the tense-index does not occur; the form is: $n u k u$ - $\mathbf{i}$.
5) nuku-èsir-u, "to eat future l"; B-t-s. Translation: "I shall eat". In the future formation the tense-index is esir; the subject-indices are $1 \mathrm{p} . \mathrm{s}$ : $u ; 1$ p. pl. and 2 p. pl.: am; 2 p. s.: im; 3 p.s.: $i ; 3$ p. pl.: é.
6) a) è kumbu-num-wor-è", "negation to bind present negation P ".
b) è kumbu-wor-è", "negation to bind negation to-day and yesterday preterit l";
c) è kumbu-wor-agha-u, "negation to bind negation remote preterit I";
d) kumbu-anga ${ }^{a} r$ - $u$, "to bind negation/future I". Transtation: a) "I do not bind"; b) "I did not bind (to-day or yesterday)"; c) "I did not bind"; d) "I shall not bind".
In formations of present and preterit the negation of a process is expressed by the negation $\dot{e}$ —— wor, in the future by angar $r$, a tenseand negation-suffix at the same time. In the present formation the tenseindex of the affirmative forms is numur; in the negative forms num; in the preterit the formations of a to-day and a yesterday preterit coincide and the tense-index is zero. In the present the place of the negative element wor is after, and in the remote preterit before the tense-index.
7) $n u k-\mathbf{u}$, "to eat thou"; B-m/s;
nuku-mi, "to eat you"; B-m/s. Transtation: "eat!". The imperative is expressed by the base followed by $2 \mathrm{p} . \mathrm{s} .: \mathrm{a}$ or $2 \mathrm{p} . \mathrm{pl}$ : mi . The final vowel of the base is sometimes left out before 2 p.s.: $u$.
8) kumb-akèdèprim, "to bind prohibitive singular";
kumb-akèdèpram, "to bind prohibitive plural". Translation: "thou don't bind"; "you don't bind". The prohibitive formation is formed by the base followed by the suffix akèdèprim in the singular, akedèpram in the plural. Possibly this suffix is to be split in akedepr-im and akedèpr-am; im and $a m$ being subject-indices $2 \mathrm{p} . \mathrm{s}$. and $2 \mathrm{p} . \mathrm{pl}$. in the future formation.
9) a) kumbu-tukwodöpun-èv, "to bind affirmation usually/preterit I"; B-affirm./a/t-s;
b) kumbu-zanggibkwodopun-è , "to bind negation/usually/preterit I "; B-neg./a/t-s;
c) kumbu-tuför-èsir-u, "to bind usually future I"; B-a-t-s;
d) kumbu-tufor-angaur-u, "to bind usually negation/future $\mathrm{I}^{\text {" }}$; B-a-neg./t-s. Translation: a) "I bound usually"; b) "I did not bind usually"; c) "I shall bind usually"; d) "I shall not bind usually". These formations express the habitual aspect of the process; in the present we come across nominal formations to be discussed further on; in the preterit there are different indices in the affirmative and negative formations viz. fukwodopun and zanggibkwodöpun; both followed by the subject-indices 1 p.s. $4^{4}$; 1 p. pl., 2 p.s. and 2 p.pl.: èm; 3 p.s. and pl.: $\dot{e}$; in the future the aspect-index tufor is inserted between the base and the tense-index.

## II. NOMINAL PREDICATES.

1) nu nènggèr ko, "I big present"; S-B-t;
num nènggèr ko-ri, "we big present plural"; S-B-t-n. Translation: "I am big"; "we are tall". The nominal predicate is composed of a nominal element followed by a tense-index. When the subject is plural, the plural-index $r i$ is added.
2) nu nènggèr aghadè, "I big preterit"; S-B-t. Translation: "I was big". In the preterit the index aghadè is used. There is no plural-index.
3) nènggèr èsir-u, "big future-index l"; B-t-s. Translation: "I shall be big". In the future the tense-index esir, familiar to us, is found followed by subject-indices that are the same as in the future formation of the verbal predicate, part i, n. 5.
4) nu kumbu-tukwo, "I to bind usually"; S-B-a;
nu kumbu-tukwo-ri, "I to bind usually plural"; S-B-a-n; nu kumbu-tunapo, "I to bind usually/negation"; S-B-a/negat.
Translation: "I bind usually"; "we bind usually"; "I do not bind usually". In present formations the habitual aspect is expressed in a nominal way; in the affirmative forms the aspect-index tukwo is added to the base; in the plural the plural-index $r i$ occurs after the aspect-index. In the negative forms the aspect-index is at the same time negationindex tunapo; the plural-index is not used in that case.

## III. SOME PECULIARITIES IN VERBS.

1) There are complex predicates containing bases that occur only in combination with each other forming a set phrase, e.g. ésu u, "to sneeze"; pokèrè kèmu,"to tell lies".
2) nè or jo"-numar-i, "me to make hungry it"; pers. pron.-B1-B2-t-s. Translation: "I am hungry". Some bases are conjugated in an impersonal way; the logical subject (viz. "I") is rendered by a direct objectform.

## Section 6. Linking-elements.

In this language we come across tinking-elements which are always placed after the word they belong to, e.g. $e$, "in behalf of", indicating a direct or indirect object; nimb $e^{\text {e }}$, "father for", "for father"; $i$, "in", indicating place; par $i$, "garden in", i.e. "in the garden"; nggibko, "out"; e.g. woköra nggibko, "house out", i.e. "out of the house".

## CHAPTER V

## KIMAGHAMA-LANGUAGE

## Section 1. Name and Territory.

Kimaghama is the name of a village in Frederik-Hendrik-Island (Kolopom), the seat of the government. The language is also spoken in some villages of the N . East and S . West of the Island. There is no general name for the peoples and the languages of the districts. In the island two more languages occur: Riantana and Ndom. Drabbe does not consider these languages as sister-languages of the Kimaghama, nor as dialects, as a comparison of the vocabularies of these three languages does not show resemblances and certainly no fixed soundshifting. Riantana is spoken in some villages in the N.West, Ndom in some villages of the West. Probably Riantana means: real man; Drabbe has given this name to the language. Ndom is the name, used by the tribe for itself; they speak about themselves as the Ndom-wèr and about their language as the $N d o m-$ bana. Here we shall discuss the Kimaghama-language and shall mention those items of the other two languages that are important for a better understanding.

## Section 2. Nouns.

1) In nouns the number is expressed. The plural is indicated by agha or ragha, nagha, dagha, vagha, which form is placed either after the noun or after the determination of the noun; e.g. do ragha, "tree plural", i.e. "trees"; do mamu ragha, "tree big plural", i.e. "the big trees".
2) Sex or gender are not expressed by formal features.
3) The relation between nouns is expressed in one of the following ways: a) two nouns form a compound word; the first constituent qualifies the second; e.g. do-aghavo, "tree-fruit";
b) two nouns form a phrase indicating that the first element is the possessor of the second; e.g. aghavö pitje, "child knife", i.e. "the knife of the child";
c) two nouns are separated by the personal pronoun 3 p . This formation is used to indicate possession and is preferred to the formation mentioned in $b$ ); the use of the possessive pronoun makes it possible to indicate the number of the possessors; e.g. aghavö da pitje, "child his knife", i.e. "the knife of the child"; aghavö dii pitje, "child their knife", i.e. "the knife of the children";
d) a linking-element following the noun may be used to express various relations, e.g. pitjè jè, "knife with", i.e. "with a knife"; dè has the meaning of "because". A linking-element indicating a possessive relation is not found.

Section 3. Pronouns.

|  | Set I | Set II | Set III |
| :--- | :--- | :--- | :--- |
| 1 p.s. | $n o$ | niè | $n a$ |
| 1 p. pl. | $n i$ | $n i r e ̀$ | $n i$ |
| 2 p.s. | ungga | angga | $g a$ |
| 2 p. pl. | inggi | anggé | $g i$ |
| 3 p.s. | $n \ddot{\partial}$ | anda | $d a$ |
| 3 p. pl. | $i i$ | andé | dii |

Explanation to the table:
Set I contains the personal pronouns used as subject in the sentence; set Il the forms used as relation in the sentence showing a contraction of the subject-forms (set I) with the linking-element $\dot{e}$ or $a$ or $\dot{e}$; set III the forms used to indicate possessive relations. The place of the possessive forms is before the noun. It is not possible to use the possessive forms substantively; instead of "mine" they say; na nagha, "my thing", or, when referring to a person, they use the name with a possessive pronoun (set III).

## Section 4. Numerals.

This language has a senary system. The numerals from one to six inclusive are: növèè; kavé; péndji; jando; mado; turo. Seven to twelve is counted: six-one; six-two etc., but "six" is indicated by iburo instead of by turo; "thirteen" is $n \hat{\imath}$ or $n \hat{\imath} n o ̈ v e ̀ r e ̀ ~ ; ~ " f o u r t e e n " ~ i s ~ n i ̂ ~ k a v e ́ ~ e t c . ~ D r a b b e ~ a l s o ~ m e n t i o n s ~$ twenty: tjif; forty: tjî kavé; two hundred: tjî iburo-jando (twenty-ten); in the numerals twenty, forty etc. to two hundred follow a score system. Drabbe does not mention numerals higher than two hundred.

## Section 5. Verbs.

In Kimaghama subject and predicate are two unchanged parts of the sentence: the subject is a noun or pronoun, the predicate a base unchanged by indices of tense, mood, aspect, subject or object. These categories are indicated here by forms standing by themselves. The base may have a nominal or verbal character. The sequence of the parts of the sentence is: subject - relation - predicate, e.g. nö niè aura roana, "he me to beat present", "he beats me"; nö kapara oana, "he chief present", "he is chief".

1) nö niè a"ra r-oana, "he me to beat lig. present"; S-R-B-1-T.

Translation: "he beats me". The present tense is expressed by the tenseindex oana; the place of the tense-index is after the predicate; often a ligature occurs before the tense-index.
2) The preterit has the index otée: S-R-B-I-T.
3) The tense-index of the future is aghatj. The various tense-indices of 1), 2) and 3) sometimes occur with an initial $r$ or $n$, which may be considered as a ligature.
4) nó diwo vana oana, "he to do negation present"; S-B-Neg.-T.

Translation: "he does not". The process is made negative by the negation vuna that appears in three tenses. The negation is between the predicate and the tense-index.
5) nö̀ niè a"ra nè, "he me to beat"? S-R-B-M/T. Translation: "does he beat me?". The interrogative mood is indicated by a different index in the three different tenses, therefore the mood-index is tense-index at the same time. The present tense has $\dot{e}$ (with ligature: nè or rè), the preterit has téè (with ligature: ntéè, déè, ndéè), the future has aghajè (with ligature: naghajè, raghajè).
6) a) nö diwo mambura, "he to make progressive"; S-B-A;
b) nö diwo ine, "he to make perfection"; S-B-A. Transfation: a) "he is making"; b) "he has made". The durative and perfective aspect are expressed by mambura (or wambura) and inè respectively; these aspectindices are placed after the predicate. The place of a tense-index, if it occurs, is not to be determined, as Drabbe gives no rule, nor examples.
7) not bu aghakatja, "he to come perhaps future"; S-B-M/T. Translation: "perhaps he will come". In the future doubt is expressed by the index aghakatia; in present or preterit taghane beiore the base.
8) $a^{\circ}$ unggu diwo, "imperative thou to do"; M-S-B;
ni diwo marèe, "we to do adhortative"; S-B-M;
$a^{\circ}$ inggi diwo marée, "imperative you to do adhortative"; M1-S-B-M2. Translation: a) "do that"; b) "let us do that"; c) "please do that". The imperative index $a^{\circ}$ is placed before the subject; the adhortative index marée is found after the predicate. The two indices may occur in the same sentence.
9) a) avava, "to see iterative";
b) diwondiwo vo, "to do prohibitive";
c) diwondiwo de, "to do usually";
d) diwondiwo vuna (nundarunda), "to do usually negation";
e) nö diwondiwo jè, "he to do usually interrogative". These formations contain a reduplication or a doubling of the bases (avu and diwo). The meaning expressed by these forms is in: a) the process is repeated more or less frequently; b) the process is to be prohibited; the index vo or po is used; c) the habitual aspect of the process; the index is $d e$; d) the negation of the process just mentioned in c); the index is $v u n a$ which may be followed by nundarunda; e) the interrogative mood of the process mentioned in $c$ ).

Section 6. Some notes about the predicate-formation in the Riantanaand Ndom-languages.

1) Riantana distinguishes a preterit to-day and a preterit earlier than today. In the first case the tense-index is found before the subject or between subject and base; in the second case the tense-index occurs after the base. The future is distinguished in a future to-day and a future beginning to-morrow. The indices are found respectively before the subject or between the subject and the base in the first case, and after the base in the other case. All indices in these two languages occur standing by themselves.
2) The negation is expressed in the following way. The base has in all tenses the suffix $v i$; in the present and the preterit to-day the tenseindex andi occurs after $\nu i$; in the preterit earlier than to-day the tenseindex ata and negation nianona occur after $v i$; in the future to-day the tense-index is put before the subject and the negation nianöna is placed after $v i$; in the distant future to-day the tense-index $t j a$ is found after $v i$ and followed by the negation nianöna.
3) The Ndom-language has four tenses viz. present, preterit to-day and preterit earlier than to-day, and the future. The formations of the different tenses vary according to the different bases:
a) there are some bases that change with the tense, e.g. un, "to go", is in the present tense: gharone; in the preterit to-day: ghun; in the preterit earlier than to-day: un; in the future: ntaghun;
b) there are bases that occur only together with a secondary base. The bases of the language may be divided into classes in accordance with the base that accompanies them as secondary base. Such a secondary base changes with the tense, e.g. present: ghasraté (subject 1 p.), ghatèté (subject not 1 p .) ; preterit to-day: ghatön; preterit earlier than to-day: atön; future: ntaghatön. From what is said in a) and b) the tense-indices can be deduced viz. present ghasr; preterit to-day gh(a); preterit earlier than to-day: zero-modification; future ntagh.

## Section 7. Linking-elements.

The linking-elements are found here after the parts of the sentence they belong to, e.g. pitjè jè, "knife with", i.e. "with a knife"; dè has the meaning of "because"; drö indicates a final clause; nè $j e ̀ ~ d r o ̈, ~ " t o ~ l i v e ~ i n ~ o r d e r ~ t o ", ~ i . e . ~$ "in order to live".

## CHAPTER VI

## KANUM-LANGUAGE

## Section 1. Name and Territory.

Probably the name Kanum is a Marind term used by the Marind-people to indicate all Papuans living east of the river Maro below a line traceable from Merauke to the Australian border. Drabbe analysed the Kanumlanguage as it is spoken in the villages Jenggalntjur and Onggaja.

## Section 2. Nouns.

There are several ways to indicate relations between nouns:
a) two nouns may form a compound in which the first element qualifies the second, e.g. po bèl, "coco-nut"; mpowor bèl, "cassowary-egg";
b) a linking-element following the noun may be used expressing various relations, e.g. $n i$, indicates "at a place"; nèm indicates "by means of"; wa indicates "because of"; ènè indicates the possessor; al ènè moa, "father of house", i.e. "the house of the father".

## Section 3. Pronouns.

| 1 p.s. | $\begin{aligned} & \text { Set I } \\ & \text { nggo } \end{aligned}$ | Set II nggai | Set III nsanè |
| :---: | :---: | :---: | :---: |
| 1 p.pl. | $n i$ | ninta | nsönè |
| 2 p.s. | mpo | mpai | mponè |
| $2 \mathrm{p} . \mathrm{pl}$. | mpu | mpunta | mpane |
| $3 \mathrm{p} . \mathrm{s}$. | $p i$ | péèngku | pènè |
| $3 \mathrm{p} . \mathrm{pl}$. | $p i$ | pinta | pènsjènè |

Explanation to the table:
The first set contains the personal pronouns occurring as subject with verbs in intransitive use and occurring as object with verbs in transitive use. The constituents of set II are forms used as subject with verbs in transitive use and in reflexive use, showing a contraction of the forms of set I and the linking-element $i$ or nta. Set IIt is composed of forms in which the personal pronoun is combined with a linking-element used to indicate an indirect object or a possessive relation; in the latter case they are found before or after the noun they belong to.

## Section 4. Numerals.

The Kanum-language has a senary system. The numerals from one to six are: nămpèr; jèmpoka; juău; èsèr; tãmpui; tarāwo; from seven to twetve the numerals are formed: six-one; six-two etc., but number "six" is not expressed by tarãwo, but by pesmèri, and "one", "two" and "three" by empi, jālmpö and jèla; so we get: pèsmèri èmpi, "seven"; pèsmèri jalmpö, pèsmèri jèla, pèsmêri èsèr etc.; 12 is pèsmèri tarăwo or jèmpoka tarāwo; 18 juāu tarāwo; 24 èsèr tarāwo; 36 nimpe; 72 jālmpö nimpè or jèmpoka nimpè (twice thirty-six). Numerals are placed before what is counted.

## Section 5. Verbs.

The usual word-order is subject (S) - object (R) - predicate (P), but examples of other sequences may be found, e.g. péèngku bor jèr, "he proah makes" or péèngku jèr bor, "he makes proah".

The most striking feature of the conjugation is the often occurring absence of person-distinction in the subject-indices which follow the bases. In the case the person-distinction is expressed by the personal pronoun. The relation-indices precede the base and may differ according to some tenses. It does not seem possible to give an all round paradigm of the tense-, mood-, aspect-, subject- and relation-indices as the short notes of Drabbe analyse only some verbal bases. We will discuss the different formations of the base betna intransitively used meaning "to break down", transitively used meaning "to smash", and we shall mention formations of other bases in so far it helps us to get a better insight in this language.

## I. VERBAL PREDICATES.

1) a-bèlna, "intransitive to break down some person"; intr. index-B-t/s; a-bèlna-i, "intransitive to break down we"; intr. index-B-t/s; $a$-bètna-è, "intransitive to break down you/they"; intr. index-B-t/s; né-bètna-i, "thee to smash we"; r-B-t/s. Translation: "some person breaks down"; "we break down"; "you or they break down"; "we smash thee". The present formation has the following subject-indices following the base: singular zero; 1 p. pl.: $i$; non 1 p. pl.: $\dot{e}$; the relation-indices preceding the base are: 1 p.s.: $a ; 2$ p.s. and 1 p.pl.: $n ; 3$ p.s. and 2 and 3 p. pl.: $i$. Besides the absence of relation-indices the intransitive use of a base is expressed by the vowel a preceding the base. In the base rwo, "to hide" the final $o$ is replaced by the vowel $a$ before a sub-ject-index 1 p. pl.: e.g. $a-r w a-i$, "we hide ourselves". The base ntjara, "to get up" or "to rouse", gets a ligature $k(a)$ before the subject-indices and has as subject-index $a$; the resultant forms are: a-ntjara- $k$-0, "some person gets up"; $a$-ntjara-ka-i, "we get up". The base owmpè, "to bathe" is found without the intransitive index $a$.
2) ta-bèma-i, "intransitive to break down some person/to-day preterit"; intr. index-B-t/s;
ta-bèlna-mè, "intransitive to break down two persons/to-day preterit"; intr. index-B-t/s;
a-bèlna-ins, "intransitive to break down some people/to-day preterit"; intr. index-B-t/s;
$b \dot{e}$-bèlna-i, "me to smash some person"; r-B-t/s. Translation: "some person broke down to-day"; "two persons broke down to-day"; „some people broke down to-day"; "some person smashed me". This formation expresses a to-day preterit; in intransitive use the subject-indices are in the singular, dual and plural: $i$, mè and ins. As the subject-indices differ from those of the present tense, they have the function of tenseindices at the same time. In the transitive use the subject-indices are: $i$ with a singular subject and a singular or plural object; mè with a plural subject and a singular object; ins with a plural subject and a plural object. The relation-indices are: 1 p.s.: bè; 2 p.s.: kèn; 3 p.s.: sé; 1 p. pl.: nè; non 1 p. pl.: $i$. The intransitive index is $t a$ for the singular and dual, $a$ for the plural. In intransitive use the base rwo has the subject-indices: $w i$ in the singular; wè in the dual; ins in the plural, but in transitive use: wi with a singular subject and a singular object; ai with a singular subject and a plural object; wè with a plural subject and a singular object; ins with a plural subject and a plural object. The base ntjara agrees with the base rwo according to the conjugation but adds the ligature $k(a)$ before the index ins and the index $a$. The base ownpe has the same form for dual and plural and has as relationindices those of the present.
3) ta-bèlna-nt, "intransitive to break down some person/yesterday preterit"; intr. index-B-t/s;
$k w o-b e ̀ l n a-i$, "intransitive to break down some people/yesterday preterit"; intr. index-B-t/s;
kun-belna, "us to smash some person/yesterday preterit"; r-B-t/s.
Translation: "yesterday some person broke down"; "yesterday some people broke down"; "yesterday some person smashed us". The expression of the yesterday preterit takes place by some distinct subjectindices; moreover another intransitive index and vowel-change in the relation-index occur. In intransitive use the subject-indices are singular: $n t$; dual: ntrains; 1 p. pl.: $i$; non 1 p. pl.: $\dot{e}$. With a subject-index singular and dual the intransitive index is $t a$, with a subject-index plural: $k w o$. In the transitive use the subject-indices are: $n t$ with a singular subject and a singular object; zero with a singular subject and a plural object; ntrains with a plural subject and a singular object; $i$ with a subject 1 p.pl. and a plural object; $\dot{e}$ with a subject non 1 p. pl. and a plural object. The relation-indices are: 1 p.s.: bè; 2 p.s.: kèn; 3 p.s.: sé; 1 p.pl.: kun; non 1 p.pl.: su. The base rwo occurs with the subjectindices wra instead of $n t$, and wrains instead of ntrains. The base ntjara has in intransitive use the subject-indices: int, intrains, kai, kaè; in
transitive use: int, ko, intrains, kai and kae; the ligature $k(a)$ can easily be analysed from them. The base owmpè shows no special dual forms; the subject-indices are zero in the singular and ie in the plural; the relation-indices are: 1 p.s.: $u$; 2 p.s. and 1 p. pl.: kun; 3 p.s., 2 p. pl. and 3 p. pl.: su.
4) $a$-bèlna-u, "intransitive to break down some person/distant preterit"; intr. index-B-t/s;
ta-bèlna-ngkai, "intransitive to break down two persons/distant preterit"; intr, index-B-t/s;
$a-b e ̀ l n a-k a i$, "intransitive to break down some people/distant preterit"; intr, index-B-t/s;
$n \grave{e}-b e ̀ t n a-k a i$, "us to smash some people/distant preterit"; r-B-t/s.
Translation: "some person broke down"; "two persons broke down"; "some people broke down"; "some people smashed us". A distant preterit is indicated by distinct subject-indices. In intransitive use the subjectindices are singular: $u$; dual.: ngkai; plural: kai. The intransitive index is $a$ in singular and plural formations, $t a$ in the dual. In the transitive use the subject-indices are: $n g k$ with a singular subject and a singular object; $u$ with a singular subject and a plural object; ngkai with a plural subject and a singular object; kai with a plural subject and a plural object. The relation-indices are the same as in the to-day preterit.

In intransitive use the base rwo has the subject-indices: wa, wai, kai; in transitive use: wu, $a, w a i, k a i$.

The base ntjara occurs in intransitive formations with the subjectindices: ingk, ingkai, kakai; in transitive forms with: ingk, kan, ingkai, kakai; the ligature is evident.

The base owmpè has no special dual and the relation-indices are the same as in the to-day preterit.
5) sé-kra-bèlna, "future intransitive to break down I or he"; t-intr. index-B-t/s;
sé-ka-bèlna-ntai, "future intransitive to break down you"; t-intr. index-B-t/s;
sé-bèr-bèlna, "future me to smash he"; t-r-B-t/s. Translation: "I shall or he will break down"; "you will break down"; "he will smash me". The future tense has a proper tense-index: sé preceding the intransitive or the relation-indices. The intransitive formations show different intransitive indices according to different persons: 1 p.s., 1 p. d., 2 p. d,, 3 p.s., 3 p.d.: kra; 2 p.s., 2 p. pl.: $k a ; 1$ p. pl., 3 p. pl.: $a$. The subjectindices are: in 1 p.s. and 3 p.s.: zero; 1 p. pl., 1 p.d., and 2 p.d.: $i$; 2 p. pl.: ntai; 3 p.d.: mè; 3 p. pl.: $\dot{e}$. In the transitive formations the subject-indices are: zero with a singular subject and a plural object; $i$ with a subject 1 p. pl. and a singular or plural object, and with a subject $2 \mathrm{p} . \mathrm{pl}$. and a singular object; ntai with a subject $2 \mathrm{p} . \mathrm{pl}$. and a plural object; mè with a subject 3 p . pl. and a singular object; $\dot{e}$ with a
subject 3 p. pl. and a plural object. We come across, however, the subjectindex $n t$ as index 2 p.s. in combination with an object-index 1 p. pl. or 3 p. pl. The relation-indices are: 1 p.s.: bèr; 2 p.s.: ntè; 3 p.s. sèr; 1 p. pl.: ne; non 1 p.pl.: $i$; when, however, the subject is $2 \mathrm{p} . \mathrm{s}$. or pl. the relation-index 1 p.s. is $b \grave{e} ; 3$ p.s.: sè; 1 p. pl.: kèn; 3 p. pl.: sè.

In intransitive use the base rwo gets the subject-indices: $1 \mathrm{p} . \mathrm{s}$. and 3 p.s.: $u$; 1 p.d. and 2 p.d.: wi; 3 p.d.: wè; 1 p.pl.: ai; 2 p.pl.: ntai; 3 p. pl.: je; in transitive use: $u$ with a singular subject and a singular object; zero with a subject $1 \mathrm{p} . \mathrm{s}$. and $3 \mathrm{p} . \mathrm{s}$. and a plural object; $n t$ with a subject 2 p.s. and a plural object; wi with a subject 1 p. pl. and 2 p. pl. and a singular object; we with a subject 3 p . pl. and a singular object; $a i$ with a subject $1 \mathrm{p} . \mathrm{pl}$. and a plural object; ntai with a subject $2 \mathrm{p} . \mathrm{pl}$. and a plural object; jè with a subject 3 p . pl. and a plural object.

The base ntjara has in the intransitive formations the subject-indices: singular: $i$; 1 p.d., 2 p.d.: ii; 3 p.d.: imè; 1 p.pl.: kai; 2 p. pl.: kantai; 3 p. pl.: kae; in the transitive formations the following subject-indices occur: $i$; ko; kant; ii; ime; $i$; kantai; kai; with the same functions as mentioned in the transitive formations of the base rwo; the ligature may be noticed.

In intransitive use the base owmpè gets the subject-indices 1 p.s. and 3 p.s.: zero; 2 p.s.: $n t$; 1 p. pl.: $i ; 2$ p. pl.: ntai; 3 p. pl.: $j e$; in the transitive use: zero with a subject $1 \mathrm{p} . \mathrm{s}$. and $3 \mathrm{p}, \mathrm{s}$. and a singular or plural object; nt with a subject 2 p.s. and a singulat or plural object; $n t$ with a subject 2 p.s. and a singular or plural object; $i$ with a subject 1 p. pl. and a singutar or plural object; ntai with a subject 2 p. pl. and a singular or plural object; je with a subject 3 p . pl. and a singular or plural object. The relation-indices are the same as in the present, but when the subject is $2 \mathrm{p} . \mathrm{s}$. or pl . the relation-indices are $1 \mathrm{p} . \mathrm{s}$.: b; 1 p. pl.: kèn; 2 p. pl., 3 p.s. and 3 p. pl.: s.
6) Besides the formations analysed so far, Drabbe gives the different forms in the five tenses of the base mākar, "to go away"; the base has a reflexive character and suppletion of bases in singular and plural occurs; this base does not agree in many respects with the examples given just now and their analysis. A short survey seems necessary.

| Present | To-day Pret. | Yesterday Pret. | Distant Pret. | Future |
| :---: | :---: | :---: | :---: | :---: |
| 1 p.s. wa-mākar | wa-mākarai | ko-mãkar | wa-mākara ${ }^{\text {a }}$ | so-makar |
| 2 p.s. na-mākar | na-mākarai | kuna-mãkar | $n \mathbf{a}-m a ̄ k a r \mathbf{a}^{\prime \prime}$ | sékèna-makar |
| 3 p.s. ja-mäkar | ja-mäkarai | so-iamăkar | ja-mākara* | séa-makar |
| 1 p.d. $n$-iamākar | n-iamākarai | kun-iamākar | $n$-i amākara" | sén-ia-makar |
| 2 p.d. i-tamākar | i-iamăkarai | su-amākar | i-iamākara" | sés-amakarant |
| 3 p.d. i-iamākar | i-iamākarai | su-amäkar | i-iamākara ${ }^{\text {a }}$ | sé-iamakar |
| 1 p. pl. $n-\mathrm{i} a$ | $n-i \mathbf{a} i$ | $k \mathrm{u} n-i a$ | $n-i a^{\text {a }}$ | sén-ia |
| 2 p. pl. i-ia | i-iai | su-a | i-i $\mathbf{a}^{\text {a }}$ | sés-ant |
| $3 \mathrm{p} . \mathrm{pl}$. $\mathrm{i}-\mathrm{ia}$ | i-iai | $s \mathbf{u}-a$ | i-ia ${ }^{\text {a }}$ | sé-ia |

7) The negation is expressed by the element $j a^{u}$, "not" preceding the formations discussed in number 1 to 5 .
8) To express the interrogation, interrogative words are combined with the formations analysed in the preceding numbers.
9) The imperative formation is the same as the future formation without the tense-index sé. In the 1 p . and 3 p . the formation is mostly preceded by opo, in the 2 p . by $o^{4}$. The prohibitive is indicated by the word mèrimo followed by special forms. Drabbe gives only the following examples in which the intransitive index will be noticed: mèrimo ..... krowmpè, "let me or let him not bathe"; mèrimo krowmpè, "do not bathe"; mèrimo krowmpèi, "let us not bathe"; mèrimo krowmpèi, "do not bathe"; mèrimo krowmpèiè, "let them not bathe". Another prohibitiveindex is wai.

## II. NOMINAL PREDICATES.

supal pi mbaroa io, "bow that strong to be", S-demonstr.-B1-B2t/s. Translation: "that bow is strong". The nominal predicate is composed of the nominal-element as primary base and a conjugated form as secondary base. The forms of the secondary base in the different tenses will be given in the following part IH, n. 1.

## III. SOME PECULIARITIES IN VERBS.

1) Drabbe presents the complex predicate mpur with a secondary base; the primary base mpur does not occur by itself; in combination with a secondary base this complex predicate means "to like something or some person". When the complex predicate means "to like something" the secondary base has a reflexive character and occurs in the following forms:

| 1 p.s. | Present wo | To-day Pr. urai | Yesterd. Pr. kuraè | Distant Pr. ura" | Future séwo |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 p.s. | no | nèrai | kunèraè | nèra ${ }^{\text {a }}$ | sekè̀nè |
| $3 \mathrm{p} . \mathrm{s}$. | io | irai | suraè | ira ${ }^{\text {u }}$ | sésèrè |
| $1 \mathrm{p} . \mathrm{d}$. | no | nerai | kunèraè | nèra ${ }^{\text {a }}$ | séno |
| $2 \mathrm{p} . \mathrm{d}$. | io | irai | suraè | iras | sésè |
| 3 p.d. | io | irai | suraè | ira ${ }^{\text {a }}$ | sésèrè |
| $1 \mathrm{p} . \mathrm{pl}$. | nèrar | nèrarai | kunèrar | nèraras | sénèrar |
| $2 \mathrm{p} . \mathrm{pl}$. | irar | irarai | surar | irara" | sésèrnt |
| 3 p.pl. | irar | irarai | surar | irara ${ }^{\text {a }}$ | seirar |

When the complex predicate means "to like a person" the usual rela-tion-indices are combined with the secondary base and the subjectindices mostly resemble those of the simplex base. Some examples will
do: mpur wèr, "some person likes me"; mpur wèrée, "some people like me"; mpur bèèi, "some person liked me to-day"; mpur nèri, "some person likes us to-day"; mpur bėème, "some people liked me to-day"; mpur nerns, "some people liked us to-day"; mpur sėent, "some person liked him yesterday"; mpur kènèngkai, "some people liked thee"; mpur sékènèrnt, "thou wilt like me"; mpur sébèrèma, "they will like me". In the different formations the common secondary base in the intransitive as well as in the transitive formations is $r$; the exact meaning is not easy to fix. Some formations of this base $r$ may occur as a simple base and mean "to give"; some have the meaning of "to do".
2) ntèntjar $u$-puno, B2-r-B1. Translation: "I shiver". The analysis shows that the grammatical subject is a 3 p. s.; the logical subject (1) is indicated by the relation-index $u$; closely rendered the meaning is: "it trembles me, trembling affects me".

## Section 6. Linking-elements.

ètè indicates possession (cf. sect. 2 and 3); a indicates the subject of the sentence; ni indicates place; wi expresses "together with"; nèm indicates "by means of"; wa indicates "because of". The linking-elements always follow the word they qualify.

## CHAPTER VII

## MORAORI-LANGUAGE

## Section 1. Name and Territory.

There is a little village Mbur about ten miles to the east of Merauke; the inhabitants (forty souts) call themselves Mora $\%$ i. They are given the name Manggat by the Marind-people.

## Section 2. Nouns.

The relations between nouns may be expressed as follows:
a) two nouns may form a compound in which the first element qualifies the second, e.g. bosik-fièru, "pig-tail"; pojo-sèr rl, "coconut-leaf";
b) a linking-element following the noun may be used to express various relations, e.g. sour kènggè, "house from", i.e. "from the house"; pari na, "father in behalf of", i.e. "for father"; pari nam sour, "father of house", i.e. "the house of the father".

## Section 3. Pronouns.

|  | Set I | Set II | Set III |
| :--- | :--- | :--- | :--- |
| 1 p.s. | $n a$ | $n a \mathbf{i}$ | nam |
| 1 p.pl. | $n i e ̀ ~$ | $n i e ̀ \mathbf{i}$ | ninam |
| 2 p.s. | $k a$ | $k a \mathbf{i}$ | kanam |
| 2 p.pl. | $k i \mathbf{e ̀}$ | kièi | kinam |
| 3 p.s. | nggafi | $n g g a m e ̀$ | nggafinam |
| 3 p.pl. | nggamdè | nggamdè | nggamdènam |

Explanation to the table:
Set I contains the personal pronouns used as subject in the sentence; set II consists of forms of the personal pronoun used as relation showing contraction of the subject-forms (set I) and the linking-element $i$; set III has forms indicating a possessive relation; this forms are composed of the personal pronoun and the linking-element nam; they are used either adjectively preceding the noun, or substantively (cf. section 2 , n. b).

Section 4. Numerals.
There are only four numerals: sèkudu; jènadu; pènèr; ndènadu; larger
numbers are expressed by means of hands and feet. The numerals follow the word they belong to.

Section 5. Verbs.
The usual word-order is subject (S) - object (R) - predicate (P), e.g. pari jom pendi, "father proah makes", i.e. "father makes a proah"; the sequences S-P-R1-R2, S-R2-R1-P and S-R1-R2-P are found as well. The most striking feature of the conjugation is the suppletion of different bases according to the number of subjects or objects. The subject-indices follow the bases, the relation-indices are prefixed or infixed to the base. Tenseindices are mostly combined with the subject-indices so that it is impossible to indicate them separately.

## I. VERBAL PREDICATES.

First we analyse the different forms of the two bases: $t \ddagger r \ddagger m$; and $k \ddagger s \ddagger m$, both used in one paradigm to express our "to beat". The relationindices are infixed to these bases. Afterwards we will give some formations of a base which has the relation-indices prefixed.

1) in the present tense the following bases occur:
tèr-i-m, singular subject with object $1 \mathrm{p} . \mathrm{s}$.;
tèr-a ${ }^{\circ}-m$, singular subject with object 2 p . s.;
tèrm, singular subject with object 3 p.s. masc.;
torm, singular subject with object 3 p.s.fem.
The relation-indices are 1 p.s.: $i$ (ri?); 2 p.s.: $a^{\circ} ; 3$ p.s.: zero, but the difference of sex is indicated by vowel-change of the base. Drabbe is not sure whether gender occurs in the language. The subject-indices will be given further on together with those of the other tenses.
2) kasa-ri-m, singular subject with object $1 \mathrm{p} . \mathrm{pl}$;
kas-a ${ }^{\circ}-m$, singular subject with object 2 p. pl.;
kasam, singuiar subject with object 3 p. pl.;
3) kas-wa-ri-m, plural subject with object 1 p.s.;
$k a s-w a-a^{\circ}-m$, plural subject with object 2 p.s.;
$k e ̀ s-w e ̀-m$, plural subject with object 3 p. s. masc.;
kas-wa-m, plural subject with object 3 p.s. fem.
The relation-indices are, 1 p.s.: ri; 2 p.s.: $a^{\circ} ; 3$ p.s.: zero, but sex is indicated by vowel-change. The plural number of the subject is expressed by $\boldsymbol{w}$ before the relation-index.
4) kasa-ri-m-r, plural subject with object 1 p. pl.;
kas-ao-m-r, plural subject with object 2 p. pl.;
kasam-r, plural subject with object 3 p. pl.
The relation-indices are: $r i, a^{\circ}$ and zero; the plural number of the subject and the object is indicated by the consonant $r$ put at the end of the forms.

5）The subject－indices follow the bases．There are，however，some forma－ tions which have a subject－indication infixed．
kès－n－èm，subject 2 p．pl．with object 3 p．s．masc．；
$k a s-n-a m$ ，subject 2 p．pl．with object 3 p．s．fem．；
kas－n－am－r，subject 2 p ．pl．with object $3 \mathrm{p} . \mathrm{pl}$ ．
The infix $n$ indicates a subject 2 p ．pl．here．When this infix occurs， a difference is made in the formations of the 2 and 3 p ．pl．When the consonant $n$ does not occur，the plural formations are only distinguished in 1 p．and non 1 p．
6）The following table indicates the different subject－indices in the dif－ ferent tenses．Note，however，that the dual forms occur only when the object is in the singular，and that a distinction is made only between 1 p ．and non 1 p ．

|  | Present | Torday and gesterday－pret． | Before <br> yesterday－prec． | dist．－prec． | future |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 p．s． | $\ddagger+d u$ | $\ddagger b \ddagger n$ | $\ddagger+f \ddagger r i$ | 中 | $\ddagger r u$ |
| 1 p．d． | ＋${ }_{\text {den }}$ | $\ddagger$ 隹 $\ddagger n$ | $\ddagger f \ddagger r i$ | \＄ |  |
| $1 \mathrm{p} . \mathrm{pl}$ ． | $\ddagger m$ 中 $n$ | $\ddagger b \ddagger n$ | $\ddagger f \ddagger r i$ | $\pm b i$ | $\ddagger m \ddagger n$ |
| non 1 p．s． | $\ddagger$ | ＋f | \＄fi | $\ddagger m \ddagger f$ | $\ddagger$ |
| non 1 p．d． | ＋ | $\ddagger m$ | $\ddagger f i$ | 串 $m \ddagger f$ | ＊ |
| non 1 p．pl． | ＋ | $\ddagger b$ | $\ddagger f i$ | $\ddagger b \ddagger f$ | $\ddagger m$ |

In the subject－indices of the preterit before yesterday the consonant $f$ is common to all forms．Perhaps this $f$ is the tense－index．Besides by the distinct subject－indices the future is indicated by the element $p a$ which precedes the formation and may be separated from it．
7）In order to give some idea about the combination of the subject－indices with the different bases mentioned in the numbers 1 to 5 ，we shall give here some examples of the 1 p ．in the different tenses：
ter $r-\alpha^{\circ}-m-\alpha d u$ ，＂to beat thee I／present＂；B－with r－t／s；
ter－a－m－obon，＂to beat thee I／to－day and yesterday preterit＂；B－with r－t／s；
tèr－ao－m－ofori，＂to beat thee I／preterit before yesterday＂；B－with $\mathrm{r}-\mathrm{t} / \mathrm{s}$ ； tèr－ao－m－a，＂to beat thee I／distant preterit＂；B－with $\mathrm{r}-\mathrm{t} / \mathrm{s}$ ；
pa tèr－a－m－aru，＂future to beat thee I／future＂；T2－B－with r－t1／s；
Translation：＂I beat thee＂；＂I beat thee（to－day or yesterday）＂；＂I beat thee（before yesterday）＂；＂I beat thee（distant preterit）＂；＂I shall beat thee＂．
8）Besides the bases in which the relation－index is infixed，there are bases to which the relation－index is prefixed．The relation－indices are：$i$ or $j e$ in 1 p．；$k$ in 2 p．；zero in 3 p．；e．g．jé－fi－a，＂me to see he＂； $\mathbf{r}-\mathrm{B}-\mathrm{t} / \mathrm{s}$ ，＂he sees me＂；$k$－if－of，＂thee to see he＂；r－B－t／s，＂he saw thee＂；pa if－è， ＂future him to see he＂；T2－B－t1／s，＂he will see him＂．
9）There are bases which have no relation－index at all；the object must
be expressed by the use of the personal pronouns. The subject-indices do not agree in all details with those of the bases mentioned in the preceding numbers. Drabbe has the following examples of the future formation of the base kafr, "to drink": pa kafraru, "I shall drink"; pa Kafrarèn, "we two shall drink"; pa kofrimon, "we shall drink"; pa kafra, "non 1 p.s. will drink"; pa kanafra, "you two will drink"; pa konofrim, "you will drink"; pa kafra, "they two will drink"; pa kofrim, "they will drink".
10) The negation is expressed by the index mar in all tenses except in the future, where madi is found. The negation precedes the formations.
11) The "yes-or-no-question" has the interrogative-index ai following the usual tense-formations, e.g. kowor tam ai, "did he dream?"; when interrogative words occur, e.g. aina, "who" or aimbeni, "what", they precede the base and the interrogative-index ai is not found, e.g. aina umam, "who comes there?".
12) The imperative is expressed by the future formation without the element $p a$. The prohibitive is indicated by the negative element ongga preceding the imperative formation.

## II. NOMINAL PREDICATES.

1) kumraon na tobondu, "sorcerer I to be"; B1-S-B2t/s. Translation: "I am a sorcerer". The nominal predicate is composed of a nominal-element and a secondary base. The secondary base "to be" is found in the following forms:

|  | Present | Preterit | Future |
| :---: | :---: | :---: | :---: |
| $1 \mathrm{p} . \mathrm{s}$. | tobondu | orouje | junggo |
| 1 p.d. | tobondon | oroujè | jèrnggo |
| $1 \mathrm{p} . \mathrm{pl}$. | trèmèn | mirèrnggri | jèrnggurim |
| 2 p.s. | to | kujemèf | kunggo |
| 2 p.d. | nodo | noroujèméf | kèrnggo |
| $2 \mathrm{p} . \mathrm{pl}$. | nèdrè | minènggrimèf | kèrnggurim |
| 3 p.s. | to | kujèmèf | nggu |
| $3 \mathrm{p} . \mathrm{d}$. | to | kujèmèf | nggo |
| $3 \mathrm{p} . \mathrm{pl}$. | tèrèm | minggrimèf | nggurim |

2) There are some complex predicates in this language, e.g. kowor ta, "to dream"; fimèf mim, "to be sleepy"; jèmèr rim, "to be hungry" etc. These complex predicates show moreover this peculiarity that they are conjugated in an impersonal way. The subject-index is 3 p.s.; the rela-tion-index (as a prefix before the secondary base) indicates the person who is affected by the process expressed by the primary base. A similar formation is found in the secondary base nggo, "to be", used only in the future singular forms and in the base nggurim, used in the future plural
forms. These two bases have the relation-indices prefixed and indicate by them the person who is the subject of the process.

## Section 6. Linking-elements.

Besides the possessive element nam and $i$ used in the personal pronouns to express an object-form, there are some linking-elements with other functions: sour kènggè, "house from" i.e. "from the houlse"; sour ku, "house to" i.e. "to home"; pari na, "father in behalf of" i.e. "for father". The linkingelements always occur following the word they qualify.

## CHAPTER VIII

## JEI-LANGUAGE

## Section 1. Name and Territory.

The Jei-language is the language of a tribe, living on the upper-course of the Maro-river. The number of the people amounts to one thousand at this moment. The speakers of this language call themselves Jéi-kera", "Jeipeople", and they call their language Jei-kerko, "Jei-language".

## Section 2. Nouns.

There is no distinction in nouns according to sex and gender. The relations between nouns are indicated here in two ways:
a) two nouns form a compound word, the first constituent qualifies the second, e.g. wur-po, "coco-nut";
b) a linking-element, following the noun, is used expressing a possessive relation viz. $\ddagger n \ddagger$; e.g. Kiti éni $a k$, "Kiti of house", i.e. "the house of Kiti".

## Section 3. Pronouns.

Set I Set II Set III Set IV

| 1 p.s. | $n i$ | $n \cdot \bar{a}$ | $n \times$ àné | n'a |
| :---: | :---: | :---: | :---: | :---: |
| 1 p.pl. | $b i$ | $b i$ | $b i n i$ | biè |
| 2 p.s. | $b u$ | $b \bar{a}$ | $b$ āné | $b a$ |
| $2 \mathrm{p} . \mathrm{pl}$. | $b u$ | $b a$ | $b \mathbf{u} n i$ | bue |
| 3 p . | èd | $\dot{e} d$ è | èdèni | èdè |

Explanation to the table:
Set 1 contains the forms of the personal pronoun used as subject. Set II consists of pronouns indicating possessive relations with words indicating relationship; they precede these names and are closely connected with them, e.g. n"ā-na 0 , "my father". Set IIl contains the personal pronoun to which the linking-element $n i$ or nè is attached; they indicate possessive relations. Set IV comprehends the personal pronouns used as relation, formed by the contraction of the personal pronouns and a linking-element $a$ or $\dot{e}$.

## Section 4. Numerals.

There are only two numerals viz. nämpèi, "one", and jètapaé, "two". Number "three" is indicated by the compound jetapaé-nämpei. The position of the numerals is before what is counted.

## Section 5. Verbs.

A predicate in the Jei-language always contains two bases. One of these bases remains unchanged (primary base); to the other the group of indices is attached (secondary base). Sometimes the primary and secondary bases form a set phrase with a meaning not belonging to one of the constituents by itself but only to their combination. The primary and secondary bases may be identical or are two forms of the same base or different bases occurring in combination to each other, e.g. andèrè andèrè, "to climb"; atjégè itjégè, "to chop"; ki wadèra, "to say". The subject-indices do not express the person, bat only the number of the subject (though in some exceptional cases both are expressed). The person is indicated by the personal pronouns. The retation-indices indicate person, number and in 3 p.s. the sex of the relation. These indices and those of tense, mood and aspect will be given further on. In sentences in which no relation is expressed the subject may precede the two bases or may be inserted between them; e.g. amai di apa, "father to go", or: di amai apa, "to go father to go", i.e. "father came". In sentences in which subject and relation occur, the relation is found either between the subject and the primary base or between the two bases, e.g. bu amaia olgè jelgè or: bu olgè amaia jelgè, "thou boundst father".

## 1. VERBAL PREDICATES.

1) a) $d i a p$, "to go with a singular subject"; B1-B2;
di $a p-e$, "to go with a dual subject"; $\mathrm{B} 1-\mathrm{B} 2-\mathrm{n} / \mathrm{s}$;
di $\alpha$-é, "to go with a plural subject"; B1-B2-n/s. Translation: "some person goes"; "two persons go"; "some people go". Those bases of this language that have an intransitive meaning occur in three forms according to wether the subject is singular, dual or plural. The singular is indicated by a zero-modification, the dual by addition of a vowel $\dot{e}$ to the base, the plural by the loss of the final consonant and the addition of é. According to Drabbe this plural formation is used for all intransitive bases, though he gives only one example. This formation expresses the present tense by a zero-modification.
b) olgè wo-lg, "to bind me with a singular subject"; B1-r-B2; olgè wo-lg-è, "to bind me with a plural subject"; B1-r-B2-n/s; olgè $n e ̀-l g-i$, "to bind us or thee with a plural subject"; B1-r-B2-n/s. Translation: "some person binds me"; "some people bind me"; "some people bind us or thee". In bases with a transitive meaning the relationindex occurs before the secondary base. These indices are: $1 \mathrm{p} . \mathrm{s} .:$ wo; 1 p. pl. and 2 p.s.: nè; 2 and 3 p.pl.: jé; 3 p.s.masc.: jé; 3 p.s.fem.: gwé. In order to indicate the subject zero is used for some singular person; $\grave{e}$ or $i$ for some plural person, i.e. the vowel $\grave{e}$ is used with the relation-index $1 \mathrm{p} . \mathrm{s}$. and 2 and $3 \mathrm{p} . \mathrm{pl}$; the vowel $i$ with the relation-
index 1 p. pl., 2 p.s. and 3 p.s. This formation has a present tense meaning. The tense-index is zero.
c) wènj wo m, "to be present myself"; B1-r-B2;
wènj nè-m-i, "to be present ourselves we two"; B1-r-B2-n/s;
wènj nè-m, "to be present ourselves we"; B1-r-B2. Translation: "] am present"; "both we are present"; "we are present". In bases with a reflexive character the relation-indices refer to the person of the subject and as the usual relation-indices differ for the different persons, the person of the subject is indicated at the same time. The relation-indices have been mentioned in connection with the base olgè lg. The relationindex 2 p.s. however is not nè but $n \alpha$. The dual of the subject is indicated by a vowel placed after B2 viz. $i$ in 1 p.; $\dot{e}$ in 2 and 3 p. The given formation is of a present tense, indicated by a zero-modification.
2) a) di ap-a, "to go preterit"; B1-B2-t;
di ap- $a-n \mathrm{e}$, "to go preterit dual"; $\mathrm{B} 1-\mathrm{B} 2-\mathrm{t}-\mathrm{n} / \mathrm{s}$;
di a é-a, "to go plural preterit"; B1-B2-n/s-t. Translation: "some person went"; "two persons went"; "some people went". These formations differ from the $d i a p$ examples of the preceding number through the addition of the tense-index $a$. The meaning is a preterit to-day, the dual indication is an $\grave{e}$ preceded by the ligature $n$.
b) olgè wo-lg-a, "to bind me with a singular subject preterit": B1-r-B2-t; olgè nè-lg-è, "to bind us with a singular subject preterit"; B1-r-B2-t; olgè wo-lg-a-né, "to bind me with plural subject preterit"; B1-r-B2-t-n/s; olgè nè-lg-è-ni, "to bind us with plural subject preterit"; B1-r-B2-t-n/s. Translation: "some person bound me"; "some person bound us"; "some people bound me"; "some people bound us". Here the sound $a$ or $\dot{e}$ occurs indicating the preterit to-day. The rules about the use of either $a$ or $\dot{e}$ are not clear. The plurality of the subject is expressed by $\dot{e}$ or $i$, connected with the tense-index by the ligature $n$. The number-index né occurs after tense-index $a$; $n i$ after index $\dot{e}$. In this preterit the formation with 1 p . pl. and 2 p.s. are not identical as in the present tense formation, because the $1 \mathrm{p} . \mathrm{pl}$. is combined with the tense-index $\dot{e}$ and 2 p.s. with the tense-index $a$.
c) wènj wo-m-a; wènj na-ma; wèn jé-m-è; the preterit form of the reflexive base wènj is quite analogous to that of olge $1 g$, except for the number indication: s. and pl. have zero; dual: $1 \mathrm{p} .: n i ; 2 \mathrm{p}$. and $3 \mathrm{p} .:$ né. 3) di ap-ènd-a, "to go preterit, preterit"; B1-B2-t2-t1; olgè wo-lg-ènd-a, "to bind me preterit, preterit"; B1-r-B2-t2-t1; wènj wo m-ènd -a , "to be present myself preterit, preterit"; B1-r-B2-t2-t1; Translation: "some person went"; "some person bound me"; "I was present". The tense-index is ènd in these formations and indicates a preterit viz. yesterday. The forms are except for this tense-index analogous to those of the preceding number.
3) a) di ko-ap-ag, "to go preterit"; B1-t1-B2-t2;
di ko-ap-ag-é, "to go preterit dual"; B1-t1-B2-t2-n/s;
di ko-a-é~nd-ag, "to go plural preterit"; B1-t1-B2-n/s-suff.-t2.
Translation: "some person went"; "two persons went"; "some people went". The tense-index is ag with prefix ko. The meaning is: a preterit preceding the day of yesterday. In the plural the base contains the element nd which has not yet been explained.
b) olgè kuè-lg-ag, "to bind me preterit"; B1-r-B2-t. Translation: "some person bound me". The tense-index ag or èg means a preterit before the day of yesterday; distinct relation-indices occur viz. 1 p.s.: kwe; 1 p. pl. and 2 p.s.: kwènè; 2 and 3 p. pl.: tjè; 3 p.s.masc.: tié; fem. $k w e ́$. Plurality of subject is indicated by $\dot{e}$ or $i$, already familiar to us.
c) wenj ko-m~ag, "to be present"; B1-tl-B2-t2. Translation: "I was present". The formation is analogous to that of olge lg, except that a dual occurs; so we have zero as a number-index in the singular and plural; in the dual $i$ in 1 p . and $e$ in 2 and 3 p . The relation-index 1 p.s. does not occur, probably by the influence of the tense-index ko.
4) a) $d e-b-\mathrm{a} p d i$, "future me to go"; $\mathrm{t}-\mathrm{r}-\mathrm{B} 2-\mathrm{Bl}$;
$d \dot{e}-b-a p-e ́ d i$, "future both of us to go"; t-r-B2-n/s-B1;
$d \grave{e}-b-a-e ́ d i$, "future ths to go"; t-r-B2-11/s-B1. Translation: "I shall go"; "we two shall go"; "we shall go". These formations express the future by means of the tense-index $d \dot{e}$. The base occurs with a reflexive character and the relation-indices differ in the three persons. So the person of the subject is indicated. The number of the subject is expressed as usual in the bases, di-ap. The relation-indices are: $1 \mathrm{p} .: b ; 2 \mathrm{p}:: k ; 3 \mathrm{p} .: k e n$. It is important to note that the usual sequence $\mathrm{Bl}-\mathrm{B} 2$ is inverted here: B2-B1.
b) dè-na-lg-è olgè, t1-r-B2-t2-B1;
dè-ko-lg-è olgè, t1-r-B2-t2-B1;
$d e-k w e ̀ n \dot{e}-\lg -\mathrm{è}-i$ olgè, t1-r-B2-t2-n/s-B1. Translation; "I shall bind thee"; "thou wilt bind me"; "they will bind her". In the first example $d e \dot{e}$ is tense-index indicating the future; $n a$ is the relation-index 2 p.s.; $l g$ is the secondary base; $\dot{e}$ is tense and aspect-index expressing that the process takes place in the future with a connotation of doubt about the actual happening; olgè is the primary base. The plain sequence B1-B2 is inverted here $\mathbf{B 2 - B 1}$. In this formation the relation-index has at the same time the function to indicate the subject of the sentence as the relation-indices differ according to the person of the subject they accompany. So we find as relation-index:
1 p.s. ko together with a subject 2 p.; kone together with a subject 3 p .;
1 p. pl. kune together with a subject 2 p. or 3 p.;
2 p.s. $\quad n a$ together with a subject $1 \mathrm{p} . ;$ kone with a subject 3 p .; 2 and 3 p. pl. $b \dot{e}$ together with a subject 1 p.; tjène with a subject 3 p.;

3 p.s.masc. bé together with a subject $1 \mathrm{p} . ; \quad t j e$ with a subject 2 p .; tjéné with a subject 3 p.;
3 p. s. fem. gwé with a subject 1 p.; kwé with a subject 2 p.; kwéné with a subject 3 p .
The plurality of the subject is expressed by $\dot{e}$ or $i$, i.e. the vowel $\dot{e}$ occurs after the tense-index $a ; i$ occurs after the tense-index $\dot{e}$ or $\dot{e}$.
c) dè-b-èrtin wènj; t1-r-B2/t2-B1;
dè-b-èrtin-i-wènj; t1-r-B2/t2-n-B1;
dè-bè-marét wènj; t1-r-B2/t2-B1. Translation: "I shall be present"; "we both shall be present"; "we shall be present".
In the future the base wenj is not accompanied by the secondary base $m$ but by èrfin when the subject is singular or dual and by marén when the subject is plural. Tense-index and relation-indices are the same as in the given formation di ap. The number is indicated by a zero for singular and plural and by $i$ for the dual of the three persons.
6) The negation of the formations analysed in the preceding numbers is expressed by the word jengga* placed in front of them. In the future the tense-index $d \dot{e}$ is not found here.
7) di arkam, B1-B2;
olgè wā-wèr, B1-r-B2;
wènj wā-wèr, B1-r-B2. Translation: "some person usually goes"; "some person usually binds me"; "I am usually present". The meaning of these formations is: the process usually takes place. The habitual aspect is not expressed by an index but by several secondary bases showing the conjugation. All primary bases can be divided into groups according to the distinct secondary bases they take in order to express this habitual aspect. Some primary bases event take different secondary bases for the different persons of the conjugation. The relation-indices are: 1 p.s.: $w a ; 1$ p.pl.: nè; 2 p. pl.: ja; 3 p.s.masc.: je; fem.: gé. Dual and plural are expressed in the same way as in the momentaneous formations.
8) di $b-a p, \mathrm{~B} 1-\mathrm{r}-\mathrm{B} 2$;
olgè ko-lg-è, B1-r-B2-m;
wènj b-èrfin, B1-r-B2. Translation: "let me go"; "bind me"; "I may be present". The adhortative, imperative and optative mood is expressed in a way analogous to the future formation. The sentence-order, however, is the usual one: B1-B2. The same relation-indices of the future formation which at the same time indicate the subject are found here. The bases di ap occur in combination with a relation-index and show a reflexive character; the bases olge lg have a mood-index: $a$ or $\dot{e}$; the base wènj is found together with a different secondary base.
9) The prohibitive is expressed by: mètè followed by the imperative.
10) Reciprocity of the process is expressed by a repetition of the primary base but when it is repeated the second base is connected with the indices of number, tense and mood. In the distant-preterit formation the conso-
nant $k$ precedes; so $k$ does in the imperative, e.g. olgè olgè-é, "we, you, they bind each other"; olgè olg-a-né, "we, you, they bound each other"; olgè olg-ènd-a-né, "we, you, they bound each other"; olgè k-olg-ag-é, "we, you, they bound each other"; dè-kèn-olg-aé olgè, "we, youl, they will bind each other"; olgè $k$-olg-áé, "bind each other".

## II. NOMINAL PREDICATES

taga ${ }^{\circ}$ jém, "strong to be he"; B1-B2;
guru kwénèg, "guru to be she"; B1-B2. Translation: "he is strong"; "she is guru". Drabbe gives only these two examples of nominal formations in which we have a nominal element as a primary base and a secondary base with the meaning of "to be".

## Section 6. Linking-elements.

In the analysis of the possessive relations in nouns we came across the linking-element $\ddagger \mathrm{n} \ddagger$. Other linking-elements are: bé, "from", e.g. $a k b \dot{e}$, "house from away", "from the house"; $p a^{\circ}$, "to"; tè, "at"; $a$ indicates that the preceding word is object in the sentence. The linking-elements always follow the word they belong to.

## CHAPTER IX

## B ${ }^{\circ}$ AZI-LANGUAGE

## Section 1. Name and Territory.

The Boazi-language is spoken in the region commonly called Gab-gab. The native speakers live on either side of the river Fly, where it crosses the Dutch-Australian border. The people call themselves $B \circ a z i$.

## Section 2. Nouns.

1) In the short notes of Drabbe on this language we read: „Nouns indicating men and animals show sex, nouns indicating things sometimes are neuter, sometimes masculine; the feminine does not seem to occur. Up to the present we cannot give any rule on this matter". Neuter nouns are followed by the verb in the singular.
2) Relations between nouns are expressed:
a) by a compound of two nouns in which the first constituent qualifies the second, e.g. piwi-bikisi, "coconut-leaf";
b) by the use of the linking-element $g \neq$, which is placed after the noun that indicates the possessor, and varies according to sex, gender and number of the possession; so we get masculine: gé; feminine: $g u$; neuter: $g h a$; plural: gi. Note, however, that gé is used in the plural and gi in the masculine singular as well.

## Section 3. Pronouns.

| 1 p.s. | $n o$ | $n$ |
| :--- | :--- | :--- |
| 1 p. pl. | $n i$ | $n$ |
| 2 p.s. | $o$ | $g h$ |
| 2 p.pl. | $z u$ | $z$ |
| 3p.s.masc. | ndéné | $t e ́ g e ́ / z$ |
| 3 p.s. fem. | $n d u n u$ | $t u g u / z$ |
| 3p.pl. | $n d i n i$ | $t i g i / z$ |

## Explanation to the table:

Set I consists of the forms of the personal pronouns occurring as subject or object in the sentence. Set II contains prefixes used to indicate the possessor with names of relatives, e.g. n-éas, "my wife". The possessive relation is expressed by the personal pronoun followed by the linking-element $g$ 半, e.g. no gé suki, "me of ax", i.e. "my ax".

## Section 4. Numerals.

There are three numerals only: $k^{u} o p \mathbf{d}$, "one"; ménas, "two"; midika, "three"; "four" is expressed by ménangqanék-ménangqanèk, where ménas is found in. Jambatokwi indicates "five"; the meaning of the word is not clear to Drabbe. The numerals follow the word they belong to.

## Section 5. Verbs.

The order of the parts of the sentence is: subject (S) - object (R) predicate ( P ). Subject and object are repeated in the predicate by the sub-ject-index(s) and the object-index( $\mathbf{r}$ ). The personal pronoun is used as subject or object for the sake of emphasis. The predicate consists of a base (B) and a group of indices indicating tense, mood, aspect, relation and subject. The indices have their own place, some always precede, some always follow the base. This will be indicated in details in the following numbers. The common subject-indices are:
1 p.s.: no; 1 p.pl.: $n i$ or $z a ; 2$ p.s.: gho; 2 p.pl.: $z t l ; 3$ p.s.masc.: $\mathrm{ge} / n d a$; fem.: gu/nda; $3 \mathrm{p} . \mathrm{pl}$.: gi/nda. In $3 \mathrm{p} . n d a$ occurs when the formation is preceded by some determination.
The relation-indices are closely connected with the base as prefix or as suffix or as prefix plus suffix; some bases have the relation prefixed, others suffixed etc.
The prefixes are:

|  | Prefix | Prefix-suffix | Suffix |
| :--- | :--- | :---: | :--- |
| 1 p.s. | $n$ | $n-n d$ | mb |
| 1 p. pl. | $n i$ | $n-n d$ | mbam |
| 2 p.s. | $g h$ | $g h-q$ | $b$ |
| 2 p. pl. | $z$ | $z-t$ | bam |
| 3p.s. | $m b o l o$ | $o-t$ | $o$ |
| 3 p. pl. | $z$ | $z-t$ | bam |

In the predicates a suffix for number in bases occurs, e.g. na-éwag-ém, $\mathrm{r}-\mathrm{B}-\mathrm{n}$, "to hear me with a plural subject"; na-éwag, r-B, "to hear me with a singular subject"; therefore the different bases that occur in combination must be indicated in the vocabulary of the language.

## I. VERBAL PREDICATES

1) no-sungguz-it, "I to wash present"; s-B-t. Translation: "I wash". In this formation no is the subject-index, sungguz the base and it the tense-index for the present. The process is represented as momentaneous by the zero-modification in opposition to the progressive form to be discussed later on.
2) ghangqa-ghomat, "I to sit"; t/s-B. Translation: "I sit". This formation is a present tense occurring with those bases that are intransitive. The
subject-indices (tense-indices at the same time) are: 1 p.s.: ghangqa; 1 p. pl.: ghangqaé; 2 p.s.: tandogho; 2 p. pl.: tandazu; 3 p.s.masc.: téndé; fem.: tundu; neuter: tanda; 3 p. pl.: tindi.
3) no-sungguz-at, "I to wash preterit"; s-B-t. Transtation: "I washed". The preterit formation is analogous to the present. The tense-index is $a t$.
4) ndogho-sungguz-it, "present/thou to wash present"; t1/s-B-t2; ghogho-sungguz-at, "preterit/thou to wash preterit"; t1/s-B-t2. Translation: "thou washest"; "thou washedst". Besides the formations mentioned in numbers 1 and 3 , tense may be indicated by distinct subject-indices varying in present and preterit. In the present the indices are: 1 p.s.: ngqai; 1 p. pl.: ndéza; 2 p. s.: ndogho; 2 p. pl.: ndazu; 3 p.s.masc.: ndé; fem.: ndu; 3 p. pl.: ndi. According to Drabbe these indices contain the element $n d$ as present tense-index. In the preterit the subject-indices are: 1 p.s.: nono; 1 p. pl.: nini; 2 p.s.: ghogho; 2 p. pl.: zuzu; 3 p. has $g \neq$.
5) a) no-ma-sungguz, "I future to wash"; s-t-B;
b) ni-ma-sungguz-im, "we future to wash plural"; s-t-B-n. Translation: "I shall wash"; "we shall wash". The process is represented here as to be accomplished to-day. This future is expressed by the usual subjectindices followed by the future tense-index $m a$. The plural of the subject is indicated by a special index added to the base (example b).
6) $n d-\dot{e}(m a)$ sungguz, "future I future to wash"; $\mathrm{t} 1-\mathrm{t} 2 / \mathrm{s}-(\mathrm{t} 3)-\mathrm{B}$. Translation: "I shall wash". The future to-day may be expressed also by the futureindex nd followed by the distinct subject-indices 1 p.s.: $\dot{e} ; 1$ p.pl.: $e i ; 2$ p.s.: $o ; 2$ p. pt.: $a ; 3 \mathrm{p} .: a$; after these stbject-indices the element $m a$ may occur in 1 and 2 p . singular and 3 p .s. and pl.; and the element $z a$ in $1 \mathrm{p} . \mathrm{pl}$.; $z u$ in 2 p . pl.
7) no-sungguz, "I to wash"; s-B. Translation: "I shall wash". The simplest formation s-B indicates that the process will take place to-morrow. The subject-indices are: 1 p.s.: no or $t a ; 1$ p. pl.: $n i$ or $z a ; 2$ p.s.: gho; 2 p. pl.: $z u ; 3$ p.: ma or nda. Usually the formation is preceded by the adverb ghasu, "to-morrow". Sometimes ghasu means "yesterday" but in that case the preterit formation occurs.
8) gha-ta-sungguz, "future I to wash"; t-s-B; gha-gho-na-sungguz, "future thou future to wash"; t1-s-t2-B; gé-na-sungguz, "he future to wash"; s-t-B. Translation: "I shall wash"; "thou wilt wash"; "he will wash". The more distant future is expressed by the tense-index gha for 1 and 2 p . and by a second future-index na for all persons except $1 \mathrm{p} . \mathrm{s}$. The subject-indices are: 1 p.s.: ta; 1 p. pl.: $z i ; 2$ p.s.: $g h o ; 2$ p. pl.: $z u ; 3$ p.: $g$ 束. The base is followed by the suffix im when the subject is plural.
9) no-sungguz-um-it, "I to wash durative present"; s-B-a-t. Translation: "I am washing". When the process is represented as in progress, the
present and preterit formations occur with the infix um as the aspectindex for the durative.
10) ndogho-sungguz-u, "present thou to wash usually"; t/s-B-a.

Translation: "thou washest usually". The use of the subject-indices given under n. 4 in combination with the suffix $u$ indicates the habitual aspect viz. "to do something usually", or "to do as one's job".
11) mé-no-sungguz, "perfection I to wash" a-a/s-B. Translation: "I have washed". The aspect of perfection is expressed by the consonant $m$. This $m$ is combined with the subject-indices: 1 p.s.: mè or mèno or mata; 1 p.pl.: méi or méini or maza; 2 p.s.: mogho; 2 p.pl.: mazu; 3 p.: manda. The base changes for number.
12) no-sungguz-umba, "I to wash negation/present or preterit"; s-B-t/neg.; no-sungguz-ak, "I to wash negation/future"; s-B-t/negation; no-sungguz uwav, "I to wash negation/perfection"; s-B-a/negation.
Translation: "I do not wash" or "l did not wash"; "I shall not wash"; "l have not washed". The negation of the process is indicated by the base with the addition of an index that varies according to the tenses. Present and preterit have umba or aavi; future has $a k$ and the aspect of perfection shows uwav. The absence of subject-indices requires the use of the personal pronouns.
13) ab-a-sungguz, "adhortative I to wash"; m-s-B;
am-gho-sungguz, "optative thou to wash"; m-s-B. Translation: "let me wash"; "that thou washest". An incitement or a wish is expressed by the mood-index $a b$ or $a m$ in combination with special subject-indices. So we get 1 p.s.: aba; 1 p.pl.: azi; 2 p.s.: amgho; 2 p. pl.: amuzu; 3 p.: $a b e ́$.
14) va sungguz, "imperative to wash"; m-B;
va sungguz-im, "imperative to wash plural"; m-B-n. Translation: "thou, wash"; "you, wash". The imperative is expressed by the index $v a$ preceding the base. There are no subject-indices. Only the number of the subject is indicated by a suffix im added to the base.
15) $b$ - $\alpha$-sungguz-it, "prohibitive 1 to wash prohibitive"; m1-s-B-m2; nda-sungguz-it, "prohibitive to wash prohibitive"; m1-B-m2.
Translation: "let me not wash"; "don't wash". The base followed by the suffix which occurs as present tense-index viz. it, and preceded in 1 and 3 p . by the consonant $b$, in 2 p . by $n d$, indicates the prohibition of a process. The combination of mood- and subject-indices is as follows: 1 p.s.: ba; 1 p. pl.: biza; 2 p.s.: nda; 2 p. pl.: zunda; 3 p.: bé.

## II. NOMINAL PREDICATES

Drabbe does not give any example of a plain seminominal formation, so it is impossible to answer the question whether secondary bases are used here.

## ili. SOME PECULIARITIES IN VERBS

1) a) no téna-na-mé-nd-at, "me he me to see me preterit"; r-s-r-B-r-t;
b) ndéné noma-na-mé-nd-at, "he me me to see me preterit"; s-r-r-B-r-t; These formations want a closer analysis. In both examples the form na-méndat is built up as follows: mé is the base and means "to see"; na-nd are the prefix and suffix of the relation-index; at is the tenseindex of the preterit. This formation is preceded in the example a) by no téna, "me he"; in example b) by ndèné noma, "he me". It is important to note that in these constructions the object of the process is indicated twice and in a different order: in a) no is the indication of the object followed by téna the subject; in b) ndéné is subject followed by noma the object. Moreover no and ndéné are personal pronouns; téna and noma special forms not yet found. It is possible that na in téna is a subject-indicator and ma in noma an object-indicator. Our examples are in the $3 \mathrm{p} . \mathrm{s}$. Analogous constructions for other persons occur. The matter requires further research.
2) Sometimes two bases, which cannot be used by thenselves, form together a set phrase, e.g. mangqat in, "to speak"; ou ghaghaémam, "to sing"; sasai wanjap, "to work".
3) gé-na-ngqosagiap-ét, "he (or it) me to ache present"; s-r-B-t.

Transtation: "I ache" or "l am in pain". Some bases are used in an impersonal way i.e. with a subject-index of 3 p.s. The logical subject (cf. translation) is expressed by the relation-index.
4) gho-té émér manda-na-gu, "thee love it perfective me does"; i.e. "I have loved thee". This is an example in which a set phrase, used as eventive, occurs with a direct object. The person who loves is expressed by the relation-index; the person who is loved, is indicated by special forms of the personal pronoun 1 p.s.: noté; 1 p. pl.: nitégha; 2 p. s.: ghoté; 2 p. pl.: zutégha; 3 p.s.: ta; 3 p. pl.: ita.

## Section 6. Linking-elements.

Only one linking-element is mentioned in the notes of Drabbe viz. $g \neq$, placed after nouns and pronouns to indicate possession. In section 5, part III, n. 1, we suggested that the forms $m a$ and $n a$ might be linking-elements. The linking-elements always follow the word they belong to.

## CHAPTER X

## JAQA ${ }^{\text {L-LANGUAGE }}$

## Section 1. Name and Territory.

The Jaqai-language is the language of the Papuans, who live in the basin of the river Mapi, i.e. on the lower-course of the Mapi and of its affluents the Qobamara ${ }^{\circ}$ and the Nambéomön. Therefore the people are called the Mapinese. The same language, however, is found on the banks of the two affluents of the Qodaqa-moqon viz. the Maburamara and the Bapai. These two groups of Papuans call themselves Jaqai to distinguish themselves from the Marinds to whom they give the name of Qowa, from the people they call Qauti i.e, the speakers of the Kati-language, and from the people of the $A^{u} j u$. Drabbe chose this name to indicate the language now to be analysed. He says, however: there is one objection to this name as other tribes viz. those on the Wildeman-river and on the Cooks-bay, have this name as well though they don't speak the same language. A closer analysis of these languages may make it necessary to find other names for them. There are two dialects in this language viz. one spoken on the Mapi and the Qobamara ${ }^{\circ}$, and one on the Nambéomön, Maburamara and the Bapai. Here the first dialect is discussed.

## Section 2. Nouns.

1) Number may be expressed by vocalic change either in the noun itself or in words that regard it (concord), e.g. taz, "woman" is in the plural tai, "women"; bacèndép, "good" has bièndip; rék, "from" has rik. This plural form occurs only with nouns indicating ghosts, men and all beings that have got human nature according to the myths; words indicating beings that have no human nature and never possessed it, have only one form for the singular and the plural and are followed by the verbal formation in the singular.
2) In the nouns indicating human beings, vocalic change either in the noun itself or in words accompanying it (concord) expresses sex; the vowel $\delta$ is used in the masculine; the vowel $u$ in the feminine. When, however, the sex-distinction is not paid attention to, the names of animats are either masculine or feminine as the animal in the myths acts as man or as woman, e.g. the naqapé, a kind of tortoise (pleurodira cheloniidea) is the wife of the crocodile (gender). The nouns indicating beings that have not got human nature, show the vowel o not in the noun itself but
in the accompanying words (gender). The same vowelshift ( $\delta / u / o / i$ ) is found in some verbs according to sex, gender or number of the object, e.g. boam $\ddagger k$, "to make" occurs as boamék; boamuk; boondodo; béandidi.
3) The relation between thouns may be expressed in one of the following ways:
a) two nouns form a compound word, the first element qualifies the second; e.g. de-moki, "tree-fruit";
b) a linking-element following the noun is used to express various relations, e.g. ape (épe after é, i or a), kén, aqan indicate place; rék (ruk, rok, rik according to sex, gender and number) means "from"; in, ape (epe) ot qat occur to express a possessive relation, e.g. dé-in-moki, "tree of fruit", i.e. "fruit of the tree", poqoinépé-maq, "headman of child", i.e. "the child of the headman".

## Section 3. Pronouns.

|  | Set I | Set II | Set II | Set IV | Set V |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 1p.s.m. | anok | $n$ | anokondin | anggápape <br> f. |  |
| pl. | indok | $n$ | anokape |  |  |

Explanation to the table:
Set I contains the personal pronouns occurring as subject or object in a sentence; set II consists of prefixes to names of relatives indicating the possessive relation; set 111 comprehends forms used in the function of possessive pronouns; the forms are composed of the personal pronoun (set I) and the linking-element in; set IV and V have forms used in the function of possessive pronouns and derived from the personal pronouns (set I) by the addition of the linking-element ape; in these forms vowelshift indicating sex and number is found. Besides the forms just mentioned we come across: l p.s. m.: anggafpaqamare or anggápakén; 1 p. s.f.: anggápaqamare or anggaupakén etc. The meaning of these forms is: "I myself" or "I alone".

## Section 4. Numerals.

There are two numerals: diaqand, "one"; kaiaqamaére, "two". Number
"three" is expressed by amandaq diaqand or amandaq kaiaqamaere, but the informants were not sure whether "two" or "three" was meant by these terms. The place of the numerals is after what is counted.

## Section 5. Verbs.

The usual word-order is: subject (S) - object (R) - predicate (P). Subject and object are represented in the predicate by subject- and relationindices (s and r). The usual subject-indices are 1 p.s.: oko; 1 p. pl.: iki; 2 p.s.: aqa; 2 p.pl.: é or épé; 3 p.s.m.: é; fem.: u; neuter: o; 3 p. pl.: $e$. The relation-indices are 1 p.s.: an; 1 p. pl.: éné, iné or néné; 2 p.s.: a or (a) qa; 2 p. pl.: $\dot{e} \dot{e} ; 3$ p.s.: $o ; 3$ p.pl.: $\dot{e}$. These relation-indices are prefixed to the base and are never separated from it by other indices. It is noteworthy that the relation-indices always have the meaning of an indirect object; the direct object must be expressed by a noun or pronoun preceding the predi-cate-formation. The indices of tense, aspect and mood will presently be indicated in the different formations. The group of indices always precedes the base. The base may change in form according to the number of the subject or the object; often e.g. the suffix mak occurs when the subject or object is in the plural, e.g. onadaq, "to be full with a subject in the singular", onadaqamak, "to be full with plural subject"; naqak, "to carve with a singular object"; naqakamak, "to carve with a plural object". So different bases occur according as the subject is singular or plural, e.g. tak, "to go with a singular subject"; éedèk, "to go with a plural subject" (suppletion).

## I. VERBAL PREDICATES

1) a) oko-r-ponokon, "l present to give"; s-t-B;
b) aqa-r-o-ponokon, "thou present him to give"; s-t-r-B;
c) $\dot{e}$-a-na-ponokon, "he me to give"; s-r-B;
d) in-aqa-ponokon, "they thee to give"; s-r-B. Translation: a) "I give"; b) "thou givest him"; c) "he gives me"; d) "they give thee". In the first example oko is the subject-index; $r$ is the tense index, indicating that the process takes place in the present time; ponokon is the base. In example b) $o$ is the relation-index; the other elements are clear from the example. When the relation-index 1 p . occurs, the tense index does not appear (cf. example c). In the singular the subject index 3 p . has vocalic change according to group 1 and II of the nouns: ${ }^{\wedge} a,{ }^{v} a,{ }^{\text {e }} a$, and in the plural $i$; ( $n$ is subject-index 3 p .). The subject-index 3 p. pl. never occurs in combination with the tense-index $r$. It is noteworthy that, when change for number occurs in the bases, the subject index $3 \mathrm{p} . \mathrm{pl}$. is not in but $\boldsymbol{i} e$, and in that case the tense index $r$ is used; e.g. ${ }^{i} e-r$-tibi, "they are present".
2) a) k-ok-a-ponokon, "preterit I thee to give"; t-s-r-B;
b) $k-\dot{e}-\alpha-\bar{\varepsilon} \dot{e}$-ponokon, "preterit he ligature you to give"; t-s-i-r-B;

d) $k$-éé-ponokon, "preterit you to give"; t-s-B. Translation: a) "I gave thee"; b) "he gave you"; c) "she gave us"; d) "you gave". When the process happened in the past, the tense-index is either $k$ (cf. example a) or $b$ indiscriminately; the place is in front of the formation. The subjectindex $3 \mathrm{p} . \mathrm{s}$. is the vowel $\dot{\varepsilon}, u$ or $o$ according to sex or gender (cf. examples $b$ ) and $c$ ). In that case the relation-index 2 p . is preceded by the vowel $a$ functioning as ligature (example b); the relation-index $1 \mathrm{p} . \mathrm{pl}$. has the consonant $n$ in the same function of ligature between subject- and relation-indices (example c). The subject-index $2 \rho$. pl. occurs before a base with instial consonant not as épé but as éé.
3) a) nan-aqa-ene-ponokon, "future thou us to give"; t-s-r-B;
b) nana-m-an-ponokon, "future ligature me to give"; t-1-r-B. Translation: a) "thou wilt give us"; b) "he will give me". The future tense-index is nan(a). The final $a$ of nan(a) is found used when nan is followed by a consonant. The subject-index $2 \mathrm{p} . \mathrm{pl}$. is éé and not épé. $\ln 3 \mathrm{p}$. a vocalic change according to sex, gender and number does not occur. In the $3 \mathrm{p} . \mathrm{s}$. there is no subject-index. The ligature $m$ appears between the tense-index nana and any following vowel in 3 p.s.
4) The preceding formations add one of the following suffixes to the base: möm, (na)möna and mör. The choice between these suffixes is not bound to fixed rules, and the same base may be followed by any of these suffixes. The function of these suffixes is to indicate an habitual aspect, e.g. potot, "to wring out sago"; potomöm or potomör, "usually wring out sago, have the job of wringing out sago".
5) n-oko-ponokon, "future and not sure 1 to give". Translation: "perhaps I shall give". This formation differs in so far from that given in n. 3 that here the tense-index is not nan(a) but $n(a)$. The meaning is that a process will happen in the future but the speaker is in doubt. The formation is used in an interrogative clause in the future, in a conditional clause or in a statement in the future expressing a doubt. This formation can express an adhortative or optative mood as well but only in the 1 and 3 p . In this case the translation is: let me give; let him give.
6) a) anok qai-o-ponokon-an, "I negation thee to give negation"; personal pronoun negation-r-B-negation;
b) aqa oa-nd-ponokon qaikire, "thou future me io give negation"; personal pronoun t-r-B-negation. Translation: a) "l don't give thee", or "I did not give thee"; b) "thou wilt not give me". The analysis of these formations is as follows: ad a) anok is personal pronoun and subject of the sentence; qai as prefix and an as suffix to the base express the negation of the process, indicated by the base ponokon; o is relationindex $2 \mathrm{p} . \mathrm{s}$. This formation gives a negative meaning to the sentence and is used in the present and past tenses. The personal pronoun is necessary to indicate the subject; ad b) the use of the prefix ${ }^{\circ} a$ indicates
that the process is thought of as happening in the future; the negation is expressed by qa/kire which is used with nouns and adjectives as well.
7) ké $k$-oko-ponokon, "?preterit I to give"; m-t-s-B;
kérok oko-ponokon, "what I to give"; interrogative s-B;
kérok t-oko-ponokon, "what preterit I to give"; interrogative t-s-B.
Translation: "did I give?" "what do I give?" "what did I give?" Two types of questions are to be distinguished; type $I$, the yes-or-no-questions get the plain formations, mentioned in the numbers 1), 2) and 3) but they are preceded by the mood-index ke (cf. example a); type II, the question about the subject, object or circumstances gets the formation s-B in the present while the tense is indicated by a zero-modification (example b), and has in the preterit the consonant $t$ as a tense-index preceding the subject-index (cf. example c).
8) ka-ponokon, "imperative to give"; m-B;
${ }^{\text {en }} a-k a-$ ponokon, "plural imperative to give"; $\mathrm{n}-\mathrm{m}-\mathrm{B}$. Translation: "give". The imperative mood is indicated by the index $k(a)$. The final $a$ of $k a$ is not found before $a, o$ and $u$; it forms a falling diphthong in combination with the following é or $i$ ( $k a^{e}$ or $k a^{2}$ ) and it assimilates with a following $o$ (koo). There is no subject-index; the difference in number is indicated by the addition of ${ }^{\varepsilon} a$ before the mood-index $k a$ in $2 \mathrm{p} . \mathrm{pl}$.
9) n-aqa-ponokon-ape, "future/not sure thou to give prohibition"; $\mathrm{t} / \mathrm{m} 1-\mathrm{s}-\mathrm{B}-\mathrm{m} 2$. Translation: "don't give". The $n$-formation, mentioned in n. 5 of this part, followed by the index ape, expresses the prohibitive. When the last syllable of the base has: $\dot{e}, i$ or $u$, the mood-index is épé.
10) Two adhortative and two optative formations follow here:
a) r-oko-ponokon, "adhortative I to give"; m-s-B;
$r$-iki-ponokon, "adhortative we to give"; m-s-B;
t-oko-ponokon, "adhortative I to give"; m-s-B;
$t$-iki-ponokon, "adhortative we to give"; m-s-B. Translation: "let me give"; "let us give". In the 1 p . the adhortative mood-index is $r$ or $t$.
b) m-a-ponokon, "opłative he to give"; m-s-B;
ma-an-ponokon, "optative they to give"; m-s-B;
$t-a-p o n o k o n$, "optative he to give"; m-s-B;
$t$-an-ponokon, "optative they to give"; m-s-B.
In the 3 p . the optative mood-index is $m$ or $t$. Vocalic change in the sub-ject-indices 3 p . does not occur. With $t$ as mood-index also an optative of 2 p. may be constructed: t-aqa-ponokon and t-éponokon. All the formations, mentioned in this number, can be used in a final clause as well. Then a suffix an is usually added to the base, though this suffix an is also used in the other functions of this formation.
11) anok a-pindok-emaq |tan-oko-baka, "l if to sit irrealis |irrealis I to beat"; S-m1-B-m2 | m-s-B. Translation: "if I had sat, then I should have beaten". This formation is an irrealis construction. The apodosis
is the plain formation of the future, but instead of $\operatorname{nan}(a), \tan (a)$ is used. The protasis, however, has a remarkable construction. Anok is the personal pronoun, subject of the sentence; the prefix $a$ and the suffix ( $e$ )maq indicate the irrealis. In the 1 and 3 p . the prefix $a$ is followed by the consonant $m$ before any following vowel; in the 2 p.s. we meet oqo-(e)maq, e.g. aq oqo-pindok-emaq, "thou if to sit irrealis", i.e. "if thou hadst sit

## 1I. NOMINAL PREDICATES

1) ora ${ }^{6} a-r-n \mathrm{e}$, "ill he present to be"; B1-s-t-B2;
ora ${ }^{\text {en }}$-r-ame, "ill he present to be"; B1-s-t-B2;
ora ${ }^{\text {e }}$ - $-r$-tébé, "ill he present to be"; B1-s-t-B2;
ora e $\alpha-r-p o \mathrm{e} n$, "ill he present to lie"; B1-s-t-B2. Translation: "he is ill". The nominal element is accompanied by a secondary base (seminominal predicate). There are three bases that appear either in the meaning of "to be somewhere" or in the meaning of the English copula. These bases are: ne, a $m e$ and $t \ddagger b \ddagger$. Moreover there are several bases indicating a special mode of being (e.g. to lie, to sit). In the same way the bases nèno, kipén and of $\ddagger k \ddagger$ mör with the meaning: to be usually present, may be used as secondary bases. The base ame occurs in several derivative bases, which indicate a special mode of sitting, and all these derivatives can be used as secondary bases, e.g. bame, "to sit at the fire"; bakame, "to sit for a long time", tame, "to sit near". The bases $\ddagger \ddagger b \neq$,"to be", indok, "to sit", arin, "to stand" are also used as secondary bases in their derivatives.
2) radé-én $k$-é-péac; B1-linking element-t-s-B2. Translation: "he changed into a man" i.e. "he became a man". When the secondary base $p \ddagger \mathrm{a}^{\circ}$ is used, the nominal element of the predicate is followed by: aqan or an or én or kén. These forms are linking elements and indicate some direction.
3) a) itdok bindén oa-aqa-ponokon anemaq, "we possible negation thee to give negation"; personal pronoun- to be able- negation-r-B-negation. b) a'ok békan oo-pindok anemaq, "you place to negation to sit negation". Translation; a) "we are not able to give thee"; b) "you cannot sit here". The analysis of these formations is as follows: ad a) the meaning of the element binden is: to be able to; the negation index is ${ }^{\circ} a$-anemaq; ad b) the meaning of the element békan is: there is place to; it is tused instead of bindén with bases that mean to sit, to stand, to lie. These elements bindén and bekan occur only in connection with the negation.

## III. SOME PECULIARITIES IN VERBS

1) a) $b-o k-a-b a k a^{\circ}$, "preterit I prefix to shoot"; t-s-prefix-B;
b) $b$-é-ké-bakao, "preterit he prefix to shoot"; t-s-prefix-B;
c) $b-u-k u-b a k a$, "preterit she prefix to shoot"; t-s-prefix-B;
d) oko-r-o-ko-boroqok, "I present him to pity"; s-t-r-prefix-B.

Translation: a) "I shot"; b) "he shot"; c) "she shot"; d) "I pity him". There are several bases which occur in different formations either with an initial $a$ or $k \$$. In case there are no relation-indices, $k \ddagger$ is used in the $3 \mathrm{p} . \mathrm{s}$. and in this $3 \mathrm{p} . \mathrm{s}$. sex or gender is indicated by vowelshift (cf. example a): abakaㅁ and examples b) and c) kébaka ${ }^{\circ}$ and kubaka ${ }^{\circ}$ ). In case there are relation-indices, $k$ occurs after the relation-index $o$, $e$ or ée. The vowel following this $k$ is always the same as the vowel preceding this $k$ (example d) oko-r-o-ko-boroqok).
2) toko-oko-nam, "..... I to come"; na-oko-nam, "..... I come". In this examples the elements toko and na may have the meaning "already" or the function of an index for the perfective. In the first case the examples must be rendered: "I have come/came already"; in the second case: "I have come". Drabbe is not sure which explanation is the best.
3) a) kab ué-r-métikin; B1-s-t-B2.
b) batikini ${ }^{\circ} a-r$-moto $\mathbf{a}^{\circ}$; B1-s-t-B2. Translation: a) "she menstruates"; b) "he hiccups". Sometimes we meet a primary and secondary base that form a set phrase, i.e. a verbal expression. The bases do not occur separately. Kab métikin means "to have the monthly periods"; batikini motoa" "to hiccup".
4) a) ${ }^{\circ} a-n a-b o k o-a<b$, "it me to think"; s-r-B;
b) anok naq oa-r-atopopén, "me thirsty it present to be"; R-B1-s-t-B2. Translation: a) "I think"; b) "I am thirsty". In this language some bases occur only with a subject-index 3 p.s.; moreover, in formations in which vocalic change is found in 3 p.s. according to sex and gender, the form ${ }^{\circ} a$ appears here. The logical subject of the sentence (cf. translation: I think) is expressed by the relation-index (cf. example a) or by the personal pronoun (cf. example b). In the first example this impersonal formation occurs in the simple base bokoa ${ }^{6}$, "to think"; in the second example this impersonal formation is found in a set phrase naq atopopén, "to be thirsty". It is important to note that the somcalled logical subject must be rendered by a relation-index in the first example and by a personal pronoun in the second. This is not because the first example has a simple base and the second contains a set-phrase, but because in example a) the logical subject is taken as an indirect object and in example b) as a direct object. As the relation-index in this language always indicates an indirect object ondy, the direct object is always indicated by a personal pronoun preceding the subject-index.
5) tumi diaqand in-én-ajaqob; translation: "we are unanimous". This formation consists of three bases: tumi, diaqand, ajaqob which form together a set-phrase. This phrase is used only with a subject of the 3 p . pl. (in). The logical subject (we) is expressed by the relationindex én.
6) a) ép-ame képéde/époo, "he to be present here/there". Translation: "he is here/there";
b) an ade, "I to go". Translation: "I go". Ad a) the base ame occurs with the demonstrative pronoun as subject 3 p .s. in the phrases: "to be here" or "to be there". Vocalic change occurs; so we get: ép-ame képédé or ép-ame époo; up-ame kupudé or up-ame upoo; op-ame kopédé or op-ame opoo; ip-ame kipédé or ip-ame ipoo. Ad b) the base $a d \ddagger$, "to go away" has distinct subject-indices and vocatic change. The result is: an adé, "I (masculine) go"; an adu, "I (feminine) go"; aq adé and $a q a d u$, "thou (masculine) goest", and "thou (feminine) goest". This formation of $2 \mathrm{p} . \mathrm{s}$. has the meaning: "please go". In the 3 p .: $n$-adé and $n$ - $a d u$ mean: "let him go" and "let her go". In the 1,2 and 3 p. pl. the forms are: ind-adi, ken-adi, n-adi; 3 p.s. and pl. have also the meaning: "to be gone".

## Section 6. Linking-elements.

Several linking-elements occur here which are always placed after the word they determine. In sect. 2 and 3 we noticed the linking-elements which are to be used to express a relation between nouns viz. in, ape or épé, qat. Other linking-elements express a determination of place: ape, kén, aqan and $r \ddagger k$, that changes for sex, gender and number. The same elements may be used in a figurative sense (cf. sec. 5, part II, n. 2). Besides ar or er, "because"; amön, "together with", kadun, "and" etc. are extant here.

## CHAPTER XI

## AUJU-LANGUAGE

## Section 1. Name and Territory.

The Auju-language is spoken along the right affluents of the Digul, from a point just above Tanah-Merah down the river to the point where the Digul forms a delta; along the Upper-Mapi and probably by the peoples living between the Digul and the Mapi; along the affluents of the river Asüwe (Kampong) and the river Pasüwé (Wildeman). There is no common name for the different groups; the name of $A^{u j u}$ is given by the Jaqa ${ }^{-}$ to these tribes. The dialects known by Drabbe are 1) the dialect spoken on the river Sjiagha (and some variations spoken on the affluent of the Sjiagha: the river Jénimu) and 2) the dialect spoken by the people that call themselves Pisa, living on the banks of the affluents of the Pasliwe and the Asüwé. Our discussion deals with the Pisa-dialect.

## Section 2. Nouns.

1) In so far as number is expressed, the nouns may be divided into two groups viz. group I containing the names of men and animals; group II containing the names of things. The plural in group I is expressed by the pronoun of $3 \mathrm{p} . \mathrm{pl}$., placed after the noun. The pronoun is jogho after $\dot{e}$ and $\dot{e}, n o g h o$ after a vowel which is nasalized, ogho in other cases. Examples are: ifè, "bird of paradise", plural: ifè jogho; ghobisî, "man", plural: ghobisí nogho; omono, "child", plural: omono ogho. In this group I the words indicating relationship form their plural by the suffix $g i$, e.g. $k u d \grave{e}$-gi, "younger brothers and sisters". The plural of the names of things (group II) is indicated by the repetition of the noun or by the use of a synonym; names of things have the verb in the singular. Examples: mokâ nokâ, "districts"; afa ghat, "houses". A special use of ogho occurs after verbal formations either in the singular or plural e.g.: ghosanggi ogho or ghosanggikinâ nogho, "people who are dead", "the dead"; the verbal formation in the singular occurs with the demonstrative pronoun singular: ghosanggi ugo, "a person who is dead".
2) The relation between nouns may be indicated in the following ways: a) two nouns form a compound word; the second element is qualified by the first. Some examples: ui-wobu, "pig-tail"; ji-rô, "bird-feather"; b) two nouns form a phrase and the first word indicates the possessor of the second element; nabo ngat, "father house", i.e. "the house of the
father"; iro kinabi, "stone resemblance", i,e. "the resemblance of a stone"; sora wertu, "pool middle", i.e. "in the middle of the pool";
c) a linking-element occurs always placed after the noun, expressing various relations, e.g. $n i$ may be rendered by "in behalf of"; ma indicates place; fini says "by means of": waki fini, "knife with" i.e. "with a knife"; na indicates the possessor: ui na wobu, "pig of tail", i.e. "the tail of the pig';
d) the possessive pronoun is sometimes used but only when the possessor is a homan being or an animal: nabo éna ng $\hat{a}$, "father his house", i.e. "the house of the father".
3) A noun without indication of the number has the meaning of the English noun with the definite article; this definite character may be expressed moreover by a demonstrative pronoun; e.g. rà ugo, "woman that", i.e. "that woman" of "the woman". The personal pronoun is used in the same function; e.g. jughu wèma, "people many", i.e. "many people"; jughu wèmá nogho, "people many the", i.e. "the many people". The indefinite character may be expressed by $f \dot{e}$, "other"; e.g. ra, "the woman"; rà fè, "a woman". Sex or gender are not expressed in this language.

## Section 3. Pronouns.

| ip.s. | $n u$ | $n a$ |
| :--- | :--- | :--- |
| 1 p.pl. | $n u g u$ | $n u n a$ |
| 2 p.s. | $g u$ | ga |
| 2 p.pl. | gugur | guna |
| 3 p.s. | éki | éna or éwa |
| 3 p.pl. | jogho | joghona |

## Explanation to the table:

The constituants of set I are used as subject in the sentence. Often there are linking-elements indicating the subject-function of these pronouns, viz. $t a$, $t e$ and $k i$ (these elements occur as object-indicators as well). The pronouns of set II are used as object in the sentence and occur also in the function of possessive pronouns; in this function they have their place before the possession. These pronouns can get a linking-element $n a$ as well; so one may say either na ngâ', "my house" or na-na ng $\hat{a}$; they occur also substantively: nana-ami, "my things render", i.e. "give back what is mine". There are some names of relatives that occur without the possessive form as prefix, e.g. subrâ, "daughter", mô, "the brother of mother" etc. Many names, however, have the possessive form of the pronoun as prefix, e.g. na-bo, "my father", ga-bo, "thy father" etc.

## Section 4. Numerals.

Number "one" is indicated by sikirè or tisijè; in number "two" kurumâ we
meet the suffix $m a$ that occurs in the following numbers as well. The numerals for "three" etc. are formed by the names of the fingers. The place of the numerals is after the noun.

## Section 5. Verbs.

The usual order of the parts of the sentence is: subject (S) - indirect object (R2) - direct object (R1) - predicate (P) ; the place of the direct and indirect object may be interchanged, e.g. gu nabo nama toto ma édoghoi, "thou my father to things he already gave", i.e. "thou gavest the things already to my father". The subject is represented in the predicate by a subject-index (s). The personal pronoun itself occurs only in the function of subject or object for the sake of emphasis; in all other cases the indices in the predicate are sufficient. There are only two forms of subject-indices viz. a first person and a non-first person. Relation-indices are not found. Sometimes suppletion of bases occurs for number of subject or object, e.g. $k u$, "to die with subject in the singular"; ghosanggi, "to die with subject in the plural"; ra, "to take with object in the singular"; kirimo, "to take with object in the plural". Predicates occur in simple and complex form as we will discuss further on.

## I. VERBAL PREDICATES

1) ada-di, "to bind P "; B-s; ada-da, "to bind we"; B-s; ada-ki, "to bind thou/he"; B-s;
ada-kinâ, "to bind you/they"; B-s. Translation: "l bind"; "we bind"; "thou bindst"; "he binds"; "you bind"; "they bind". This formation indicates a process happening in the present, in the to day preterit or in the historical present. The base is ada, "to bind"; subject-indices are 1 p.s.: $d i$; 1 p. pl.: $d a$; non 1 p.s.: $k i$; non 1 p. pl.: kinâ. Bases ending in $e$ are followed by a subject-index non 1 p.: ghi and ghenâ; bases ending in $o$ by ghor and gona. The tense-index is zero.
2) ada-di-ra, "to bind I preterit"; B-s-t;
$a d a-d a-r a$, "to bind we preterit"; B-s-t;
ada-ki-ra, "to bind thou/he preterit"; B-s-t;
ada-kina-ra, "to bind you/they preterit"; B-s-t. Translation: "l bound", "we bound"; "thou/he bound(st)"; "you'they bound". This formation indicates a process accomplished yesterday; the forms are those of the present with addition of the tense-index ra after the subject-indices. It is noteworthy that before the tense-index there is no nasalization of the subject-index non 1 p. pl.; bases ending in $o$ are followed by gho-ra, instead of ghorra in the non 1 p.s.
3) mari-dagha-ri, "to descend preterit I"; B-t-s; mari-dagha-ia, "to descend preterit we"; B-t-s;
mari- $\alpha-k$, "to descend preterit thou/he"; B-t-s;
mari-a-kind, "to descend preterit you/they"; B-t-s. Transiation: "I descended"; "we descended"; "thou/he descended(st)"; "you/they descended". This formation is the distant (before yesterday) preterit; it shows in 1 p . the tense-index dagha; in the non 1 p . the tense-index $a$ (before which the final $e$ or $o$ of the base is dispensed with). Subject-indices are 1 p.s.: $r i$; 1 p.pl.: $j a$; non 1 p. s.: $k i$; non 1 p. pl.: kină.
4) The expression of the future tense is rather intricate. The bases must be divided in classes according to the tense-index wanted:
a) there are bases occurring with a prefix $a$, e.g. do, "to bake"; ado, "to bake in the future"; in this case the base is unchanged, but some bases change, e.g. su, "to ascend"; atu, "to ascend in the future";
b) there are bases occurring with one of the suffixes: $f i ; f o$; $f u$; ro; e.g. $d \dot{e}$, "to come"; de-fi, "to come in the future";
c) there are bases occurring with the suffix $g h o^{t}$ which suffix is probably the verbal base gho, "to go";
d) there are bases indicating the future by a change in the base itself; e.g. ife goni, "to weep"; ifè godi, "to weep in the future"; mari, "to descend"; mario, "to descend in the future"; ro, "to say"; raghe, "to say in the future";
e) the base mo has no future-index and before mo there is no nasalization;
f) there are bases that occur in suppletion to each other, i.e. in present and future different bases with the same meaning are used.
The subject-indices are 1 p.s.: zero; final $o$, however, is not found, $\dot{e}$ is used instead; 1 p. pl.: $a$; final $o$ of the base does not appear before this $a$ (except in base mo, "to make", where the base $m i$ is found before the subject-index 1 p.pl.); non 1 p.s.: nasalization of the final vowel; non 1 p. pl.: nâ, but instead of final $o$ the vowel $\dot{e}$ occurs. Some examples: $a-r u$, "future to fell I "; t-B;
a-ru-a, "future to fell we"; t-B-s;
$a-r$ иी, "future to fell thou/he"; t-B-s;
a-ru-nâ, "future to fell you/they"; t-B-s. Translation: "I shall feili" etc. The affirmative index ni (cf. II, nominal predicates, $n$. 1) is often used after the subject-indices of the future, e.g. mari-a-ni, "we shall descend".
5) fana wudi dè, "negation to enter preterit I negation". Translation: "I did not enter'. The negation of a process is expressed by fa(na) before and $d \dot{e}$ after the conjugated base.
6) wadi $d \mathrm{e}$, "to enter preterit I interrogation-index";
$a$-wu-a nè, "future to enter we interrogation-index";
$f a$ wuki dè de, "negation to enter thou/he negation interrogative index"; fa $\alpha$-wu dè jogho, "negation future I to enter negation, interrogative index". Translation: "did I enter?"; "shall we enter?"; "didst thou not enter?"; "did he not enter?"; "shall I not enter?". Interrogation is expressed
by the addition of $d \dot{e}, n \dot{e}$ or ogho in yes-or-no-questions; when interrogative words are used, the affirmative index is found, e.g. monoghoi $k i d i$, "who is it?" The index dè is used in present and preterit formations, nè in future forms. When the negation is expressed ( $f a$ - d $\grave{e}$ ) the interrogative indices de or ogho can both be used; but ogho is compulsory in the future.
7) The imperative formations differ for different classes of bases:
a) there are bases that show the prefix na, e.g. mu, "to enter"; namu, ,,enter";
b) there are bases that occur with a suffix $n$, e.g. sagha, "to hit"; saghan, "hit";
c) there are bases that occur with the suffix $n$ placed after the base with its future-index, e.g. ada, "to bind"; adafu, "to bind in the future"; adafu-n, "bind";
d) there are bases with a final $n$ occurring as imperative forms, while the same base is not found in a present formation, e.g. ifun, "beat";
e) there are bases which change in the imperative, e.g. made, "to come"; mad, "come";
f) the base $m o$ has $m u$ as imperative.

The subject-indices are: for bases ending in a vowel 2 p.s.: zero; 2 p. pl.: ni; for bases ending in a consonant 2 p.s.: è; 2 p. pl.: aghani. Some examples: na-da, "imperative to hear singular"; na-da-ni, "imperative to hear plural"; fété-nè, "to see imperative singular"; fété-naghani, "to see imperative plural". The imperative may be intensified by the element $f a$ - different from the negation-index $f a(n a)$ - placed before the formation, e.g. fa nada, "hear!"
8) fana $a-w u$ de jughu, "negation future to enter I negation prohibitive". Translation: "let me not enter". The prohibitive is expressed by the element jughu added to the negative future formation.
9) rigiró dèfiná girô | édaghai," ..... to come you/they to become non 1 p.s. | to give future I". Translation: "if you/they will come | I shall give". This construction is the expression of an open condition. The protasis is to be analysed as follows: rigiro is a base appearing only in this future formation non 1 p.s.; the meaning of this form is not clear; dèfinâ is a future formation non 1 p . plur, of the base dè, "to come"; girô is a future formation non 1 p.s. of the base gi, "to become". An exact translation would be "it will (happen?), they will come, it will be | I shall give". The apodosis is a plain future formation.
10) fa dèghi dè girô ago $\mid$ fa édaghai dè, "negation to become non 1 p.s. negation to become future non $1 \mathrm{p} . \mathrm{s}$. demonstrative pronoun, | negation to give future". Translation: "if thou/he do(e)s(t) not come | I shall not give". The negation of a sentence expressing an open condition, shows in the protasis the usual negation-index $f a--d e$; the base indicating the process is always in the present; gi, "to become", the base indicating
the conditional mood may occur in the present or in the future formation. The protasis is closed by the demonstrative pronoun.
11) a) dèghi bu | ifuro-di, "to come present non 1 p.s. linking-element | to beat future I";
b) dèghi giki $b u \mid$ ifuro-di, "to come present non $1 \mathrm{p} . \mathrm{s}$. to become non 1 p.s. linking-element | to beat future I";
c) dèghi démoghoi $\mid$ ifuro-di, "to come present non $1 \mathrm{p} . \mathrm{s}$. base in future non 1 p.s. | to beat future l";
d) dèghi démogho giki|ifuro-di, cf. preceding examples.

Translation: "if he would have come | I should have beaten".
ad a) This construction expresses a sentence of rejected condition. The protasis shows one of the usual tenses followed by the linking-element bu, indicating the irrealis character of the clause; the apodosis gets the corresponding tense.
ad b) To the formation of the preceding example (protasis) the form giki may be added between the base and the linking-element; gikis non $1 \mathrm{p} . \mathrm{s}$. of the base gi, "to become". A close rendering of example b) runs: "if thou/he comes(t) it becomes if", i.e. "if it will be that thou/he conles( $t$ )...."
ad c) Instead of the linking-element $b u$, a future formation of a base occurring only in this formation may be found viz. demogho'; the meaning is not clear.
ad d) To the formation mentioned under c) the form giki may be added after démoghoi.
The negation of this construction is expressed by $f a-d e$.
12) eki-ta roghoi |omono gho-kinâ|ni-aki, "personal pronoun non 1 p.s. linking-element to say present non 1 p.s. | the children to go present non 1 p.pl. | to say remote preterit non 1 p.s.". Translation: "he said that the children had gone away". This formation expresses an indirect speech. There are two bases: one before the communication, one after it, both with the meaning "to say". The use of the first base rogho is not compulsory but, if extant, it occurs as a present tense formation; the second base $n i$ changes according to the different tenses; the dependent clause containing the communication is always in the present tense.
13) rodi | ofo ugo $d$-aki, "to tell present I | the boy to come remote preterit non 1 p.s.". Translation: "I told the boy to come". This construction is the expression of an indirect order. The striking feature is that the tense of the dependent clause indicates the tense of the principal one. The rendering is: "I tell | the boy came", and the meaning: "I told the boy to come". When the sentence has a future meaning: raghai $\mid$ dèfini, "I shall tell him to come", both predicates are in the future formation. When the negation is used, $f a$ is placed before the predicate of the head clause and dè after the predicate of the dependent clause.
14) ki rafì nidi | deghi, "to steal future non 1 p.s. linking-element | to
come present non 1 p.s." Translation: "thou/he comes(t) to steal", or "thou he came(st) to steal". A final clause consists of a future formation followed by the linking-element nidi "in order to"; the base of the principal sentence is in the present formation with a present or preterit meaning; in order to express a future both predicates are in the future tormation; in the latter case the linking-element nidi is facultative.
15) ghaî jl arukunggi | do-gho-ra, "house fire to burn down present non 1 p.s. to consume to-day-preterit non 1 p.s.". Translation: "the fire burnt down the house (so that it consumed it)". This construction indicating a consecutive clause, resembles those of the two preceding numbers. The predicate of the protasis is in the present; the predicate of the apodosis indicates the tense of the whole construction.
16) dèghi|kidi|rogho, "to come non 1 p.s.| base suffix | to say non 1 p.s.". Translation: "thou/he comes(t) and says(t)". The form kidi consists of the base $k i$ the meaning of which is unknown, and the suffix di. Kidi is used to link up two conjugated bases which have the same subject and are closely connected. In the future tense $k i b u$ is used in the same function. The elentent $d i$ and $b u$ will be discussed in part 111 n .2 .

## II. NOMINAL PREDICATES

1) gu ki tengghaghas, "thou linking-element big"; S-linking element-B; gu fengghaghat di, "thou big affirmation-index"; S-B-affirmation.
Translation: "thou art big". These are two specimens of a pure nominal predicate. The subject is a noun or pronoun and precedes the predicate which is an adjective or a noun. In the first example the linking-element $k i$ has the function to indicate the subject; in the second the affirmationindex $d t$ is added to the predicate.
In this language we come across the following affirmation-indices: $d i$; $u g h \mathbf{u} ; n i$, opposite to the interrogation-indices dè; ogho; nè. The indices $d \dot{e}$ and $d i$ appear after a noun, an adjective and a pronoun; the indices ogho and ughu occur after adjectives and numerals. These indices are found after conjugated forms as weII, viz. de and $d i$ are used after present and preterit formations; ogho and ughu after negative present and preterit formations alternating with $d e$ and $d i$; nè and $n i$ occur in the future formations; in negative future forms ogho and ughu are compulsory. Some examples: gabo de, "thy father?"; nabo di, "my father!"; popora ogho, "good?"; popora aghu, "good!".
2) $n u$ kadagha' badi, "I to sit alive"; S-B1-B2-s. Translation: "I am alive". The seminominal construction has the secondary base $b a$, "to sit".

## III. COMPLEX PREDICATES

The following formations consist of a primary and secondary base. The nominal or verbal character is not yet determined.

1) a-kumi-ni mogho, "future to die linking-element to do non I p.s.". Translation: "thou/he art/is on the point of dying". This construction is probably semi-nominal: $\alpha$-kumi-ni is possibly considered as a noun and mo, "to make", as a secondary base. The form $a-k$ umi-ni is analysed thus: $a$ is future-index; kumi is a base meaning "to die"; $n i$ is a linking-element indicating "in order to"; mogho is non $1 \mathrm{p} . \mathrm{s}$. of base mo "to do".
2) a) ra-di gho-ki, "to hold present/preterit-suffix to go non 1 p.s."; B1-suffix-B2-t/s.
b) ra-bu $a-g h a \hat{i}$ ', "to hold future-suffix future to go non 1 p.s."; B1-t-B2-s.
Translation: a) "keeping it in his hands he went away (or thou)"; b) "keeping it in his hands he will go away (or thou)" i.e. "thou/he will(t) take it away". In these predicates two bases occur: the first not conjugated, the second conjugated and together expressing two processes occurring at the same time, closely connected and performed by one person. In the example a) the nominal base radi consists of the element $a$, occurring in verbal formations as well, and the suffix $d i$; this suffix di occurs only in connection with a secondary base in present or preterit formation. In example b) the nominal base is rabu which contains the suffix $b u$, and this form occurs only in connection with a future formation of the secondary base. Contrary to expectation the nominal base ending in $d i$ which belongs to present, preterit and not to future tense formations, is found in the imperative or optative formation and in a final clause construction. The base mo "to make" has as a primary base midi in the present, mbu in the future.
3) radi rimo, "to hold to go on". The nominal form (cf. the preceding number) may be followed by the secondary base rimo. This formation expresses the iterative or durative aspect of the process indicated by the nominal form (the primary base).
4) émi girimo, "to make to do habitually". The secondary base gitimo may be put after a verbal base to indicate the habitual aspect of the process expressed by that verbal base (the primary base). The resemblance of this formation to that of the preceding number suggests that this formation is a nominal predicate.

## IV. SOME PECULIARITIES IN VERBS

1) There are complex predicates whose bases occur only in combination with each other forming a set phrase, e.g. ife ru, "to weep"; gho ni, "to sprout".
2) nu ghaghaki, "me to make have an abcess non 1 p.s.". Translation: "I have an abcess". The predicate ghaghaki is the present formation non ${ }^{1}$ p.s. of the base ghagha; the formation is used in an impersonal way;
$n u$ is personal pronoun occurring as direct object. A narrow rendering would be: "it makes me have an abcess". We translate: "I have an abcess". The logical subject is indicated by a grammatical object.

## Section 6. Linking-elements.

In this language many linking-elements occur, always placed after the word or the clause they belong to. There are subject-indicators already familiar to us: $k i$, ta, tè; sometimes an object may be indicated by the same indicators as well. Ni may be rendered by "in behalf of". Ma indicates a place, ghai ma, "home at", i.e. "at home". Fini means "from" or "by means of", e.g. ghâi fini, "home from", i.e. "from home"; waki fini, "knife with", i.e. "with a knife". Di is used with verbs indicating "to say", e.g. nu di roghoi, "me to he says", i.e. "he says to me". Magha after a clause indicates tense, e.g. kunggi magha | maridi, "after he died, | I came downstairs".

## CHAPTER XII

## KATI-LANGUAGE

## Section 1. Name and Territory.

Going down the river Digul we meet the tributary Ka* on the left. This name Ka is a corruption of the native word Kowo. One of the affluents of the Kowo is the river Muju. The tribes living between Maju and Ka are called Mujunese by the Dutch Government and the Catholic Mission. In their own language there is no such word as indicates the whole of the tribes, but they are called $Q a^{u t i}$ by the Jaqai-people, living in the basin of the river Mapi; and Ghawisi by the Auju-people, living between the Digul and the Mapi. The territory, where the Qauti-people live, has not yet been described, nor has the number of the dialects already been fixed. The population has been concentrated in villages only for a short time; the local differences in speech are innumerable. Drabbe lias been able to ascertain two dialects viz. the dialects of Niinati, a village on the Muju, and of Metomka, situated to the sotith of the village of Jiptem. The names Ghawisi and Qauti are related to the word kati, which according to Drabbe in the dialect of Niinati means "real man"; therefore Drabbe speaks of this language as the Kati-language. We analyse the Niinati-dialect.

## Section 2. Nouns.

1) Nouns may be single nouns or compounds. Some sound-groups are only used as nouns, others are used both as nouns and as verbs.
2) The nouns may be divided into two groups. The first group corresponds to the sex-distinction and consists of names of men and animals; the second group corresponds to a gender-indication and consists of names of animals the sex of which is not obvious, and of things. The linguistic value of the distinction is proved:
a) by the use of native terms to indicate masculine (sex or gender) and feminine (sex or gender) viz. katuk aninggo, "name of a man"; wonong aninggo, "name of a woman";
b) by the referring gender of the personal pronoun, e.g. je ambe, "his father"; ju ambe, "her father";
c) by differences in form in the conjugation according to sex or gender of the subject;
d) by change of vowel occurring in names of relatives, e.g. minggi, "son"; manggan, "daughter".

When the sex-distinction is irrelevant in words of group I, the forms are considered as being of masculine gender; sometimes difference of gender denotes different shades of meaning, e.g. ok, "water in a well" is feminine; ok, "drawn water" or "sap in fruits" is masculine. Parts of the body are masculine except typically female parts. The rules on gender are still to be analysed.
3) Indication of number in nouns is only used when the number cannot be concluded from the context; plural is indicated by repetition, e.g. katuk katuk, "men". When the names of things occur in the plural, the predicate is always in the singular even when the noun is repeated. The plural of names of men and animals may also be expressed by a personal pronoun $3 \mathrm{p} . \mathrm{pl}$. which pronoun is put after the noun, e.g. tana ji mbet, "children they subject-indicator", i.e. "the children". A linkingelement (in this case a subject-indicator) is always added in this plural form. The personal pronoun gets the function of the definite article in English; the personal pronoun of $3 \mathrm{p} . \mathrm{s}$. is used in the same way but also occurs with names of things.
4) The relation between nouns is expressed as follows:
a) by a plirase in which the first element indicates the possessor, e.g. ambe ambip, "father house", i.e. "the house of the father"; the second element of this composition may have the function of a linking-element, e.g. ambiw-ati, "house upperpart", i.e. "on the top of the house". Sometimes a real linking-element may be added;
b) by a phrase with a personal pronoun between the two nouns, e.g. ambe je ambip, "father he house", i.e. "father of him house", "the house of the father". Number, sex or gender of the possessor may be expressed by the corresponding forms of the personal pronoun;
c) by a compound, the first element of which is an apposition to the second, e.g. on-karao, "bird kara $0^{\prime}$ ", i.e. "the bird that is a karao";
d) by a compound, the first element of which determines the second, e.g. at-jop, "tree-fruit", i.e. "fruit of a tree";
e) a linking-element following the noun is used to express various relations, e.g. jaa indicates place; pet is to be rendered sometimes by "from"; eep or iip means "provided with"; kim is "along" or "across"; a, joom, janop, toore mean "together with" or "and". A special linking-element to express a possessive relation is not found.
5) Many nouns are composed with the morpheme man, (plural: tan) with the meaning: "somebody" or "something". This man may follow a noun, a formation ending in $-i$ (cf. sect. 5, part III, n. 1) or a conjugated form, e.g. fokput-man, "liar somebody"; ani-man, "to eat something", "something belonging to the process to eat"; in these compositions the pronoun 3 p.s. may be used as well, e.g. ani-je-man, "to eat it something", i.e. "something of the process to eat", "some food".

Section 3. Pronouns.

| 1 p.s. | $n e$ | 2 p. pl. | $t i p$ |
| :--- | :--- | :--- | :--- |
| 1 p. pI. | nup | 3 p.s.masc. | $j e$ |
| 2 p.s.masc. | tep | 3 p.s. fem. | $j u$ |
| 2 p.s.fem. | tup | 3 p.pl. | $j i$ |

Explanationto the table.
The personal pronouns show sex-indication in 2 p.s. and 3 p.s. Number is expressed in all three persons. There are no special forms indicating a possessive relation. The personal pronouns occur preceding the nouns and form a phrase in the same way as two nouns do, e.g. tew ambip, "thou house", i.e. "thy house". Drabbe compares this formation with: ambe ambip, "father house", i.e. "the house of the father". The personal pronouns in combination with the morpheme man stand for the possessive noun used substantively, e.g. ne-man, "I something", i.e. "something I have got".
The personal pronoun followed by the element $k a$ or manden, plays the same part as a reflexive pronoun, e.g. je ka jeetmon, "he about himself speaks". Sometimes both words $k a$ and manden occur while the personal pronoun is repeated, e.g. je ka je manden jeetmon, "he about himself speaks".

## Section 4. Numerals.

Only two genuine numerals are used: mim, "one"; ajoop, "two"; "three" is indicated by a composition: ajoo-miim. From "four" the names of fingers and other parts of the body are used; from "twelve" a senary system is used. "Twelve" is war-ajoop, "six-two"; "six" may be expressed by war-mim, "six-one". The first member of an enumeration is preceded by kipiktun, e.g. kipiktun ambe, "first father"; the other members are followed by the numerals: enang ajoop, "mother secondly".

## Section 5. Verbs.

The usual word-order is: subject (S) - relation (R2) - relation (R1) - predicate (P): kakewet je ambe took kondon, "the boy to his father tobacco gave", i.e. "the boy gave tobacco to his father". In the predicate subject and relation are represented by subject- and relation-indices which, together with the indices of tense, mood and aspect, form the conjugation. The personal pronouns only occur in the function of subject or relation for the sake of emphasis; in all other cases the indices in the predicate are sufficient. In the predicate we distinguish the base i.e. the bearer of the lexical meaning, and the group of indices attached to it. The relation-indices are: 1 p.s.: $w ; 2$ p.s.: pt; 3 p.s.masc.: $n$; fem.: $m b$; the three persons
plural: nd. The indices of tense, mood, aspect and subject will be indicated in the different numbers further on. All bases end in a vowel. This final vowel is often subject to change. Generally speaking the following statement can be made:
a) the final vowel occurs before suffixes beginning with a consonant (e.g. the relation-indices 2 p.s.: pt);
b) some bases with one single final vowel drop this vowel before suffixes; other bases correlate the vowel to the next. This difference of behaviour should be mentioned in the vocabulary of the language. Drabbe put the single correlating vowel in brackets;
c) bases ending in a double vowel drop their final vowel before the initial vowel of a suffix and the penultimate vowel is correlated with the initial vowel of the suffix;
d) bases with final $e$ and $e$ in the preceding syllable drop the final $e$ before suffixes with initial vowel and have the $e$ of the preceding syllable correlated with the initial vowel of the suffix. Suppletion occurs in bases according to the number of object or subject, e.g. popne, "to die", subject is singular; jowore, "to die", subject is plural; naambe, "to open", the object is singular; naatme, "to open", the object is plural.

## I. VERBAL PREDICATES

1) jeetm-an, "to say P "; B-t/s;
jeetme-pt-an, "to say thee I"; B-r-t/s;
mane-ep, "to stab thou"; B-t/s;
manee-w-ep, "to stab me thou"; B-r-t/s;
kamo-on, "to do he"; B-t/s;
kame-pt-on, "to do for thee he"; B-r-t/s;
tu-un, "to rub she"; B-t/s;
taa-pt-un, "to rub thee she"; B-r-t/s;
Kapaku-up, "to think we"; B-t/s;
kapaka-pt-up, "to think to thee we"; B-r-t/s;
tipir-ip, "to sit down they/you"; B-t/s;
tipere-w-ip, "to sit down with me they/you"; B-r-t/s. Translation: "I say"; "I tell thee"; "thou stabst"; "thou stabst me"; "he does"; "he does for thee"; "she rubs"; "she rubs thee"; "we think"; "we think to thee"; "you/they sit down"; "you/thee sit down with me"; or in the preterit: "I said", "I told thee" etc. This set of examples illustrates the rules for bases and suffixes just mentioned viz. the predjcate consists of a base (B) and the indices ( r and s); the final vowel occurs before following consonants, is dropped before or correlates with following vowels. The bases are: jeetme, "to say"; manee, "to stab"; kame (e), "to do"; taa, "to rub"; kapaka(a), "to think"; tipere, "to sit down". By the use of distinct subject-indices a momentaneous process in
the present or past is expressed. The subject-indices are 1 p.s.: $\alpha n$; 1 p. pl.: up; 2 p.s.: ep; 3 p.s.masc.: on; 3 p.s. fem.: $u n$; non 1 p. pl.: ip. It should be noted, that the relation-indices may refer to direct, indirect object and to relations which in English are rendered by a preposition. This momentaneous formation is also used to express reciprocity; then the predicate is repeated and is found with the two subject-indices alternately, followed by the base kamee, "to do" with the subject-index in plural, e.g. jeetmembon jeetmentun kamíp, "he told her, she told him they did", i.e. "they told each other". The base kamee indicates the tense and occurs therefore in all tenses, moods and aspects.
2) jeetme-pt-an-iin, "to tell thee future I"; B-r-t-t/s. Translation: "I shall tell thee". This is the future formation; the tense-index is $a n$; the sub-ject-indices are 1 p.s.: ïn; 2 p.s.: eep; 3 p.s.masc.: een, fem.: uun; 1 p. pl.: uup; non 1 p. pl.: $i i p$.
3) jeetme-pt-iin, "to tell thee durative l "; B-r-a/s. Translation: "I am telling thee" or "I was telling thee". This is the durative formation of present and preterit. The durative aspect is indicated by a reduplication of the vowel of the subject-indices. When the base ends in $\alpha a$ or $a(a)$, the subjectindices are 1 p.s.: ain; 2 p.s.: aap; 3 p.s.masc.: aan; fem.: aon; 1 p. pl.: aop; non 1 p. pl.: aip.
4) manee-pt-on-en, "to stab thee he perfective"; B-r-s-a. Translation: "he has stabbed thee" or "he had stabbed thee". The aspect index en indicates that the process is finished. The place of the aspect-index is after the subject-index. The formation stands for present and preterit.
5) jeetm-ain parin, "to tell I not"; B-s-negation;
jeetm-aaj-in parin, "to tell future 1 not"; B-t-s-negation;
jeetm-aan-in parin, "to tell future I not", B-t-s-negation. Translation: "I shall not tell". The negation of a process in the future tense is expressed by three different constructions: a) by a base without tense index followed by the subject indices: 1 p. s.: ain; 2 p.s.: aap; 3 p.s. masc.: aan; fem.:aon; 1 p. pl.: aop; non 1 p. pl. aip; b) by a base with a tense-index aaj followed by the plain subject-indices (cf. n. 1), except $1 \mathrm{p} . \mathrm{s}$. : $i n$; c) by a base with the tense-index aan; the subject-indices are the same as mentioned in b); the most common construction is a); b) is more common than c). The negation of the formations discussed in $n$. 1-4 will be treated in part II (nominal predicates, n. 3) and 4).
6) jeetm-a, "to tell l"; B-m/s. Translation: "let me tell". The imperative mood is expressed for all persons by special indices which differ from those used in the indicative. The subject-indices are 1 p.s.: a; 2 p.s.: e; 3 p.s.masc.: ok; fem.: uk; l p.pl.: em; non 1 p.pl.: im(e).
7) In number 5) three negative future formations were mentioned. These formations are also used as three prohibitives, used indiscriminately, but the negation-index parin is left out.
8) jeetm-ilik-et, "to tell I linking-element"; B-s-linking-element (formation I);
jeetm-iik- $a$, "to tell I linking-element"; B-s-linking-element (formation 11);
jeetm-ii, "to tell I"; B-s (formation III). Transtation: "I told and (afterwards ....)", or "I shall first tell and (then .....)". These examples are the specimens of three different formations used in the protasis of compound sentences and each of the three expresses that the process of the protasis precedes that of the apodosis. Formation I consists of the base followed by the subject-indices 1 p.s.: iik; 2 p.s.: eep; 3 p. s. masc.: eek; fem.: uuk; 1 p. pl.: uup; non 1 p. pl.: iip; the formation is always followed by the linking-element et, before which the final $p$ of the sub-ject-indices is found and not a final $w$. Formation II consists of the base followed by the subject indices: 1 p. s.: ïk; 2 p. s.: eew; 3 p.s. masc.: eek; fem.: $u u k$; 1 p. pl.: $u u w$; non 1 p. pl.: itw; the formation is followed by the linking-element $a$, before which the final consonant of the subjectindices is $w$ and not $p$. Formation III consists of the base followed by the subject-indices 1 p.s.: ii; 2 p.s.: eep; 3 p.s.masc.: ee; fem.: uu; 1 p. pl.: uup; non 1 p. pl.: $u$ p; no linking-element is found here. The two processes of the protasis and the apodosis may be thought of as happening in the past or in the future. The tense is always indicated by the apodosis. We shall discuss the two cases separately.
A) If the two processes are thought of as happening in the past, there are two possibilities:
a) the same subject occurs in both clauses: the protasis gets formation I or formation III and the apodosis gets the plain formation indicating a present or past tense either in the momentaneous aspect or in the durative (cf. n. 1 and 3 of this part), e.g. kokamun-iij wan-an, "to do $1 \mid$ to go away I"; B-s | B-s, i.e. "I did first and afterwards I went away"; b) a different subject occurs in the two clauses: the protasis and the apodosis get a present or preterit formation either in the momentaneous or durative aspect (cf. n. 1 and 3 of this part) and the protasis is followed by the linking-element kop; e.g. an-on kop | wun-un, "to eat he linking-element | to go away she"; B-s-linking-element \} B-s, i.e. "after he ate, she went away".
B) If the two processes are thought of as happening in the future, the following constructions are found:
a) protasis with formation I \| apodosis with a prohibitive formation (cf. n. 7 of this part);
b) protasis with formation II | apodosis with imperative formation (cf.
n. 6 of this part);
c) protasis with formation III | apodosis with a prohibitive formation or a plain future formation (cf. n. 2 and 7 of this part).
Formation III does not occur if protasis and apodosis have different
subjects; formation I and II allow difference of subjects but in that case the subject-index $1 \mathrm{p} . \mathrm{s}$. is: aak; 3 p.s.masc.: ook. Formation I may express a kind imperative, e.g. aniik-et, "let me eat first"; often the apodosis is left out, when the context makes clear what the apodosis would say.
9) Ongm-ew o |waakrip-ok, "to cause thou linking-element |to recover he"; B-s-linking-element|B-s. Translation: "make him recover". If a clause with an imperative meaning is followed by an apodosis expressing the object of the request, the protasis gets the plain present and preterit formation (cf. n. 1 of this part) followed by the linkingelement $o$ before which the final $p$ of the subject-indices is substituted by $w$; the apodosis gets the imperative ( $n .6$ of this part) or formation 1 ( n .8 of this part) or a prohibitive formation ( n .7 ).
10) The imperative formation mentioned in n. 6 and 9 of this part, may be preceded by $m$ (before a vowel) or $m a$ (before a consonant) adding to the formation the meaning of an attempt, e.g. m-ongme, "try to tell".
11) maantep-aaj-ep |mon-ok, "to move prohibitive thou | to come imperative he"; B-m-s |B-m/s;
jeetm-a $a$-we | man-a an, "to speak prohibitive thou linking-element | to come prohibitive he"; B-m-s-linking-element | B-m/s. Translation : a) "don't move so that he comes"; b) "don't move otherwise he comes". Whenever a probibitive formation is followed by an apodosis, indicating the object regarding which the prohibition was given, two constructions may be used: a) if something is to be attained, the protasis has the prohibitive formation ( $n .7$ of this part), the apodosis the imperative ( n .6 ); b) if something is to be avoided, the protasis uses the prohibitive formation (n.7) followed by a linking-element $e$, the apodosis the prohibitive formation ( n .7 ).
12) mon-on kaneet | wan-an-iin, "to come present he linking-element | to go future I "; B-t/s-linking-element | B-t-t/s. Translation: "if he comes, 1 shall go". The open condition is expressed by the momentaneous formation (n. l of this part) followed by the linking-element kaneet in the protasis and by the future formation in the apodosis.
13) wan-an katen | mon-on katen, "to go present I linking-element | to come present he linking-element"; B-t/s-linking element | B-t/s-linking efement;
wan-an-en katen | mon-on-en katen, "to go I perfective linking-element | to come he perfective linking-element"; B-t/s-a-linking-element B-t/s-a-linking-element. Translation: a) "if I should go, he would come"; b) "if 1 should have gone, he would have come". The rejected condition is expressed by the linking-element katen at the end of the protasis and the apodosis. In present and future the momentaneous formation (n. 1 of this part) is used in both clauses; in the past the perfective aspectformation (n. 4) is found in both clauses.

## II. NOMINAL PREDICATES

1) katuk amun (an), "man good"; S-nominal element-(linking-element). Translation: "the man is good". The nominal element of the predicate may be followed by a linking-element, which indicates that the noun is used predicatively. This index an is not obligatory. The linking-element pet which may be used in sentences with a verbal predicate to indicate the subject, never occurs in sentences with a nominal predicate.
2) katuk amun, keron, "man good to become he"; S-B1-B2-t/s; amun $t$-en, "good to be he"; $\mathrm{Bt}-\mathrm{B} 2-\mathrm{t} / \mathrm{s}$; ne aam n-in, "I grown up to be I"; S-B1-B2-t/s. Translation: "the man is good"; "he is good"; "I became a grown up". A secondary base is used in seminominal constructions. The base kere, "to become" usually occurs in this function, especially in its perfective formation: ker-on-en. The secondary base te is also used indicating, however, a durative aspect; the base te gets the common subject-indices (cf. n. 1 of part I) but for the first person singular: in instead of an. Another secondary base is pere also with a durative meaning; some primary bases require the secondary base ne.
3) a) ambe of noo, "father money without"; S-B-linking efement; ambe of noo keron, "father without to be he"; S-B1-B2-t/s;
b) ambe ot noo, "father money absent"; S-B-linking element; ambe of noo kerun, "father money absent to be it "; S-B1-B2-t/s;
c) tep wenggopi noo, "thou to speak without"; S-B-linking element;
tep wenggopi noo kerep, "thou to speak without to be thou"; S-B1linking element-B2-t/s;
d) ambe wenggopi noo, "father to speak absent"; S-B-linking element;
e) inum niini noo keraniin, "work to hold without to be future I"; B1-linking element-B2-t-s. Translation: a) "father is without money"; b) "father has no money"; c) "thou dost not speak"; d) "father does not speak"; e) "I shall have no work". These are correlated nominal and seminominal constructions. The examples in a) and b) give two meanings of the word noo; in a) noo means: "without", in b) noo means: "absent"; this difference is clear from the difference of subject in the examples viz. in a) "father" is subject; in b) ambe-ot is subject (cf. the feminine subject-index an referring to the noun ot, "money"). In c) and d) we come across forms which consist of a base and the suffix $i$; they are used substantively in opposition to the forms ending in $e$, which will be mentioned later on (cf. part III, n. 2). The seminominal construction of the example in c) occurs only when the subject is emphasized. When the form in $i$ is subject in the sentence (cf. example d) no seminominal construction can be used. The examples given from a) to d) may be translated in the past time as well. The formation mentioned in d) is usual negation of a process in the present or the past; the forma-
tion given in example e) indicates the way of denying a process in the future viz. by means of a secondary base.
4) tep wenggop-i eep parin, "thou to speak provided with not";
tep wenggop-i eep parin kerep, "thou to speak provided with not to be thou";
wenggop-i eep parin, "to speak provided with not". Translaton: "thou dost not speak"; "thou dost not speak"; "no word is said". This language has some other constructions to express a negation in which the formation in $i$ occurs; these examples correspond to those given in the preceding number in c) and d); these formations are also employed as negation of a process in present and preterit; the use of the secondary base kere in its future formation expresses negation of a future tense. The element eep is the opposite in meaning of noo, "without" or „absent", something like "provided with" or "present".

## III. COMPLEX PREDICATES

In the following formations a combination of a primary and secondary base is found. The nominal or verbal character of these predicates is not yet determined.

1) je an-i kin (keron), "he to eat able to". Translation: "he is able to eat" or "he is going to eat", or "he enjoys eating". When tense, mood or aspect must be expressed, the secondary base kere is used. The negation is indicated by parin placed after kin.
2) niin-e kambon, "to hold to hold he". Translation: "he holds". Here the complex predicate consists of a primary base followed by the suffix $e$, while the secondary base is conjugated. This $e$-formation represents a process without reference to person and number of subject or object, to tense or mood. This e-formation does not occur by itself but always in combination with a secondary base. The two bases of this complex predicate are almost synonymous; they have the same subject; the processes happen in the same time; the bases may be separated by adjuncts. The primary base always precedes the secondary base. The e-formations express the momentaneous aspect in opposition to the forms in $00, n$ or naan (cf. n. 8) and 9). When the two bases are not synonymus (e.g. "he said laughing") the formation which will be discussed in IV n. 1 is used.
3) a) jeetme mboron, "to tell to be usually he";
b) jeetme mbaraniin, "to tell future to be usually l ";
c) jeetme-mber-emoon, "to tell to be usually to be used he";
d) jeetme-mbiri-mo kamoon, "to tell to be usually only to do he".

Translation: a) "he usually tells"; b) " 1 shall usually tell"; c) "he is used to tell"; d) "he is always saying". The formation in $e$ combined with the secondary base pere (which has become mbere in our exam-
ples) expresses a habitual aspect. In example a) the habitual aspect is in the present and the preterit; in b) the future tense is meant; in $c$ ) the base mber is joined to the base emee, which indicates the habitual aspect as well; in d) a combination of formations in $e$ and $i$ occurs; the $i$-formation is followed by the element mo "only"; the secondary base is kamee, "to do".
4) There are still some other formations in which the $e$-forms are used:
a) connected with the bases: noo kere, woomone or korone the construction indicates to check the process expressed in the e-formation, e.g. ani-mbon tepere noo kerip, "to eat place to sit to have finished they", i.e. "they have finished to sit in the place of eating", "the feast is over"; b) joined with kutip the meaning of the construction is that the process expressed by the e-fomation cannot be accomplished, e.g. ongme kutip, "impossible to do";
c) the $e$-formation of bases meaning "to grow" or "to become" combined with the base wene, indicates to do something increasingly; the base wene is always found here in durative form: wenendere, e.g. japne wenendere, "to grow up more and more";
d) in combination with the secondary base jare, the $e$-formation indicates that the process is related to all the members of the subject or object, e.g. jowore jarip, "they all died"; jeetmende jaron, "to tell them all to pass he", i.e. "he passed them all telling", "he told it to them all"; e) combined with the base taambe, "to take from", the construction expresses that all members participate in the process, e.g. awon ane taambip, "pig to eat to take from they", i.e. "all ate of the pig".
5) a) ambe anok parin (keron), "father to eat not (to be)"; S-B-negation-(B2-s);
b) ambe an-emook parin, "father to eat to be used not"; S-B1-B2negation. In both examples a formation in ok occurs: an-ok, "to eat"; emo-ok, "to be used". In example a) a nominal or seminominal construction is given, corresponding with the $i$-formation, given in n. 3 of this part. The use of the secondary base kere adds the connotation: father does not eat as he was used to do. In b) a habitual aspect is expressed by the base emee, which got the suffix ok. This formation followed by parin is the usual negation of a habitual aspect.
6) The $o k$-formation is also used:
a) in combination with a secondary base tape, with the meaning "to do for just a moment", "to do almost". The same meaning may be expressed by a formation in $i$, followed by tep, and the secondary base kere, e.g. aamone toorok tapun, "to give bitth to, to be on the verge sbe", i.e. "she almost gives birth to"; kapakii tep keraniin, "to think about a little to be future I", i.e. "I shall think about it for a moment";
b) connected with another $o k$-formation with the meaning that the two processes alternate, e.g. kuponok japonok, "to descend to ascend";
c) joined with any secondary base with final meaning, e.g.: anok manan, "to eat to come I", i.e. "I come in order to eat".
7) ambe wan-an-ok parin, "father to come future suffix negation".

Translation: "father will not come". The formation in ok in combination with the future tense-index and the negation, is a negative future construction.
8) ongmoot-en, "to do to be he". Translation: "he is making". The formation in $o o$ joined with the secondary base te expresses a durative aspect. The subject-indices are 1 p.s.: in; 2 p.s.: ep; 3 p.s.masc.: en; fem.: $u f ; 1$ p. pl.: up; non 1 p. pl.; ip.
9) ane-n wenep, "to eat suffix to walk thou";
ane-naan wenep, "to eat suffix to walk thou". Translation: "thou walkest white thou art eating". The formation in $n$ is used for all bases; naan for a small number of bases; the meaning is always a durative one; the secondary base used in these constructions is always a verb of motion; without a secondary base, these $n$ - and naan-formations do not occur.

## IV. SOME PECULIARITIES IN VERBS

I) a) wingga-ni | noo ker-an, "to sing (base ne) I | absent to be l"; b) am monoo mun | mir-un-en, "rain to keep on (base me) she $\mid$ night to fall she". Translation: a) "I sing and I stop"; b) "the rain kept on and the night is fallen", i.e. "it was raining until night". Two processes are coordinated in this construction; this coordination is expressed by a secondary base: ne or me, which have their own subject-indices 1 p.s.: $i$; 2 p.s.: ep; 3 p.s.masc.: $e$; fem.: $u$; 1 p. pl.: $u p$; non 1 p. pl.: ip. These bases are only used to connect two processes; the base ne occurs with any primary base either without change of the final vowel or with final $e$ (e-formation) but only when a momentaneous aspect is required. The base $n e$ is also found in the so-called formation I and formation III, which express that the process of the protasis precedes that of the apodosis. These formations I and III (formation II does not occur here) are used in the same way as is discussed in part I, n. 8), therefore it will do to give one example: wingge n-ik-et | noo keran, "to sing I (first) | absent to be I". Translation: "J sing first and then I stop". It ought to be noted, however, that the forms of formation I occurring together with the base $n e$, get the subject-index $i k$ etc. instead of $\ddot{i k}$, etc. The secondary base $m e$ is used after formations with a durative aspect.
2) a) komo and-eep, "what to mean thou";
b) je and-i $i p$ | eetepe-n-iip, "him to mean they | to look for him they";
c) wana |and-ik-et, "to go imperative I | to mean I linking-element";
d) wene | and-ik-et, "to go imperative thou | to mean I linking-element. Translation: a) "what dost thou mean?"; b) "they look after him"; c) "I
intend to go"; d) "I will that thou goest". In all these formations the base ande is used. This base occurs in formation I and III mentioned in the preceding number. In example a) the conjugated form is found combined with an interrogative word, and expresses clearly the meaning of the base ande viz. "to intend", "to purpose", "to mean"; in b) a protasis expressing the object of the process indicated in the apodosis; in c) and d) the base ande is found in the apodosis, and is followed by a direct speech, expressed in the protasis. Drabbe suggests, that this base ande is identical with a base ande "to say"; "to say something" can easily take the meaning of "to mean".
3) The Kati-language has a very peculiar formation viz. a combination of relation- and subject-indices without any base. This combination is used in the momentaneous, durative, habitual, perfective aspect, in the future, the three negative future tenses, the imperative, the three prohibitive formations, in formation I, II and IlI, the formations in $e$, ok, anok, $o o, n$ and $i$. Some examples:
$n-o n$, "me he", i.e. the relation-index and subject-index of momentaneous aspect (cf. part 1, n. 1);
$n-e e n$, "me he", i.e. indices of the durative aspect (cf. part l, n. 3); $n-o k$, "me ok-formation". The meaning of these formations is: "to cause trouble to somebody", "to kill", "to beat", "to pierce somebody". Special relation-indices are used 1 p.s.: $n, 2$ p.s.: $t ; 3$ p.s.masc.: ai, fem.: $u$; three persons plural: $i$.
4) kokne-mb-on-en, "to dry up to her it perfective". Translation: "she is recovered (from a wound)". The impersonal formation occurs to express that a person is affected by a process. The logical subject (cf. translation: she) is indicated by the relation-index.
5) konom ta-an; B1-B2-s;
konom ne-w-en; B1-B2-r-s. Translation: "I cough"; "thou hast got a cold". In our discussion of the various formations of this language we came across several complex predicates the bases of which have been translated separately; but there are many complex predicates in which the bases occur forming a set-phrase; sometimes one or another of the bases can be translated, but the combination as a whole has a new meaning. In our examples the base konom means "phlegm" but in the combination it is not clear how this meaning is expressed.
6) aa-ne kow-an, "him to kill to lay down I"; r-B1-B2-s. Translation: "I kill him and lay him down'. There are some bases that have the relationindices prefixed. The most recurrent base with this feature is ne, "to illtreat", "to kill". This base is seldom used alone but nearly always as an $e$-formation with a secondary base. Instead of the usual relation-indices (cf. part I, n. 1) the following are found: 1 p.s.: ne; 2 p.s.: $t e$; 3 p.s.masc.: $a$; fem.: we; three persons plural: $j e$. (Before the base ne the vowel of the relation-indices is repeated: nee, tee, etc.). Some-
times the relation-indices are followed by the consonant $n$, e.g. nen-pure, "me to chase away".

## Section 6. Linking-elements.

Here the linking-elements occur after words and after clauses. Some examples: jaa is to be translated by the English "at", and is added to adjuncts of time and place; it also indicates the object in the sentence; pet is sometimes "at", sometimes "from"; it may also indicate the subject in a sentence, sometimes the object, the cause or the means; $a n$ in a nominal sentence indicates that the nominal element is used predicatively; eep or iip means "provided with"; kim is "along", "across"; a, joom, janop, toore, mean "together with" or "and"; kin and atep mean "as"; kop, e, o are coordinating conjunctions: "and"; ko-e is a consecutive conjunction; katen at the end of a protasis and an apodosis indicates a rejected condition; kaneet at the end of a protasis expresses an open condition; koneet is "though". The great number of linking-elements strikes Drabbe.

## CHAPTER XIII

## KAMORO-LANGUAGE

## Section 1. Name and Territory.

In the south-west of New Guinea there are extensive lowlands between the river Opa (the mouth of which is long. $134^{\circ} 45^{\prime} \mathrm{E}$. long.), and the river Karumuga (the mouth of which is long. $137^{\circ} 5^{\prime} \mathrm{E}$. long.). Since the expedition of Wollaston this territory has been called the Mimika-region, after one of the rivers flowing there. This name was kept when the gouvernment was set up in 1926. The people themselves have no particular name. As contrasted with the inhabitants of the interior, they say that they are "true men": Wénata or Kamoro. So Kamoro means "true man" or "living man", as contrasted with the deceased, the ghosts, things, plants and animals. All inhabitants are deeply convinced to be: Kamoro; the other people of New Guinea have no claim to this title. The former name of Mimika refers only to a part of the region and is not used by the native speakers of other parts. This is why Drabbe speaks of the Kamero-region, Kamoro-language, Kamoro-people. In this treatise we shall describe the Tar'a-dialect.

## Section 2. Nouns.

In this language there are several elements, bearers of a lexical meaning which may adopt a nominal or a verbal character; we use the general term of base (B) for those elements.
Now there are bases which occur only as nouns; others only as verbs; for others, however, the function in the sentence is decisive as to the character adopted; finally, there are bases usually occurring as verbs, but underlying affixation they show the characteristics of nouns. The principal affixes are: the suffixes $a$ and $t^{i} a$, and the prefix ma combined with the suffix $t^{i} a$, or the prefix ma combined with the suffix $k a^{e}$. A conjugated verb can be used as agent-noun, e.g. manekammere, "he bears" stands for "the bearer".
Number and gender are not formally expressed in nouns. The relation between nouns is indicated in one of the following ways:
a) two nouns may form a compound; the accent is on the first constituent; according to the meaning the first element qualifies the second, e.g. ote-èké, "tree-fruit";
b) two nouns form a phrase; the accent is on the second constituent, and according to the meaning, the second qualifies the first, e.g. utiri-éke,
"coconut fruit", i.e. "the coconut", (not the trunk, not the leaves but the fruit);
c) two nouns form a phrase; the first indicates the possessor of the second. This construction occurs only in names of relatives and in the second element the possessive pronoun is extant preceding the noun, e.g. $M a^{u n}$ éti a-ote, "Ma"néti his mother", "the mother of Ma"neti";
d) a linking-element following the noun is used to express various relations, e.g. $j a$, "because of"; the linking-element $t^{t} a$ is used expressing a possessive relation, e.g. kame nati tia, "house headman of", i.e. "the house of the headman". To this formation the personal pronoun $3 \mathrm{p} . \mathrm{s}$. (are) may be added: kamé nati ara-tia, "house headman him of", i.e. "the house of the headman". Moreover, a prefix indicating the indirect object (am) can be used, e.g. kamé nati am-ara-tia, "house headman to him, him of", i.e. "the headman to him belongs this his house". The linkingelement $t a$ used in these constructions is placed after the noun that indicates the possessor, but when this noun is accompanied by a determination, $t a$ is placed after this determination; is the determination, however, a numeral, $t^{i} a$ is found immediately after the noun itself. Examples: katia wé awalta-t $a$, "things people other of", i.e. "things of other people"; arraa-tia rani, "children of all", i.e. "of all children".

## Section 3. Pronouns.

|  | Set I | Set II | Set III | Set IV | Set V |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 p.s. | noro | nuru(ue) | noatia | noma | no |
| $1 \mathrm{p} . \mathrm{pl}$. | re | naru(4e) | natat | na | naa |
| $2 \mathrm{p} . \mathrm{s}$. | oro | uru( ${ }^{\text {e }}$ e ) | oratia | oma |  |
| 2/3 p.d.m. | kimané | kimané("e) | Kimanatia | kimané kama | Kimané-a |
| 2/3 p.d.f. | kaokamané | kaokamané( ${ }^{\text {e }}$ e | kaokamanatia | kaokamané | kaokaman |
| $2 \mathrm{p} . \mathrm{pl}$. | kare | karu( ${ }^{\text {c }}$ ) | katia | kama [kama | kaa |
| $3 \mathrm{p} . \mathrm{s} / \mathrm{pl}$. | are | aru(ue) | arat'a | ama | a |

Explanation to the table:
Set I consists of the personal pronouns used as subject in the sentence; set II contains the pronouns used as subjects, when this function is emphasized. The linking-element ${ }^{2} e$ occurring in these forms can be left out, though the vowel-change, caused by the element, is maintained. Set III is composed of forms indicating the possessor and used as possessive pronouns; in that function they always follow the word to which they belong. The linkingelement in these forms (viz. tia) is already familiar to us (section 2). Sets IV and V consist of forms used as indirect and direct object; the linkingelements are $m a$ and $a$. Now and again the forms of these two sets are used promiscuously. The forms mentioned under 2 p. dual. hold good for 3 p.d. as well, In 1 p . the dual is expressed by the numeral jaminatia, "two". In the

3 p . we find only one form for singular and plural. A special form indicating possession is found only in names of relatives, where a prefix to the noun occurs. In 1 p.s.: $n \ddagger ; 1$ p. pl.: $n \neq 2$ p.s.: o, $u, \dot{e} ; 2$ p.pl.: $k ; 3$ p.: $a$. Some examples: o-ote, "thy mother"; n-eamo, "my wife".

## Section 4. Numerals.

The Kamoro-language has only two genuine numerals: enakoa, "one", and jamané or jamanatia or jaminat'a, "two"; after a noun or pronoun mané, "two" is used. The number "three" is already a compound; "four" and the following numbers are expressed by means of the fingers. The place of the numerals is after the word they belong to.

## Section 5. Verbs.

The usual word-order is: subject (S) - indirect object (R2) - direct object (R1) - predicate (P), e.g. ka ${ }^{\circ} k a$ a ${ }^{\text {ar }} \boldsymbol{r} u$ éréka makéaamere, "the wonan to the boy a fish gives". The subject is indicated in the predicate by a subject-index (s). The personal pronouns are only used in the function of subject or object for the sake of emphasis, in all other cases the indices in the predicate are sufficient. The object is represented in the predicate by the relation-index ( $r$ ) but this index refers not only to what is generally called the indirect and the direct object, but also to relations which in English are expressed by prepositions (speak about, go to etc.). So we might say: the relation-index indicates that the process refers to somebody or to something. The relation-index is found in two forms: one indicating a first or second person and one not indicating a first or second person. In the latter case the index may indicate either a third person, or a relation not familiar to us or perhaps the absence of any relation. The two relationindices agree in position and occurrence. There are verbal and nominal predicates, and a predicate may be constructed: a) as a simple predicate consisting of one base only; b) as a compound predicate consisting of two bases, a primary base not conjugated and a secondary base conjugated; the two bases show the character of a compound by the fact that some indices are attached to the primary base as prefixes; c) as a complex predicate consisting of two bases, a primary base not conjugated and a secondary base conjugated, but here the indices mentioned under the preceding $b$ ) are prefixed to the secondary base.

## I VERBAL PREDICATES

1) $m a-k \dot{e} a-m-a-r-i$; t2-B-t1-s with r-infix;
$m a-k e ́ a-m-\alpha-n-i$; t2-B-t1-s with r-infix. Translation: "I bake for him"; "I bake for thee". The three persons have their own subject-indices in singular, dual and plural, but there are only two relation-indices as
mentioned already viz. one for 1 p . and 2 p . and one for non 1 and 2 p . These fwo indices are: the consonant $n$ for 1 p. and 2 p ., and the consonant $r$ for non 1 and 2 p . Now the difficulty is: when the index $n$ refers to a 1 p . and when to a 2 p .? The Kamoro-language has distinct formations to express a process with a reflexive character; sometimes this enables us to decide which person is referred to by the $n$. When the subject is 1 p ., the index $n$ must refer to a 2 p ., otherwise a reflexive formation would have been used. Likewise the index $n$ in connection with a subject 2 p . must refer to a relation 1 p . If, however, the subject is a 3 p ., the index $n$ may refer to a 1 or 2 p . In this case the ambiguity is not removed. Add to this that neither $n$ nor $r$ indicate the number of the relation they refer to, and the amount of the difficulties is complete. The following tables will help us to make clear how the different forms are combined and how some difficulties are partly removed.
ma-kéa $\alpha-m-a-n-i$, "I for thee/you";
$m a-k e \mathbf{a} a-m-\alpha-r-i$, "I for him/them";
ma-kéa $\alpha-m e-n-\frac{a}{}{ }^{\text {r }} m u$, "we two for thee/you";
$m a-k e ́ a a-m-a^{4} m u$, "we two for him/them";
ma-kéa $a-m e-n-o m$, "we for thee/you";
$m a-k e \dot{e} a-m e-r-o m$, "we for him/them".
If the subject is 1 p . singular, dual or plural, the subject-indices are 1 p.s.: $a i$; 1 p.d.: $a^{u} m u$; 1 p. pl.: om(o). Relation-indices are $n$ and $r$ or zero.
$m a-k e \dot{a} a-m a-n$-ém, "thou for me";
ma-keaa-me-n-ame, "thou for us";
ma-kéaa-me-r-ém, "thou for him/them";
ma-kéa $\alpha-m$ - $a$-ni-mimi, "you two for me";
ma-kéa $\alpha$-me-n-amimi, "you two for us";
ma-kéaa-amimi, "you two for him/them";
ma-kéaa-m-a-n-tim, "you for me";
ma-kéaa-me-n-aimi, "you for us";
$m a-k e ́ a a-m-\mathbf{a}{ }^{2} m$, "you for him/them".
If the subject is 2 p . singular, dual or plural, some variations in the use and the form of the subject-indices occur in case the relation-index $n$ refers to a $1 \mathrm{p} . \mathrm{pl}$. In this way the number of the relation, which is not indicated by the relation-index itself, is expressed after all. The subjectindices are 2 p.s.: ém or ame; 2 p.d.: amimi; 2 p.pl.: atim or aimi. The relation non 1 p . is indicated by $r$ or zero-modification; number is not expressed in any way in this case.
$m a-k e ́ a a-m a-n-e$, "he for me";
ma-kéa-me-n-ao, "he for us";
ma-kea $\alpha-m e-n-a$, "he for thee/you";
ma-kéa $a-m e-r-e$, "he for him/them";
$m a-k e ́ a a-m-a-n i-m u t i$, "they two for me";
$m a-k e ́ a a-m e-n-a m u t i$, "they two for us/thee/you";
ma-keaa-m-amuti, "they two for him/them";
ma-keaa-m-ante, "they for me";
$m a-k e ́ a a-m e-n-a t e$, "they for us/thee/you";
$m a-k e ́ a a-m-a t e$, "they for him/them".
If the subject is a 3 person singular, dual or plural the subject-indices are different when the relation-index $n$ refers to either $1 \mathrm{p} . \mathrm{s}$. or pl. and in this way the number of the relation is indicated. The subject-indices are $3 \mathrm{p} . \mathrm{s} .: e$ or $a o$ when relation is $1 \mathrm{p} . \mathrm{s}$. or pl., and $a$ when relation is 2 p.; 3 p.d.: amuti; 3 p. pl.: ate. In case the relation-index $n$ refers to a 2 p., number is not expressed; the relation non 1 p . or 2 p . is indicated by $r$ or zero, and number is not expressed.
2) éma-muku-m-i-n-i, "preterit to hit preterit thee l"; t2-B-tl-s with $r$-infix; éma-muku-ma-o, "preterit to hit preterit him l"; t2-B-t1-s. Translation: "I hit thee"; "I hit him". There are two formations indicating a past tense sphere: the one indicates that the process was accomplished today or last night, the other that the process was accomplished before last night. Names for these tenses are: to-day preterit and distant preterit. The latter tense is analysed now, the former tense in number 4). Ema is a cooperating secondary tense-index and may be omitted; muku is base; $m a$ is the primary tense-index, the $a$ of $m a$ is left out here. The subject-indices are: 1 p.s.: o or $i i ; 1$ p.d.: $i m u ; 1$ p. pl.: om(o); 2 p.s.: me; 2 p.d.: imimi; 2 p. pl.: itimi; 3 p.s.: $\dot{e} ; 3$ p.d.: imuti; 3 p. pl.: ate. -The relation-indices are $n$ in 1 and 2 p., zero in non 1 and 2 p.
In this and in the formation of the preceding number, the negation is expressed by putting ne after the form. In this case the secondary tenseindex does not occur. Another way to express the negation, found only in this preterit formation, is the addition of the negation taka, "not yet, never yet", to the conjugated base. The subject-indices in that case are 1 p.s.: i; 1 p.d.: umu; 1 p. pl.: amo; 2 p.s.: ami; 2 p.d.: umimi; 2 p. pl.: itimi; 3 p.s.: a; 3 p.d.: amuti; 3 p. pl.: ate. The negation ne may also be added after the tak $\alpha$-formation.
3) $a-k e ̀ m e-k-a^{i} m i-n-i$, "future to give lig. fut. thee 1 "; t2-B-1-t1-r-s; $a-k e ̀ m e-k-a^{i m i}-r-i$, "future to give lig. fut. him l"; t2-B-i-tl-r-s; a-neké-r-aimi-n-i, "future to bear lig. fut. thee l"; t2-B-I-t1-r-s; $a-n e ́ k e \dot{e}-\mathrm{r} \mathbf{a}^{I} m i-r-i$, "future to bear lig. fut. him I"; t2-B-l-t1-r-s. Translation: "I shall give thee"; "I shall give him"; "I shall bear thee" "I shall bear him". These formations indicate a future time sphere with a momentaneous aspect. The prefix $a$ is a secondary tense-index. It occurs also in formations expressing a request, a command or wish, because the realization lies in the future. This prefix can also be dispensed with. After the base the consonants $k$ or $r$ occur, called ligature by Drabbe. They appear not only in the future, but in several other forms as well. We shall use the symbol I to denote the ligature. The ligature
$r$ is often omitted after bases ending in $-n \dot{e},-n i,-n o,-n u$ and $-r e,-r i$, -ro, -ru. According to these ligatures the verbal bases are to be divided into two groups viz. the $k$-bases and the $r$-bases. The primary tense-index is $a^{i m i}$. The subject-indices and the relation-indices are the same as those of the present tense.
$K a^{o-k-a k u m u-r-e ́ m, ~ " t o ~ b e a t ~ l i g a t u r e ~ n o t ~ h i m ~ t h o u " ; ~ B-l-n e g .-r-s . ~}$
Transtation: "thou wilt not beat him". The negation is expressed in a special way (akumu) occurring only in the future. The base has no secondary tense-index prefixed; the ligature is extant; the subject- and relation-indices are those that occur in the present as well.
4) $e m a-k a^{\circ}-n-i$, "preterit to beat thee I"; t2-B-r-s;
éma-kao-k-i, "preterit to beat him I"; t2-B-l-s;
ema-mép-a-n-i, "preterit to sit beside thee I"; t2-B-s with r-infix;
éma-mép- $a-0$, "preterit to sit beside him I"; t2-B-t1-s. Translation: "I beat thee to-day"; "l beat him to-day"; "I sat beside thee to-day"; "I sat beside him to-day". These forms represent a to-day preterit. The secondary tense-index is ema, which is sometimes left out. The ligature $r$ does not occur at alt, the ligature $k$ appears when the relation is non 1 or 2 p. and the subject 1 p.s. and pl.; 2 p.s.; 3 p.s. and pl. This ligature $k$ is followed by the vowel $a$ in case the subject is $2 \mathrm{p} . \mathrm{s}$. or $3 \mathrm{p} . \mathrm{s}$. and in the same cases the vowel $a$ is found in $r$-bases. This $a$ also occurs in 1 p.s. of $r$-bases. The function of this $a$ is not clear. Drabbe suggests that it is the primary tense-index of this formation. The subject-indices $1 \mathrm{p} . \mathrm{s}$. are: $i$ or $o$ or $u$; the other subject-indices agree with those of the present tense; there is, however, often a vowel, occurring between the base and the subject-index, e.g. 2 p.d. may appear as muti, amuti, emuti, imuti. The relation-index is $n$ or zero with the usual function.
5) a) $a m a-k e ̀ m e-k-\mathrm{a}^{i}-n-i$, a2-B-l-al-r-s;
b) ama-kème-k-at-ma-i-n-i, a2-B-1-a1-t-s with r-infix;
c) $a m a-k$ ème- $k-a^{i}-r-i m i-n-i, ~ a 2-B-l i g .1-a 1-l i g .2-t-s$ with r-infix.

Translation: "I am used to give thee"; "I was used to give thee"; "I shall be used to give thee". The meaning of these formations is "to be used to". This aspect is expressed by the index $a^{i}$, the $a$ of which is left out after bases ending in $i, a^{i}, u, a^{u}$. There is a secondary aspect-index viz. the prefix ama. After the base the ligature $k$ or $r$ occurs. The $r$ does not appear, however, in the cases enumerated in $n .3$ of part I (some $r$-bases). In the present (example a) no tense-index is used; the subject-indices are: 1 p.s.: $i ; 1$ p. d.: $i m u ; 1$ p. pl.: om(o); 2 p.s.: ém(é); 2 p.d.: imimi; 2 p. pl.: imi; 3 p.s.: $e$; 3 p.d.: imuti; 3 p. pl.: ti. Relation-indices are $n$ and $r$ as usual. In the preterit (example b) the form of the distant preterit ( $n .2$ of part I) is found. In the future a second ligature appears consisting always of the consonant $r$, following the primary aspect-index (example c). After this ligature $r$ the future tense-index imi occurs. The subject- and relation-indices are the same as those of the future tense mentioned in n. 3 (of part 1).
6) a) ara-inao-tako-mo-r-e, m2-B-m1-t-r-s;
b) ara-inao-tako~ma-c, m2-B-m1-t-s. Translation: a) "perhaps he comes to-day" or "perhaps he has come to-day" or "perhaps he will come to-day"; b) "perhaps he has arrived before yesterday". This formation is used to express the doubt of the speaker. There are two mood-indices viz. ara and tako. In example a) the present formation is found; in b) the distant preterit.
7) $a-k a^{\circ}-k-\mathrm{a} k i-n-i$, $\mathbf{t}-\mathrm{B}-1-\mathrm{m}-\mathrm{r}-\mathrm{s}$. Translation: "pethaps I shall beat thee". In the preceding number the speaker's doubt referred to a process in the present, the preterit or the future. The form given here indicates that the speaker is not sure about the realization of the process in the future. The mood-index is $a k a$ (in our example aki under influence of the vowelharmonization). The prefix $a$ indicates the future tense as in the plain future formation (n. 3 of this part I); it is, however, possible that $a$ is a secondary mood-index. The subject-indices are: I p.s.: $i ; 1$ p.d.: umu; 1 p. pl.: amo; 2 p.s.: ame; 2 p.d.: umimi; 2 p. pl.: itimi; 3 p.s.: $a$; 3 p. d.: umuti; 3 p. pl.: ate. The relation-indices are $n$ and $r$.
8) $a w a-k a^{\circ}-k-a k i-n-i$; m2-B-l-ml-r-s. Two translations of this formation are possible. It may be used in a dependent clause of time and indicates the future time when the process is to happen. In this case the formation is to be rendered by: "when I shall beat thee". Another example of this function is: jaw awa-onaokakare, ainimikimirom, "when the sun rises, we shall go". Sometimes this formation occurs in a clause of place as well. The same formation can also express a yes-or-no-question in a future tense. In this case the rendering is: "shall I beat thee?" Interrogative words may be put in the place of the prefix awa asking after subject, object or circumstances, e.g. wé $k a-k a^{\circ}-k-a k a-r-e ́ m$, "whom wilt thou beat?"
9) A second type of interrogation may be formed by the use of the prefix awa or interrogative words together with the formation of the present (n. 1), e.g. awa-im-mi-r-ém, "dost thou it"; m-B-t-r-s; or the two preterit forms (n. 2 and 4), e.g. awa-muku-ma-o, "did I hit him"; $\mathrm{m}-\mathrm{B}-\mathrm{t}-\mathrm{s}$. In that case, however, the secondary tense-indices of these tenses are dispensed with. In the future only the formation mentioned in the preceding number occurs. The three tenses of the habitual aspect (n.5) occur in the interrogative mood. Instead of the aspect-index ama the mood-index $a w a$ is found. In certain cases the prefix awa may be left out in all the formations just mentioned except in that of the future. Often we meet the prefix $a$ instead of $a w a$. The interrogative words inquiring after time, place or quantity are also prefixed instead of awa but in this case the formation gets a suffix pe added as interrogative index, e.g. oka $k a^{0-k-a k i-r-i-p \dot{e}, ~ " w h e r e ~ s h a l l ~ I ~ b e a t " ; ~ i n t e r r o g a t i v e-B-~}$ I-m-r-s-suffix.
10) a) $a$-kème-k-a-"; m2-B-1-m1-s;
b) a-kème-k-a-n-e; m2-B-1-m1-r-s. Translation: a) "let me give"; b) "let he give me" or "that they may give me". This formation occurs in the 1 and 3 persons only and should by analysed as follows. The vowel $a$ is the same prefix as mentioned in connection with the plain future ( $n .3$ ) and the dubitative formation (n. 7). After the base comes the ligature $k$ or $r$, followed by the mood-index $a$. The meaning of the formation is adhortative or optative. The relation-indices are $n$ and zero.
The subject-indices are:
1 p.s.: $\quad a$ in combination with a relation non 1 or 2 person; $i$ in combination with a relation 2 p .;
1 p. d.: $a^{a} m u$; when, however, the refation is a non 1 or 2 pers. the sub-ject-index ati may occur as well;
1 p.pl.: om $(o)$, before which the mood-index $a$ is left out.
3 p.s.: $\quad o$ in combination with a relation non 1 or 2 pers.; before this $o$ the mood-index $a$ is left out, except when the ligature $r$ is omitted.
$e$ in combination with a relation 1 p.s.; $a^{\circ}$ in combination with a relation $1 \mathrm{p} . \mathrm{pl}$.; $a$ in combination with a relation 2 p.;
3 p.d.: amati when the relation is $1 \mathrm{p} . \mathrm{pl} ., 2 \mathrm{p}$. and non 1 or 2 p .; imuti when the relation is $1 \mathrm{p} . \mathrm{s}$.;
3 p. pl.: $\dot{e}$ or ate when the relation is non 1 or 2 pers.;
et when the relation is $1 \mathrm{p} . \mathrm{s}$.;
ate when the relation is 1 p . pl. or 2 p .
11) $k \mathbf{e} m-a$; $\mathrm{B}-\mathrm{m} / \mathrm{s}$;
$k$ èm-a-n; B-m/s-r;
$k$ me $m-n-a$; B-r-m/s. Translation: "give"; "give me"; "give us". As a rule the imperative gets no prefix. The prefixes $a$ or $m a$ are used respectively in bases indicating movement to or from the speaker. With some $k$-bases the ligature is used and some $r$-bases occur with $k$ as ligature; mostly the $r$-bases appear without a ligature. The final vowel of the base is often left out. The subject-indices are: 2 p . s.: in $k$-bases $a$, in r-bases $a^{*}$ in combination with relation-index non 1 or 2 p ., expressed by zero; $a n$ in combination with a relation 1 p.s.; na in combination with 1 p. pl.; 2 p. d.: amu in combination with a relation non 1 or 2 p.; anumut in combination with a relation 1 p.s.; namu in combination with a relation 1 p.pl.; 2 p. pl.: akt in combination with a relation non 1 or 2 p.; ants in combination with a relation $1 \mathrm{p} . \mathrm{s} . ; n a^{u}$ in combination with a relation $1 \mathrm{p} . \mathrm{pl}$. The $n$ occurring in these subject-indices is the relation-index $n$.
12) The prohibitive is rendered by two formations. The first formation is only used in the 2 p . and consists of an imperative formation with a plural subject, followed by the suffix re; this form stands for the singular as well as for the plural, e.g. kèm-aku-re, "thou/you don't give!" The
second formation occurs in the three persons, e.g. kao-k-aki-n-i-(ja), "to beat ligature prohibitive thee I (suffix)"; the mood-index is aka (in the example aki by vowel-harmonization); the suffix $j a$ may be added as an intensifying element. The subject-indices are: 1 p.s.: $i$; 1 p.d.: umu; 1 p. pl.: amo; 2 p.s.: ame; 2 p.d.: umimi; 2 p. pl.: itimi; 3 p.s.: a; 3 p.d.: umuti; 3 p. pl.: ate.
13) In a conditional clause with a future meaning (open condition) the formation discussed under n. 8 is used in the protasis, except for the prefix awa which is here aka; the apodosis uses a future ( $n .3$ ).
14) aka-kao-k-ako-m-ani | apa-kini-r-ako-mo-r-ém; m2-B-I-m1-t-s with r-infix | m2-B-l-mi-t-r-s. Translation: "if I should beat thee, thou wouldst go to the inlands". The formation expresses a sentence of rejected condition. The protasis gets the prefix $a k a$; the apodosis apa. The mood-index is ako preceded by the ligature in both clauses. The present tense formation is used for the present and to-day preterit; the remote preterit for the past tense. A rejected condition, thought in the future, is expressed by a present tense-formation.
15) a-kapi-r-apa-n-i-a ${ }^{\bar{E}}$; m2-B-I-ml-r-s-m3. Translation: "may 1 follow thee". It is a wish. The prefix is $a$, as we should expect (cf. future); the mood-index is $a p a$; the ligature is extant. The usual subject-indices occur with some modification, caused by the harmonization of the vowels. The relation-indices are $a$ and zero. A third mood-index is added viz. in subject $1 \mathrm{p} .: a^{\dot{c}} ; 2$ and 3 p . $a$; the place of this index is after the conjugated base.
16) airtu map-ame-k-ai-ne |aka-i-mi-r-om; S-m2-B-1-s-m1|m-B-r-s.

Translation: "that a boy stood there, (so) we thought". The formation expresses that the facts do not cover the thought of the speaker. The contents of his thoughts precede in an object clause. This clause is analysed as follows: airu means "a boy" and is subject of the clause; mapa (the final vowel is left out before the following vowel) indicates in combination with the suffix ue an irrealis; ame is base, which means "to stand"; $k$ is ligature occurring in the formations of the to-day preterit ( n .4 ) ; $a^{e}$ is subject-index 3 p.s. occurring in this preterit. The following principal clause shows the prefix aka (n. 14) and the base $i$ which means "to say", here "to think"; mi-r-om is 1 p . pl. of the present but to be rendered as: "we thought". The dependent clause occurs with the forms of the remote preterit; if a future is meant, the object clause occurs either in a plain future formation (n. 3) or in the dubitative (n. 7).
17) a) ema-koraimi-na-ma-e, "he washed himself" (remote preterit);
b) éma-korami-na-k-à, "he washed himself" (to-day preterit);
c) a-koraimi-ni-mire, "he will wash himself";
d) Koraimi-na-muna, "not to wash oneself".

Talking about the relation-indices $n$ and $r$, we mentioned that this language has special forms indicating that the process has a reflexive char-
acter. The reflexive-index is na. What is the position of this index? In the present and the distant preterit ( n .1 and 2) it occurs between the base and the tense-index (B-na-t) (example a); in the to-day preterit it precedes the ligature (example b); in the other formations which require the ligature, na is found in the place of the ligature, which does not occur (example c); in the negative forms with poro-muna and tiane, formations which will be discussed later on, the index na follows the base (example d).
18) a) ema-kao-ma-ate, "they beat each other";
b) kap-mo-muru-k, "to follow each other".

Reciprocity is expressed by the index mo; it occurs between index and base in simple predicates (example a), between the constituent bases in a compound predicate (example b). When a combination of mo and $n a$ ( n .17 ) occurs, the meaning of the formation is: "every one for himself and so every one for the other", e.g. pikima is "to break"; pikima$m o-n a$ is "by breaking divide among each other". Another reciprocal formation is possible by inserting mame or ame between the two bases, e.g. naware mame-ke-r, "to pay each other".

## li. NOMINAL PREDICATES

1) nikia noatla Mannéti, "father me of Mannéti"; S-possessive form of the pronoun-B;
noma pau, "me to whiteness"; B-S. Translation: "my father is Ma"néti"; "I am white". These are two specimens of the pure nominal predicate in the Kamoro-language. In the first example two nouns occur, the second of which is predicated of the first. The second example contains two nouns (here pronoun and noun) but the first is accompanied by a linking-element which marks the noun as an indirect object.
2) noro ka${ }^{\circ}-a$ muna, "I to beat not"; S-B-negation; noro $k \mathrm{a}^{\circ}$-a poromuna, "] to beat not usually", S-B-negation-habitual aspect. Translation: "I do not beat"; "I am not a man that is always beating". In order to deny a process of the present or the past-tense the base is made a noun through the addition of the suffix $a$ (cf. section 5 , introduction) and after this noun the negation is indicated by muna. To indicate the person of the subject, a noun or pronoun precedes; this formation is a nominal one. A process with a habitual aspect (cf. second example) gets the same formation but with the negation poromuna.
3) noro ma-k $\hat{e}-a$-tiane, "I to bake not". Translation: "I should not have baked". When the protasis of an irrealis is negative, a similar formation is used. By means of the prefix $m a$ and the suffix $a$ the base becomes a noun, which is followed by the negative element tiane. The subject is indicated by a noun or pronoun. In this and the formation of the preceding number, the personal pronoun does not occur when the subject can be conjectured from the context.
4) noro mapa-tna-tir-imuru, "I to come not". Translation: "(l thought), that I should not come". In the sentence just given the object clause is negative. The formation now used agrees with that of the preceding numbers. By means of the prefix mapa and the suffix imura the base is made a noun and a negative sense is expressed. Person of the subject is eventually indicated by a noun or pronoun.
5) janare ma-6re-me-r-e, B1-t2-B2-t1-t-s. Translation: "he is stupid". This formation is a semi-nominal one. The secondary base éré used here in the sense of the English auxiliary "to be", means properly "walk about".

## III. COMPOUND AND COMPLEX PREDICATES

1) Up till now only simple predicates were discussed. The compound and the complex predicates are still to be analysed; the nominal or verbal character of these predicates is not yet determined.
The compound predicate is a composition of two bases, a primary base not conjugated and a secondary base conjugated; the two bases are linked together by prefixes indicating tense, mood or aspect, which are attached to the primary base. These bases occur in the following combinations:
a) a primary base with a secondary base, both not composed themselves, e.g. $k q^{\circ}-\mathrm{ame}-k$, "to beat - to be", i.e. "to be beating";
b) a primary base, (which consists of two bases), with a secondary base, e.g. ép-me - kamo-k, "to sit down-to make - to leave", i.e. "to leave somebody or something in a seated position";
c) a primary base with a secondary base, the latter of which consists of two bases, e.g. ipi - $n \mathbf{u - m u}-\boldsymbol{r}$, "to cleave - to descend to make"; i.e. "to cleave from the top";
d) a primary base, (consisting of two bases), with a secondary base, also composed of two bases, e.g. ware-ke - mari-ki-r, "to leave to do - to float to do"; i.e. "to float in order to leave", "to leave by means of a proah";
e) a primary base with a secondary base; the primary base is followed by the suffix $a$, the final vowel of which is left out before the suffix $a$, e.g. $k$ é- $\alpha-k \mathbf{a}^{u}-k$, "to hold in one's hand - to put down", i.e. "to set down from one's hand";
The complex predicate is a connection of two bases, a primary not conjugated and a secondary conjugated, which bases are separated by the prefixes of tense, mood or aspect attached to the secondary base, e.g. ta" $k e-r$, "to divide to do", i.e. "to divide"; $a k$ "ére $k e-r$, "speech to do", i.e. "to speak".
2) The secondary bases used in the compound or complex predicates just mentioned, can be divided according to their meaning into:
A) bases with a more or less general meaning: only two bases occur in this sense viz. a) $i-r$, which has the meaning of the English copula
"to be", e.g. pu-i-r, "to be on fire", "to burn"; b) ke-r which may be rendered by "to do", "to be engaged", "to be occupied with", e.g. akuére $k e-r$, "to occupy oneself with speech", "to speak". These bases are made causative through an additional base viz. $m \neq-k$, "to make". The resultant forms are: $\mathbf{i}-m i-k$, "to make burn"; kè-me-k, "to make do". B) bases with a more definite meaning as there are:
a) bases that indicate a particular way of posture, e.g. ame-k, "to stand". Most processes in Kamoro are represented as executed in a certain posture, e.g. $k \mathbf{a}^{\circ}$, "to beat" occurs as $k a^{o}-\mathrm{ame}-k$, "to beat to stand", i.e. "to be beating";
b) bases that express "to put in a posture", "to cause a certain quality or situation"; mostly the additional base me, "to make", occurs here in combination with the bases meant in a), e.g. ko, "to stand" combined with me results in komo-k, "to cause to stand";
c) bases which indicate the direction in which the process takes place, to or from the speaker, e.g. ini-r, "to go upstream";
d) bases which indicate the causative of the bases mentioned in c) by the additional base me "to make", e.g. ona $o-m o-k$, "to rise to make", i.e. "to raise";
e) bases which indicate an aspect or mood, e.g. ima-poro-t," to do to try", i.e. "to try to do". The very frequent use of these secondary bases is a striking feature of the Kamoro-language.

## IV. SOME PECULIARITIES IN VERBS

1) There are complex predicates in this language whose bases occur only in combination with each other, forming a set-phrase. Some examples: ko $a^{e}-r$, "to die"; iripo komopo-r, "the knee to bend", i.e. "to bend the knee" in the sense of "kneeling"; the base komopo does not occur in the language outside this set; $m u$ imi-k, "to love"; mu does not occur by itself.
2) namuti im-ma-n-e. The analysis is: namuti expresses the idea "ill", but it is impossible to settle the question whether namuti is a noun or a verb; im is the base indicating "to cause"; ma is index of the past tense; $n$ is relation-index indicating the 1 or 2 person; $e$ is subject-index 3 p.s. of the past-tense. A close translation says: "to be ill made me or thee it", i.e. "it made me or thee ill", "I was ill or thou wert ill". The peculiarity is in the occurrence of an impersonal subject ( $3 \mathrm{p} . \mathrm{s}$.), while the logical subject (viz. I or thou) is expressed by the relationindex. This formation is found with bases expressing: "to affect someone"; "to catch someone"; "happen to someone". Some examples: atoare $\mathbf{i k i - r}$, "to regret"; namoko i-r, "to be tired"; temako $i-r$, "to be astonished".
3) $a$-me-kena ${ }^{\circ}-k-\mathbf{a} \cdot m i-n-\mathbf{a}^{\circ}$; t2-prefix-B-1-t1-r-s. Translation: "it will drive
us from the east to this place". The analysis is as follows: $a$ is prefix occurring in the future; me is a prefix found in this formation meaning "together with"; kena ${ }^{\circ}$ is base indicating "drive from the east to this place"; $k$ is ligature; ami is future-index; $n$ is relation-index 1 p. pl. in combination with $a^{\circ}$ subject-index 3 p.s. There should have been a subject like: the current or the wind, but it is always dispensed with. This apparently impersonal formation is used in some bases that indicate a direction at sea or ashore or in the air.
Strictly impersonal is the use of the bases iwè-u-r, "conceive"; piku-r, "give birth to" and some others.
This formation also occurs to indicate that a definite group of people is occupied with something, e.g. mokare mimmace, "he fought" means here:
"there is some fighting". In this case the remote preterit is always used.

## Section 6. Linking-elements.

The linking-elements are not very numerous in this language; their place is after the word they belong to. We already came across some of them in the different sets of the personal pronouns. Some elements indicate that the noun or pronoun is subject; tia expresses a possessive relation; ma points out a direct or indirect object. Another linking-element is ja, indicating "because of". In order to express the idea of a purpose, the following formation is used: akuér a-ke-r-amaria, "in order to speak"; the linkingelement amaria indicates the purpose and is combined with the prefix $a$ preceding the secondary base.

## CHAPTER XIV

## EKARI-LANGUAGE

## Section 1. Name and Territory.

In the district of the lakes Paniai and Tigi (Wissel) and in a large region east of them a language is spoken called Ekari-language after the name Ekari which people give themselves. A dialect, called Simari after one of the tribes, is found south-west of the lakes. The informants of Drabbe were living in the village Jaba.

## Section 2. Nouns.

Relation between nouns is expressed as follows: two nouns form a compound in which the first element qualifies the second, e.g. pèpèka-ijo, "eyebrow"; kona-ijo, "chin hair", i.e. "beard".

Section 3. Pronouns.

| lp.s. | $a n \mathrm{i}$ | $1 \mathrm{p} . \mathrm{pl}$. | $i n \mathrm{i}$ |
| :--- | :--- | :--- | :--- |
| $2 \mathrm{p} . \mathrm{s}$. | $a k \mathrm{i}$ | $2 \mathrm{p} . \mathrm{pl}$. | $i k \mathrm{i}$ |
| $3 \mathrm{p} . \mathrm{s}$. | $o k \mathrm{a}^{i}$ | $3 \mathrm{p} . \mathrm{pl}$. | $o k 0^{i}$ |

## Section 4. Numerals.

The numerals from one to ten are the following: èna, wia, wido, wi, idibi, bétumi, pituó, waghuó, ijè, ghaati; ten to twenty is expressed by "one and ten", "two and ten" etc. "Twenty", "forty" and "sixty" are: mépina, mepia, muto; "thirty" is expressed by: joka ghaati, "three ten"; "fifty" by ghaati béu, "ten five"; seventy, eighty, ninety and a hundred are composed by "ten and sixty", "twenty and sixty" etc.; a hundred and twenty is indicated by "sixty two". Drabbe suggests that the Ekari system was a senary one; the decimal system might be an Indonesian influence in the language.

## Section 5. Verbs.

The usual word-order is: subject (S) - object (R) - predicate (P), e.g. Ekari-mè koma wéghitomèghaé, "Ekari-people proahs usually chop", i.e. "the Ekari-peopie usually chop proahs". The conjugation consists in a base preceded by the relation-indices and followed by the tense-, mood-, aspectand subject-indices. The end of the base changes before different indices. The subject-indices are 1 p.s.: $a ; 1$ p.pl.: $\dot{e} ; 2$ p.s.: $\dot{e} ; 2$ p. pl.: $a ; 3$ p.s.:
$i ; 3$ p. pl.: $a^{e}$. The relation-indices are: 1 p.s.: na; 1 p. pl.: ni; 2 p.s.: $k a$; 2 p. pl.: $k i ; 3$ p.: é.

1) ui-nè-gh-a, "to go away present ligature I"; B-t-l-s. Translation: "] go away". The present formation has the tense-index nè; a ligature occurs.
2) $u \mathrm{i}-p-a$, "to go away to-day preterit I"; B-t-s. Translation: "I went away to-day". The tense-index of the to-day preterit is $p$; a ligature does not oceur.
3) uè-tè-gh-a, "to go away preterit ligature I"; B-t-l-s. Translation: "I went away". The preterit tense is indicated by the index $t e$; the ligature $g h$ is found.
4) ui-pi-gh-a, "to go away to-day future ligature l"; B-t-I-s; $u i-p a-g h-e$, "to go away to-day future ligature thou"; B-t-l-s. Translation: "I shall go away to-day"; "thou wilt go away to-day". The to-day future tense-index is pi before following subject-index $a$; $p a$ before following subject-index $e$; the ligature occurs.
5) ai-ta-gh-a, "to go away future ligature I"; B-t-l-s. Translation: "I shall go away". The future is indicated by the tense-index $t a$; the ligature $g h$ is found.
6) é-dua $\dot{e}-t a-g h-a$, "him or them to fell future ligature I"; r-B-t-I-s. Translation: "I shall fell him or them". This is an example of the use of the relation-indices. The example is in the future tense; the same place of the relation-index is found in the other tenses as well.
7) maki-tomè-gh-ac, "to bear usually ligature they"; B-a-l-s. Translation: "they are used to bear". The aspect-index $t o(m e)$ indicates that the process usually takes place; the ligature is found.
8) $u$ è- $g h e ̀-g h-a$, "to go away dubitative ligature I"; B-m-l-s. Translation: "I may go away (perhaps)". A doubt may be expressed by the use of the mood-index ghe; the ligature occurs. Drabbe also gives the following form: $u$ è-gh- $a$ with the same meaning. He suggests that the moodindex and the ligature coincide bere.
9) té n-aghi-ta-gh-è, "not me to beat future ligature thou"; negation index-r-B-t-1-s;
$n-a g h i-t a-g h-e ̀ b e^{u}$, "me to beat future ligature thou not"; r-B-t-]-snegation index. Translation: "thou wilt not beat me". The negation of a process may be expressed either by té preceding the formation or by $b e^{u}$ following it.
10) The imperative is formed by the base without any index; the number of the subject can be indicated only by the use of the personal pronoun, e.g. aki witogha', "thou, clean up!", pers. pron.-B.
11) édi mè-pagho, "rain to rain open condition". Translation: "if it rains". In the protasis of a conditional construction the base is followed by the index pagho; the apodosis gets the usual future formation (cf. n. 5).
12) The base changes its end before the different tense-indices; rules cannot be fixed as sufficient examples lack; in the examples mentioned by

Drabbe, the present, future (both formations) and the imperative forms have the same base before the indices.
13) Complex predicates occur. Drabbe mentions these two examples: awi ghai, "to stop" (used in the expression: "it stops raining"); édi mé, "to rain".
14) A combination of particular forms is found to express the idea "to give something to a person"; different bases occur and possibly a special relation-index 3 p.s. Drabbe indicates the future formations: ka-ni-tagha, "I shall give thee"; the base $n i$ with a subject 1 p.s. and 3 p.s. and an object 2 p.s. and 2 p. pl.; na-mi-ta-gh-e, "thou wilt give me", the base $m i$ is used with an object 1 p.; instead of namitaghe also na-emai-ta-gh-e, and instead of nimitaghe also ni-mat-ta-gh-i is used; mé-ni-ta-gh-a, "I shall give him or them", the base ni is combined with a relation-index 3 p. $m e$; this analysis of méni does not agree with that of Drabbe who suggests that the verbal base is here méni and the relation-index zero.

## Section 6. Linking-elements.

No linking-elements are extant in the notes of Drabbe.

## CHAPTER XV

## MONI-LANGUAGE

## Section 1. Name and Territory.

East of lake Paniai live a people calling themselves Moni. Drabbe gave their name to the language he found there in a village called Kugapa.

## Section 2. Nouns.

The relation between nouns is expressed in the following ways:
a) two nouns may form a compound in which the first element qualifies the second, e.g. sènggamu ada, "eye-lid"; mada do, "bow-string";
b) the sequence of two words may indicate a possessive relation: the possessor precedes the possession, e.g. a ita, "I father", i.e. "my father"; a ita $i$, "I father house", i.e. "the house of the father of me";
c) a linking-element may be used to express a refation; Drabbe has only the following example: bati-gi, "to ease nature in order to", i.e. "in order to ease nature". A linking-element to express a possessive relation is not extant.

Section 3. Pronouns.

|  | Set I | Set II | Set III | Set IV | Set V |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1p.s. | $a$ | ago | andi | ao | anoa |
| 1 p. pl. | $i$ | igo | indi | io | inoa |
| 2 p.s. | aga | agago | agati | agac | aganoa |
| 2 p.pl. | éna | énago | énati | éno | énanoa |
| 3p.s. | ogo | ogogo | ogoti | ogo | ogonoa |
| 3p.pl. | $w i$ | wigo | witi | wio | winoa |

Explanation to the table:
The first set contains the personal pronouns used as subject or object in the sentence; when the subject- of object-function is emphasized, the forms of set II or set III respectively are used; they are composed of the personal pronoun (set I) and the linking-element go or $t i / n d i$; set IV and V consist of forms showing a contraction of the personal pronoun (set I) with linkingelements o or noa; they indicate a possessive relation and are used substantively. Instead of possessive forms used adjectively, the personal pronoun occurs preceding the noun (cf. section 2, b).

Section 4. Numerals.
There are five numerals; a greater number is expressed by the use of hands and feet; the numerals from "one" to "five" are; hago; hiza; hédo; $w i$; $\mathbf{i} d i$; "six" is amo né hago, "the other of the pair plus one"; "seven" is amo ne hiza, "the other and two"; "the other of the pair" points to the other hand than the one which the man used when begianing to count. "Ten" is hanagi, probably "both hands"; "eleven" is indicated by bado hago, -one foot one", "twelve" bado hiza etc. to fifteen; "sixteen" is amo bado hago, "the other foot one" and so on to twenty amo bado idi, "the other foot five"; "twenty" is expressed also by mèndo hago, "one man"; "thirty" is mèndo hago né aginé, "one man plus ten"; "forty" is mèndo hiza, "men two", i.e. "two men"; "fifty" is mèndo hiza né aginé, i.e. "two men plus ten".

## Section 5. Verbs.

The usual word-order in the sentence is: subject ( S ) - object ( R ) predicate ( P ) ; Drabbe has no example of a complete sentence in his short notes about this language. He is, however, sure of the fact, he told us. The conjugation consists of tense-, mood-, aspect-indices followed by sub-ject-indices; all these indices are found after the base; the base ents in $a, i$ or $u$ and this final vowel changes before the indices. Relation-indices do not occur. There are two sets of subject-indices, probably without any difference of meaning: 1 p.s.: $a^{\circ}$ or ate; 1 p.pl.: igio or igite; 2 p.s.: éo or éte; 2 p . pl.: igio or igite; 3 p.s.: io or ite; 3 p. pl.: igia or igiate. There is a ligature $g$ which is often used between the base and the indices. Some bases prefer a ligature in some tenses, others do not.

1) kibae-a ${ }^{\circ}$, "to break $\mathrm{I}^{\prime}$ " B-s;
kiba-gio, "to break we"; B-s. Translation: "I break"; "we break". The present tense is indicated by a zero tense-index; in the second example the base occurs without the final $\dot{e}$ and the subject-index without the initial $i$. The rules for the sound-combinations have not been stated up till now. A to-day preterit is indicated by these formations as well.
2) $k i b-a m u$-a ${ }^{\circ}$, "to break preterit I "; B-t-s;
to-am-igio, "to be present preterit we"; B-t-s. Translation: "I broke"; "we were present". The formations expressing a preterit before to-day have the tense-index am; the base is found without final vowel(s) before the tense-index; in the $1 \mathrm{p} . \mathrm{s}$. the tense-index is combined with the subject-index by the semivowel $a$; the second example shows a base $t u$ "to be present", which base is found with a final $o$ instead of $u$ before the tense-index am.
3) $k i b-a^{u}-\mathbf{a}^{o}$, "to break future I "; B-t-s; kibac-nd-a", "to break future I"; B-t-s. Translation: "I shall break". In the future tense two indices occur; $a^{u}$ and $n d$; Drabbe says that he is not sure whether there is any difference in meaning or not. The final base-
vowel is not found before the index $a^{\prime}$; when, however, the final vowel of a base is $u$, the initial $a$ of the index $a^{t}$ does not occur.
4) kiba-e, "to break imperative singular"; B-m/s; $k i b a-d i e ̀$, "to break imperative plural"; B-m/s;
hatota kibo-è, "prohibitive to break imperative singular; m2-B-ml/s. Translation: "break"; "do not break". The subject-indices of the imperative mood are 2 p.s.: $\grave{e} ; 2$ p. pl.: ie or diè; the combination with the end of the base is rather intricate. The prohibitive-index is hatata preceding the imperative formations.
5) kib-au-ano, "to break future I with interrogative infix"; B-t-m/s.

Translation: "shall I break?". The interrogative mood is expressed by the infix of the consonant $n$ in the usual subject-indices; the resultant indices are: 1 p.s.: ano; 1 p.pl.: igino; 2 p.s.: éno; 2 p. pl.: igino; 3 p.s.: ino; 3 p. pl.: igiano; in the second set of indices we find: anote, iginote etc.
6) The negation of a sentence is indicated by the index ki preceding the predicate; when, however, the predicate is a complex one, the negation is found between primary and secondary base, e.g. ki tuio, "not to be present he", i.e. "he is not present"; ina ki dio, "he does not laugh".
7) Complex predicates occur here, e.g. dodé héna, "to say"; dia di, "to go"; the conjugation of the secondary bases is identical with that of the simple predicates.
8) The base followed by the suffix $j a$ is used as predicate in combination with a subject when the situation wants no more special forms.
9) bati-gi poga-io, "to ease nature - in order to - to go he". Translation: "he goes to ease nature". The base followed by the linkingelement $g i$ expresses a final meaning.

## Section 6. Linking-elements.

The personal pronouns used in subject- and object-functions are, when this function is emphasized, composed of the personal pronoun and a linking-element. The subject-indicator is go; the object-indicator is ndi. The linking-element gi indicating a final meaning is mentioned in section 5 n. 9.

## SECOND PART

## INTRODUCTION

Our first task has been the arrangement of the data contained in the grammars and notes of the fathers H. Getrtjens and P. Drabbe, in order to prepare a comparison of the languages they described. This comparison, which forms the main subject-matter of our thesis, is to be undertaken now. An answer has to be given to the questions: are the languages of South Western N. Guinea cognate or at least, in some way or other, related? Is it possible to point out groups of related languages? In short: what is the language-pattern of this region? Therefore we will investigate the various ways in which the grammatical notions of number, sex, gender, case, person, time, aspect and mood are expressed in these languages in order to state the features that possibly indicate linguistic affinity between them.

## CHAPTER I

## NOUNS

## Section 1. Number.

Number is expressed formally in the following ways.
a) In Marind some of the words indicating men and animals show vocalic change; the vowet used to indicate the plural is $i$; the vocalic change may occur in accompanying words as well, indicating the number of the governing noun; words indicating plants, trees and lifeless things have the same form in singular and plural, and are followed by the verb in the singular. ${ }^{1}$
b) In Kimaghama the nouns are followed by agha (with a ligature ragha, nagha, dagha, vagha); agha may be separated from the noun by an adjunct. ${ }^{2}$
c) In Bazi a distinction is made between nouns indicating men and antntals, and nouns indicating things. This distinction has a formal feature in the subject-index of the present tense formation where vocalic change occurs viz. the vowel $i$ for the plural of men and animals, the vowel $a$ for the nouns indicating things. The latter nouns are followed by a verb in the singular. ${ }^{3}$
d) In Jaqa some of the words indicating human beings have vocalic change; the vowel used to indicate the plural is $i$; this vocalic change also occurs in words depending from nouns; words indicating beings that have no human nature, have the same form in the singular and the plural and are followed by a verb in the singular. The distinction between beings with or without human nature is founded on the myths of the people. ${ }^{4}$
e) In $A^{u} j u$ nouns indicating men and animals are followed by the personal pronoun 3 p. pl. viz. jogho (or nogho; ogho); names of relatives are followed by gi; nouns indicating things are repeated or combined with a synonym and have a verb in the singular. ${ }^{5}$
f) In Kati nouns indicating men and animals are followed by the personat pronoun 3 p . pl. viz. $j i$, but this 3 p . pl. is always followed by a linkingelement expressing the function of the noun to which it refers; moreover, all nouns may be repeated, but even in this case nouns indicating things have a verb in the singular. ${ }^{\text {a }}$
g) In Kamoro no formal feature exists. ${ }^{7}$

Summary.
a) Marind, Boazi and Jaqa agree in the feature of vowelshift and they ase the same vowel in the plural viz. $i$.
b) Auju and Kati agree in the use of 3 p . pl. and the repetition, but in $A^{u} j u$ the two alternatives refer to a lexical distinction viz. between men and animals on the one hand and things on the other, while in Kati the two alternatives refer to a grammatical distinction viz. between the occurrence of nouns either with the indication of their function in the sentence (by the linking-element) or without this indication.
c) In $A^{u j u}$ and Kati the personal pronoun following the noun has got the function of the definite article in English. In Auju Drabbe mentions this function only with regard to $3 \mathrm{p} . \mathrm{pl}$; in Kati also with regard to $3 \mathrm{p} . \mathrm{s}$.
d) Marind, Boazi, Jaqa', A"ju and Kati have a verb in the singular after nouns indicating things.

## Section 2. Sex and Gender.

In nouns the following features indicate sex or gender.
a) In Marind some of the words which indicate men and animals have vowelshift according to sex in their singular forms viz. masculine $\dot{e}$, feminine $u$. In case of common gender the feminine is used with the names of animals. Some of the words indicating things have the vowel $a$ or $o$ expressing the neuter-gender. The same vowelshift also occurs in words depending from nouns. ${ }^{8}$
b) In Kimaghama sex or gender is not expressed. ${ }^{9}$
c) In Jéi there is no distinction in nouns according to sex or gender. ${ }^{10}$
d) In Boazi there is a sex-distinction in nouns indicating men and animals; in nouns indicating things Drabbe noticed masculine and neuter-forms but no feminine ones; the vowelshift which expresses this distinction is not found in the nouns themselves but in the pronouns and in the subject-index of the present-tense-formation viz. $\dot{e}$ for the masculine; $u$ for the feminine; $a$ for the neuter-gender. ${ }^{11}$
e) In Jaqa ${ }^{i}$ some nouns indicating human beings show vocalic change according to sex; the vowel $\dot{e}$ is used for the masculine, the vowel $a$ for the feminine. The same vowelshift is also found in words depending from nouns. Some nouns indicating beings that lave no human nature, have the vowel $o$ for the neuter-gender in the same cases. In names of animals the masculine or feminine is used in the function of common-gender according to the myths. ${ }^{12}$
f) In Auju sex or gender is not expressed. ${ }^{13}$
g) In Kati the distinction between masculine and feminine occurs both in nouns indicating men and animals according to sex, and in nouns indicating things (gender). In both groups the distinction is indicated by the following terms: katuk aninggo, "name of a man" and wonong aninggo, "name of a woman". In some names of relatives the vowel-shift $i$ (masc.), $a$ (fem.) is found. In nouns indicating men and animals the masculine is used when common gender is meant. In nouns denoting
things, shades of meaning may be expressed by the use of a different gender of the same word. ${ }^{14}$
h) In Kamoro sex or gender is not expressed formally. ${ }^{15}$

Summary.
a) Marind, Boazi, Jaqa and Kati agree in the indication of sex by vowershift $\dot{e} / u /(i / \alpha)$. Marind, Boazi and Jaqai indicate a neuter by the same feature, viz. vowelshift but Marind and Boazi have the vowel $a$, while Marind and Jaqa have the vowel 0 .
b) Boazi and Kati show in the group of nouns indicating things a further distinction of gender. Boazi divides these nouns in masculine and neuter. Kati in masculine and feminine.

## Section 3. Comparison of Number, Sex and Gender.

a) The comparison of the formal features of number, sex, and gender in Marind, Boazi, Jaqa, A ${ }^{\circ} \mathrm{ju}$ and Kati suggests a division to be made in the nouns of these languages viz. group I indicating men and animals, group II indicating things. The characteristics of the two groups are : group I shows a distinction of sex, has plural forms and is followed by the verb in the plural; group II may exhibit a gender-distinction, has only one form for the singular and the plural and is followed by a verb in the singular.
b) Number, sex and gender are mostly not expressed in the nouns themseives but in the accompanying words (concord).
c) In Jaqa the principle is mentioned upon which the division of group I and II is based in that language viz. the mythology of the people. The same point of view is decisive for the common gender in names of animals. It will be a most interesting subject of research to examine the languages, which show the same group-division, on this principle.
d) In Kamoro neither number nor sex or gender is expressed.

## Section 4. Some Relations in Nouns.

In nouns the following linguistic means are used to indicate relations which are not expressed by the noun itself.

1) A linking-element may emphasize the subject-function of a noun, e.g. Kati: mbèt. ${ }^{16}$ This occurs in Kanum, Auju, Kati, Kamoro and Moni.
2) Two nouns may form a compound in which the first constituent is a qualification of the second, e.g. in Marind deg-äném, "bush-native". The compound character of these two nouns is proved by the fact that two nouns are never separated by a third element. Moreover, the examination of the stress-pattern suggests, according to Drabbe, ${ }^{17}$ that in most languages the stress is laid upon the first constituent, but a new investigation is wanted to state the fact with certainty. Drabbe is, however, sure that in Kamoro the stress is on the first element of the compound.

This type of compound occurs in all the languages discussed in Part I.
3) Two nouns may form a phrase, in which the first noun indicates the possessor and the second the possession, e.g. in Marind: Kodwa zib, "Kodwa's son". In this case the two nouns may be separated by adjuncts but the order of sequence is fixed. This type of phrase is found: a) in Marind in names of relatives; ${ }^{18} \mathrm{~b}$ ) in Mombum, but only with a special meaning: woköra irmèn, "house-top" is used to say "on the top of the house"; ${ }^{18}$ c) in Kimaghama, ${ }^{20}$ but the possessive pronoun 3 p. is usually placed between the nouns; ${ }^{21} \mathrm{~d}$ ) in $\mathrm{A}^{4 j} \mathrm{u}^{22}{ }^{22}$ possession or the meaning mentioned in b) of this number are expressed; e) in Katies possession or the meaning mentioned in $b$ ) of this number are expressed; f) in Moni. ${ }^{24}$
N.B. A special type of compound occurs in Kati ${ }^{25}$ and a special phrase in Kamoro. ${ }^{28}$
4) Two nouns separated by a possessive pronoun of 3 p ., form a construction to express a possessive relation, e.g. in Mombum: nimb éwè woköra, "father his house", i.e. "the house of the father". The use of a 3 p. singular or plural indicates the number of possessors. This construction occurs: a) in Mombum; ${ }^{27}$ b) in Kimaghama, ${ }^{28}$ where it is the usual form to indicate possession; c) in Auju, ${ }^{28}$ but only when the possessor is a human being or an animal; d) in Kati, ${ }^{30}$ but here the pronoun is the personal pronoun having the function of a possessive pronoun, and in the 3 p.s. the sex of the possessor is also expressed; e) in Kamoro, ${ }^{31}$ but only in names of relatives which have the possessive pronoun prefixed.
5) Nouns may be followed by a special kind of words that follow them closely and express all kind of relations the noun may have with other nouns or other parts of the sentence. These words - which we call linking-elements - are fike prepositions or case-endings in Indo-European languages. They were not described in detail by father Drabbe, but they were mentioned in the discussion of the different languages in Part I, and special attention was paid to such linking-elements as express a possessive relation.
Here follow some general remarks.
a) The linking-element may be considered as a common feature of all the languages which are the subject-matter of our study, with the exception of Ekari, of which no data are furnished.
b) A comparison of the linking-elements used to express a possessive relation, shows that the languages Mombum, Kimaghama, Kati and Moni have no special linking-element to indicate the possessor; that there is a similarity of form of this element in Makléa and Jélmèk; and that in the element used in Kanum, Morari, Jéi, Jaqa' and Auju occurs the same consonant, which seems to be the kernel of the element viz. the consonant $n$. c) The linking-element $g$ 韦 of $\mathrm{B}^{\circ} \mathrm{azi}$ shows vowelshift according to sex, gender and number. ${ }^{32}$

## NOTES.

1. Part I, ch. I, sect. 2, n. 1.
2. Part 1 , ch. V, sect. 2, n. 1.
3. Part I, ch. IX, sect. 2, n. 2.
4. Part I, ch. X, sect. 2, n. 1 .
5. Part I, ch. XI, sect. 2, n. 1.
6. Part I, ch. XH, sect. 2, n. 3.
7. Part I, ch. XIII, sect. 2, n. 3.
8. Part I, ch. I, sect. 2, n. 2.
9. Part I, ch. V, sect. 2, n. 2.
10. Part I, ch. VIII, sect. 2.
11. Part I, ch. IX, sect. 2, n. 2.
12. Part 1 , ch. $X$, sect. 2, n. 2.
13. Part 1, ch. XI, sect. 2, n. 4.
14. Part I, ch. XII, sect. 2, n. 2.
15. Part I, ch. XIII, sect. 2.
16. Part I, ch. XII, sect. 2, n. 3 .
17. Part I, ch. I, sect. 2, n. 3.
18. Part I, ch. I, sect. 2, n. 3.
19. Part l, ch. IV, sect. 2.
20. Part I, ch. V, sect. 2, n. 3.
21. Ibidem.
22. Part I, ch. XI, sect. 2, n. 2.
23. Part I, ch. XII, sect. 2, n. 4.
24. Part I, ch. XV, sect. 2.
25. Part I, ch. XII, sect. 2, n. 4 ad d).
26. Part I, ch. XIII, sect. 2.
27. Part I, ch. IV, sect. 2.
28. Part I, ch. V, sect. 2.
29. Part I, ch. XI, sect. 2, n. 2.
30. Part I, ch. XII, sect. 2, n. 4.
31. Part I, ch. XIII, sect. 2.
32. Part I, ch. IX, sect. 2, n. 2.

## CHAPTER H

## PRONOUNS

## Section 1. Form and Function.

The comparison of the pronominal forms in the languages of South Western N. Guinea is rather intricate. The data of Geurtjens comprehend the various traditional categories ${ }^{1}$ but the results of the investigations of Drabbe are restricted to a list of the personal pronouns in different forms according to different functions, and to some interrogative pronouns, mentioned in the discussion of the interrogative mood etc. Therefore we confine our study to the personal pronoun in its various functions. The following forms are found.
A. In Marind: 1) one set of personal pronouns occurring as subject or object (nok) and 2) three sets of pronouns indicating a possessive relation viz. a) forms used adjectively, showing a contraction of the personal pronoun with the linking-element $a n$ (noh-an); b) forms prefixed to names of relatives (na-vai); c) forms used substantively, showing the linking-element $m b$ ( $n a m b$ ). ${ }^{2}$
B. In Maklé: 1) two sets of personal pronouns: a) forms used as subject (ngöllo); b) forms used to express relation, showing contraction of the forms used as subject with the linking-element l (ngöletl); 2) one set of pronouns contracted from the personal pronouns (set I) and the linking-element ang indicating a possessive relation (ngölang). ${ }^{3}$
C. In Jélmèk: 1) two sets of personal pronouns: a) forms used as subject ( $n g \ddot{l}$ ); b) forms used to express relation showing contraction of the subject-forms and the linking-element $l$ (ngölel); 2) two sets of forms indicating a possessive relation viz. a) forms occurring either adjectively, following a noun, which is subject in the sentence, or substantively, acting as subject or as nominal of a predicate (nglauk); these forms show contraction of the personal pronoun with the linking-element $a k ; b$ ) forms occurring either adjectively, preceding a noun which is object in the sentence, or substantively, acting as relation (nglaki); these forms show contraction of the personal pronoun with the linkingelement ( $u$ ) ki. ${ }^{4}$
D. In Mombum: 1) two sets of personal pronouns: a) forms used as subject ( $n u$ ); b) forms used to express relation showing contraction of the sub-ject-form with the linking-element $\dot{e}^{i}$ (nèi); 2) one set of forms com-
posed of the subject-forms and the linking-elements $\dot{e}$ or $a$, used to express possessive relations ( $n \dot{e}$ ). ${ }^{5}$
E. In Kimaghama: 1) two sets of personal pronouns: a) forms used as subject (no); b) forms used to express relation showing contraction of the subject-form with the linking-element $e$ or $a$ (nie); 2) one set of forms indicating a possessive relation, only occurring adjectively preceding the noun ( $n a$ ). ${ }^{6}$
F. In Kanum: three sets of personal pronouns: a) forms occurring either as subject with verbs in intransitive use or as object with verbs in transitive use (nggo); b) forms occurring as subject with verbs in transitive use, showing a contraction of the forms just mentioned and the linking-element $i$ or nta (nggai/ninta); c) forms indicating an indirect object or a possessive relation, showing a contraction of the forms just mentioned (in a) and the linking-element nè (mpo-nè). ${ }^{7}$
G. In Moraori: 1) two sets of personal pronouns: a) forms used as subject in the sentence ( $n a$ ); b) forms used to express relations showing a contraction of the subject-forms with the linking-element $i(n a i) ; 2)$ one set of forms, indicating a possessive relation, showing a contraction of the subject-form of the personal pronoun and the linking-element nam and occurring either adjectively before the noun or substantively (ninam). ${ }^{8}$
H. In Jèi: 1) two sets of personal pronouns: a) forms used as subject ( $n^{i i}$ ); b) forms used to express relation showing a contraction of the subject-forms with the linking-element $a$ or $\dot{e}$ (nia); 2) two sets indicating possessive relations: a) forms closely connected with names of relatives ( $n^{i} a-n a o$ ); b) forms composed by the subject-forms and the linking-element $n i$ or né (niané). ${ }^{9}$
I. In Boazi: 1) one set of personal pronouns occurring as subject or object in the sentence (no); 2) one set of forms used to express a possessive relation, showing a composition of the subject-form of the personal pronoun and the linking-element $g \neq$; 3) one set of possessive forms occurring as prefixes to names of relatives ( $n$-éas). ${ }^{10}$
J. In Jaqai: 1) one set of personal pronouns occurring as subject or object in the sentence (anok); 2) three sets of possessive forms: a) forms occurring as prefixes to names of relatives (na-é); b) forms showing contraction of the personal pronouns with the linking-element in (anokondin); c) forms showing composition of the personal pronoun with the linking-element ape (anggapape). ${ }^{11}$
K. In Auju: 1) two sets of personal pronouns: a) forms occurring as subject in the sentence ( $n u$ ); b) forms occurring as object in the sentence ( $n a$ ); 2) two sets of possessive forms: a) the object-form of the personal pronoun preceding the noun ( na ); these object-forms may be followed
by the linking-element $n a$ ( $n a$-na) either used adjectively or substantively; b) possessive forms occurring as prefixes to names of relatives ( $n a-b 0$ ). ${ }^{12}$
L. In Kati: one set of personal pronouns occurring as subject or object in a sentence (ne); the personal pronoun followed by the morpheme man stands for a possessive pronoun used substantively (ne-man). ${ }^{13}$
M. In Kamoro: 1) four sets of personal pronouns: a) forms used as subject (noro); b) forms showing contraction of subject-forms (cf. a) and the linking-element ue emphasizing the subject-function (nuru-ue); c) forms showing contraction of the subject-form and the linking-element $m a$, used as indirect object (noma); d) forms contracted from the sub-ject-form and the linking-element $a$ used as direct object (no $a$ ); 2) two sets of possessive forms: a) forms showing contraction of the subjectform and the linking-element tia (noatia); b) forms used as prefixes before the names of relatives ( $n$-éamo). ${ }^{14}$
N. In Ekari: one set of personal pronouns (ani). ${ }^{15}$
O. In Moni: 1) three sets of personal pronouns: ${ }^{16}$ a) forms used as subject or object (a); b) forms contracted from the subject-forms and the link-ing-element go used when the subject-function is emphasized (ago); c) forms showing contraction of the subject-forms with the linking-element ndi or $t i$, used when the object-function is emphasized (andi); two sets of possessive forms: a) forms contracted with the linking-element $a$ ( $a o$ ); b) forms contracted with the element noa (anoa); the forms of both sets are used substantively.

## Summary.

a) In all these languages, except Moni, the first person is characterized by the consonant $n$; in Kimaghama, Mora•ri, Boazi, Jaqai, A ${ }^{\text {uju, Kamoro, Ekari }}$ and Monj the second person shows a guttural sound (in Marind $h$ is found); the forms of the three persons resemble in Marind and Jaqa ${ }^{1}$ and also in Maklé and Jélmèk, b) In Marind, B ${ }^{\circ}$ azi, Jaqai, Kati, Ekari only one form occurs both as subject and as object; in Makléu, Jélmèk, Mombum, Kimaghama, Kanum, Moraori, Jéi, Auju, Kamoro and Moni, the object-form shows a contraction from or composition of the subject-form with a linking-element; Makléu and Jelmèk use the same consonant as linking-element indicating the object. c) In Kamoro and Moni a special subject-form occurs in which a linking-element is found emphasizing the subject-function of the form. d) In all these languages, except Kimaghama and Kati, a possessive form is found contracted from a subject-form and a linking-element; the linking-elements used in this function do not resemble and, even when they do, the forms to which they are added do not agree. e) In Marind, Jéi, Boazi, Jaqa', Auju, Kamoro we come across prefixes to names of relatives indicating a possessive relation.

Section 2. Number.
The various pronominal forms mentioned in section 1 show the difference of number by difference of form, except in the following cases.
Marind: 1 p . singular and plural of the personal pronouns and of those possessive forms that are used adjectively (nok, nohan, n).
Kanum: 3 p. singular and plural of the subject-forms in verbs of transitive use ( $p i$ ).
jéi: 2 p.s. and pl. of subject-forms (bu), 3 p.s. and pl. of subject-(ed ) and object-forms (edè).
Boazi: 1 p.s. and pl. of possessive forms used as prefixes ( $n$ ). Jaqai: 1 p.s. and pl. in possessive forms used as prefixes ( $n$ ).
Kamoro: 3 p.s. and pl. in all pronominal forms (are, ar $\mathbf{u}^{s} e$, ama, a).
Difference of form may be caused in the following ways.

1) a different word occurs, e.g. Kanum 1 p.s.: nggo; 1 p.pl.: ni;
2) a vowel indicating plurality is found. a) In Marind 2 p.s. of the personal pronoun: oh; 2 p. pl.: $\epsilon_{0}$; 2 p.s. of the possessive form: oohan; 2 p. pl.: ${ }^{6}$ ohan; and in the same way in Jaqai 2 p.s. of personal pronoun: $a q ; 2$ p. pl.: $a^{e} 0 k ; 2$ p.s. of the possessive form: aqandin; 2 p. pl.: $a^{e}$ okondin and 2 p.s.masc.: aqarépape; 2 p.pl.: áokaripape. b) In Kimaghama the three persons plural have a final $i$ contrasting with the final vowel of the singular forms; the plural-index $i$ is found in the sub-ject- and in the object-forms; in Morari and Jei the vowel $a$ is used in singular and the vowel $i(\dot{e})$ in plural forms of personal and possessive forms; in Kamoro the distinction is made by the vowels o and $a$; in Ekari by the vowels $a$ and $i$; in Marind, Boazi, Jaqa ${ }^{\text {a }}$ and Kati the plural forms show the vowel $i$, while at the same time the sex- and gender-distinction is found. c) In Mombum the consonant $m$ occurs as plural-index in the personal pronouns of 1 p. pl., 2 p. pl., and in the possessive and rela-tion-forms derived from them. d) Kanum shows a change in the linkingelement used to form the subject-forms of transitive verbs: singular $i$, plural nta. e) In $\mathrm{A}^{\mathrm{u} j u}$ we come across the plural-index $g u$ in $1 \mathrm{p} . \mathrm{pl}$. and 2 p . pl. of the personal pronoun (subject-form). f) In Kamoro a dual form occurs in which the numeral jamane, "two" is found; only the following forms are extant: 2 p . and 3 p . dual masculine kimand (subject- and direct object-form), kimanéve (emphasized subject-form), kimanatia (possessive form), kimanè-kama (indirect object-form); 2 p . and 3 p. dual feminine ka $k$ kamané (subject- and object-form), ka $\circ$ kamanatia (possessive form), ka*kamané-kama (indirect object-form); in the feminine forms we come across the noun $k a^{\circ} k a$, "woman"; in the masculine forms the element $k i$ is not yet explained.
Summary.
The plural-index $\dot{e}$ is common to the Marind- and Jaqai-languages in parallel forms; the plural-index $i$ occurs in Kimaghama, Moraori, Jéi, Ekari
and, moreover, in Marind, Boazi, Jaqai and Kati contrasting with another vowel in the singular; this feature of vowel-shift is also found in Kamoro, but there the alternating vowels are different.

Section 3. Sex and Gender.
The following features occur.
a) In Marind the 3 p.s. of the personal pronoun (subject-form) shows the vocalic change $\dot{e}$ indicating masculine sex, $u$ indicating feminine sex (anép/anup); the prefixes indicating possession in names of relatives have the same vowelshift ( $\varepsilon / u$ ).
b) In Boazi the $3 \mathrm{p} . \mathrm{s}$. of the personal pronoun (subject-form) shows the vowelshift $\mathfrak{k} / u$ according to sex (ndéné/ndunu), and so do the prefixes in names of relatives ( $t e ́ g e ́ / t u g u$ ).
c) In Jaqai the 3 p.s. of the personal pronoun (subject-form) shows the vowelshift: $\dot{e}$ as masculine-index, $u$ as feminine-index, $o$ as neuter-index (arép, arup, arop); the possessive form in which the linking-element in is combined with the subject-form has consequently arepin, arupin, aropin; the possessive form in which the element ape is found, has 1 p.s.m.: anggápape, 1 p.s.f.: anggaupape, 2 p.s.m.: aqarépape, 2 p.s.f.: aqarupape.
d) In Kati the 2 p.s. of the personal pronoun shows $e$ for the masculine and $u$ for the feminine (tep/tup) and so does the 3 p.s. viz. je/ju.
e) In Kamoro the sex-distinction is found in the dual forms of 2 and 3 p . of the personal pronoun kimané and kaokamané.

## Summary.

The sex-distinction is expressed in Marind, Boazi, Jaqai and Kati by the same vowelshift $\bar{e} / u$; in Marind and Jaqai the forms in which this distinction occurs, strongly resemble one another (anép/arép).

## Section 4. Some Relations in Pronouns.

In pronouns the following linguistic means are used to indicate relations which are not expressed in the form of the pronouns itself: a) a pronoun plus a noun may form a phrase in which the pronoun indicates the possessor and the noun the possession; this feature produces in Kati: tew ambip, "thou house" i.e. "thy house"; in Moni: a ita, "I father" i.e. "my father"; b) linking-elements may be used to indicate the function of the pronominal form; in Auju the elements: $t a$, té, ki following the personal pronoun (sub-ject-form) indicate the subject- or sometimes the object-function; the element $n a$ put after the object-form indicates a possessive relation.

## Section 5. Comparison of Nouns and Pronouns.

The feature of vowelshift to express number, sex and gender (i, é, $u, o$
or $a$ ) is found in Marind, Jaqa, Boazi and Kati, both in nouns and pronouns; in Kati and Moni, both in nouns and pronouns, a possessive relation is expressed by the fixed sequence "possessor-possession".

## NOTES.

1. Geurtjens H., Spraakleer der Marindineesche Taal, p. 22-33.
2. Part I, ch. I, sect. 3.
3. Part I, ch. II, sect. 3.
4. Part I, ch. III, sect. 3.
5. Part I, ch. IV, sect. 3.
6. Part I, ch. V, sect. 3.
7. Part I, ch. VI, sect. 3.
8. Part I, ch. VII, sect. 3.
9. Part I, ch. VIII, sect. 3.
10. Part I, ch. IX, sect. 3.
11. Part l, ch. X, sect. 3.
12. Part I, ch. XI, sect. 3.
13. Part I, ch. XII, sect. 3.
14. Part I, ch. XIII, sect. 3.
15. Part l, ch. XIV, sect. 3.
16. Part I, ch. XV, sect. 3.

## CHAPTER III

## NUMERALS

## Section 1. Various Systems of Counting.

a) In Marind are only two numerals: 1 and 2; 3 is 1 plus $2 ; 4$ is 2 plus 2; then hands and feet are used up to twenty; more than 20 is expressed by much. ${ }^{1}$ b) In Makléu are only two numerals: 1 and $2 .{ }^{2}$ c) In Jélmèk are numerals for 1 to $5 .^{3}$ d) In Mombum are numerals for 1 to 5; 6 to 10 are indicated by the prefix ma followed by the numerals of 1 to $5 .{ }^{4}$ e) In Kimaghama we come across a senary system: there are numerals for 1 to 6; 7 to 12 are counted 6 plus 1 etc., but in this combination 6 is indicated by a special word; 13 may be expressed 12 plus $1 ; 14$ is 12 plus 2 . To this senary system is added a score system: $20 ; 40$ is $20 \times 2,200$ is $20 \times 10$ etc. ${ }^{5}$ f) In Kanum a senary system occurs: 1 to $6 ; 7$ to 12 are counted 6 plus 1 but here 6 is indicated by a special word; 12 is $6 \times 2 ; 18$ is $3 \times 6 ; 24$ is $4 \times 6$; 36 has a distinct numeral; 72 is $2 \times 36 .{ }^{6} \mathrm{~g}$ ) In Moraori are only four numerals: 1, 2, 3, 4; larger numbers are indicated by means of hands and feet. ${ }^{7} \mathrm{~h}$ ) In Jéi are only two genuine numerals: 1 and 2; 3 is indicated by 2 plus $1 .{ }^{8}$ i) In Boazi are only three numerals: $1,2,3$. Number 4 is indicated by 2 plus 2; 5 is expressed by janbatokwe but Drabbe suggests that this is not a real numeral. ${ }^{9}$ j) In Jaqa are two numerals: 1 and 2; 3 probably occurs as well. ${ }^{10} \mathrm{k}$ ) In Auju are two numerals: 1 (expressed by two different terms) and 2; larger numbers are indicated by the use of the fingers. ${ }^{11}$ 1) In Kati only two genuine numerats occur: 1 and 2; 3 is 2 plus 1; 4 to 11 are names of fingers and other parts of the body; 12 is $6 \times 2$ and even 6 may be expressed by $6 \times 1$; a senary system is extant. ${ }^{12}$ m) In Kamoro are only two numerals: 1 and $2 ; 3$ is 2 plus 1 ; then fingers may be used. ${ }^{13}$ n) In Ekari we come across a decimal system: numerals for 1 to 10 ; for 20 , 40,$60 ; 30$ is $3 \times 10 ; 50$ is $10 \times 5 ; 70$ is $10+60 ; 80$ is $20+60 ; 90$ is $30+60 ; 120$ is $60 \times 2$. A senary system seems to be implied here. ${ }^{14}$ o) In Moni are five numerals: 1 to $5 ; 6$ is "the other (of the pair) plus one"; 7 is "the other plus two"; 11 is "one foot one"; 20 is "one man plus ten"; 50 is "two men plus ten". ${ }^{15}$

## Summary.

a) In Marind, Maklév, Jéi, Jaqa', Auju, Kati and Kamoro, the numeral system has only two genuine numerals and counting goes on by using hands and feet. b) ln Jélmèk, Mombum and Moni a quinary system
is found, c) In Kimaghama, Kanum, Kati and Ekari (to some extent) a senary system is extant. d) In Ekari and Moni a decimal system occurs. e) In Kimaghama, Ekari and Moni a score system is extant.

## Section 2. Comparison of some Forms.

a) In Marind number "two" is indicated by ina $h$; in Maklé" by inagé, in Jélmèk by ina. b) In Kanum number "one" is nāmpèr, in Jéi nāmpèi. c) In Kanum number "two" is jèmpoka, in Jéi jètopaé. d) In Ekari and Moni the numerals 3,4 and 5 are respectively wido and hédo, wi and wi, idibi and idi.

Summary.
Marind, Makiév and Jémèk agree in the form of the numeral for "two"; Kanum and Jei agree in the numeral for "one" and most likely in the numeral for "two"; Ekari and Moni agree in the numerals for "three", "four" and "five".

## Section 3. Place of the Numerals.

In all the fifteen languages the place of the numerals is after the word they belong to, except in Kanum and Jej where they are found before this word; in Marind the numerals may either precede or follow the noun. Kanum and jei agree in the form as well as in the place of the numerals for "one" and "two".

NOTES.

| 1. Part I, ch. I, sect. 4. | 9. Part I, ch. IX, sect. 4. |
| :--- | :--- |
| 2. Part I, ch. II, sect. 4. | 10. Part I, ch. X, sect. 4. |
| 3. Part I, ch. II, sect. 4. | 11. Part I, ch. XI, sect. 4. |
| 4. Part I, ch. IV, sect. 4. | 12. Part I, ch. XII, sect. 4. |
| 5. Part I, ch. V, sect. 4. | 13. Part I, ch. XII, sect. 4. |
| 6. Part I, ch. VI, sect. 4. | 14. Part I, ch. XIV, sect. 4. |
| 7. Part I, ch. VII, sect. 4. | 15. Part I, ch. XV, sect. 4. |

## CHAPTER IV

## VERBS: SIMPLE SENTENCE

## Section 1. Sequence of the Sentence.

In all fifteen languages the usual wordorder is: subject-object-predicate. ${ }^{1}$ Drabbe mentions the following peculiarities: in Makiéu the object sometimes follows the predicate; in Moraori direct and indirect object may be found after the predicate; in Jélmèk, Mombum, Mora다, Auju, Kati and Kamoro both the indirect and the direct object are inserted between the subject and the predicate (the indirect object is not mentioned in the other languages); in Mombum, Mora ${ }^{\circ}$ i, Auju direct and indirect object interchange place; in Jéi the subject may occur between the primary and the secondary base when there is no object; when an object is found, the subject opens the sentence.

## Section 2. Verbal and Nominal Predicates.

In the predicate-formations of our languages we come across the following combinations.

1) Marind.
I. Verbal predicates. a) A base conjugated according to tense, aspect, mood, relation and subject, e.g. ndam-e-na-kipārud, $\mathrm{t}-\mathrm{s}-\mathrm{r}-\mathrm{B}$, "you will bind me". ${ }^{2}$ b) A base, conjugated according to tense, aspect, relation and subject, bearing a vague meaning of "to be", followed by a base which is not conjugated, but is the bearer of the lexical meaning of the whole formation, e.g. $k-a k-u m-n-\mathrm{a}$ man, .....-s-a-r-B2-B1, "I am already coming". ${ }^{3}$ The conjugated base is called secondary base (B2), the base which bears the lexical meaning is called: primary base (B1). Here the primary base follows the secondary base.
II. Nominal predicates. a) A nominal form followed by elements of conjugation, e.g. jäba ka-no nok, B-t-s-pers. pron., "I am big". In I and 2 p. the formation is always followed by the personal pronoun. ${ }^{4}$ b) A nominal form followed by a base which is preceded by its conjugation, e.g. jāba ndam- $\dot{e}-a-\mathrm{i} n, \mathrm{~B} 1-\mathbf{t}-\mathrm{s}-\mathrm{r}-\mathrm{B} 2$, " 1 shall be big". The primary base is bearer of the meaning; the secondary base is conjugated. ${ }^{5}$ c) A combination of elements of conjugation without a primary or secondary base, e.g. (duèt) ip-a-namb, (S)-t-s-possessive index, "money is mine", i.e. "I have money"; (mbavak) ip-a-na, (S)-t-s-r, "hair is to me", i.e. "I have hair". ${ }^{6}$
2) Makled.
1. Verbal predicates. A base conjugated according to tense, aspect, mood, relation and subject, e.g. béba-n-ha-p, t-r-B-s, "he will see me". ${ }^{\text {r }}$
II. Nominal predicates. a) A nominal form used as primary base followed by a conjugated base which is different for the different tenses (secondary base), e.g. hiting ém-ak, B1-B2-s, "I am small", ${ }^{8}$ b) A primary and a secondary base both derived from the same base, e.g. pöswo $m a-p o ̈ s$, B1-t-B2, "I am used to spring". ${ }^{9}$ c) A primary base and a secondary base both derived from the same base; the primary base, however, is followed by a linking-element, e.g. pöswo-l ma-pös, Bl-inking-ele-ment-B2, "I am springing". ${ }^{10}$
3) Jélmèk.
1. Verbal predicates. A base conjugated according to tense, mood and subject, e.g. $m e^{3}-p-m a, B-t-s$, "I broke". 11
II. Nominal predicates. A nominal form used as primary base followed by a conjugated base, which is different for the different tenses and even for the different persons of one tense, e.g. balo kom, B1-B2t/s, "thick it is". ${ }^{12}$
4) Mombum.
I. Verbal predicates. A base conjugated according to tense, mood, aspect and subject, e.g. nuku-numur-u, B-t-s, "l eat". ${ }^{13}$
II. Nominal predicates. a) A nominal form followed by a tense- or aspectindex, e.g. nènggèr ko, B-t, "big present tense". ${ }^{14}$ b) A nominal form followed by a tense-index and a subject-index, e.g. nènggèr èsir-u, B-t-s, "I shall be big". ${ }^{15}$
5) Kimaghama.

The predicate is a base without indices; this base may have a nominal or verbal character, e.g. nö niè a"ra r-oana, S-R-B-l~T, "he beats me", ${ }^{10}$ In the Ndom language there are predicates composed of a primary and a secondary base; the primary bases of this language may even be divided into classes as to the base that accompanies them as secondary base. ${ }^{17}$
6) Kanum.
I. Verbal predicates. A base conjugated according to tense, mood, relation and subject, e.g. nè-bèlna-i, "we smash thee", r-B-t/s. ${ }^{18}$
II. Nominal predicates. A nominal element as primary base followed by a secondary base, e.g. mbaroa io, "strong it is", $\mathrm{Bl}-\mathrm{B} 2 \mathrm{t} / \mathrm{s} .{ }^{19}$
7) Morari.
I. Verbal predicates. A base conjugated according to tense, relation and subject, e.g. ter-å-m-adu, B with r-infix-t/s, "I beat thee". 0
II. Nominal predicates. A nominal element followed by a conjugated base, e.g. kumraon na tobondu, B1-S-B2t/s, "I am a sorcerer". ${ }^{21}$
8) Jéi.

1. Verbal predicates. Two bases: a primary and a secondary, the fatter conjugated according to tense, mood, aspect, relation and subject, e.g. di ap, B1-B2, "to go with a subject singular". 22
II. Nominal predicates. A nominal element followed by a secondary base, e.g. tagao jém, BI-B2, "he is strong". ${ }^{3}$
9) $B^{\circ} a z i$.
I. Verbal predicates. A base conjugated according to tense, mood, aspect, relation and subject, e.g. no-sungguz-it, s-B-t, "I wash". ${ }^{24}$
II. Nominal predicates. Drabbe does not give any example.
10) Jaqa.
I. Verbal predicates. A base conjugated according to tense, mood, aspect, relation and subject, e.g. oko-r-ponokon, s-t-B, "I give". ${ }^{25}$
II. Nominal predicates. a) A nominal element as primary base followed by a secondary base, e.g. ora " $\alpha-r-n e ̀$, $\mathrm{B} 1-\mathrm{s}-\mathrm{t}-\mathrm{B} 2$, "he is ill". ${ }^{36}$ b) A nominal base followed by a linking-element preceding the secondary base, e.g. radé-én $k-\dot{e}-p e ́ a \circ$, B1-linking element-t-s-B2, "he became a man". ${ }^{27}$
11) $A^{v j u}$.

1 Verbal predicates. A base conjugated according to tense, mood and subject, e.g.: ada-di-ra, B-s-t, "I bound". ${ }^{28}$
II. Nominal predicates. a) A nominal base preceded by a subject which is followed by a linking-element, e.g. gu ki tengghaghai, S-linking ele-ment-B, "thou art big". ${ }^{29}$ b) A nominal base followed by an affirmative index, e.g. gu tengghaghai di, S-B-affirmative index, "thou art big". ${ }^{30}$ c) A nominal base followed by a secondary base, e.g. nu kadaghai badi, S-B1-B2-s, "I am alive". ${ }^{31}$
III. Complex predicates. a) A formation followed by a secondary base, e.g. a-kumi-ni mogho, formation-B2-s, "thou art on the point of dying". b) A base which changes according to tense and is followed by a secondary base, e.g. ra-di gho-ki, B1-tense suffix-B2-t/s, "keeping it in his hands he went away". ${ }^{33}$ c) A base followed by a distinct secondary base to express durative, iterative and habitual aspects of the process indicated by the primary base, e.g. émi girimo, B1-B2, "to be habitually making", ${ }^{34}$
12) Kati.

1. Verbal predicates. A base conjugated according to tense, mood, aspect, relation and subject, e.g. jeetme-pt-an, B-r-t/s, " 1 tell thee". ${ }^{35}$
II. Nominal predicates. a) A nominal base followed by a linking-element, e.g. je ambiw eep, S-B-linking element, "he has a house". ${ }^{36}$ b) A nominal base followed by a secondary base, e.g. katuk amun keron, S-B1-B2-t/s, "the man is good" ${ }^{3 \tau}$
III. Complex predicates. a) A base followed by a suffix, preceding a distinct secondary base to express the habitual aspect of the process of the primary base or of an idiomatic phrase, e.g. jeetm-e mboron, B1-suffix-B2-t/s, "he usually tells"; jowor-e jarip, B1-suffix-B2, "they all died". ${ }^{38}$ b) A phrase followed by a secondary base, e.g. ambe $a n-\mathrm{i}$ kin keron, S-phrase-B2-t/s, "father is able to eat". ${ }^{39}$
13) Kamoro.
I. Verbal predicates. A base conjugated according to tense, aspect, mood,
relation, and subject, e.g. ma-kéa $a-m-a-r-i$, t2-B-t1-s with r-infix, "I bake for him". ${ }^{40}$
II. Nominal predicates. a) A nominal base following the subject, e.g. nik $^{i}{ }^{a}$ noatia Manéti, S-possessive form-B, "my father is Maunéti". ${ }^{4 \mathrm{x}}$ b) A base followed by a suffix, preceding the negation, e.g. noro ka${ }^{\circ} \circ a$ muna, S-B-suffix-negation, "I do not beat". ${ }^{42}$ c) A nominal base followed by a secondary base, e.g. janare makéé-me-r-e, B1-t2-B2-t1-r-s, "stupid is he". ${ }^{43}$
III. Compound and Complex predicates. a) A primary base (consisting of one or more elements) followed by a secondary base (consisting of one or more elements), e.g. ware-ke - mari-ki-r, B1-B2, "to float in order to leave", i.e. "to leave by means of a proah". ${ }^{44}$ b) A primary base followed by a suffix preceding the secondary base, e.g. $k$ é- $a-k \mathbf{a}^{u-k}$, B1-suffix-B2, "to hold in one's hand to put down", i.e. "to set down from one's hand", ${ }^{45}$ N.B. The primary and secondary bases just mentioned in a) and b) cannot be separated by indices; the indices of tense, mood and aspect are prefixed to the primary base (compound type). c) A primary base followed by a secondary base, e.g. ta" $k e-r$, B1-B2, "to divide to do", i.e. "to divide". In this case the two bases are separated by the indices of tense, mood, and aspect which are prefixed to the secondary base (complex type). ${ }^{46}$
14) Ekari.
1. Verbal predicates. A base conjugated according to tense, mood, aspect, relation, and subject, e.g. ui-nè-gh-a, B-t-l-s, "I go away". ${ }^{47}$
II. Nominal predicates. Drabbe gives no example of a nominal predicate. 15) Moni.
I. Verbal predicates. A base conjugated according to tense, mood, and subject, e.g. kibae ${ }^{\text {e }}{ }^{\circ}$, B-s, "I break", ${ }^{48}$
Il. Nominal predicates. Drabbe gives no example of a nominal predicate, but he says that a base followed by the suffix $j a$ is used as a predicate when the situation does not want a more special form of the predicate; the form with $j a$ is indifferent to tense, aspect, mood, and subject. It is likely to be a nominal predicate here. ${ }^{49}$

Summary.
a) In all languages we discussed, except Kimaghama, the verbal predicate consists of a base conjugated according to tense, mood, aspect, relation, and subject. In some languages there is no relation-index, in others we have no data with regard to the aspects. We will treat these subjects in detail in the following chapters. Here we state the conjugation of the verbal base as a common feature. b) The $\mathrm{A}^{\mathrm{u} j u}$ - and Kamoro-languages agree in a nominal predicate which consists of one nominal base only; ${ }^{50}$ Marind, Mombum, $A^{u j u}$, and Kati have the nominal predicate of one base but Marind and Mombum add elements of conjugation to $i t$; A ${ }^{u} j u$ adds an affirmative-
index, Kati adds a linking-element; ${ }^{51}$ Kamoro and perhaps Moni have one base composed of a verbal base and a suffix as the nominal part of the predicate. ${ }^{52}$ c) The Marind, Makléu, Jélmèk, Kanum, Moraori, Jéi, Jaqa', Auju, Kati and Kamoro languages have a nominal predicate consisting of two bases, a primary base and a secondary base; in Kimaghama and Mombum this type of predicate does not occur; with regard to the Boazi- and Ekari-languages data fail in this point. d) In the Marind-language we have found a verbal predicate composed of a primary and secondary base. In comparison with the other languages, mentioned in the preceding paragraph, we are inclined to call this predicate also a nominal predicate. The sequence of the bases is, however, not B1-B2 but B2-B1.53 e) Makléu and jaqar have also a primary base with a following linking-element in the nominal part of the predicate. ${ }^{54}$ f) $\mathrm{A}^{4} \mathrm{j} u$, Kati and Kamoro have the combination of a primary and a secondary base in a complex predicate. ${ }^{55}$ g) Kati and Kamoro have a complex predicate: a primary base consisting of a verbal base with the addition of a suffix, followed by a secondary base; ${ }^{56} \mathrm{~A}^{\mathrm{n} j u}$ and Kati allow a phrase as the primary base of a complex predicate. ${ }^{5 \pi}$

NOTES.

1. Part I, ch. I to XV, sect. 5.
2. Part I, ch. I, sect. 5, part I, n. 10.
3. Part I, ch. I, s. 5, p. I, n. 37; 38.
4. Part I, ch. I, sect. 5, part II, n. 1.
5. Ibidem.
6. Part I, ch. I, sect. 5, part MI, n. 4.
7. Part I, ch. II, sect. 5, part I, n. 8.
8. Part I, ch. II, sect. 5, part II, n. 1.
9. Part I, ch. II, sect. 5, part II, n. 2.
10. tbidem.
11. Part I, ch. III, sect. 5, part I, n. 2.
12. Part I, ch. III, sect. 5, part II.
13. Part I, ch. IV, sect. 5, part I, n. 1.
14. Part 1, ch. IV, sect. 5, part II, n. 1.
15. Part I, ch. IV, sect. 5, part II, n. 3.
16. Part I, ch. V, sect. 5, n. 1.
17. Part I, ch. V, sect. 6, n. 36.
18. Part I, ch. VI, sect. 5, part. I, n. 1.
19. Part I, ch. VI, sect. 5, part. II.
20. Part I, ch. VII, sect. 5, part I, n. 7.
21. Part I, ch. VII, sect. 5, part II, n. 1.
22. Part I, ch. VIII, sect. 5, part I, n. 1.
23. Part I, ch. VIII, sect. 5, part H.
24. Part l, ch. IX, sect. 5, part I, n. 1.
25. Part I, ch. X, sect. 5, part I, n. 1.
26. Part I, ch. X, sect. 5, part II, n. 1.
27. Part I, ch. X, sect. 5, part II, n. 2.
28. Part I, ch. XI, sect. 5, part I, n. 2.
29. Part l, ch. Xl, sect. 5, part ll, n. 1.
30. Ibidem.
31. Part I. ch. XI, sect. 5, part II, n. 2.
32. Part I, ch. XI, sect. 5, part III, n. 1.
33. Part I, ch. XI, sect. 5, part III, n. 2.
34. Part I, ch. XI, s. 5, p. III, I. 3; 4.
35. Part I, ch. XII, sect. 5, part 1, n. 1.
36. Part I, cl. XII, sect. 5, part II, n. I.
37. Part I, ch. XII, sect. 5, part ll, n. 2.
38. Part I, ch. XII, s. 5, p.' 'III, n. 3; 4d.
39. Part I, ch. XII, sect. 5, part III, n. 1.
40. Part I, ch. Xill, sect. 5, part I, n. 1.
41. Part I, ch. XIII, sect. 5, part II, n. 1.
42. Part I, ch. XIII, sect. 5, part II, n. 2.
43. Part I, ch. XIII, sect. 5, part II, n. 5.
44. Part I, ch. XIII, s. 5, p. III, n. 1d.
45. Part I, ch. XIII, s. 5, p. III, n. 1e.
46. Part 1, ch. XIII, s. 5, p. III, n. 1.
47. Part I, ch. XIV, sect. 5, n. 1.
48. Part 1, ch. XV, sect. 5, n. 1.
49. Part I, ch. XV, sect. 5, n. 8.
50. Part II, ch. IV, sect. 2 n. 11, Ha and 13, Ha.
51. Part II, ch. IV, sect. 2, n. 1, IIa; n. 4, Hb; n. 11, llb; n. 12, lla.
52. Part II, ch. IV, sect. 2, n. 13, 11b and n .15 H .
53. Part II, ch. IV, sect. 2, n. 1, lb.
54. Part II, ch. IV, sect. 2, n. 2, IIc, and n. 10, Ilb.
55. Part II, ch. IV, sect. 2, n. 11, III; n. 12, III and n. 13, III.
56. Part 11, ch. IV, sect. 2, n. 12, IHa; n. 13 , HIL .
57. Part 1!, ch. IV, sect. 2, n. 11, Ilta and $\mathrm{n}, 12,111 \mathrm{~b}$.

## CHAPTER V

## VERBS: TIME AND TENSE

## Section 1. Marind.

A. The present time is expressed in the following ways.

1. Verbal predicates. a) No tense-index is extant, e.g. no-kipãrud, s-B, "I bind". This formation is used whenever the present time of the process is sufficiently clear from the context or the circumstances. Drabbe says that this formation is indifferent to tense. We do not agree with him in this point, as Drabbe himself states that this formation is only used in the present and the preterit and not in the future. We prefer to say that this formation has no tense-index but is used with present or preterit meaning. ${ }^{1}$ b) Tense-index is $m$ or tam, e.g. m-o-kipārud, t-s-B, "thot bindst"; the tense-index $m$ occurs only in 2 and 3 person; the tense-index tam is found when there is a relation-index of 3 p . The tense-indices precede the subject-index and the base. 2
II. Nominal predicates. Tense-index is $k$, e.g. jā $b a k a-n o$ nok, B-t-spersonal pronoun, "I am big". The tense-index precedes the subjectindex but both follow the nominal element. ${ }^{3}$
B. The past time is expressed in the following ways.
I. Verbal predicates. a) No tense-index is extant etc. .... cf. this section in A, l, a). b) Tense-index is $d$, e.g. no-d-kipārud, s-t-B, "I bound". The tense-index follows the subject-index and precedes the relationindex, if any, and the base (except when the subject-index is 3 p . in the singular and at the same time no relation-index occurs, and also with a subject-index 3 p. pl.). The meaning of this preterit formation is a near past. ${ }^{4}$ c) Two tense-indices occur viz. nd and $d$, e.g. $n d-a-d-k i p a \bar{r} u d$, t2-s-ti-B, "he bound". The second tense-index added to the formation, mentioned in the preceding paragraph, precedes any other index. The meaning of this preterit is a more distant past. ${ }^{5}$
II. Nominal predicates. Tense-index is $d$, e.g. jāba no-d nok, B-s-t-personal pronoun, "I was big". The tense-index follows the subject-index (except in case the subject-index is a 3 p.) and both follow the nominal element. ${ }^{\text {e }}$
C. The future time is expressed in the following ways.
I. Verbal predicates. Tense-index is in the 1 p. $m$, in 2 and 3 p. ndam, e.g. ma-no-kipārud, t-s-B, "I shall bind"; ndam-o-kiparud, t-s-B, "thou wilt bind". The tense-index is ndap before bases that don't have the relation-index affixed to the base, whenever the tense-index is followed by another index. ${ }^{7}$
2. Nominal predicates. Tense-index is $m$ or ndam preceding a secondary base viz. in, e.g. jäab ma-no-n-in, B1-t-s-r-B2, "I shall be big", ${ }^{8}$
N.B. 1) Geurtjens does not agree with the data of Drabbe with regard to present and future indices; according to him the present tense-index is always $k$ and the future tense-index is $m .{ }^{8}$ It is not easy to settle this difference of data; the present tense-index of the nominal predicate is the consonant $k$ also according to Drabbe, but he suggests that the mistake of Geurtjens originated from the fact that Geurtjens was not familiar with the so-called $k$-formation. ${ }^{10}$ This formation occurs in three tenses: present, e.g. $k a-n o-k i p a ̄ r u d ;$ past $k a-n o-d-k i p a ̄ r u d$; future $k a-m-o-k i p a ̈ r u d$. As the present tense of this $k$-formation opens with the consonant $k$, Geurtjens may have taken this consonant $k$ for the tense-index $k$, which as such occurs in the nominal predicates. It seems to us that the position of Drabbe is corroborated by the fact that in those formations which in the same three tenses express a process as attempted ${ }^{11}$ the three tenses are indicated in the way Drabbe stated; Geurtjens does not mention this aspect. 2) Besides the use of tense-indices this language may indicate tense in another way viz. by adding a suffix to the base. The suffixes cannot be used without the tense-indices mentioned in the discussion. The suffixes are: et or sometimes at for the present; $t i$ or at for the preterit; $\dot{e}$ or moto for the future. It is noteworthy that analogous tense-suffixes are compulsory in the Upper-Mbian-dialect of the Marind-language. ${ }^{12}$

## Section 2. Maklér.

A. The present time is expressed in the following way.

1. Verbal predicates. Tense-index is $\dot{e} p$ in singular and dual, éma in plural forms, e.g. ép-pös-oma, t-B-s, "I jump". The tense-index precedes the base. ${ }^{13}$
II. Nominal predicates. A secondary base ém is found in I and 2 p. and a (ak?) in 3 p., e.g. hiting ém-ak, B1-B2-s, "I am small". ${ }^{14}$
B. The past time is expressed in the following ways.
I. Verbal predicates. a) Tense-index is éma, e.g. éma-pös, t-B, "I jumped". The meaning of this formation is a yesterday preterit. The index precedes the base. ${ }^{15}$ b) Two tense-indices occur viz. émé ( 3 p . s.fem. and 3 p .d. and pl.: ém) and an index which varies for the different persons, e.g. émé-nga-pös-oma, t1-t2-B-s, " 1 jumped". Both tense-indices precede the base. The meaning of the formation is a distant past. ${ }^{16}$
II. Nominal predicates. A secondary base éi occurs, e.g. hiting éi-maka, B1-B2-s, "I was small". ${ }^{17}$
C. The future time is expressed in the following ways.
I. Verbal predicates. The tense-indices are béma, béba or bia according to the different persons or different number of a person, e.g. béma-pös-ka, t-B-t/s, "I shall jump". The index precedes the base. The future time is also expressed by the distinct subject-indices. ${ }^{18}$
II. Nominal predicates. A secondary base is extant: ngatk with addition of the future indices just mentioned in the verbal predicates, e.g. hiting béma-ngak-ka, B1-t2-B2-t1/s, "I shall be small", ${ }^{10}$
N.B. The different subject-indices used in the three tenses of the nominal predicates indicate the difference of tenses as well.

## Section 3. Jélmèk.

A. The present time is expressed in the following way.
I. Verbal predicates. A zero-modification is found, e.g. mè-mè, B-t/s, "I break". The subject-indices differ from those of the preterit and future and, therefore, indicate the tense as well. ${ }^{20}$
II. Nominal predicates. A secondary base with distinct subject-indices is extant, e.g. bato kom, B1-B2t/s, "thick is it"..21
B. The past time is expressed as follows.
I. Verbal predicates. A tense-index $p$ occurs, e.g. mè-p-ma, B-t-s, " 1 broke". The distinct subject-indices indicate, moreover, the tense. The tense-index follows the base. ${ }^{22}$
II. Nominal predicates. A secondary base and its distinct subject-indices are found, e.g. wotök köd mjéiwa, B1-(unexplained element)-B2t/s, "small wert thou". ${ }^{23}$
C. The future time is expressed as follows.
I. Verbal predicates. The subject-indices indicate the tense, e.g. mé-ka, B-t/s, "I shall break". ${ }^{24}$
11. Nominal predicates. A secondary base with distinct subject-indices occurs e.g. mbala-mbalak köd ngajakpa, B1-(unexplained element)$\mathrm{B} 2 \mathrm{t} / \mathrm{s}$, "they will be big". 25
N.B. Besides the preceding formations there are bases that show a set of indices prefixed to the base; these indices differ in the different persons and in the different tenses: so they may be tense- and subjectindices at the same time. The bases in which these indices are found indicate tense and subject twice, e.g. $k$-wè-gama, $\mathbf{t} / \mathrm{s}-\mathrm{B}-\mathrm{t} / \mathrm{s}$, "I come". ${ }^{26}$

## Section 4. Mombum.

A. The present time is indicated in the following way.
l. Verbal predicates. A tense-index is extant viz. numur, e.g. nuku-numur-u, B-t-s, "I eat". The tense-index follows the base. ${ }^{27}$
II. Nominal predicates. A tense-index ko follows the nominal element, e.g. nu nènggèr ko, S-B-t, "I am big", ${ }^{28}$
B. The past time is expressed in the following ways.
I. Verbal predicates. a) The tense-index $r$ indicates a to-day pretetit, e.g. nuku-r-a, B-t-s, "I ate to-day". The place of the tense-index is after the base. ${ }^{29}$ b) Distinct subject-indices indicate the yesterday preterit, e.g. nuku-è", B-t/s, "I ate". The tense-index follows the base. ${ }^{30}$ c) The
tense-index agha indicates a remote preterit, e.g. nuku-agha-u, B-t-s, "I ate". The tense-index follows the base. ${ }^{.21}$
II. Nominal predicates. A tense-index aghadèi follows the nominal element, e.g. nu nènggèr aghadèi, S-B-t, "l was big". ${ }^{32}$
C. The future time is expressed as follows.

1. Verbal predicates. The tense-index ésir follows the base, e.g. nuku-èsir-a, B-t-s, "I shall eat". ${ }^{33}$
II. Nominal predicates. The tense-index èsir follows the nominal element and is followed in its turn by the subject-indices of the future of the verbal predicate, e.g. nènggèr èsir-a, B-t-s, "I shall be big", ${ }^{34}$

## Section 5. Kimaghama.

A. The present time is indicated in the following way. The tense-index is oana, which follows the base; the tense-index is a word by itself. The example is: nö niè a"ra r-oana, S-R-B-1-T, "he beats me". ${ }^{35}$
B. The past time is expressed as follows. The tense-index is ote $\mathbf{e}$ occurring after the base: S-R-B-I-T. ${ }^{36}$
C. The future time is indicated as follows. The tense-index is aghatj found after the base: S-R-B-1-T. ${ }^{37}$
N.B. 1) The tense-indices may be preceded by the consonants $r$ or $n$ which may be considered as a ligature. ${ }^{38}$ 2) The Riantana-language distinguishes a preterit to-day and a preterit earlier than to-day and also a future to-day and a future beginning to-morrow. ${ }^{39}$ The Ndomlanguage distinguishes four tenses: present, preterit to-day and preterit earlier than to-day and the future. ${ }^{40}$

## Section 6. Kanum.

A. The present time is expressed in the following way.
I. Verbal predicates. Distinct subject-indices indicate the tense at the same time; they follow the base, e.g. nè-bèlna-i, r-B-t/s, "we smash thee". ${ }^{41}$ II. Nominal predicates. A secondary base with distinct subject-indices occurs following the nominal element, e.g. mbaroa io, B1-B2t/s, "he is strong". ${ }^{42}$
B. The past time is expressed in the following ways.
I. Verbal predicates. a) Distinct subject-indices express the tense at the same time, e.g. bé-bèlna-i, r-B-t/s, „some person smashed me to-day". The subject/tense-indices follow the base. The meaning of this formation is a preterit of to-day. ${ }^{48}$ b) Distinct subject-indices indicate the tense, i.e. a yesterday preterit; they follow the base, kun-bèlna, r-B-t/s, "yesterday some person smashed us". ${ }^{14} \mathrm{c}$ ) Distinct subject-indices express the distant preterit, e.g. nè-bèlna-kai, r-B-t/s, "some people smashed us". The indices follow the base. ${ }^{45}$
II. Nominal predicates. A secondary base together with distinct subjectindices following the nominal element occurs for the to-day preterit, for the yesterday preterit and for the distant preterit. It seems to us that a common element is extant in the three secondary bases viz. ra, e.g. mbaroa irai, "he was strong to-day", B1-B2t/s. ${ }^{46}$
C. The future time is indicated as follows.

1. Verbal predicates. A tense-index is found here, together with distinct subject-indices, e.g. sé-bèr-bètna, $\mathrm{t}-\mathrm{r}-\mathrm{B}-\mathrm{t} / \mathrm{s}$, "he will smash me". The tense-index opens the formation, the subject-indices follow the base. ${ }^{4 \tau}$ II. Nominal predicates. A secondary base with a distinct subject-index occurs following the nominal element, e.g. mbaroa séwo, B1-B2t/s, "I shall be strong". ${ }^{48}$
N.B. Besides the formations just mentioned, the five tenses may be expressed in a different way, the present, the to-day preterit and the distant preterit showing the same subject-indices; the present has a zero-modification, the to-day preterit the vowel $i$, the distant preterit the vowel $u$ as a tense-index. These tense-indices follow the base. The yesterday preterit has distinct subject-indices indicating the tense at the same time, and preceding the base; the future has the tense-index sé at the beginning of the formation and distinct subject-indices some before, some after the base. The future formations resemble the secondary base-formations of the nominal predicates very much. ${ }^{48}$

## Section 7. Mora*ri.

A. The present time is indicated in the following way.
I. Verbal predicates. Distinct subject-indices following the base indicate the tense at the same time, e.g. ter $r-a^{\circ}-m-\alpha d u, B$ with $r$-infix- $t / \mathrm{s}$ "I beat thee". ${ }^{50}$
II. Nominal predicates. A secondary base following the nominal element occurs, e.g. kumra ${ }^{\circ} n$ na tobondu, B1-S-B2t/s, "I am a sorcerer". ${ }^{51}$
$B$. The past time has the following formations.
I. Verbal predicates. a) Distinct subject-indices following the base express at the same time the yesterday preterit, e.g. tèr-a$a^{\circ}-m-o b o n$, B -with r -infix- $\mathrm{t} / \mathrm{s}$, "I beat thee yesterday". ${ }^{52}$ b) Distinct subject-indices indicate a preterit before yesterday, e.g. ter-a ${ }^{\circ}$-m-ofori, B-with r-infix$\mathrm{t} / \mathrm{s}$, "I beat thee before yesterday". As the consonant $f$ is found in all the subject-indices of this tense, Drabbe suggests that this $f$ is the tense-index. The subject-indices follow the base. ${ }^{53}$ c) Distinct subjectindices following the base indicate a distant preterit at the same time, e.g. tèr- $a^{\circ}-m$-a, B-with $r$-infix-t/s, "I beat thee (long ago)". ${ }^{54}$
II. Nominal predicates. A secondary base following the nominal element is found, e.g. kumra ${ }^{\circ} n$ na oro ${ }^{u} j$ e, B1-S-B2t/s, "I was a sorcerer". ${ }^{55}$
C. The future time is expressed as follows.
I. Verbal predicates. Distinct subject-indices indicate the future tense at the same time. They follow the base. The example is: ter $-a^{\circ}-m$-ara, B-with r-infix-t/s, "I shall beat thee". The formation is preceded by the element $p a$ which may be separated from it and has the function of a tense-index. ${ }^{56}$
II. Nominal predicates. A secondary base following the nominal element is extant, e.g. kumraon na junggo, B1-S-B2t/s, "I shall be a sorcerer".5*

## Section 8. Jéi.

A. The present time is indicated in the following way.

1. Verbal predicates. A zero-modification is used, e.g. di ap, B1-B2, "some person goes". ${ }^{58}$
II. Nominal predicates. A secondary base following the nominal element occurs, e.g. tagao jém, B1-B2, "he is strong". ${ }^{59}$
B. The past time is indicated as follows.
2. Verbal predicates. a) The tense-index is $a$ following the secondary base indicating a to-day preterit, e.g. di ap-a, B1-B2-t, "some person went to-day". ${ }^{60}$ b) The tense-index end occurs after the secondary base and precedes the tense-index $a$ mentioned in the preceding paragraph, e.g. di ap-ènd-a, B1-B2-t2-t1, "some person went yesterday". The meaning of this formation is a yesterday preterit. ${ }^{61}$ c) Two tense-indices occur in combination viz. ko preceding the secondary base and ag following the secondary base. The meaning of the formation is a preterit preceding the day of yesterday. An example: di ko-ap-ag, B1-t1-B2-t2, "some person went". ${ }^{62}$
II. Nominal predicates. In the data of Drabbe no examples are extant with regard to preterit formations.
C. The future time is indicated as follows.
I. Verbal predicates. a) The tense-index is de opening the formation; here the secondary base precedes the primary base, e.g. de $-b-a p d i$, t-r-B2-B1, "I shatl go". ${ }^{33}$ b) A special secondary base occurs together with the tense-index dè, e.g. dè-b-èrtin wènj, t1-r-B2/t2-B1, "I shall be somewhere". ${ }^{64}$
1l. Nominal predicates. Drabbe has no data on this matter.

## Section 9. Boazi.

A. The present time has the following formations.

Verbal predicates. a) The tense-index it is suffixed to the base, e.g. no-sungguz-it, s-B-t, "I wash". ${ }^{65}$ b) Special subject-indices precede the base and the tense-index it follows it, e.g. ndogho-sungguz-it, t1/s-B-t2, "thou washest". In the subject-indices Drabbe pointed out the common element $n d$ as tense-index. ${ }^{66}$ c) Special subject-indices occut before intransitive bases, e.g. ghangqa-ghomat, t/s-B, "l sit". ${ }^{\text {gT }}$
B. The past time is indicated in the following ways.

Verbal predicates. a) The tense-index $a t$ is suffixed to the base, e.g. no-sungguz-at, s-B-t, "I washed". ${ }^{68}$ b) Distinct subject-indices precede the base in combination with the tense-index at that follows the base, e.g. ghogho-sunguz-at, t1/s-B-t2, "thou washedst". ${ }^{69}$
C. The future time has the following formations.

Verbal predicates. a) The index $m a$ precedes the base, no-ma-sungguz, $\mathrm{s}-\mathrm{t}-\mathrm{B}$, "I shall wash". The meaning of this formation is a to-day future. ${ }^{70}$ b) The tense-index $n d$ in combination with distinct subject-indices indicates also a to-day future, e.g. $n d-\dot{e}-$-sungguz, $\mathrm{t} 1-\mathrm{t} 2 / \mathrm{s}-\mathrm{B}$, " 1 shall wash to-day". ${ }^{71}$ c) The plain subject-indices precede the base; this simplest formation indicates a to-morrow future, e.g. no-sungguz, s-B, "I shall wash to-morrow". $\mathrm{T}^{72}$ d) The tense-index gha for 1 and 2 p . opening the formation and a second tense-index na preceding the base for all persons except $1 \mathrm{p} . \mathrm{s}$. indicate a more distant future, e.g. gha-gho-nasungguz, $\mathrm{t} 1-\mathrm{s}-\mathrm{t} 2-\mathrm{B}$, "thou wilt wash (after some time)". ${ }^{73}$
N.B. The forms of the three tenses in nominal predicates cannot be stated as Drabbe does not give any rule or example. ${ }^{74}$

## Section 10. Jaqa'.

A. The present time is expressed as follows.
I. Verbal predicates. The tense-index is $r$ following the subject-index, e.g. oko-r-ponokon, s-t-B, "I give". ${ }^{75}$
II. Nominal predicates. The tense-index $r$ occurs preceding a secondary base, e.g. ora ${ }^{\text {e }}$ a-r-nè, B1-s-t-B2, "he is ill". ${ }^{76}$
B. The past time is expressed as follows.
I. Verbal predicates. The tense-indices $k$ or $b$ used indiscriminately open the formation, e.g. $k$-ok-a-ponokon, t-s-r-B, "I gave thee". ${ }^{77}$
II. Nominal predicates. The tense-index $k$ occurring with the secondary base $p \ddagger \alpha^{\circ}$ is mentioned by Drabbe in the following example: radé-én $k$-é-péa, ${ }^{\circ}$ B1-linking element-t-s-B2, "he became a man". ${ }^{38}$
C. The future time is indicated as follows.
I. Verbal predicates. The tense-index is nan( $a$ ) opening the formation, e.g. nan-aqa-néé-ponokon, $\mathbf{t - s - r}-\mathrm{B}$, "thou wilt give us". ${ }^{79}$
II. Nominal predicates. Data fail on this point.

## Section 11. Auju.

A. The present time is expressed as follows.
I. Verbal predicates. The tense-index is zero; the formation consists of the base followed by the subject-indices, e.g. ada-di, B-s, "I bind". ${ }^{80}$
II. Nominal predicates. a) In the pure nominal predicate there is no distinct tense-index for the present; the affirmation-index $d i$ and the interrogation-index de occur only after present and preterit formations,
thus some indication of time is extant, e.g. ga tengghaghai di, S-B-affirmation-index, "thou art big". ${ }^{81}$ b) In the seminominal predicate the secondary base $b a$, "to sit", occurs in the same tense-formations as mentioned in the verbal predicates. ${ }^{82}$
B. The past time has the following formations.
I. Verbal predicates. a) The tense-index $r a$ following the subjectindices indicates a yesterday preterit, e.g. ada-di-ra, B-s-t, "I bound yesterday". ${ }^{83}$ b) The tense-index dagha in the 1 p . and $a$ in the non- 1 p . indicate a more distant preterit, e.g. mari-dagha-ri, B-t-s, "I descended". ${ }^{84}$
1I. Nominal predicates. Cf. present formations.
C. The future is expressed as follows.

1. Verbal predicates. The bases must be divided into classes according to the tense-index wanted; some bases have the prefix $a$; some a suffix $f i$, fo, fu or ro; some bases change themselves, some bases occur in combination with a synonym. ${ }^{55}$
II. Nominal predicates. Cf. present formations; here the affirmation index is $n e ̀$ or $n i$ in contrast with the affirmation-index of the present and preterit formations.
N.B. The primary base of some complex predicates shows a different suffix according to the tense of the secondary base viz. the suffix $d i$ occurs when the secondary base is in the present or the preterit; the suffix $b u$ when the secondary base is in the future, e.g. ra-di ghoki, "keeping it in his hands he goes (or went) away"; ra-bu $a$-ghait, "keeping it in his hands he will go away". ${ }^{86}$

## Section 12. Kati.

A. The present time is expressed in the following way.
I. Verbal predicates. Distinct subject-indices indicate the tense at the same time, e.g. jeetm-an, B-t/s; "I say". ${ }^{87}$
II. Nominal predicates. a) The pure nominal predicate has no tenseindex, e.g. katuk amun, S-B, "the man is good". ${ }^{88}$ b) The seminominal predicate usually has the secondary base kere, e.g. kafuk amun keron, S-B1-B2-t/s, "the man is good"; the tense of the secondary base shows forms analogous to those of the verbal formations. ${ }^{89}$
B. The past time is expressed as follows. The formations of the preceding paragraph have a preterit meaning as well, both in the verbal and in the nominal predicates. ${ }^{90}$
C. The future is expressed as follows.
I. Verbal predicates. The tense-index an preceding the distinct subjectindices and both following the base is found, e.g. jeetme-pt-att-iin, B-r-t-t/s, "I shall tell thee" ${ }^{91}$
II. Nominal predicates. Cf. the present formations.

## Section 13. Kamoro.

A. The present time is expressed as follows.

1. Verbal predicates. The tense-index is $m$ following the base; a second tense-index is $m a$, a facultative prefix to the base, e.g. ma-kea $a-m-a-r-i$, t2-B-t1-s with r-infix, "I bake for him/them". 92
II. Nominal predicates. a) The pure nominal predicate has no tenseindication, e.g. noma puu, B-S, "I am white". ${ }^{93}$ b) The seminominal predicate has a secondary base, which shows the same tense-formations as the verbal predicates, e.g. janare ma-eré-me-r-e, B1-t2-B2-t1-r-s, "he is stupid". ${ }^{94}$
B. The past time is indicated as follows.
I. Verbal predicates. a) There is a rather intricate formation indicating a to-day preterit. The facultative tense-index which precedes the base is ema; in some cases the base shows the ligature $k$, in some cases the vowel $a$ instead of the ligature $r$, sometimes both $k$ and $a$ occur. Drabbe suggests that this $a$ is a tense-index. An example: éma-kao-k-i, t2-B-ligature-s, "I beat him to-day" ${ }^{95}$ b) The tense-index is $m(a)$ following the base; second tense-index is éma, a facultative prefix to the base; the time indicated is a remote past, e.g. (ema)-muku-ma, (t2)-B-t1-s, "I hit him (long ago)". ${ }^{96}$
II. Nominal predicates. Cf. A. The present formations under II.
C. The future is indicated as follows.
I. Verbat predicates. The tense-index is $a^{i m i}$ following the base but linked to it by a ligature ( $k$ or $r$ ); the second tense-index is $a$, a facultative prefix to the base, e.g. $a-k e m e-k-\mathbf{a}=m i-n-i$, t2-B-1-t1-r-s, "I shall give thee". ${ }^{97}$
II. Nominal predicates. Cf. A. The present formations under II.

## Section 14. Ekari.

A. The present time is indicated in the following way.

Verbal predicates. The tense-index is $n \dot{e}$ following the base, e.g. $u \mathrm{i}-n \dot{e}$ -gh- $a$, B-t-ligature-s, "I go away". ${ }^{98}$
B. The past is expressed by the following formations.

Verbal predicates. a) The tense-index $p$ following the base indicates a to-day preterit, e.g. $u \mathrm{i}-p-a$, $\mathrm{B}-\mathrm{t}-\mathrm{s}$, "I went away to-day". ${ }^{99}$ b) The tenseindex tè following the base expresses a distant preterit, e.g. uè-tè-gh-a, B-t-ligature-s. ${ }^{100}$
C. The future has the following formations.

Verbal predicates. a) The tense-index $p \neq$ indicates a to-day future. The index follows the base, e.g. ui-pi-gh-a, B-t-ligature-s, "I shall go away to-day". ${ }^{101}$ b) The tense-index ta indicates a future beginning to-morrow. The index follows the base, e.g. ui-ta-gh-a, B-t-ligature-s, "I shall go away". ${ }^{\text {.02 }}$
N.B. The nominal predicate cannot be analysed here as Drabbe has no data on this point.

## Section 15. Moni.

A. The present time is expressed as follows.

Verbal predicates. A zero-modification is found, e.g. kiba ${ }^{\boldsymbol{\epsilon}} \mathbf{a}^{\circ}$, $\mathrm{B}-\mathrm{s}$, "I break", ${ }^{103}$
B. The past has the following formation.

Verbal predicates. The tense-index am following the base is extant, e.g. to-am-igio, B-t-s, "we were present". ${ }^{104}$
C. The future is expressed as follows.

Verbal predicates. a) The index is $a^{u}$, e.g. kib- $a^{u-a}$, B-t-s, "I shall break". The index follows the base. ${ }^{105}$ b) The index is nd, e.g. kibae$n d-a^{\circ}$, $\mathrm{B}-\mathrm{t}-\mathrm{s}$, "I shall break". The index follows the base. ${ }^{106}$ Drabbe is not sure whether there is a difference of meaning between these two future-formations.
N.B. The nominal predicates have not been discussed by Drabbe.

Summary.

1) In all languages, except Kimaghama, the tense is indicated by an element of conjugation either in the primary or in the secondary base.
2) The preterit and to some extent the future show various formations according to an exact expression of the time when the process takes place.
3) The following methods are used to indicate the different times.
A. For the present.
I. In verbal predicates. a) A zero-modification occurs in $\mathrm{A}^{u j u}$ and Moni. b) Distinct subject-indices are found in Jélmèk, Kanum, Morari following the base. c) A tense-index preceding the base is extant in Marind, Maklé", Jaqa and a tense-index following the base occurs in Marind (facultatively), Mombum, Boazi, Kamoro and Ekari. It is noteworthy that the facultative tense-index of Marind and the obligatory tense-index of Boazi are formally identical viz. it.
II. In nominal predicates. a) A nominal element with a zero-modification is found in Kati and Kamoro; a nominal element with a tense-index occurs in Marind and Mombum; a nominal element with an affirmationindex which is a tense-index at the same time is extant in Auju. b) A distinct secondary base is found in Makléu, Jélmèk, Kanum, Могаюri and jéi. c) A secondary base which is conjugated as the base of a verbal predicate of the same language occurs in Auju, Kati and Kamoro.
N.B. In the Marind-language we come across the s-B-formation with a present or preterit meaning according to the context; in Kati the $\mathrm{B}-\mathrm{t} / \mathrm{s}$-formation is indifferent to a present or preterit meaning but is only opposed to a future formation. The Kimaghama-, Riantana- and

Ndom-languages have their tenses indicated by elements which are separate words.
B. For the past.

1) The verbal predicates may have various preterit formations; the nominal predicates have only one formation for the preterit. 2) One formation is found in Jélmèk, Kimaghama, Boazi, Jaqa' and Moni. 3) Two formations viz. a near preterit and a remote preterit occur in Marind, Maklér, Auju, Kamoro, Ekari. 4) Three formations viz. a to-day preterit, a yesterday preterit and a distant preterit are extant in Mombum, Kanum, Jei; in Morarit, however, the three formations indicate a yesterday preterit, a before-yesterday preterit and a distant preterit.
Verbal predicates. a) With regard to the languages in which one preterit occurs, Jélmèk and Moni agree in the formation B-t-s; B ${ }^{\circ}$ azi and Marind (in one of the two preterits) agree in the formation s-B-t; in this case the tense-indices of the two languages are formally identical viz. at; in Marind this tense-index is however optional. b) With regard to the languages in which two preterit formations are found, Marind and Makléu agree in the addition of a secondary tense-index to the primary index to indicate the remote preterit; moreover, the tense-indices precede the base in both languages. c) With regard to the languages in which three preterit formations are extant, Kanum and Morari agree in the use of distinct subject-indices in the three tenses which are at the same time tense-indices.
C. For the future.

Boazi shows different formations meaning a to-day future, a to-morrow future or a distant future; Ekari has the distinction between a to-day future and a distant future.

1. Verbal predicates. a) Distinct subject-indices following the base occur in Makléu, Jélmèk, Kanum, Mora ${ }^{\circ}$ ri and Kati; distinct subject-indices preceding the base occur in some bases of Kanum. b) A tense-index which precedes the base is extant in Marind, Makléu, Kanum, Jéi, Boazi and Jaqa ${ }^{1}$; a tense-index which follows the base is found in Mombum, Kati, Kamoro, Ekari and Moni.
II. Nominal predicates. a) A nominal element followed by an affirma-tion-index which is a tense-index at the same time, occurs in Auju. b) Distinct subject-indices occur in Makléu, Jélmèk, Kanum and Kati following the base. c) A distinct secondary base is found in Marind, Makléu, Jélmèk, Kanum, Moraori, Jéi; a secondary base which is conjugated as the base of a verbal predicate of the same language is extant in Auju, Kati and Kamoro.

## NOTES

1. Part I, ch. I, sect. 5, part I, n. 6.
2. Part I, ch. I, sect. 5, part I, n. 7.
3. Part I, ch. I, sect. 5, part II n. 1.
4. Part I, ch. I, sect. 5 , part I, n. 8.
5. Part I, ch. I, sect. 5, part I, n. 9.
6. Part I, ch. I, sect. 5, part II, n. 1.
7. Part I, ch. I, sect. 5 , part I, n. 10.
8. Part I, ch. I, sect. 5, part II, n. 1.
9. Geurtjens M., Spraakleer der Marindineesche Taal, p. 46.
10. Part J, ch. I, sect. 5, part I, n. 11.
11. Part I, ch. I, sect. 5, part I, n. 18.
12. Part I, ch. I, sect. 5, part IV, and sect. 7, n. 4.
13. Part I, ch. 11, sect. 5, part I, n. 1.
14. Part 1, ch. II, sect. 5, part II, n. 1.
15. Part I, ch. II, sect. 5, part I, n, 2.
16. Part I, ch. II, sect. 5 , part I, n. 3.
17. Part I, ch. II, sect. 5 , part Il, n. 1.
18. Part I, ch. II, sect. 5, part I, n. 4.
19. Part I, ch. II, sect. 5, part II, n. 1.
20. Part I, ch. III, sect. 5 , part I, n. 1.
21. Part I, ch. III, sect. 5, part II.
22. Part I, ch. III, sect. 5, part I, n. 2.
23. Part I, ch. III, sect. 5, part II.
24. Part I, ch. III, sect. 5, part I, n. 3.
25. Part I, ch. III, sect. 5, part II.
26. Part [, ch. III, sect. 5 , part I, n. 6.
27. Part I, ch. IV, sect. 5, part. I, n. 1.
28. Part I, ch. IV, sect. 5, part II, n. 1.
29. Part I, ch. IV, sect. 5, part I, n. 2.
30. Part I, ch. IV, sect. 5, part I, n. 3.
31. Part I, ch. IV, sect. 5 , part I, n. 4.
32. Part I, clı. IV, sect. 5, part II, n. 2.
33. Part I, ch. IV, sect. 5, part I, n. 5.
34. Part I, ch. IV, sect. 5, part II, n. 3.
35. Part l, ch. V, sect. 5, n. 1.
36. Part I, ch. V, sect. 5, n. 2.
37. Part I, ch. V, sect. 5, n. 3.
38. Ibidem.
39. Part I, ch. V, sect. 6, n. 1.
40. Part I, ch. V, sect. 6, n. 3.
41. Part l, ch. VI, sect. 5, part I, n. 1.
42. Part I, ch. VI, sect. 5, part II.
43. Part I, ch. V1, sect. 5, part I, n. 2.
44. Part I, ch. VI, sect. 5, part I, n. 3.
45. Part I, ch. VI, sect. 5, part I, n. 4.
46. Part I, ch. VI, sect. 5, part III, n. 1.
47. Part I, ch. VI, sect. 5, part 1, n. 5.
48. Part I, ch, Vl, sect. 5, part Il, and part IUI, n. 1 .
49. Part I, ch. VI, sect. 5, part I, n. 6.
50. Part I, ch. VII, sect. 5, part I, n. 6; 7.
51. Part I, ch. VII, sect. 5 , part II, n. 1.
52. Part I, ch. VII, sect. 5 , part I, n. 6; 7.
53. Ibidem.
54. Ibidem.
55. Part I, ch. VII, sect, 5 , part II, n. I.
56. Part 1, ch. VIl, sect. 5, part I, n. 6; 7.
57. Part I, ch. VII, sect 5, part II, n. 1.
58. Part 1, ch. Vill, sect. 5, part 1, n. 1.
59. Part I, ch. VIII, sect. 5, part II.
60. Part I, ch. VIII, sect. 5, part I, n. 2.
61. Part I, ch. VIII, sect. 5, part I, n. 3.
62. Part I, ch. Vlli, sect. 5, part I, n. 4.
63. Part I, ch. VIII, sect. 5, part I, n. 5.
64. Ibidem.
65. Part I, ch. IX, sect. 5, part I, n. 1.
66. Part I, ch. IX, sect. 5, part I, n. 4.
67. Pari I, ch. IX, sect. 5, part I, n. 2.
68. Part I, ch. IX, sect. 5, part 1, n. 3.
69. Part I, ch. IX, sect. 5, part l, n. 4.
70. Part I, ch. IX, sect. 5, part I, n. 5.
71. Part l, ch. [X, sect. 5, part I, n. 6.
72. Part I, ch. IX, sect. 5, part I, n. 7.
73. Part I, ch. IX, sect. 5 , part I, n. 8.
74. Part I, ch. IX, sect. 5, part II.
75. Part I, ch. X, sect. 5, part I, n. 1.
76. Part I, ch. X, sect. 5 , part II, n. 1.
77. Part I, ch. X, sect. 5 , part I, n. 2.
78. Part I, ch. X, sect. 5, part II, n. 2.
79. Part I, ch. X, sect. 5 , part I, n. 3.
80. Part I, ch. XI, sect. 5, pari I, n 1.
81. Part I, ch. Xl, sect. 5, part II, n. 1.
82. Part I, ch. XI, sect. 5, part II, n. 2.
83. Part 1, ch. XI, sect. 5, part I, n. 2.
84. Part I, ch. Xl, sect. 5, part I, n. 3.
85. Part J, ch. XI, sect. 5, part I, n. 4.
86. Part I, ch. XI, sect. 5, part III, n. 1.
87. Part I, ch. XII, sect. 5 , part I, n. 1.
88. Part I, ch. XII, sect 5, part II, n. 1.
89. Part l, ch. XII, sect. 5, part II, i. 2.
90. Part I, ch. XII, sect. 5, part I, n. 1.
91. Part I, ch. XII, sect. 5, part 1, n. 2.
92. Part I, ch. XIII, sect. 5, part I, n. 1.
93. Parł I, ch. XIII, sect. 5 , part II, n. I.
94. Part I, ch. XIIl, sect. 5, part II, n. 5.
95. Part I, ch. XIII, sect. 5, part I, n. 4.
96. Part I, ch. XIII, sect. 5, part I, n. 2.
97. Part I, ch. XIII, sect. 5, part I, n. 3.
98. Part I, ch. XIV, sect. 5, n. 1.
99. Part l, ch. XIV, sect. 5, n. 2.
100. Part I, ch. XIV, sect. 5, n. 3.
101. Part I, cli. XIV, sect. 5, n. 4.
102. Part I, ch. XIV, sect. 5, n. 5.
103. Part I, ch. XV, sect. 5, n. I.
104. Part l, ch. XV, sect. 5, n. 2.
105. Part I, ch. XV, Sect. 5, n. 3.
106. Ibidem.

## CHAPTER VI

## VERBS: ASPECTS

In the preceding chapter we did not mention the various tense-formations which are combined with the so-called aspects of the verbs. We did so in order not to complicate matters. In the sections of this chapter we shall deal with the various aspects and their formations always investigating which languages agree in their ways of expressing the same aspect, and which do not.

## Section 1. The Darative Aspect.

## 1) Marind.

1. Verbal predicates. a) The aspect-index is $\hat{e} p$ when the subject is in the singular, $i p$ when the subject is in the plural, e.g. épa-no-kiparud, a-s-B, "I am binding". The subject-, object- and tense-indices follow ép or ip in the same form as after the consonant $k$ in the $k$-formation; thus a durative aspect of the present, the preterit and the future may be expressed; in the future the tense-index is always $m$ never $p .{ }^{1} b$ ) The as pect-index is in combination with a subject in the singular masculine: anépanda, with a subject in the singular feminine: anupanda, with a subject in the plural: anipanda, e.g. anépanda-no-kipärad, a-s-B, "I am binding". ${ }^{2}$
II. Nominal predicates. The primary base (a nominal form derived from the verbal base by addition of the suffix $a$ ), is followed by the plain future formation of nominal predicates, e.g. Kipārud-a ma-no-n-in, B1-t-s-r-B2, "I shall be binding". This formation only occurs in the future. ${ }^{3}$
2) Maké .
1. Verbal predicates. The durative future is distinguished from the piain future by having distinct indices in some persons, e.g. béba-pös-am, t-B-a/s, "thou wilt be springing".
II. Nominal predicates, A primary base followed by the linking element $l$ preceding a secondary base indicate the durative aspect in the present (which formation expresses the to-day preterit and the yesterday preterit at the same time) and in the distant preterit, e.g. in the present pöswo-l $m a-p \ddot{s}, \mathrm{~B} 2-\mathrm{link} \mathrm{m}_{\mathrm{n}}$ element-t-B2, "I am springing". ${ }^{5}$
3) Kimaghama.

The aspect-index is mambura following the base but pronounced separately e.g. nö diwo mambura, S-B-A, "he is making".'
4) $B^{\circ} a z i$.

Verbal predicates. The aspect-index is $u m$ following the base, preceding the tense-index, e.g. no-sungguz-um-it, s-B-a-t, "I am washing".
5) $A^{u j u}$.

Complex predicates. The use of the secondary base following a primary base indicates the aspect of the process expressed by the primary base, e.g. radi rimo, B1-B2, "to be holding"; the use of the formation either in -di or in -bu makes it possible to express the present or the future fense in this formation. ${ }^{8}$
6) Kati.

1. Verbal predicates. Distinct subject-indices showing a double vowel express the aspect, e.g. jeetme-pt-iin, B-r-a/s, "I am telling thee". The formation may indicate a preterit as well. ${ }^{9}$
II. Nominal predicates. The bases te or pere occurring as a secondary base following the nominal element indicate the aspect, e.g. amun t-en, B1-B2-t/s, "he is good (continually)". ${ }^{10}$
III. Complex predicates. a) The formation in 00 has a durative meaning and occurs with the base te as a secondary base, e.g. ongmoo t-en, B1-B2-t/s, "he is making". ${ }^{11} \mathrm{~b}$ ) The formation in $n$ used for all bases, and the formation in naan used with some bases, together with a secondary base (which is always a verb of motion) express this aspect, e.g. ane-n wenep, B1-suffix-B2-t/s, "thou walkest eating". ${ }^{12}$

## Summary.

a) The durative aspect cannot be studied as we would like to do, as data in this point fail in various languages. b) This aspect is expressed by an element of conjugation except in Kimaghama where the index is pronounced separately. c) An aspect-index occurs in Marind, Kimaghama and Boazi; distinct subject-indices indicating the aspect are found in Maklé" and Kati; the use of a special secondary base is extant in the nominal predicates of Marind, Maklév, and in Auju and Kati.

## Section 2. The Habitual Aspect.

The following formations occur.

1) Marind.

Verbal predicates. A secondary base viz. a followed by the primary base indicates the aspect of the primary base; the secondary base is found in the $k$-formation, e.g. $k a-n o-n-\mathrm{a} k \mathrm{p} \overline{\mathrm{a}} \mathrm{r} u d$, ..... s-r-B2-B1, "I am used to bind". ${ }^{13}$
2) Makléa.

Nominal predicates. A primary base followed by a secondary base (two
forms of the same base) indicates the aspect in the present; Drabbe does not say anything about the preterit or the future. An example: pöswo ma-pös, B1-t-B2, "I am used to spring". ${ }^{14}$
3) Mombum.

1. Verbal predicates. a) There is an index which, at the same time, indicates tense, affirmation or negation and aspect, viz. tukwodopun says preterit, affirmative and habitual; zanggibkwodöpun says preterit, negation, habitual; this index follows the base and precedes the subject-index, e.g. kumbu-tukwodöpun-év, B-affirm/a/t-s, "I bound usually"."̄̄ b) The aspect-index in the future is tufor inserted between the base and the tense index, e.g. kumbu-tuför-èsir-u, B-a-t-s, "l shall bind usually". ${ }^{16}$
II. Nominal predicates. The base is followed by the aspect-index tukwo in affirmative sentences, by tunapo in negative sentences, e.g. nu kumbufukwo, S-B-a, "I usually bind".'"
4) Kimaghama.

A doubling of the base and an aspect-index de fotlowing the base but spoken separately express the habitual, e.g. diwondiwo $d \dot{e}, \mathrm{~B}-\mathrm{a}$, "to do usually". ${ }^{8}$
5) Jéi.

Verbal predicates. The primary bases can be divided into two groups according to the distinct secondary base they have, in order to express this aspect, e.g. di arkam, B1-B2, "some person usually goes"."
6) $B^{\circ} a z i$.

Verbal predicates. The aspect-index is $a$ following the base which is preceded by distinct subject-indices, which indicate tense at the same time, e.g. ndogho-sungguz-u, t/s-B-a, "thou washest usually". ${ }^{20}$
7) Jaqa .

Verbal predicates. The suffixes möm, (na)möna or mör occur after the base in the plain tense formations indicating the habitual aspect of the process; there is no rule for the use of these different suffixes, the same base may be followed by each of them, e.g. potomöm or potomör, "usually wring out sago", ${ }^{21}$
8) $A^{\bullet} j u$.

Complex predicates. A secondary base viz. girimo following the primary base expresses the habitual aspect of the primary base, e.g. émi girimo, B1-B2, "to make usually". 22
9) Kati.

Complex predicates. a) The formation in $e$ combined with the secondary base pere (occurring as mbere) expresses the habitual aspect, e.g. jeetme mboron, B1-B2-t/s, "he ustually tells". b) A base followed by the ok-formation of the base emee shows a habitual aspect, e.g. ambe an-emook, "father usually eats". ${ }^{23}$
10) Kamoro.

Verbal predicates. Two aspect-indices occur viz. ama preceding the base and $a^{r}$ following the ligature $k$ or $r$; the aspect is found in the three tenses, e.g. ama-kème-k-at-n-i, a2-B-ligature-al-r-s, "I give thee usually". ${ }^{24}$ In the future a second ligature is found viz. $r$ following the prinary aspect-
index, e.g. $a m a-k$ ème- $k-a^{r}-r-\mathrm{i} m i-n-i$, a2-B-lig. 1-al-lig. 2-t-s with r-infix, "I shall give thee usually". ${ }^{25}$
11) Ekari.

Verbal predicates. The aspect-index is to or tome following the base, e.g. maki-tomé-gh-ae, B-a-lig.-s, "they bear usually".26

Summary.
a) The expression of the habitual aspect occurs in the following languages: Marind, Makiéu, Mombum, Kimaghama, Jéi, Boazi, Jaqa, Auju, Kati, Kamoro and Ekari; data fail with regard to the other languages. b) This aspect is indicated by an element of the conjugation except in Kimaghama, where the aspect-index is spoken separately. c) The aspect is expressed by a distinct secondary base in Marind, Maklév, Jéi, Auju and Kati; by an aspect-index of its own in Mombum, Boazi, Jaqa¹, Kamoro and Ekari, following the base.

## Section 3. The Perfective Aspect.

1) Marind.

Verbal predicates. The aspect-index is menda, which precedes the base, e.g. mènda-no-kipārud, a-s-B, "I have bound"." ${ }^{27}$
2) Kimaghama.

The aspect-index is inè, e.g. nö diwo inè, S-B-A, "he has made". The index follows the base and is spoken separately. ${ }^{28}$
3) $B^{\circ} a z i$.

Verbal predicates. The aspect-index is $m \ddagger$ in combination with distinct subject-indices, e.g. mé-no-sungguz, a~a/s-B, "I have washed". The as-pect-index opens the formation. ${ }^{28}$
4) Kati.

Verbal predicates. The aspect-index is en following the subject-index, e.g. manee-pt-on-en, B-r-t/s-a, "he has stabbed thee". ${ }^{30}$

Complex predicates. The $e$-formation occurring together with the secondary base noo kere or woomone or korone indicates the perfective of the process expressed by the e-formation, e.g. ani-mbon tepere noo kerip, "they have finished to sit in the place of eating", i.e. "the feast is over". ${ }^{31}$

Summary.
a) Only the following languages indicate the perfective aspect viz. Marind, Kimaghama, Boazi and Kati; data fail with regard to the other languages. b) The perfective aspect is expressed by an element of conjugation in these languages except in Kimaghama where the aspect-index is a word by itself.
c) The aspect is indicated by a distinct index in Marind and Boazi, where the index precedes the base, and in Kimaghama and Kati where the index follows the base.
N.B. In Marind, Kimaghama, Kati etc. some other aspects occur; the data, however, do not admit of a more detailed comparison.

1. Part I, ch. 1, sect. 5 , part I, n. 13 and 11.
2. Part I, ch. I, sect. 5, part I, n. 14.
3. Part I, ch. I, sect. 5 , part II, n. 2 .
4. Part I, ch. II, sect. 5 , part I, n. 5.
5. Part I, ch. II, sect. 5, part II, n. 2.
6. Part 1, ch. V, sect. 5, n. 6a.
7. Part I, ch. IX, sect. 5, part I, n. 9.
8. Part 1, ch. XI, sect. 5, part III, n. 3 .
9. Part l, ch. XII, sect. 5 , part I, n. 3.
10. Part I, ch. XII, sect. 5, part II, n. 2.
11. Part I, ch. XII, sect. 5 , part IH, n. 8 .
12. Part 1, ch. XII, sect. 5, part III, n. 9.
13. Part 1, ch. I, sect. 5 , part I, n. 38.
14. Part I, ch. II, sect. 5, part II, n. 2.
15. Part 1, ch. IV, sect. 5, part 1, n. 9. 16. Ibidem.
16. Part I, ch. IV, sect. 5, part II, n. 4.
17. Part I, ch. V, sect. 5, n. 9.
18. Part I, ch. VIII, sect. 5, part I, n. 7.
19. Part I, ch. IX, sect. 5, part I, n. 10.
20. Part I, ch. X, sect. 5, part I, n. 4.
21. Part I, ch. XI, sect. 5, part III, n. 4.
22. Part I, ch. XII, sect. 5, part III, n. $3 a$ and $5 b$.
23. Part I, ch. XIII, sect. 5, part I, n. 5.
24. Ibidem.
25. Part I, ch. XIV, sect. 5, n. 7.
26. Part I, ch. I, sect. 5, part I, n. 15.
27. Part 1, ch. V, sect. 5, n. 6.
28. Part I, ch. IX, sect. 5, part I, n. 11.
29. Part I, ch. XII, sect. 5 , part I, n. 4.
30. Part 1, ch. XII, sect. 5, part III, n. 4 a.

## CHAPTER VII

## VERBS : NEGATIONS

The examples chosen as illustrations in the preceding chapters were all affirmative formations, because we thought it better to reserve a separate chapter to the negation.

1) Marind.

Verbal predicates. a) The negative word mba preceding the $k$-formation expresses the negation of the present tense, e.g. mba kanno-kipārud, "I do not bind". ${ }^{1}$ b) In the preterit the negative word mbat precedes the usual preterit formation, e.g. mbat no-d-kipārud, "I did not bind". ${ }^{2}$ c) The negative word mbat precedes the usual future formation in a negative future sentence, e.g. mbat ma-no-kipărud, "I shall not bind". ${ }^{3}$
2) Maklér.
I. Verbal predicates. a) The negative word $m a$ precedes the formation in the present while the present tense-index lacks the initial vowel, e.g. ma $p-p o ̈ s$-oma, "I do not spring". The yesterday preterit has the negation expressed in the same way. ${ }^{4}$ b) The negative word ma combined with a tense-index bo precedes the formation in the distant preterit, e.g. mabo nga-pos-oma, "I did not spring". ${ }^{5}$ c) The negative word ma precedes the future formation but the tense-index is not béma, béba or bia but ma in 1 p. and $b a$ in 2 and 3 p., e.g. ma ma-pös-ka, "I shall not spring". ${ }^{6}$
II. Nominal predicates. In the durative formations the negative word ma precedes the secondary base; the linking-element $l$ does not occur and the secondary base takes the forms of the tenses of the verbal predicate (generally speaking). ${ }^{7}$
3) Jélmèk.

Verbal predicates. a) The negative word mo precedes the present formation, e.g. mo mème, "I do not break". ${ }^{8}$ b) The negative word ma precedes the formation of the preterit, e.g. $m a^{\circ}$ mè- $p-m a$, "I did not break". ${ }^{g}$
c) The negative word mama precedes the formation of the future, e.g. mama ma-ka, "I shall not break". ${ }^{10}$
4) Mombum.

1. Verbal predicates. a) The negation is expressed by the indices $\dot{e}$..... wor in the present, to-day, yesterday and remote preterit; the element $\dot{e}$ precedes the formations and the element wor precedes the tense-index in the present and follows it in the past tenses, e.g. è kumbu-wor-è ${ }^{4}$, "I did not bind". ${ }^{11}$ b) The negation is expressed by the index anga"r following the base for the future tense. The negative word is tense-
index at the same time, e.g. kumbu-angaur-u, "I shall not bind" ${ }^{12}$ c) The negation is expressed by the index zanggibkwodöpun following the base in the habitual aspect of the preterit tense, e.g. kumbu-zanggibkwodöpun$\mathrm{e}^{\mathrm{y}}$, "I did not bind usually". ${ }^{13}$
II. Nominal predicates. The negation is indicated by the index tunapo following the base in the present formation of the durative aspect, e.g. nu kumbu-tunapo, "I did not bind usually". ${ }^{14}$
5) Kimaghama.

The negative word is vuna occurring in the three tenses between the predicate and the tense-index, e.g. nö diwo vuna oana, "he does not do". ${ }^{\text {s }}$
6) Kanum.

Verbal predicates. The negative word já precedes the formations of the tenses, ja" $a$-bèlna-è, "you do not break down". ${ }^{16}$
7) Moraori.

Verbal predicates. a) The negative word is mar preceding the present and preterit formations, e.g. mar tèr- $a^{\circ}-m-a d u$, "I do not beat thee". ${ }^{17}$
b) The negative word is madi preceding the formation in the future, e.g. madi pa tèr- $a^{\circ}-m$-aru, "I shall not beat thee". ${ }^{18}$
8) Jèi.

Verbal predicates. The negative word is jèngga* preceding the various tense formations, e.g. jèngga ${ }^{\circ}$ di ap, "some person does not go". ${ }^{18}$
9) $B \circ a z i$.

Verbal predicates. a) The negation of the predicate is expressed by the negation-index umba or uavi in the present and past tenses; the sub-ject-indices do not occur; the negation-index follows the base, e.g. no-sungguz-umba, "I do not wash". ${ }^{20}$ b) In the future the negation-index is ak occurring after the base while the subject-indices are not found, e.g. no-sungguz-ak, "I shall not wash". ${ }^{21}$ c) In the perfective aspect the negation-index is uwav; it follows the base and the subject-indices do not occur, e.g. no-sungguz-uwav, "I have not washed". ${ }^{22}$
10) Jaqa.
I. Verbal predicates. a) A base preceded by the relation-index, if extant. is inserted between two elements of negation viz. $q a^{t}$..... an; subjector tense-indices do not occur; the resultant construction indicates the negation of a predicate in the present or past tense, e.g. anok qai-o-ponokon-an, "I don't give thee", or "l did not give thee".23 b) A base preceded by the relation-index, if extant, may be inserted between the elements ${ }^{\circ} a$..... qa'kire; subject- or tense-indices are not found; the construction indicates a negative future, e.g. aqa oa-na-ponokon qazkire, "thou wilt not give me". ${ }^{24}$
II. Nominal predicates. A base preceded by the relation-index, if extant, is inserted between the elements ${ }^{\circ} a$..... anemaq; this construction depends on a nominal element and expresses a negation of the predicate, e.g. indok bindén ${ }^{\circ}$ a-aqa-ponokon anemaq, "we are not able to give thee". ${ }^{25}$
11) $A^{\mathrm{j} j u}$.

Verbal predicates. Here the negative words are $f a, f a n$ (before vowels) or fana preceding the formations of the different tenses and de following them, e.g. fana wudi de, "I dit not enter"."s
12) Kati.
I. Verbal predicates. a) The base without tense-index followed by distinct subject-indices and by the negative word parin indicates the negation of a process in the future, e.g. jeetm-ain parin, "I shall not tell". ${ }^{27}$ b) A base followed by the tense-index $a a j$, the plain subject-indices and the negative word parin, expresses a negative future, e.g. jeetm-aaj-in parin, " 1 shall not tell". ${ }^{28}$ c) A base followed by the tense-index aon, the plain subject-indices and the negative word parin indicates a negative future, e.g. jeetm-aon-in parin, "I shall not tell". ${ }^{29}$
II. Nominal 'predicates. a) The formation in $i$ followed by the element noo indicates that a process does (did) not take place in the present or in the preterit, e.g. ambe wenggopi noo, "father does not speak", or "father did not speak". ${ }^{30}$ b) The formation in $i$ followed by the element noo and the secondary base kere in its future form indicates the negation of a process in the future, e.g. inum niini noo keraniin, "I shall not work". ${ }^{31}$ c) The formation in $i$ followed by the element eep and the negative word parin indicates the negation of a process in the present or past, e.g. tep wenggopi eep parin, "thou dost not speak". ${ }^{32}$ When the secondary base kere is used, the future may be expressed as in the preceding paragraph.
III. Complex predicates. a) The formation in $o k$ followed by the negative word parin indicates the negation of a process in the present or past, e.g. ambe anok parin, "father does not eat", or "father did not eat". ${ }^{33}$ b) The formation in ok occurring in combination with the tense-index of the future and the negative word parin expresses the negation of a process in the future, e.g. ambe wan-an-ok parin, "father will not come". ${ }^{34}$ c) A base followed by the ok-formation of the base emee and by the negative word parin indicates the negative habitual aspect of this base, e.g. ambe an-emook parin, "father does not eat usually".ss
13) Kamoro.
I. Verbal predicates. a) The negation-index is ne following the formation in the present and past tenses; the secondary tense-index does not occur in this case, e.g. keaa-m-a-r-i-ne, "I do not bake for him". ${ }^{36}$ b) The negation-index akumu is found in combination with the subject- and relation-indices of the present tense; the negation-index is separated from the base by the ligature $k$ or $r$; a secondary tense-index is not found; this formation indicates a negative future, e.g. $k a^{\circ}-k-a k u m u-r-e ́ m$, "thou wilt not beat him".37
II. Nominal predicates. a) The verbal base is made a noun by the addition of the vowel $a$ and followed by the negative word muna; this construc-
tion indicates the negation of the process in a present or past time, e.g. noro $k \mathbf{a}^{\circ}-a$ muna, "I do not beat", or "I did not beat". ${ }^{38}$ b) The same construction as in the preceding paragraph but with the negative word poromuna indicates the negation of a habitual aspect of a process in the present or past, e.g. noro kao-a poromuna, "I do not (or did not) beat usually" ${ }^{38}$
14) Ekari.
a) The negative word té precedes the formation of the various tenses, e.g. té $n$-aghi-ta-gh-è, "thou wilt not beat me". ${ }^{40}$ b) The negative word $b e^{n}$ follows the formation of the tenses, e.g. $n-a g h i-t a-g h-\dot{e} b \dot{e}^{\text {u }}$, "thou wilt not beat me". ${ }^{41}$
15) Moni.

The negative word is $k i$, which precedes the formations; when, however, the predicate is a complex formation, the negation is found between the primary and the secondary base, e.g. ki tuio, "he is not present"; ina ki dio, "he does not laugh" ${ }^{42}$

Summary.

1) The negation of a process is expressed by an element of conjugation in Mombum, Boazi, Jaqai and Kamoro; in the other languages by a negative word occurring before the formation, except in Kimaghama and Kati, where the negative word is found after the base. 2) It is a striking feature that the negation differs in form according to the different tenses. The following distinctions are extant: a) one and the same negation in the different tenses of the language occurs in Makléu, Kimaghama, Kanum, Jéi, Auju, Kati, Ekari and Moni; b) one negative word for present and preterit and another for the future is found in Mombum, Morari, Boazi, Jaqai and Kamoro. N.B. The Mombum-, Boazi-, Jaqai- and Kamoro-languages agree in two points: they use an element of conjugation and they have the distinction between present and preterit on the one hand and the future on the other; c) a different negative word in each of the three tenses occurs in Jelmèk and in the durative and habitual aspect-formations of Mombum.

NOTES.

1. Part I, ch. I, sect. 5, part I, n. 12.
2. lbidem.
3. libidem.
4. Part I, ch. II, sect. 5, part I, n. I and 2.
5. Part I, ch. II, sect. 5, part I, n. 3.
6. Part I, ch. II, sect. 5, part I, n. 4.
7. Part I, ch. II, sect. 5, part II, n. 2.
8. Part l, ch. III, sect. 5, part I, n. 7.
9. Ibidem.
10. Ebidem.
11. Part I, ch. IV, sect. 5 , part I, n. 6.
12. Ibidem.
13. Part I, ch. IV, sect. 5, part I, n. 9b.
14. Part I, ch. IV, sect. 5, part II, n. 4.
15. Part I, ch. V, sect. 5, n. 4.
16. Part I, ch. Vl, sect. 5, part 1, n. 7.
17. Part I, ch. VII, sect. 5, part I, n. 7 and 10 .
18. Ibidem.
19. Part I, ch. VIII, sect. 5, part I, n. 6.
20. Part I, ch. IX, sect. 5, part I, n. 12.
21. Ibidem.
22. Ibidem.
23. Part 1, ch. X, sect. 5, part 1, n. 6.
24. Ibidem.
25. Part I, ch. X, sect. 5, part II, n. 3.
26. Part I, ch. X1, sect. 5, part I, n. 5.
27. Part I, ch. XII, sect. 5, part I, n. 5.
28. Ibidem.
29. lbidem.
30. Part I, ch. XII, sect. 5, part II, n. 3 c and d .
31. Ibidem.
32. Part I, ch. XII, sect. 5, part II, n. 4.
33. Part I, ch. XII, sect. 5, part III, n. 5.
34. Part I, ch. XII, sect. 5, part III, n. 7.
35. Part I, ch. XII, sect. 5, part III, n. 5.
36. Part I, ch. XIII, sect. 5 , part l, n. 2 and 1.
37. Part I, ch. XIII, sect. 5, part I, n. 3.
38. Part I, ch. XIIt, sect. 5, part II, n. 2.
39. Ibidem.
40. Part I, ch. XIV, sect. 5, n. 9.
41. Ibidem.
42. Part I, ch. XV, sect. 5 , п. 6.

## CHAPTER VIII

## VERBS: INTERROGATIVE FORMS

The different means by which a sentence is made interrogative are the subject matter of the following comparison. Drabbe did not investigate this matter systematically, but he mentions it in some languages.

## 1) Marind.

There are two main types of interrogative sentences viz. the so-called yes-or-no questions and the specific interrogations. We shall discuss them separately.

1. Yes-or-no questions. a) The interrogative-index $a p$ is followed by the $k$-formation of the base ${ }^{1}$ i.e. instead of the consonant $k$ the interrogative word $a p$ is found; after this formations the interrogative word $a^{e}$ is found, e.g. apa-no-kiparud $a^{\epsilon}$, m1-s-B-m2, "do 1 bind?". ${ }^{2}$
b) The interrogative-index $e k$ in the singular and $i k$ in the plural is followed by the $k$-formation, but instead of $k$ the index ék is extant; the interrogative word $a^{6}$ occurs after this formation, e.g. éka-no-kipārud $a^{e}, \mathrm{ml}-\mathrm{s}-\mathrm{B}-\mathrm{m} 2$, "do I bind?". ${ }^{3}$ c) The index bat occurring in the plain tense formation ${ }^{4}$ indicates an interrogation, when the formation is followed by the interrogative word $a^{k}$, e.g. mo-bat-kipārud oh $a^{k}$, s-m1-Bpersonal pronoun-m2, "dost thou perhaps bind?". The personal pronoun indicating the subject is always found in this formation. ${ }^{5}$
II. Specific interrogations.
A. In the present tense. a) The interrogative-index is $s \neq b$; the subjectindices occurring in the s-B-formation ${ }^{6}$ may be infixed in the index, e.g. ènda $s$-o-b-kipōrud, interrogative-s (infix in m)-B, "where dost thou bind?". ${ }^{7}$ b) The interrogative-index is $s \ddagger b$ occurring in combination with the $k$-formation, but instead of the consonant $k$ we find the consonant $m$, e.g. ènda m-aka-sab-kipārud, interrogative ..... s-m-B, "where do $\mathbf{J}$ bind?". ${ }^{\text {s }}$ c) The interrogative-index is $s \ddagger b$ occurring together with the $k$-formation, e.g. ènda $k$-aka-sab-kipārud, interrogative $\qquad$ s-m-B, "where do I bind?". ${ }^{\text {. }}$
B. In the past tense. a) The interrogative index $s \ddagger b$ occurs with the plain preterit, ${ }^{10}$ e.g. ènda s-o-da-b-kipärud, interrogative-m (with infix s and t)-B, "where didst thou bind?", ${ }^{11}$ b) The interrogative-index $s \neq b$ is combined with the $k$-formation, but instead of $k$ the consonant $m$ is found, e.g. è $n d a m-a k-s a-d a-b-k i p a ̈ r u d$, interrogative ..... $\mathrm{s}-\mathrm{m}$ (with t-infix)-B, "where did I bind?". ${ }^{12} \mathrm{c}$ ) The interrogative-index $s \ddagger b$ occurs
with the $k$-formation, e.g. ènda $k$-ak-sa-da-b-kiparrud, interrogative ..... $\mathrm{s}-\mathrm{m}$ (with infix t)-B, "where did I bind?". ${ }^{13}$
C. In the future. The interrogative-index is combined with the future forms of the $k$-formation, e.g. ènda kapa-sab-kiparrud, interrogative t-m-B, "where shall 1 bind?". ${ }^{14}$
2) Kimaghama.
A. In the present tense. The interrogative word is $\grave{e}$ (with a ligature; ne, $j e ̀ ~ a n d ~ r e ̀ ~ a r e ~ f o u n d), ~ e . g . ~ n o ̈ ~ n i e ̀ ~ a y r a ~ n e ̀, ~ S-R-B-M / T, ~ " d o e s ~ h e ~ b e a t ~$ me?". ${ }^{15}$
B. In the preterit. The interrogative word is téè (with tigature; ntée, déé, ndè $o c c u r$ ). ${ }^{13}$
C. In the future. The interrogative word is aghajè (with ligature; naghajè or raghajè are extant). ${ }^{17}$
N.B. The three interrogative words indicate at the same time the three tenses. They follow the base and are spoken separately.
3) Moraori.

There are two types of interrogation here.
I. Yes-or-no questions are expressed by the interrogative word ai occurring after the usual tense-formations, e.g. kowor tam ai, "did he dream?", ${ }^{18}$
II. Specific interrogations show the interrogative words preceding the base; the word ai is not found, e.g. aina amam, "who comes there?", ${ }^{18}$
4) Jaqa.

There are two types of interrogation.
l. Yes-or-no questions have the interrogative word $k e$ preceding the usual tense-formations, e.g. ké k-oko-ponokon, m-t-s-B, "did I give?" ${ }^{20}$ II. Specific interrogations have in the present no tense-index and in the preterit the tense-index $t$, preceding the subject-indices, though the usual tense-index in affirmative formations is $k$; some examples: kerok oko-ponokon, interrogative-s-B, "what do I give?"; kerok t-oko-ponokon, interrogative-t-s-B, "what did I give?". ${ }^{21}$
5) $A^{v j u}$.

There are two types of interrogation.
I. Yes-or-no questions show the interrogative words dè after present or preterit formations, ne after future formations and ( $j$ )ogho after negated future formations, e.g. wudi dè, "did I enter?", a-wu-a nè, "shall we enter?", fo $a$-wu dè jogho, "shall I not enter?" ${ }^{2}$
N.B. It is noteworthy that in this language three affirmative words are found opposite to the three interrogative words just mentioned viz. $d i$ opposite to dè; ni opposite to nè and ughu opposite to ogho. ${ }^{23}$
II. The specific interrogations show the affirmative words after the base, e.g. monogho $k i d i$, "who is it?", ${ }^{24}$
6) Kamoro.

There are two types of interrogation.

1. Yes-or-no questions.
A. In the present the interrogative index is awa, preceding the present formation, of which the secondary tense-index is left out, e.g. awa${ }^{i m-m i-r}-e m^{2}$, m-B-t-r-s, "dost thou do it?", ${ }^{25}$
B. In the preterit. a) The interrogative index awa precedes the to-day preterit, of which the secondary tense-index is not found, e.g. awa$k \mathrm{a}^{\circ}-n-i, \mathrm{~m}-\mathrm{B}-\mathrm{r}-\mathrm{s}$, "did I beat thee?". ${ }^{20}$ b) The interrogative index $a w a$ precedes the distant preterit whose secondary tense-index is dispensed with, e.g. awa-muku-ma-o, m-B-r-s, "did I hit him?". ${ }^{2 \tau}$
C. In the future the interrogative index $a w a$ precedes the base and a second index viz. ak follows it, e.g. awa-kao-k-aki-n-i, m2-B-1-m1-r-s, "shall I beat thee?". The second index ak is also found in sentences which express the doubt of the speaker about the realization of the process. ${ }^{28}$
II. Specific interrogations. a) The interrogative words precede the present and preterit formations; the interrogative index awa does not occur, e.g. wékaru-imi-ka ${ }^{e}$, interrogative-B-lig.-t-s, "who did it (to day)?". ${ }^{29}$
b) The interrogative words precede the base, awa does not occur, the second index $a k$ follows the base; this formation has a future meaning, e.g. wéka-kèm-aka-r-ém, interrogative-B-m-r-s, "to whom wilt thou give it?". ${ }^{30}$ c) The interrogative words inquiring after time, place and quantity precede the base (in present, preterit or future formations with $a k$ ), but in this case the suffix $p e$ is added to the formation, e.g. oka $k a^{\circ}-k$ a $k i-r-i-p e$ e, interrogative-B-1-m-r-s-suffix, "where shall I beat?". ${ }^{31}$
N.B. The same formations occur in the three tenses of the habitual aspect; the interrogative word or index (awa) takes the place of the aspect-index ama. ${ }^{32}$
The prefix $a w a$ may be left out in all formations just mentioned, except in those of the future. We often meet the prefix $a$ instead of $a w a{ }^{33}$
7) Moni.

Interrogation is expressed by infixing the consonant $n$ in the usual sub-ject-indices, e.g. kib-a $a^{u}-\mathrm{a}-\mathrm{n}-\mathrm{o}$, B-t-m/s, "shall I break?", ${ }^{34}$

Summary.
a) There is only one feature some of these languages have in common viz. the yes-or-no questions and the specific interrogations. In this point Marind, Moraori, Jaqai, Auju and Kamoro agree; the Kimaghama and Moni languages do not show this distinction. b) Marind and Moraori have respectively: $a^{k}$ and ai following the formation as interrogative words for the yes-or-no questions; it seems to us that these words are identical but pronounced with a slight difference by the two peoples. c) It is noteworthy that the various interrogative formations differ very much in details.

NOTES.

1. Part I, ch. I, sect. 5 , part 1, n. 11 . 16. Ibidem.
2. Part I, ch. I, sect. 5, part I. n. 24, A 2.
3. Part I, ch. I, sect. 5, part I, n. 24, A 3.
4. Part I, ch. I, sect. 5, part I, n. 7.
5. Part I, ch. I, sect. 5, part I, n. 24, A 1.
6. Part I, ch. I, sect. 5, part I, n. 7.
7. Ibidem.
8. Part I, ch. VIl, sect. 5, part I, n. 11.
9. lbidem.
10. Part I. ch. X, sect. 5, part I, n. 7.
11. Ibidem.
12. Part I, ch. XI, sect. 5, part I, n. 6.
13. Part I, ch. XI, sect. 5, part II, n. 1.
14. Part I, ch. I, sect. 5, part I, n. 24, B.
15. Ibidem.
16. Part I, ch. XI, sect. 5, part I, n. 6.
17. Ibidem.
18. Part I, ch. XIII, sect. 5 , part I, n. 9.
19. Ibidem.
20. lbidem.
21. Part I, ch. XIII, sect. 5, part I, n. 8.
22. Part I, ch. I, sect. 5, part I, n. 8.
23. Part 1, ch. I, sect. 5, part I, n. 24, B.
24. Ibidem.
25. Ibidem.
26. Part I, ch. I, sect. 5, part I, n. 25.
27. Part I, ch. XIII, sect. 5, part I, n. 9.
28. Part I, ch. XIII, sect. 5, part I, n. 8.
29. Part I, ch. XIII, sect. 5, part I, n. 9.
30. Jbidem.
31. Ibidem.
32. Part I, ch. XV, sect. 5, n. 5.
33. Part I, ch. V, sect. 5, n. 5.

## VERBS : IMPERATIVES AND PROHIBITIVES

The imperative formations occur in the three persons; in some languages the imperative of the first person is called "adhortative" and the imperative formation of the third person "optative"; in this chapter, however, we shall discuss the formations of all the three persons under the heading of "imperative".

1) Marind.
A. Imperatives. a) The index of the 1 p . is mat preceding the base; subject-indices do not occur, e.g. mat-a-kipārud, m-r-B, "let me bind thee". ${ }^{1}$ b) The imperative index in the $2 \mathrm{p} . \mathrm{s}$. is ah preceding the base; the subject-indices are not found, e.g. ah-kipārud, m-B, "bind!". ${ }^{2}$ c) The imperative index of $3 \mathrm{p} . \mathrm{s}$. is anam preceding the base; no subject-indices are extant, e.g. anam-kipārud, m-B, "may he bind!". ${ }^{3}$ d) In the three persons the index nda may precede the base without any subject-index, e.g. nda-kipārud, m-B, "let me bind"; "bind"; "may he bind!"."
B. Prohibitives. a) In the 1 p . the negative form of the plain future formation is used. ${ }^{5}$ b) In the $2 \mathrm{p} . \mathrm{s}$. the index is tomat; in the $2 \mathrm{p} . \mathrm{pl}$. tamat; the index precedes the base and subject-indices do not occur, e.g. tomat-na-kipārud, "thou, do not bind me!". ${ }^{6}$ c) in the $3 \mathrm{p} . \mathrm{s}$. the index is tapat preceding the base; no subject-index is extant; in the $3 \mathrm{p} . \mathrm{pl}$. the index is tapt preceding the subject-index en $n$; both indices precede the base, e.g. tapt-èn-na-kipārua, m/s-r-B, "let them not bind me!"."
2) Makléu.
A. Imperatives. a) The imperative-index of the 1 p . is $a$ preceding the respective future formations (the tense-index is, however, dispensed with), e.g. $\alpha-p o ̈ s-k a, m-B-s$, "let me spring!". ${ }^{\mathbf{s}}$ b) The imperative-index of the 2 p . is ia preceding the respective future formation in which the tenseindex is left out, e.g. ' $a$-pös, m-B, "spring!".' c) The imperative-index of the 3 p . is $a$ preceding the respective future formation, e.g. $a-p o ̈ s-p$, m-B-s, "may he spring!". ${ }^{10}$
N.B. The durative future formation may occur in the imperative as well. ${ }^{11}$
B. Prohibitives. The prohibitive word is nganggol preceding the negative future formation (some slight differences, however, are extant), e.g.
nganggol ma-pös-ka, M-negation-B-s, "let me not spring!". ${ }^{12}$ The pro-hibitive-index nganggol may be replaced by ma. ${ }^{13}$
N.B. The index nganggol may be put before the durative future formation indicating the prohibitive of the durative aspect. ${ }^{14}$
3) Jèlmèk.
A. Imperatives. a) Here the index is twofold viz. the prefix $i$ and the suffix pö or pu, e.g. i-mè-pö, m1-B-m2, "break!". The singular and the plural are distinguished by the subject-indices. ${ }^{15}$ b) The indices in the singular are $i$ as a prefix and mo as a suffix to the base e.g. ${ }^{i-u e}-m o$, m1-B-m2/n, "come!". ${ }^{*}$
B. Prohibitives. The prohibitive word is iméba or ingéba preceding the imperative formations, of which the prefix is, however, left out, e.g. iméba li-pö, M-B-m, "don't give!". ${ }^{17}$
4) Mombum.
A. Imperatives. The imperative is expressed by distinct subject-indices which follow the base viz. 2 p.s.: $u, 2$ p. pl.: mi, e.g. nuka-mi, B-m/s, "eat!". ${ }^{18}$
B. Prohibitives. In the singular the base is followed by the suffix akèdèprim, in the plural by akèdèpram. Possibly these indices are to be split in akèdèpr-i $m$ and akedèpr-a $m$ as $\mathbf{i} m$ and a $m$ are found as subjectindices in the future formation. An example: kumb-akèdèprim, B-m-(s), "don't bind!". ${ }^{19}$
5) Kimaghama.
A. Imperatives. a) The imperative word $a^{\circ}$ occurs before the base or before the subject which is found before the base, e.g. a unggu diwo, M-S-B, "thou, do it!". ${ }^{20}$ b) The imperative word maré follows the base, e.g. ni diwo marée, S-B-M, "let us do it!",.21 c) Both imperative words may be extant in the same formation, e.g. $a^{\circ}$ inggi diwo marée, M1-S-B-M2, "you, do it!". ${ }^{22}$
B. Prohibitives. A doubling of the base followed by the prohibitive word vo or po indicates the prohibitive, e.g. diwondiwo vo, B-M, "don't do it!" ${ }^{23}$
6) Kanum.
A. Imperatives. a) The imperative is expressed by the future formations without the future tense-index sé ${ }^{24}$ b) The imperative words which precede the future formation (without tense-index) are in the 1 and 3 p . opo; in the 2 p . $o^{u}$; this formation is more usual than that mentioned in a). ${ }^{25}$
B. Prohibitives. The prohibitive word is mèrimo preceding the base; the base has distinct subject-indices, e.g. mèrimo krowmpè, $M-\mathrm{B}-\mathrm{m} / \mathrm{s}$, "let me not bathe!". ${ }^{26}$ Another prohibitive word occurring instead of mèrimo is wai. ${ }^{27}$
7) Morari.
A. Imperatives. The imperative is expressed by the future formation without the tense-index $p a{ }^{28}$
B. Prohibitives. The prohibitive word ongga precedes the imperative formation. ${ }^{29}$
8) $\mathrm{je} \dot{\mathrm{i}}$.
A. Imperatives. The imperative is expressed by the future formation without the tense-index. The order of sentence, however, is not B2-B1 but B1-B2, e.g. di b-ap, "let me go!". ${ }^{30}$
B. Prohibitives. The prohibitive word is mètè preceding the imperative formation. ${ }^{31}$
9) $B \circ a z i$.
A. Imperatives. a) The imperative word $v a$ precedes the base which occurs without subject-indices, e.g. va sungguz, M-B, "thou, wash!". ${ }^{32}$ b) The imperative-indices occur in combination with distinct subjectindices viz. 1 p.s.: aba, 1 p. pl.: azi, 2 p.s.: amgho, 2 p. pl.: amuzu, 3 p.: abé. These indices precede the base, e.g. aba-sungguz, m-s-B, "let me wash!". ${ }^{33}$
B. Prohibitives. The prohibitive-indices occurring in combination with the subject-indices are 1 p.s.: ba, 1 p. pl.: biza, 2 p.s.: nda, 2 p. pl.: zunda, 3 p.: bé. These indices precede the base, which is followed by the suffix it, e.g. ba-sungguz-it, m1-s-B-m2, "let me not wash!", ${ }^{24}$
10) Jaqai.
A. Imperatives. a) The imperative-index $r$ precedes the subject-indices and the base; this formation occurs in the 1 p ., e.g. r-oko-ponokon, $\mathrm{m}-\mathrm{s}-\mathrm{B}$, "let me give!". ${ }^{35}$ b) The imperative-index $m$ precedes the sub-ject-indices and the base in the 3 p., e.g. m-a-ponokon, m-s-B, "let him give!". ${ }^{36}$ c) The imperative-index $n$ precedes the subject-indices and the base in 1 and 3 p., e.g. n-oko-ponokon, m-s-B, "let me give!". ${ }^{3 \gamma}$ d) The imperative-index $t$ precedes the subject-indices and the base in the three persons, e.g, t-oko-ponokon, m-s-B, "let me give!". ${ }^{38}$ e) The imperative index $k(a)$ precedes the base; no subject-indices occur; in the plural the plural index ${ }^{6} a$ precedes the imperative index. This formation occurs only in the 2 p., e.g. ka-ponokon, m-B, "give!", ${ }^{39}$
B. Prohibitives. The prohibitive-index ape or épe is found after the imperative formation mentioned under A.c) viz. the $n$-formation occurring here in the three persons, e.g. n-aqa-ponokon-ape, m1-s-B-m2, "thou, don't give!". 40
11) A"ju.
A. Imperatives. The bases of this language may be divided into classes according to their different imperative formations; to express the imperative some bases have the prefix $n a$; some bases have a suffix $n$; some have a suffix $n$ after the base in its future form; some show a change in the base itself; some have a completely different base occurring as imperative base. When these different bases end in a vowel, the subjectindices are 2 p. s.: zero, 2 p . pl.: $n$; when these bases end in a consonant,
the subject-indices are 2 p.s.: $\dot{e}, 2$ p. pl.: aghani. Some examples: the base da, "to hear" has na-da, "thou, hearl" and na-da-ni, m1-B-m2/s, "you, hear!" The imperative may be intensified by the element $f a$ which precedes the formation. ${ }^{\text {an }}$
B. Prohibitives. The prohibitive word jughu is found after the negative future formation to express the prohibitive, e.g. fana $a$-wu dè jughu, negation-t-B-negation-M, "let me not enter!". ${ }^{42}$
12) Kati.
A. Imperatives. Special subject-indices following the base indicate the imperative in the three persons, viz. 1 p.s.: $a, 1$ p. pl.: em, 2 p.s.: e, 3 p.s.m.: ok, 3 p.s.f.: $u k$, non-1 p.pl.: im(e), e.g. jeetm-a, B-m/s, "let me tell!". ${ }^{33}$
B. Prohibitives. The three negative future formations occur as prohibitive forms; the negation parin, however, is left out, e.g. jeetm-aan-in, B-m-s, "let me not tell!". ${ }^{44}$
13) Kamoro.
A. Imperatives. a) The imperative-index is $a$ in the 1 and 3 p.; this index occurs after the ligature; the base is preceded by the prefix $a$, found in future and dubitative formations; distinet subject-indices which differ according to the occurrence of different relation-indices are extant, e.g. $a$-keme-k-a-", m2-B-1-mi-s, "let me give!'" 5 b) In the second person we meet only the base, followed by distinct subjectindices, which differ according to different relation-indices, e.g. kèm-a, B-m/s, "thou, give!". ${ }^{43}$
B. Prohibitives. a) In the 2 p . the imperative formation which has a plural subject, followed by the suffix re, stands for the singular as well as for the plural probibitive. In the dual a dual formation followed by $f e$ is used. An example: kem-aku-re, B-m1/s-m2, "thou (or you) don't give!". ${ }^{4 \pi} b$ ) In the three persons the formation of the dubitative is found but here the prefix $a$ does not occur in the prohibitive, e.g. $k a^{\circ}-k-a k i-n-i$, B-1-m-r-s, "let me not beat thee". The element ja may be added to the formation with an intensifying function. ${ }^{48}$
14) Ekari.
A. The imperative is formed by the base without any index. The use of the personal pronouns indicates the person to whom the order is given, e.g. aki witoghat, S-B, "thou, clean up!". ${ }^{4 \theta}$
$B$. The prohibitive formation is not given by Drabbe.
15) Moni.
A. Imperatives. The imperative is indicated by distinct subject-indices after the base viz. 2 p.s.: è, 2 p. pl.: iè, or diè, e.g. kiba-diè, B-m/s, "you, break!". ${ }^{50}$
B. Prohibitives. The prohibitive word is hatata preceding the imperative formations, e.g. hatata kiba-diè, prohibitive-B-m/s, "you, do not break!". ${ }^{51}$

Summary.
A. Imperatives. a) The imperative is expressed by distinct subject-indices which follow the base in Mombum, Auju, Kati, Kamoro and Moni, and precede the base in Boazi. b) The imperative is expressed by a distinct index preceding the base in Marind, Maklé", Jélmèk, Boazi and Jaqaa. c) The imperative formation is identical to the future formation without the future tense-index in Kanum, Moraori and also in Jéi, in which language, however, the sequence of the sentence is inverted; a future formation with the addition of a mood-index occurs in Makléu.
B. Prohibitives. a) A prohibitive word preceding the imperative formation is found in Jélmèk, Moraori, Jéi and Moni. b) A resemblance to the future formations of the language occurs in $\mathrm{A}^{\mathrm{uj}} \mathrm{u}$, Makléu and Kati, but the two prohibitives show great differences as well.

NOTES.

1. Part I, ch. I, sect. 5, part I, n. 25.
2. Part I, ch. I, sect. 5, part I, n. 26.
3. Part I, ch. I, sect. 5, part I, n. 27.
4. Part I, ch. I, sect. 5, part I, n. 28.
5. Part I, ch. I, sect. 5, part I, n. 29.
6. tbidem.
7. Ibidem.
8. Part I, ch. II, sect. 5, part I, n. 4 and 6.
9. Ibidem.
10. Ibidem.
11. Part I, ch. II, sect. 5, part I, n. 5 and 6.
12. Part I, ch. II, sect. 5, part I, ก. 7.
13. Ibidem,
14. Ibidem.
15. Part I, ch. III, sect. 5, part I, n. 8.
16. Pbidem.
17. Part I, ch. III, sect. 5, part I, n. 9.
18. Part I, ch. IV, sect. 5, part I, n. 7.
19. Part I, ch. IV, sect. 5, part I, n. 8.
20. Part I, ch. V, sect. 5, n. 8.
21. Ibidem.
22. Ibidem.
23. Part I, ch. V, sect. 5, n. 9.
24. Part I, ch. VI, sect. 5, part I, n. 9.
25. Ibidem.
26. ibidem.
27. Part. J, ch. VII, sect. 5, part I, n. 12.
28. Ibidem.
29. Part I, ch. VIII, sect. 5, part I, n. 8.
30. Part I, ch. VIII, sect. 5, part I, n. 9.
31. Part I, ch. IX, sect. 5, part I, n. 14.
32. Part I, ch. IX, sect. 5, part I, n. 13.
33. Part I, ch. IX, sect. 5, part I, n. 15.
34. Part 1, ch. X, sect. 5, part I, n. 10.
35. Ibidem.
36. Part I, ch. X, sect. 5, part I, n. 5.
37. Part I, ch. X, sect. 5 , part I, n. 10.
38. Part I, ch. X, sect. 5, part I, n. 8
39. Part I, ch. X, sect. 5, part I, n. 9.
40. Part I, ch. XI, sect. 5, part I, n. 7.
41. Part I, ch. XI, sect. 5, part I, n. 8.
42. Part I, ch. XII, sect. 5, part I, n. 6.
43. Part l, ch. XII, sect. 5, part I, n. 7.
44. Part I, ch. XIII, sect. 5, part I, n. 10.
45. Part I, ch. XIII, sect. 5, part I, n. 11 .
46. Part I, ch. XIII, sect. 5, part I, n. 12.
47. lbidem.
48. Part l, ch. XIV, sect. 5, n. 10.
49. Part I, ch. XV, sect. 5, n. 4.
50. Jbidem.
51. lbidem.

## CHAPTER X

# VERBS: THE INDICATION OF SUBJECT and relation in The Predicate 

## Section 1. Subject-indication.

In the preceding chapters V, VI and IX we came across subject-indices in the function of indicators of tense, aspect or mood; we may call these functions secondary ones as the primary function of the subject-indices is to refer to the subject of the sentence. This function will be discussed now in connection with the more general problem: in which manner is the subject represented in the predicate in the languages we investigate. The subject of a sentence is either a noun or a pronoun; nouns and pronouns have been dealt with with regard to their number, sex or gender and their "cases". Therefore we only have to consider how person, number, sex or gender of the subject is indicated in the different predicate formations. As it seems impossible to give a manageable survey of this matter, when we examine all the predicates of all the languages, we confine our inquiries to the verbal predicates of the present, preterit and future formations.

1) Marind.
a) The subject is represented in three persons by subject-indices which precede the base, e.g. nak-a-kipärud, s-r-B, "I bind thee". ${ }^{\text {. b) The num- }}$ ber of the subject is indicated in the singular and the plural by distinct subject-indices, e.g. nak, 1 p.s.; nake, 1 p. pl.; ${ }^{2}$ or by a change in the base itself, e.g. èvikèv, "to bear with a singular subject", révikèv, "to bear with a plural subject" ${ }^{3}$ c) Sex or gender of the subject is not expressed in the predicate.
2) Makléa.
a) The subject is indicated in three persons by subject-indices which follow the base, e.g. ép-pös-oma, t-B-s, "I jump". ${ }^{4}$ b) The number of the subject is indicated in the singular, the dual and the plural by distinct subject-indices, e.g. o, 2 p.s.; oga, 2 p. d.; woga, 2 p. pl. ${ }^{5}$ or by inversion in the base itself, ép-pös-o, "he jumps"; ép-ops-o, "they two jump". ${ }^{6}$ c) The sex is indicated in the 3 p . s.by a change in the base, e.g. ép-pös-o, "he jumps"; ép-aps -0 , "she jumps" ${ }^{7}$ or by different subject-indices for the masculine and the feminine, e.g. ema-pös, "he jumped yesterday"; éma-pós-ané, "she jumped yesterday". ${ }^{8}$
3) Jélmèk.
a) The subject is represented in the singular in the three persons, in the
plural in a second and non-second person by subject-indices, which follow the base, e.g. mè-p-ö, B-t-s, "we or they broke"; mè-p-aga, B-t-s, "you broke". ${ }^{9}$ b) The number of the subject is indicated in the singular and the plural by distinct subject-indices, e.g. ma, $1 \mathrm{p} . \mathrm{s} . ; \boldsymbol{o}$, $1 \mathrm{p} . \mathrm{pl} .^{10}$ c) Sex or gender of the subject is not indicated in the predicate.
4) Mombum.
a) The subject is indicated in the singular in the three persons; in the plural in a thitd and a non-third person; the subject-indices follow the base, e.g. nuku-numar-om, B-t-s, "we or you eat"; nuku-numur-a, B-t-s, "they eat". ${ }^{11}$ b) The number of the subject is expressed in singular and plural by different subject-indices, e.g. $u, 1$ p.s.; om, 1 p. pl, or by the optional plural index ghébwe added to the base. ${ }^{32}$ c) Sex or gender of the subject is not shown in the predicate.
5) Kimaghama.

The subject of the sentence is not represented in the predicate. ${ }^{13}$
6) Kanum.
a) The subject is, generally speaking, indicated by subject-indices without the distinction of the persons, e.g. $a-b e l$ lna, intransitive index-B-t/s, "some person breaks down"; the subject-indices follow the base. ${ }^{14} \mathrm{~b}$ ) In predicates that are intransitively used, the number of the subject is indicated in all numbers, and in predicates that are transitively used in the singular and the plural but in this case the number of the relation influences the choice of the subject-indices; an example of intransitive use is: in the to-day preterit the singular has the subject-index $i$; dual has $m \dot{e}$; plural has ins; as an example of transitive use we give: in the today preterit the subject-indices are: $i$ when the subject is in the plural and the relation in the singular or the plural; me when the subject is in the plural and the relation in the singular; ins when the subject is in the plural and the relation in the plural as well. ${ }^{15}$ c) Sex or gender of the subject is not expressed in the predicate.
7) Morari.
a) The subject is indicated in the predicate by subject-indices which follow the base, e.g. ter-ac-m-adu, B-with r-infix-t/s, "I beat thee"; with regard to the persons, a distinction is made onty between the first and non-first person. ${ }^{16} \mathrm{~b}$ ) The number of the subject is indicated in all numbers when the object is in the singular; when the object is in the plural only singular and plural forms occur; the difference in number is indicated by distinct subject-indices, e.g. in the to-day preterit the $1 \mathrm{p} . \mathrm{s}$. $\ddagger b \ddagger n$; $1 \mathrm{p} . \mathrm{d} . \ddagger m \ddagger n ; 1 \mathrm{p} . \mathrm{pl} . \ddagger b \ddagger n$, or by an infix ( $w \ddagger$ ) in the base itself, e.g. kasa-ri-m, "to beat with a subject in the singular"; kas-wa-ri-m, "to beat with a subject in the plural"; when the subject as well as the object is in the plural, the infix ( $w \ddagger$ ) does not occur but the consonant $r$ is found at the end of the formation, e.g. kasa-ri-m-r, "to
beat with a subject in the plural and an object in the plural", ${ }^{17}$ c) The sex or gender of the subject is not expressed in the predicate.
8) $J e i$.
a) The subject is indicated by subject-indices but without the distinction of persons; the indices follow the secondary base, e.g. di ap-e, B1-B2-n/s, "to go with a dual subject"; ${ }^{18}$ the subject is sometimes indicated by the relation-indices (reflexive bases) and in this case also the person of the subject is expressed, e.g. wènj wo-m, B1-r-B2, "I am present" ${ }^{19}$ b) The number of the subject is in predicates that are transitively used, indicated in the singular and the plural (the plural form, however, is different according to different relation-indices) ${ }^{20}$ and in predicates that are intransitively used or show a reflexive character the subject is indicated in all numbers, e.g. di ap, B1-B2, "to go with a singular subject"; di ap-é, B1-B2-n/s, "to go with a dual subject". This difference is indicated by a difference in the subject-indices. ${ }^{21}$ c) Sex or gender is not expressed in the predicate.
9) Boazi.
a) The subject is represented by subject-indices in the three persons; they precede the base, e.g. no-sungguz-it, s-B-t, "l wash". ${ }^{22}$ b) The number of the subject is indicated in the singular and the plural by distinct subject-indices, e.g. no, 1 p.s.; ni, 1 p. pl., e.g. no-ma-sungguz, s-t-B, "I shall wash"; ni-ma-sungguz-im, "we shall wash". ${ }^{23}$ c) Sex of the subject is expressed in the subject-index of the third person singular, e.g. gé, 3 p.s.masc.; gu, 3 p.s. fem. Drabbe is not sure whether the neuter gender is indicated by a distinct subject-index or by the masculine form. ${ }^{24}$
10) Jaqa.
a) The subject is represented in the three persons by subject-indices which precede the base, e.g. oko-r-ponokon, s-t-B, "I give". ${ }^{25}$ b) The number of the subject is indicated in the singular and the plural by distinct subject-indices, e.g. oko, 1 p.s.; $i k i, 1$ p. pl. or by a change in the base itself, e.g. onadaq, "to be full with a singular subject"; onadaqamak, "to be full with a plural subject"; suppletion of bases is found as well, e.g. tak, "to go with a singular subject"; éedèk, "to go with a plural subject". ${ }^{26}$ c) Sex and gender are expressed here in the subject-indices of 3 p.s.m. é; 3 p.s.f. $u$, 3 p.s. neuter o. ${ }^{27}$
11) $A^{4} j u$.
a) The subject is represented in the predicate in a first and a non-first person by subject-indices which follow the base, e.g. ada-di, B-s, "I bind"; ada-ki, B-s, "thou bindst". ${ }^{28}$ b) The number of the subject is expressed in the singular and the plural by distinct subject-indices, e.g. $d i, 1$ p.s.; da, 1 p. pl.; or by suppletion of bases, e.g. ku, "to die with a singular subject"; ghosanggi, "to die with a plural subject". ${ }^{29}$ c) Sex or gender is not expressed.
12) Koti.
a) The subject is expressed in the singular in three persons and in the plural in a first and non-first person by distinct subject-indices, which follow the base, e.g. jeetm-an, B-t/s, "I say". ${ }^{30}$ b) The number is indicated in the singular and the plural by distinct subject-indices, e.g. an, 1 p.s.; up, 1 p. pl. ${ }^{31}$ c) Sex and gender are expressed in the 3 p.s. by vowel-change, masculine: $e$; feminine: $u{ }^{32}$
13) Kamoro.
a) The subject is expressed in three persons by distinct subject-indices, which follow the base, e.g. ma-keaa-m-a-r-i, t2-B-t1 with r-infix, "I bake for him". ${ }^{33}$ b) The number of the subject is indicated in all numbers by distinct subject-indices, e.g. ai, 1 p. s.; $a^{u m a, 1} 1$ p. d.; omo, 1 p. pl. ${ }^{34}$ c) Sex or gender is not expressed in the predicate.
14) Ekari.
a) The subject is represented in the predicate in three persons by distinct subject-indices, which follow the base, e.g. ui-nè-gh-a, B-t-l-s, "I go away". ${ }^{35}$ b) The number of the subject is indicated in the singular and the plural by distinct subject-indices, e.g. a, 1 p.s.; e, 1 p. pl. ${ }^{36}$ c) Sex and gender are not expressed in the predicate.
15) Moni.
a) The subject is expressed in the three persons by subject-indices which follow the base, e.g. $k i b a^{i}$-a , $\mathrm{B}-\mathrm{s}$, "I break". ${ }^{37}$ b) The number of the subject is expressed by distinct subject-indices for the singular and the plural, e.g. $a^{\circ}, 1$ p.s.; igio, 1 p. pl. ${ }^{38}$ c) Sex or gender is not indicated.

Summary.

1) No distinction of persons is extant in the predicates of Kanum and Jéi. 2) A distinction in the subject between a first and a non-first person is indicated in the predicate by subject-indices which follow the base in Moraori and $\mathrm{A}^{u j u}$. 3) The distinction in three persons by subject-indices which precede the base is found in Marind, Boazi, and Jaqai; by indices which follow the base in Maklé", Jélmèk, Mombum, Kati, Kamoro, Ekari and Moni. In Kanum and Jei the subject-indices follow the base but are not distinct for the different persons. 4) The number distinction in a singular and plural by distinct subject-indices occurs in Marind, Makléu, Jėlmèk, Mombum, Boazi, Jaqat, Auju, Kati, Kamoro, Ekari and Moni, and in some cases in Kanum, Moraori and Jéi; by change of the base itself in Marind, Moraori and Jaqa'. 5) The number-distinction in a singular, dual and plural by different subject-indices is found in Maklé" and in Kamoro (and in some cases in Kanum, Morarri and Jëi). 6) Sex-distinction is expressed in the $3 \mathrm{p} . \mathrm{s}$. in Maklén, Boazi, Jaqa ${ }^{\text {a }}$ and Kati, 7) A combination of features is found in the following cases: a) in Kanum and Jéi no person-distinction is indicated; the intransitive formations show a singular, dual and plural; the transitive formations a singular and a plural and this plural occurs
in two forms according to the number of the relation. The Morari-fanguage shows a similar distinction: a singular, dual and plural occur in the sub-ject-indices in case the object is in the singular, and a singular and plural only are extant in case the object is in the plural. b) In Marind, Boazi, and Jaqai the subject-indices occur in three persons, in the singular and the plural, precede the base and a change in the base itself sometimes indicates the number of the subject. c) In Boazi, Jaqai and Kati the sex-distinction is expressed in the same person ( $3 \mathrm{p} . \mathrm{s}$.) and by the same vowel-change (e/a).

## Section 2. Object-indication,

Speaking about the object-indication we must draw the reader's attention to the meaning of the term "object"; in the languages we discuss here, the object-indices occurring in the predicate may refer to a direct or an indirect object or to relations which in English are rendered by the use of prepositions. As Drabbe dit not make the distinction in most of his data, we use the two terms: object-indices and relation-indices indiscriminately.

1) Marind.
a) The person of the relation is indicated in the singular in the three persons, in the plural in a first and a non-first person by relationindices which are extant in two types viz. aa) indices that may be separated from the base and $b b$ ) indices that cannot be separated from the base; in the latter case the indices occur as prefixes, infixes, a combination of prefixes plus infixes or as suffixes to the base. An example of the first type nak-a-e-kipärud, s-r-n-B, "we bind thee"; ${ }^{39}$ an example of the second type no-ha-sak, s-r-B, "I beat thee". ${ }^{40}$ The indices are always found between the subject-indices and the base. b) The number of the relation is expressed by distinct object-indices in the singular and the plural, e.g. $n, 1$ p.s.; né, 1 p. pl. $;^{41}$ or by a change in the base itself, e.g. révikév, "to bear with a singular object"; révikav, "to bear with a plural object". ${ }^{2}$ c) Sex or gender of the relation is not expressed.
2) $M a k l e ́ n$.
a) The relation-indices occur only before some bases; distinct forms are found in the 1 p., 2 p.pl. and 3 p.s.m., e.g. béba-l-ha-p, $t-r-B-s$, "he will see you'. $\mathbf{4}^{3 \prime} \mathrm{~b}$ ) The number is indicated in the singular and the plural by distinct object-indices, e.g. 2 p.pl.: $l ; 3$ p.s.m.: $b$; or by the use of a different base, e.g. jem, "to illtreat with a relation in the singular"; um, "to illtreat with a relation in the plural", ${ }^{44}$ c) The sex of the relation is expressed by the use of a different base, e.g. jem, "to illtreat with a relation $3 \mathrm{p} . \mathrm{s} . \mathrm{fem} . "$; to, "to illtreat with a relation 3 p.s. masc.". ${ }^{45}$
3) $\int e t m e ̀ k$.

In this language there are no relation-indices. ${ }^{46}$
4) Mombum.

There are no relation-indices in this language; the plural number of the relation may optionally be indicated by the number-index ghèbwè which is added to the base, e.g. nut èwè iröw-è", "I beat him"; nu anèmrè iröwè-ghèbw-这", "I beat them". ${ }^{47}$
5) Kimaghama.

The relation is not indicated in the predicate. ${ }^{48}$
6) Kanum.
a) The relation is indicated by relation-indices which precede the base, e.g. nè-bèlna-i, r-B-t/s, "we smash thee"; the relation-indices occur in the singular in the three persons and in the plural in a first and nonfirst person; they differ in form in the different tenses (indicate tense at the same time). ${ }^{49}$ b) The number of the relation is indicated by distinct relation-indices, e.g. $u, 1 \mathrm{p}, \mathrm{s} . ; n, 1 \mathrm{p} . \mathrm{pl}{ }^{50} \mathrm{c}$ ) The sex or gender of the relation is not expressed in the predicate.
N.B. Besides the formations just mentioned, there are bases with a reflexive character; the dual occurs here; the relation-indices of the dual are, however, the same as those of the plural. ${ }^{51}$
7) Moraori.
a) The relation is indicated in the three persons by indices which are infixed in the base, e.g. tèr-i-m, (base term), "to beat with a singular subject and an object 1 p.s."; kasa-ri-m, (base kasam), "to beat with a singular subject and an object $1 \mathrm{p} . \mathrm{pl}^{1,}{ }^{52}$ or in some bases by indices which are prefixed, e.g. $j e-f i-\mathrm{a}, \mathrm{r}-\mathrm{B}-\mathrm{t} / \mathrm{s}$, "he sees me". ${ }^{53} \mathrm{~b}$ ) The number of the relation is indicated in singular and plural by the use of different bases, cf. examples in the preceding paragraph. ${ }^{54}$ c) The sex is indicated in the 3 p.s. by vowel-change in the base, e.g. term, "to beat with an object 3 p.s.m."; torm, "to beat with an object 3 p.s.f.". ${ }^{\text {ss }}$
8) Jéi.
a) The relation is indicated in the singular in the three persons and in the plural in a first and non-first person by indices which precede the secondary base, e.g. olgè wo-lg, "to bind me with a subject singular"; the indices differ in the different tenses (indicate tense at the same time). ${ }^{56}$ b) The number of the relation is indicated by distinct relationindices, e.g. wo, 1 p.s.; nè, 1 p. $\mathrm{pl}^{57}$ c) The sex of the relation is expressed in the 3 p.s. by a different index, e.g. jé, 3 p.s.m.; gwé, 3 p.s.f. ${ }^{58}$
9) $B \circ a z i$.
a) The relation is indicated in the singular in the three persons, in the plural in a first and a non-first person by relation-indices which occur either as prefixes, suffixes or prefixes plus suffixes to the base, e.g. na-éwag, r-B, "to hear me with a singular subject". ${ }^{50} \mathrm{~b}$ ) The number of the relation is indicated in the singular and the plural by distinct object-indices, e.g. $n, 1 \mathrm{p} . \mathrm{s} . ; n i, 1 \mathrm{p} . \mathrm{pl}^{60}$ c) The sex of the relation is not expressed.
10) Jaqai.
a) The relation is indicated in the singular in the three persons and in the plural in a first and a non-first person by relation-indices which are prefixed to the base and never separated from it by other indices, e.g. aqa-r-o-ponokon, s-t-r-B, "thou givest him". ${ }^{61}$ b) The number of the relation is expressed in the singular and the plural by distinct relationindices, e.g. $o, 3$ p.s.; é, 3 p. pl.: or by a change in the base itself, e.g. naqak, "to carve with a singular object"; naqakamak, "to carve with an object in the plural". ${ }^{62}$ c) Sex or gender of the relation is not indicated in the predicate.
11) $A^{4 j} j$.
a) Relation-indices are not found in this language. ${ }^{63}$ b) The number of the relation is indicated by suppletion of bases, e.g, ra, "to take with a singular object"; kirimo, "to take with an object in the plural". ${ }^{64}$ c) Sex or gender is not expressed.
12) Kati.
a) The relation is indicated in the singular in the three persons and in the plural without distinction of persons by relation-indices, which follow the base, e.g. jeetm-pt-an, B-r-t/s, "I tell thee", ${ }^{65}$ b) The number of the relation is indicated in a singular and a plural by distinct objectindices, e.g. pt, 2 p.s., nd, some people. ${ }^{66}$ c) Sex or gender is indicated in the 3 p.s. by distinct object-indices, e.g. $n, 3$ p.s.m.; mb, 3 p.s.f. ${ }^{67}$ 13) Kamoro.
a) The relation is expressed in the three persons by means of two rela-tion-indices, one indicating a first or a second person and another not indicating a first or second person; in the latter case the relation-index may refer to a third person or points out a relation not expressed in European languages, or indicates the absence of any relation; these two indices are: the consonant $n$ for 1 and 2 p .; the consonant $r$ for a non 1 and 2 p .; the answer of the question when the index $n$ refers to a first person and when to a second is rather intricate and not to the point here. ${ }^{68}$ b) The number of the refation is not expressed by these indices. ${ }^{\text {i9 }}$ c) Sex or gender is not indicated.
14) Ekari.
a) The relation is indicated in the three persons by object-indices which precede the base, e.g. $\dot{e}-d u \mathbf{a}^{e-t a-g h-a, ~ r-B-t-I-s, ~ " I ~ s h a l l ~ f e l l ~ h i m ~(o r ~}$ them) ${ }^{30}{ }^{30}$ b) The number of the relation is indicated in a singular and a plural by distinct object-indices, e.g. na, 1 p.s.; ni, 1 p. pl. ${ }^{71}$ c) The sex or gender of the relation is not expressed.
15) Moni.

Relation-indices do not occur. ${ }^{72}$
Summary.

1) The relation is not expressed in the predicate in Jelmèk, Mombum,

Kimaghama, Auju and Moni. 2) A distinction in a first and non-first person occurs in the plural form of the relation indices of Marind, Kanum, Jéi, Boazi and Jaqai. 3) A relation is indicated in the three persons by indices which precede the base in Marind, Kanum, Jéi, Boazi, Jaqai and Ekari; by indices which follow the base in Kati and Kamoro, 4) Relation-indices occurring in the form of pref., inf., suff., or pref. + inf. or pref. + suff. are found in Marind and Boazi. 5) The number-distinction in a singular and plural by distinct indices is extant in Marind, Makléu, Kanum, Jéi, Boazi, Jaqa, Kati and Ekari; by a change of the base itself in Marind, Jaqa ${ }^{1}$ and by suppletion of bases in Makléu, Morari, Auju. 6) The sex- or gender-distinction occurs in 3 p.s. of Makléu, Morari, Jéi and Kati; in Moraori the vowelshift is è/o or $\dot{e} / a$; in Jéi $\dot{e} / u$. 7) A combination of common features is found. a) In Kanum and Jei the relation-indices precede the base, show the first and non-first person distinction in the plural, and differ in form in the different tenses. b) In Marind, Boazi and Jaqai the relation-indices precede the base, show the number distinction by distinct object-indices and, moreover, Marind and Boazi have the affixed relation-indices and Marind and Jaqai show the change in the base to express the number of the object.

## Section 3. Pronouns, Subject- and Object-indices.

The personal pronouns and the indices used to indicate the subject and the object of the sentence possibly show a close relation in form; the investigation will be undertaken here. ${ }^{73}$

1) Marind.

| Set I | Set II | Set III |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | subj.-index | type | relat | $\underbrace{\text { on-ind }}$ | $\frac{\overline{\mathrm{dex}}}{\text { type II }}$ |  |
|  |  | no or nak | $n$ | pref. |  | $\left\lvert\, \begin{gathered} \text { pre-inf. } \\ n-n \end{gathered}\right.$ | $n^{\text {suff. }}$ |
| $1 \mathrm{p} . \mathrm{pl}$. nok | $n$ | naké | né | én | $\dot{e}-n$ | én-n |  |
| 2 p.s. oh | $h$ | $o$ | $a$ | $h$ | $h$ | $h-h$ | $h$ |
| $2 \mathrm{p} . \mathrm{pl}$. ${ }^{\text {eh }}$ | h | é | é | $\dot{e}$ or $i$ | $z$ | é-z | $z$ |
| 3 p.s.m.anép | é | $a$ or $\dot{e}$ | $o$ | 0 or $u$ |  | $o$ | $a$ or ${ }^{\circ} \alpha$ |
| $3 \mathrm{p} . \mathrm{s.f}$. anup | $u$ | $a$ or é |  | $o \text { or } u$ |  | o | $a$ or ${ }^{\circ} a$ |
| $3 \mathrm{p} . \mathrm{pl}$. anip | $i$ or é | én or $n$ | é | é or $i$ | z | é-z | z |

a) Set I contains the personal pronouns; set II consists of pronouns used as prefix to names of relatives to indicate the possessor; set III is composed of the subject-indices and the relation-indices, both occurring in the predicate. The relation-indices appear in two types and the second type in four different forms as is mentioned in section 2, n. 1 of this chapter. b) The first person singular shows the consonant $n$ in
the three sets; the first person plural has the consonant $n$ and often the plural number-index $\dot{e}$ in subject- and relation-indices. c) 2 p.s. shows the consonant $h$ in set I and set II and in the relation-index; 2 p . pl. has the number-index $e ́$ in set I and set III. d) The vowels occurring in the $3 \mathrm{p} . \mathrm{s} . \mathrm{m}$. and f. are extant in the other sets of the respective person.
2) Makléu.

The subject-indices do not agree with the personal pronoun formally; the relation-indices show resemblance in the following cases:
relation-index personal pronoun

| $1 \mathrm{p} . \mathrm{s}$. | $n$ | ngöllo | ngölél |
| :--- | :--- | :--- | :--- |
| $1 \mathrm{p} . \mathrm{pl}$. | $n$ | ngag | ngagol |
| $2 \mathrm{p} . \mathrm{pl}$. | $l$ | omlé | alél |
| $3 \mathrm{p} . \mathrm{s.m}$. | $b$ | ib | ibél |

3) Jélmèk.

Subject-indices and pronouns do not agree; relation-indices are not extant.
4) Mombum.

The subject-indices do not show a clear resemblance to the personal pronouns; relation-indices are not found.
5) Kimaghama.

The language has no subject- or object-indices.
6) Kanum.

The subject-indices do not agree with the personal pronouns; the rela-tion-indices have one vowel or other or consonant in common with the forms of the personal pronoun.
7) Moråri.

The subject-index 3 p .s. in the preterit formations shows the consonant $f$ which also occurs in 3 p .s. of the personal pronouns; the relationindices show no resemblance at all.
8) Jéi.

Neither subject- nor object-indices show any agreement with the personal pronouns.
9) $B \circ a z i$.

|  | Set I | Set II |  |  | Set III |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | subj. | ind. | relation- | nd. |
|  |  |  |  | pref. | pref.-suff. | suff. |
| 1 p.s. | no | $n$ | no | $n$ | $n-n d$ | $m b$ |
| $1 \mathrm{p} . \mathrm{pl}$. | $n i$ | $n$ | ni/za | $n i$ | $n-n d$ | mbam |
| 2 p.s. | 0 | $g h$ | gho | $g h$ | $g h-q$ | $b$ |
| $2 \mathrm{p} . \mathrm{pl}$. | $z u$ | $z$ | zu | $z$ | $z-t$ | bam |
| 3 p.s.m. | ndéné | té $\mathrm{ge} / \mathrm{z}$ | gé | mbolo | o-t | o |
| 3 p.s.f. | ndunu | tu $\mathrm{gu} / \mathrm{z}$ | $g u$ | mbolo | o-t | $o$ |
| $3 \mathrm{p} . \mathrm{pl}$. | $n d i n \mathrm{i}$ | ti gi/z | gi | $z$ | $z-t$ | bam |

a) Set I contains the personal pronouns; set II consists of pronouns used as a prefix to names of relatives indicating the possessor; set III is composed of the subject- and object-indices, both occurring in the predicates. The relation-indices appear in three different forms as mentioned in section 2, n. 9 of this chapter. b) The first person singular and plural agree in the three sets. c) The 2 p.s. of subject- and objectindices resemble each other and have the vowel $o$ in common with the personal pronoun of the same person. d) The 2 p . pl. shows the consonant $z$ in the three sets. e) The vowelshift of $3 \mathrm{p} . \mathrm{s}$. and pl. occurs in set I, II, and in set III with regard to the subject-indices.
N.B. The relation-indices in the suffixed form do not agree with the other formations.
10) Jaqai.

|  | Set 1 | Set II |  | Set III |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | subj-ind. | rel.-ind. |
| 1 p.s. | anok | $n$ | oko | an |
| $1 \mathrm{p} . \mathrm{pl}$. | indok | $n$ | iki | èné/iné/néné |
| 2 p.s. | $a q$ | $q$ | aqa | $a$ or (a)qa |
| $2 \mathrm{p} . \mathrm{pl}$. | $a^{6} \mathrm{o} k$ | éa | $\dot{e}$ | ée |
| 3 p.s.m. | arép | é | $\dot{e}$ | 0 |
| 3 p.s.f. | arup | $\dot{e}$ | $u$ | 0 |
| 3 p.s.n. | arop |  | 0 | 0 |
| 3 p.pl. | arip | é | e | é |

a) Set I contains the personal pronouns; set II consists of pronouns used as prefix to the names of relatives to indicate the possessor; set III is composed of the subject- and object-indices, both occurring in the predicate. The relation-indices appear only as prefixes to the base. b) In the first person the subject-indices agree with the second syllable of the pronoun and the object-indices with the first. c) The 2 p.s. agree in the three sets. d) The 2 p . pl. has in the three sets the number-index $e \dot{e}$ in common. e) In the $3 \mathrm{p} . \mathrm{s}$. the vowelshift agrees in the pronoun and in the subject-index.
11) Auju.

The subject-indices do not agree with the personal pronouns; relationindices do not occur.
12) Kati.

The subject-indices agree with the personal pronouns only in the vowelshift $e ́ / u / i$ in the 3 p.s.m., f., and pl.; the relation-indices differ totally from the pronouns.
13) Kamoro.

Subject-indices and object-indices do not agree with the personal pronouns.
14) Ekari.

The subject-indices do not agree with the personal pronouns; the rela-tion-indices show in the first and second person the same consonants as the respective pronouns:
pers. pronoun rel.-index

| 1 p.s. | $a n \mathbf{i}$ | $n a$ |
| :--- | :--- | :--- |
| 1 p. pl. | $i n \mathbf{i}$ | $n i$ |
| 2 p.s. | $a k \mathbf{i}$ | $k a$ |
| 2 p. pl. | $i k \mathbf{i}$ | $k i$ |

15) Moni.

The subject-indices do not agree with the personal pronouns; objectindices do not occur. ${ }^{73}$

Summary.
a) The Marind-, Boazi- and Jaqar-languages show a systematic agreement of form in the pronouns and the indices which indicate subject or object of the sentence; the three languages agree, moreover, in the affixation and more particularly in the prefixation of the retation-indices to the base; the subject-indices precede the base (and the relation-indices) in these three languages. b) ln Makléu and Ekari some relation-indices show resemblance to the corresponding personal pronouns. c) The vowelshift in Kati is identical to that occurring in Marind, Boazi and Jaqa.

NOTES.

1. Part I, ch. I, sect. 5 , part 1, n. 6.
2. Ibidem.
3. Part I, ch.1, sect. 5, part I, n. 4.
4. Part I, ch. II, sect. 5, part l, n. 1-4.
5. Part I, ch. II, sect. 5, part I, n. 1.
6. Ibidem.
7. lbidem.
8. Part I, ch. II, sect. 5, part I, n. 2.
9. Part I, ch. III, sect. 5, part I, n. 1-4.
10. Part I, ch. III, sect. 5, part I, n. 2.
11. Part I, ch. IV, sect. 5, part I, n. 1-5.
12. Part l, ch. IV, sect. 5 , introduction.
13. Part I, ch. V, sect. 5 , introduction.
14. Part I, ch. VI, sect. 5, part I, n. 1-5.
15. Part I, ch. VI, sect. 5, part I, n. 2.
16. Part I, ch. VII, sect. 5, part I, n. 6.
17. Ibidem.
18. Part I, ch. VIll, sect. 5, part I, n. 1a).
19. Part I, ch. VIII, sect. 5 , part I, n, 1c).
20. Part I, ch. VHI, sect. 5 , part I, n. 1b).
21. Part I, ch. VIII, sect. 5 , part I, n. 1a).
22. Part I, ch. IX, sect. 5, part I, n. 1-5.
23. Part 1, ch. IX, sect. 5, part 1, n. 5.
24. Part I, ch. IX, sect. 5, introduction.
25. Part I, ch. X, sect. 5, introduction and part I, n. I-5.
26. Ibidem.
27. Ibidem.
28. Part I, ch. XI, sect. 5, introduction and part I, t. 1.
29. Ibidem.
30. Part I, ch. XII, sect. 5, introduction and part I, n. 1-3.
31. Ibidem.
32. Ibidem.
33. Part I, ch. XIII, sect, 5, part I, n. 1-4.
34. Ibidem.
35. Part 1, ch. XIV, sect, 5, introduction and $n .1-5$.
36. Ibidem.
37. Part I, ch. XV, sect. 5, introduction and n. 1-3.
38. bidem.
39. Part l, ch. I, sect. 5, part I, n. 3, 5 and 6.
40. Ibidem.
41. Ibidem.
42. Part I, ch. I, sect. 5, part I, n. 4.
43. Part I, ch. II, sect. 5 , part I, n. 8 .
44. Ibidem.
45. Ibidem.
46. Part I, ch. IHI, sect. 5, introduction.
47. Part I, ch. IV, sect. 5, introduction.
48. Part I, ch. V, sect. 5, introduction.
49. Part I, ch. VI, sect. 5, part I, n. 1-5.
50. Ibidem.
51. Part I, ch. VI, sect. 5, part I, n. 6.
52. Part I, ch. VII, sect. 5, part I, n. 1-4.
53. Part I, ch. VII, sect. 5, part I, in. 8.
54. Part I, ch. VII, sect. 5, part I, n, 1-4.
55. Ibidem.
56. Part I, ch. VIIt, sect. 5 , pari $\mathrm{l}, \mathrm{n}$. 1-5 in b) and c).
57. Ibidem.
58. Ibidem.
59. Part I, ch. IX, sect. 5 , introduction.
60. lbidem.
61. Part I, ch. X, sect. 5, part I, n. 1.
62. Part I, ch. X, sect. 5, introduction.
63. Part l, ch. XI, sect. 5, introduction.
64. Ibidem.
65. Part I, ch. XII, sect. 5, introduction and part I, n. I.
66. Ibidem.
67. Ibidem.
68. Part I, ch. XIII, sect. 5, introduction and part I, n. 1.
69. Ibidem,
70. Part I, ch. XIV, sect. 5, introduction and $n .6$.
71. Ibidem.
72. Part I, cll. XV, sect. 5 , introduction.
73. In this section we did not refer to Part I as the forms open to comparison have been repeated and the other forms may be easily found in the respective chapters of Part I.

## CHAPTER XI

## VERBS: COMPOUND SENTENCES

So far we have studied the simple sentence in its most important features. We ought to do the same with regard to the different types of compound sentences occurring in these languages. Such a full inquiry is impossible as data fail. We prefer to mention the various formations Drabbe analysed in his notes and grammars; by indicating the most characteristic features, we are able to bring forth new data open to comparison.

## Section 1. Marind.

1) The expression of priority.

The protasis shows an index of precedence viz. $k$ which follows the sub-ject-index; between the two clauses the linking-element jah is found; the process of the protasis is represented as preceding the process of the apodosis, e.g. ndam-o-ka-kipārud | jah | ma-no-man, t-s-index-B | linking element | t -s-B, "thou wilt bind first, then 1 shall come". ${ }^{1}$
2) A suppositionalmode of speaking.

A protasis mbai nok meaning "I thought" consisting of an unexplained formation, is followed by an apodosis which is present, preterit or future in form but according to the meaning is shifted into the respective past; the subject of the apodosis is followed by the mood-index hat or ta; an example: mbai nok | naka-hat-kipārud, B-personal pronoun | s-m-B, "I thought that I bound"."
3) The open condition.

A protasis opening with the mood-index $a$, followed by the future of the so called $k$-formation and optionally closed by the addition of the demonstrative pronoun épé expresses an open condition and is followed by an apodosis in a plain future formation, e.g. a-m-o-man épé | ma-no$k i p \bar{a} r u d$, m-t-s-B1-linking element | t-s-B, "if I shall come, 1 shall bind". ${ }^{3}$
4) Therejected condition.
A. The protasis appears in two different formations. a) Opening with a mood-index which, together with the subject-indices, results in the following forms: 1 p.s. ano or aka; 1 p. pl. aké; 2 p.s. aho; 2 p.pl. ahé; 3 p.s. aha; 3 p. pl. ahana; the protasis shows a second mood-index viz. $u$ suffixed to the base, and has the demonstrative pronoun épé at the end of the formation, e.g. $a-n o-m a n-u$ épé, m1-s-B-m2-linking-element, "if I should have come..." ${ }^{4}$ b) Opening with the index $a$ the protasis
shows the infix $u m$ as a second mood-index resulting in combination with the subject-indices in the following forms: 1 p.s. akum; 1 p. pl. akumé; 2 p.s. and pl., 3 p.s. ahum; 3 p. pl. anum; the index $u$ and the demonstrative pronoun épé moreover are found, e.g. akum-kipărud-u е́pé $\mathrm{ml} / \mathrm{s}-\mathrm{B}-\mathrm{m} 2$-demonstr. pronoun, "if l should have bound....."5 B. The apodosis appears in two different formations. a) When the apodosis is in the affirmative, the perfective aspect-index mend opens the clause and is followed by the subject-index, the base and the suffixed mood-index, e.g. mènd-aka-kipārud-u, a-s-B-m, "I should have bound". b) When the apodosis is in the negative, the negation opens the clause and is followed by the subject-index, the base and the suffixed moodindex, e.g. mbat $\rightarrow-k i p a ̄ r u d-a 1$, negation-s-B-m, "thou wouldst not have bound". ${ }^{7}$
5) Atime-clause.

The protasis mentioned in the preceding number 3 ), may have the meaning of a time-indication, e.g. a-mo-man épé|ma-no-kipārud, "when I shall come, I shall bind"; the protasis mentioned in $n .4, A$, a) occurs with the same meaning but in that case the suffixed mood-index $u$ is not extant. ${ }^{\text {s }}$

## Section 2. A"ju.

1) The open condition.
A. The protasis shows the following formations. a) Two bases viz. rigi and $g i$ occur in a future formation non-first person; between these bases the future formation of the process to be expressed is inserted and the whole construction forms a protasis, e.g. rigirô dèfina girô, "it will (happen?), they will come, it will be", i.e. if you or they will come. ${ }^{9}$ b) When the protasis is in the negative, the usual negation $f a-d \dot{e}$ occurs with the present formation of the base which expresses the processes, followed by the future formation non-first person of the base $g i$, "ło become"; the clause is closed by the demonstrative pronoun according in number to the subject of the clause, e.g. fa dèghi dè girô ugo, "if thou dost (or he does) not come". ${ }^{10}$
B. The apodosis is always a future formation.
2) Therejectedcondition.

The following formations are found. a) The protasis shows one tense formation or other, optionally followed by the non-1 p.s. present of the base $g i$ and the linking-element bu, e.g. dèght (giki) bu, "if he would have come...."; the apodosis gets the corresponding tense. ${ }^{11}$ b) Instead of the linking-element $b u$ a future formation of a base occurs which is found only in this formation viz. demoghot the meaning of which is not clear, e.g. dèghi démogho' (giki), "if he would have come". ${ }^{12}$
3) The indirect speech.
a) Two bases, both meaning "to say", one preceding the communication and the other following it, insert a dependent clause which is always in the present, e.g. eki-ta (rogho ${ }^{t}$ ) omono gho-kinâ $\mid n i$-aki, "he said that the chitdren had gone away". The first base roghoi is not compulsory but, if extant, occurs always in the present, the last base ni may be found in different tenses, ${ }^{13} \mathrm{~b}$ ) The reference of a given order shows two constructions. aa) The dependent clause indicates the tense of the principal one, e.g. rodi| ofo ugo $d$-aki, "I told the boy to come". ${ }^{14}$ bb) The predicates of principal and dependent clause have both a future formation, when the order is meant in the future, e.g. raghai $\mid$ dèjini, "] shall tell him to come". ${ }^{25}$
4) The finalclause-construction.

The final clause consists of the future formation followed by the linking element nidi, "in order to"; the present formation of the principal clause may have a preterit meaning as well, e.g. ki rafínidi|dèghi, "to steal future non 1 p.s. tinking element | to come present non 1 p.s.", i.e. "thou/he comes( $t$ ) to steal"; in order to express a future both predicates have the future formation; in the latter case the linking-element nidi is not compulsory. ${ }^{16}$
5) The consecutive clause-construction.

The protasis always has the present formation; the predicate of the apodosis indicates the tense of the process, e.g. ghầ jî arakunggi $\mid$ do-gho-ra, "the fire burnt the house down to-day"."
6) The coordination of sentences.

Two bases may be coordinated by insertion between them of the base $k i$ (the meaning of which is unknown) in the di/but formation, i.e. kidi occurs when the two bases are in the present; kibu when they are in the future, e.g. déghi | kidi | rogho ${ }^{i}$, "he comes and says". ${ }^{1 s}$

## Section 3. Kati.

1) The expression of priority.

In order to express that the process of the protasis precedes that of the apodosis, the Kati-language shows three different formations of a protasis ${ }^{10}$ viz. formation I: base - distinct subject-indices - linking element ef; formation II: base - distinct subject-indices - linking element $a$; formation IH: base - distinct subject-indices.
A. If the two processes are thought of as happening in the past two cases are possible. a) The same subject occurs in protasis and apodosis: the protasis has formation I or III and the apodosis gets the plain present/preterit formation either in the momentaneous or in the durative aspect, e.g. kokamun-ii | wan-an, " 1 did it first and afterwards went away", b) The two clauses differ with regard to the subject: the prota-
sis and the apodosis have a present/preterit formation e1ther in the momentaneous or durative aspect and, moreover, the protasis shows the linking-element kop, e.g. an-on kop | wun-un, "after he ate she went away".
B. If the two processes are thought of as happening in the future, the following constructions occur: a) the protasis in formation I | apodosis in the prohibitive; b) the protasis in formation II $\mid$ apodosis in the imperative; c) the protasis in formation III | apodosis in the prohibitive or in the future; this construction does not allow difference of subjects.
2) The imperative and its dependentclause.

The order is expressed in the protasis by a plain present/preterit formation followed by the linking element 0 ; the object of the request is expressed in the apodosis in an imperative or prohibitive formation, or in the formation I (mentioned in the preceding number), e.g. ongm-ew-o | waakrip-ok, "make him recover". ${ }^{20}$
3) The finalclause-construction.

When a prohibitive formation is followed by an apodosis expressing the object in regard of which the prohibition was given, two constructions may be found: ${ }^{21}$
a) if something is to be attained the protasis has the prohibitive, the apodosis the imperative, e.g. maantep-aaj-ep | monok, "do not move so that he may come";
b) if something is to be avoided, the protasis has the prohibitive, followed by the linking-element $e$; the apodosis has the prohibitive too e.g. jeetma $a$-we |man-aan, "don't move otherwise he comes".
4) Theopencondition.

The protasis has the present/preterit formation in the momentaneous aspect-formation followed by the linking-element kaneet; the apodosis has the future formation, e.g. mon-on kaneet | wan-an-iin, "if he comes, 1 shall go".2
5) Therejected condition.
a) The rejected condition ${ }^{23}$ is expressed by the use of the linking-element katen at the end of the two clauses; in present and future the momentaneous formation of the present/past tense occurs in protasis and apodosis, e.g. wan-an katen | mon-on katen, "if I should go, he would come". b) In the past the perfective aspect-formation is found in both clauses, e.g. wan-an-en katen | mon-on-en katen, "if I should have gone, he would have come".
6) The coordination of sentences.

The coordination is expressed by a conjugated base viz. ne of me occurring between the two processes which must be coordinated; the bases ne and me have distinct subject-indices and follow the first base immediately, e.g. wingga-n-i|noo ker-an, "I sing and I stop". 24

## Section 4. Kamoro.

1) Theopencondition.

The protasis has two mood-indices: the index aka preceding the base, and the index $a k(a)$ following the ligature after the base; the apodosis has the future formation, e.g. $a k a-k 0^{\circ}-k-$ aki- $n-i$, "if I shall beat thee ..." ${ }^{25}$
2) The rejected condition.

The protasis and the apodosis show the mood-index ako after the ligature which follows the base; as a secondary mood-index aka occurs in the protasis and apa in the apodosis, both preceding the respective base; the present tense occurs in both clauses for the present, the to-day preterit and the future; the remote preterit for the preterit. An example: $a k a-k a^{\circ}-k-a k o-m-a n i \mid a p a-k i n i-r-a k o-m o-r-e m$, "if I should beat thee, thou wouldst go to the inlands". ${ }^{26}$
3) A suppositional mode of speaking.

A principal clause opened by the mood-index aka, shows the base $i$, "to say" or "to think" in a present formation with the meaning of a past tense, viz. "I thought" etc.; the object-clause precedes the head clause, has the mood-index (irrealis) mapa-ue and occurs in a to-day preterit, a remote preterit and a future or dubitative according to the tense wanted, e.g. arru map-ame- $k-\mathbf{a}^{e_{-} u} e \mid a k a-1-m i-r-o m$, "that a boy stood there, we thought". ${ }^{27}$

## Section 5. Ekari.

The opencondition.
In the protasis of this construction the base is followed by the index pagho; the apodosis has the usual future formation, e.g. édi mè-pagho, "rain to rain mood-index", i.e. "if it rains". ${ }^{28}$

Summary.
a) Priority is expressed in Marind and Kati by an element of conjugation; the formations of these languages agree also in the use of a linkingelement at the end of the first clause. b) A suppositional mode of speaking is found in Marind and Kamoro but the formations differ completely. c) An open condition is expressed in Marind, Auju, Kati, Kamoro and Ekari; Marind and $A^{0} \mathrm{ju}$ agree in the use of the demonstrative pronoun at the end of the protasis; Marind and Kamoro have the mood indicated by mood-indices; Kati and perhaps Ekari by linking-elements; the apodosis is a future formation in all the languages just mentioned. d) The rejected condition is expressed in Marind, Auju, Kati and Kamoro; Marind and Kamoro agree in the use of mood-indices; Auju and Kati by the use of a linking-element at the end of the protasis. e) The final clause is extant in Auju and Kati but the formations do not resemble, f) The coordination of sentences is found in $\mathrm{A}^{u j u}$ and Kati; both languages have a conjugated form between the two sentences.
N.B. It is important to note here that analogous formations may occur in the languages not mentioned here; Drabbe did not investigate all the languages thoroughly.

NoTES.

1. Part I, ch. I, sect. 5, part I, n. 30.
2. Ibidem.
3. Part I, ch. I, sect. 5, part I, n. 31.
4. Part I, ch. XI, sect. 5, part I, n. 14.
5. Part I, ch. I, sect. 5, part I, n. 32.
6. Part I, ch. XI, sect. 5, part I, n. 15.
7. Part I, ch. I, sect. 5, part I, n. 33.
8. Part I, ch. XI, sect. 5, part I, n. 16.
9. Part I, ch. I, sect. 5, part I, n. 35.
10. Part I, ch. I, sect. 5, part l, n. 33.
11. Part I, ch. XII, sect. 5, part I, n. 8.
12. Part I, ch. I, sect. 5 , part I, n. 34.
13. Part I, ch. 1 , sect. 5 , part I, n. 36.
14. Part I, ch. XI, sect. 5 , part I, n. 9.
15. Part l, ch. XI, sect. 5, part I, n. 10.
16. Part I, ch. XI, sect. 5, part I, n. 11.
17. Bbidem.
18. Part I, ch. XI, sect. 5, part I, n. 12.
19. Part I, ch. XI, sect. 5, part I, n. 13.
20. Part I, ch. XII, sect. 5, part I, n. 9.
21. Part I, ch. XII, sect. 5, part I, n. 11.
22. Part I, ch. XII, sect. 5, part I, n. 12.
23. Part I, ch. XII, sect. 5, part I, n. 13.
24. Part I, ch. XII, sect. 5, part IV, n. 1.
25. Part I, ch. XIII, sect. 5, part I, n. 13.
26. Part I, ch. XIII, sect. 5, part I, n. 14.
27. Part I, ch. XIII, sect. 5 , part I, n. 16.
28. Part I, ch. XIV, sect. 5, n. 11.

## CHAPTER XII

## VERBS: SOME PECULIAR FORMATIONS

1) In these langages we come across the following formation: a verbal base has a subject which is always a 3 p.s. (formal subject) and a relation which expresses the logical subject. Drabbe gives examples which have the meaning of: "something affects somebody, takes hold of, assails somebody"; therefore he calls the construction "the eventive", but he suggests that some bases with other meanings occur in this formation as well.
a) Marind: $a$-huja-na-v, "it to tremble me", s-B-with infix of the rela-tion-index, i.e. "it does me tremble" or "I shiver"."
b) Maklév: onga beba-n-hi-p, B1-future tense-r-B2-s, "it makes me to be hungry", i.e. "I am hungry". ${ }^{2}$
c) Mombum: nè or jow-numur-i, R-B1-B2-t-s, "me to make hungry it", i.e. "l am hungry"."
d) Kanum: ntèntjar u-puno, B2-r-B1, "it does me tremble", or " $\ddagger$ shiver". ${ }^{4}$
e) Boazi: gé-na-ngqosagiap-ét, s-r-B-t, "it me to ache present", i.e. "I ache", or "I am in pain"."
f) Jaqa': anok naq oa-r-atopopén, R-B1-s-t-B2, "me thirsty it present to cause", i.e. "I am thirsty". ${ }^{\text {b }}$
g) Auju: nu ghaghaki, R-B-s, "me to cause an abcess non-first person", i.e. "I have an abcess". ${ }^{7}$
h) Kati: kokne-mb-on-en, B-r-s-a, "to dry up to her it perfective", i.e. "she recovered (from a wound)". ${ }^{8}$
i) Kamoro: namuti im-ma-n-e, B1-B2-t-r-s, "ill to cause preterit first or second person it", i.e. "it made me or thee ill", or "I was ill", "thou wert ill". ${ }^{\text {p }}$
2) There are formations in these languages in which a primary and secondary base are found. The peculiarity of it is the fact that it is impossible to translate each of the two bases separately; the two bases form together a set-phrase:
a) Marind: békai $k a-n o-n-\mathrm{a}, \mathrm{B} 1-\ldots . .-\mathrm{s}-\mathrm{r}-\mathrm{B} 2$, "I breathe". ${ }^{10}$
b) Makle": joha dusu, B1-B2, "to suffer by cold". ${ }^{11}$
c) Jélmèk: wiok ku, B1-B2, "to lie". ${ }^{12}$
d) Mombum: èsu $u, \mathrm{~B} 1-\mathrm{B} 2$, "to sneeze". ${ }^{13}$
e) Kanum: mpur wo, B1-B2, "I like something". ${ }^{14}$
f) Moråri: kowor ta, B1-B2, "to dream". ${ }^{15}$
g) Boazi: mangqat in, B1-B2, "to speak". ${ }^{16}$
h) Jaqa': batikini motoa, "to hiccup". ${ }^{17}$
i) A "ju: ife ru, B1-B2, "to weep". ${ }^{18}$
j) Kati: konom ta, B1-B2, "to cough". ${ }^{19}$
k) Kamoro: ko ae-r, B1-B2, "to die". ${ }^{20}$
3) Ekari: edi mé, B1-B2, "to rain". ${ }^{21}$
m) Moni: dodé héna, B1-B2, "to say". ${ }^{22}$

The Jei-language shows this set-phrase as the usual form of the verb. ${ }^{23}$

NOTES.

1. Part I, ch. I, sect. 5, part III, n. 1. 13. Part I, ch. IV, sect. 5, part III, n. 1.
2. Part I, ch. II, sect. 5, part III, n. 2. 14. Part I, ch. VI, sect. 5, part III, n. I.
3. Part I, ch. IV, sect. 5, part III, n. 2. 15. Part I, ch. VII, sect. 5, part II, n. 2.
4. Part I, ch. VI, sect. 5, part III, n. 2. 16. Part I, ch. IX, sect. 5, part III, n. 2.
5. Part I, ch. IX, sect. 5, part III, n. 3. 17. Part I, ch. X, sect. 5, part III, n. 3.
6. Part I, ch. X, sect. 5, part III, n. 4. 18. Part I, ch. XI, sect. 5, part IV, n. I.
7. Part I, ch. XI, sect. 5, part IV, n. 2. 19. Part I, ch. XII, sect. 5, part IV, n. 5.
8. Part I, ch. XII, sect. 5, part IV, n. 4. 20. Part I, ch. XIII, sect. 5, part IV, n. I.
9. Part I, ch. XIII, sect. 5, part IV, n. 2. 21. Part I, ch. XIV, sect. 5, n. 13.
10. Part I, ch. I, sect. 5, part III, n. 2. 22. Part I, ch. XV, sect. 5, n. 7.
11. Part I, ch. II, sect. 5, part III, n. 1. 23. Part I, ch. VIII, sect. 5.
12. Part I, ch. III, sect. 5, part III, it. I.

## LINKING-ELEMENTS

In the preceding chapters we came across linking-elements in various functions. It may be useful to bring together the data on this matter.

1) Marind.

The linking-elements occur: a) to express various relations between nouns, e.g. miz basik nanggo, "bow pigs for", i.e. "bow used in shooting pigs"; änim-ènd namakad, "men of things", i.e. "things of other people"; ${ }^{\text {i }}$ b) after the subject-forms of the personal pronoun to indicate a possessive relation, e.g. eoh-an "you of", i.e. "of you"; ${ }^{2}$ c) in compound sentences in which the protasis expresses a process which precedes the process of the apodosis, between the two clauses, e.g. ndam-k-kakipārud | jah |ma-no-man, "thou wilt bind first, then I shall come". ${ }^{3}$
2) Makléu.

The linking element is found: a) to express various relations between nouns, e.g. jok bala, "house from", i.e. "from the house"; ébi bang uho, "house of door", i.e. "the door of the house"; ${ }^{4} \mathrm{~b}$ ) after the subject-form of the personal pronoun to indicate the object-function, e.g. ngol-él, "me"; ${ }^{5}$ c) after the subject-form of the personal pronoun to indicate a possessive relation, e.g. ngöl-ang, "I of", i.e. "of me". ${ }^{6}$
3) Jélmèk.

The linking-element is extant: a) to express various relations between nouns, e.g. ébi lén, "house in behalf of", i.e. "in behalf of the house"; ida $a^{u k} k$ tokwaköt, "father of knife", i.e. "the knife of the father"; ${ }^{7}$ b) after the subject-form of the personal pronoun to indicate the object-function, e.g. ngol-èl, "me"; ${ }^{\text {s }}$ c) after the subject-form of the personal pronoun to indicate the possessive retation, e.g. $\bar{e} 1-a^{u} k$, "you of", "of you". ${ }^{9}$
4) Mombum.

The linkingelement is found: a) after nouns expressing various rela tions, e.g. par $i$, "garden in", i.e. "in the garden"; the possessive relation is not expressed by a linking-element after the noun; ${ }^{10} \mathrm{~b}$ ) after the subject-form of the personal pronoun to indicate the possessive relation, e.g. num-a, "we of", i.e. "of us"; ${ }^{11}$ c) after the possessive form to indicate other relations, e.g. ju, "thou"; iwè, "thou of" (of thee); iwè-t, "thee". ${ }^{12}$
5) Kimaghama.

The linking-element occurs: a) after a noun to indicate various relations, e.g. pitjè $j e$, "knife with", i.e. "with a knife"; the possessive relation is not expressed in this way; ${ }^{13} \mathrm{~b}$ ) after the subject-form of the personal
pronoun to indicate the object-function, e.g. ni-è, "me"; the possessive function is not indicated by a linking-element following the subjectform. ${ }^{24}$
6) Kanum.

The linking-element may be used: a) after nouns to express various relations, e.g. al ène moa, "father of house", i.e. "the house of the father"; ${ }^{15}$
b) after the subject-form of the personal pronoun to indicate the subject with verbs of transitive use and of reflexive use, e.g. ni-nta, "we"; ${ }^{18}$
c) after the subject-form of the personal pronoun to indicate the indirect object, e.g. mpo-nè, "thou to", i.e. "to thee"; ${ }^{17}$ d) after the subject of the sentence to indicate this subject-function; the element is the vowel $a .^{18}$

## 7) Moraori.

The linking-etement occurs: a) after nouns to express various relations, e.g. sour kènggè, "house from", i.e. "from the house"; pari nam sour, "father of house", i.e. "the house of the father"; ${ }^{19}$ b) after the subjectform of the personal pronoun to indicate the object-function, e.g. na-i, "me"; ${ }^{20}$ c) after the subject-form of the personal pronoun to indicate the possessive relation, e.g. nggafi-nam, "he of", i.e. "of him". ${ }^{21}$
8) $\mathrm{Je} i$.

The linking-element is extant: a) after nouns to express various relations, e.g. ak bé, "house from", i.e. "away from the house"; Kiti éni ak, "Kiti of house", i.e. "the house of Kiti"; ${ }^{22}$ b) after the subject-form of the personal pronoun to indicate the object-function, e.g. $n^{1-} a$, "me"; ${ }^{23}$ c) after the subject-form of the personal pronoun to express the possessive relation, e.g. $b \mathbf{i}-n i$, "we of", i.e. "of us". ${ }^{24}$
9) $B^{\circ} \alpha z i$.

The linking-element is used: a) after nouns to express the possessive relation; the element is $g \not \ddagger$ that changes according to number, sex and gender; ${ }^{25}$ b) after the personal pronoun to express the possessive relation; the element is $g \neq .{ }^{26}$
10) Jaqa ${ }^{\text {d }}$

The linking element is found: a) after nouns to express various relations, e.g. the element ape indicates place; dé in moki, "tree of fruit", i.e. "the fruit of the tree"; ${ }^{27}$ b) after the personal pronoun to indicate a possessive relation, e.g. aréf-in, "he of", i.e. "of him". ${ }^{28}$
11) A"ju.

The linking-element is found: a) after nouns to indicate various relations, e.g. ghấ ma, "home at", i.e. "at home"; $u \mathbf{i} n a$ wobu, "pig of tail", i.e. "the tail of the pig"; ${ }^{29} \mathrm{~b}$ ) after the subject-form of the personal pronoun to indicate the object-function, e.g. jogho-na, "them", ${ }^{30}$ c) after the object-form to express the possessive relation, e.g. na-na, "me of", i.e. "of me"; ${ }^{3 x}$ d) after the subject of the sentence to indicate this function; the subject-indicators are: $k i, t a$, te ; sometimes the object as well may be indicated by the same forms. ${ }^{32}$
12) Kati.

The linking element occurs: a) after nouns to express various relations, e.g. the element jaa following the noun indicates place; the possessive relation is not expressed in this way; ${ }^{33}$ b) after the subject, object, or the nominal element of the predicate to indicate these functions; ${ }^{34}$ c) at the end of a protasis in an open condition and at the end of the protasis and the apodosis in the rejected condition. ${ }^{35}$
13) Kamoro.

The finking-element occurs: a) after a noun to indicate various relations, e.g. the element t'a "of", e.g. kamé nati-t'a, "house headman of", i.e. "the house of the headman"; ${ }^{36}$ b) after the personal pronoun to indicate the possessive relation, the indirect and direct object, e.g. oro, "thou"; ora-t'a, "thou of", i.e. "of thee"; o-ma, "to thee"; o-a, "thee";"; c) after the personal pronoun to indicate its subject-function, e.g. $n u r \mathbf{u}\left(\right.$ "e), " 1 "; ${ }^{38}$ d) after a verbal base to express a purpose, e.g. akér a-ke-r-amaria, "to speak in order to", i.e. "in order to speak". ${ }^{39}$
14) Ekari.

In the notes of Drabbe we do not find any linking-element.
15) Moni.

Linking-elements may occur: a) after the personal pronoun to indicate the possessive relation, e.g. $a^{\circ}$, "I of", i.e. "of me"; ${ }^{40} \mathrm{~b}$ ) after the personal pronoun to emphasize the subject- or object-function, e.g. a-go, "I" (subject); $a-t d i$, "I" (object); ${ }^{41}$ c) after a verbal base to indicate a purpose, e.g. ba ti-gi, "to ease nature in order to", i.e. "in order to ease nature". ${ }^{2}$

## Summary.

a) Linking-elements occur in all tanguages; with regard to the Ekari language the data fail; Drabbe is however sure that they will be found by further inquiry on the spot. b) Linking-elements occur after nouns to express various relations in most languages; with regard to the $\mathrm{B}^{\circ}$ azi and Moni languages data fail. c) The linking-elements are found after nouns to indicate the possessive relation in all languages, except in Mombum, Kimaghama, Kati and Moni. d) Linking-elements are extant after the personal pronoun to indicate the possessive relation in all languages, except Kimaghama and Moni. e) Linking-elements are used after the personal pronouns to indicate the subject- or object-function in all languages, except Marind, Boazi, Jaqa', Kati. f) Linking-elements occur at the end of clauses and in final constructions in Marind, Kati, Kamoro and Moni.

## NOTES.

| 1. Part I, ch. I, sect. 2, n. 3. | 5. Part I, ch. II, sect. 3. |
| :--- | :--- |
| 2. Part I. ch. I, sect. 3. | 6. Ibidem. |
| 3. Part I, ch. I, sect. 5, part I, n. 30. | 7. Part I, ch. III, sect. 2 b). |
| 4. Part I, ch. II, sect. 2 b). | 8. Part I, ch. III, sect. 3. |

9. Ibidem.
10. Part 1, ch. IV, sect. 2 d).
11. Part I, ch. IV, sect. 3.
12. Ibidem.
13. Part I, ch. V, sect. 2, d).
14. Part I, ch. V, sect. 3.
15. Part I, ch. VI, sect. 2, b).
16. Part I, ch. VI, sect. 3 .
17. Ibidem.
18. Part I, ch. V1, sect. 5, part III, n. 2.
19. Part I, ch. VII, sect. 2, b).
20. Part I, ch. VII, sect. 3.
21. Ibidem,
22. Part I, ch. VIII, sect. 2, b).
23. Part I, ch. VIIt, sect. 3.
24. Ibidem.
25. Part I, ch. IX, sect. 2, n. 2, b).
26. Part I, ch. IX, sect. 3.
27. Part I, ch. X, sect. 2, n. 3, b).
28. Part 1, ch. X, sect. 3.
29. Part I, ch. Xl, sect. 2, n. 2, c).
30. Part I, ch. XI, sect. 3.
31. Ibidem.
32. lbidem.
33. Part I, ch. XII, sect. 2, n. 4, e).
34. Part I, ch. XH, sect. 6.
35. Ibidem.
36. Part I, ch. XIII, sect. 2, d).
37. Part I, ch. XIII, sect. 3.
38. Ibidem.
39. Part l, ch. XIII, sect. 6.
40. Part I, ch. XV, sect. 3.
41. Ibidem.
42. Part I, ch. XV, sect. 5, n. 9.

## CHAPTER XIV

## CONCLUSIONS

## THE LANGUAGE-PATTERN OF SOUTH-WESTERN NEW GUINEA

Our comparison of the various ways in which the different grammatical categories are realized in the languages of this region is finished now. The results have been collected in the summaries at the end of each section. Before entering on the study of these summaries, we think it necessary to make the following observations.
a) The summaries show which languages agree as to a certain subject of investigation, but they seldom point out the items in which the languages differ. The disagreement, however, is very strong. We shall indicate the most typical differences between apparently related languages further on, but here already we want to state emphatically that these fifteen languages differ in such a degree that a superficial examination would suggest that these languages are absolutely irreducible to one or more "prototypes". The striking disagreement between these languages may easily be shown by a comparison of their vocabularies : names of the most obvious things do not resemble, with the exception of some names in those languages in which the grammatical formations agree to a certain extent. Here follows a short paradigm of thirteen words, some of which would be expected to be formally identical or similar, if these languages were related as e.g. the Indonesian or IndoEuropean languages are.

|  | Marind | Maklé | Jélmèk | Mombum | Kimaghama | Kanum | Moraori |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. blood |  |  |  |  |  |  |  |
|  | kāmbét | op | $o$ |  | I | ntarngkan | mèrègh |
|  | kir | opo |  | musighnam | a |  | ajigh |
| 4. head | pà | ala | be | wondrum | tuakw | mèl | mèra ${ }^{\circ}$ |
| 5. moon | mandaw | mandow | wangja | $i r i$ | kumbar | pwă | ar |
| 6. nigh | hap |  |  | ku | koo |  | péèngk |
| 7. | an | helm | bumè | menog | gond | m | kon |
| 8. | izäkod | mépola | ngklala |  | növèr | àmp | ċkod |
| 9. | bāsik | om | lom |  |  | , | bosik |
| 10. tongue | unor |  | napl | dupè | ak | imè | rèng |
| 11. tooth | ma | kò |  |  | av |  | rogh |
| 12. | inah |  |  | kum | kave | 倍 | jènadu |
| 13. sun | ka |  | além | zu | örè | kong | kum |
|  | Marind | Maklé | Jélmèk | Mombum | Kimaghama | Kanum | Mora |

A comparison of the vocabularies (as may be evident from the examination of the preceding paradigm) and more specially a statement of phonetic rules, has turned out to be an impossibility for the present. If we have tried, nevertheless, to compare these languages with regard to their grammatical formations, we are conscious - it may be repeated here - of the enormous number of discrepancies between them.
b) A second warning must precede the study of the summaries. In the table subjoined to this chapter the symbols $=X$ and $O$ indicate the occurrence of some feature in two or more languages; the absence, however, of any mark does not mean that there is a disagreement between those languages; the absence of a mark may indicate that up till now data fail or are not sufficient to draw a conclusion of any value. It is highly probable that further inquiries will bring out agreements and disagreements in many cases which we passed over in silence.

In discussing the summaries, we will start by indicating the characteristics all the languages have in common; then we will put together different features occurring either in the discussion of the nouns, or the pronouns, or the numerals, or in the different grammatical formations of the verb, with a view to arrange the data of the summaries in a new order, which will enable us to distinguish groups of languages and related languages within these groups.

## Section 1. Features characteristic for all the languages.

In these fifteen languages we came across:

1) the following lexical categories: nouns, pronouns, numerals, verbs, and linking-elements; ${ }^{1}$

| Jéi | Boazi | Jaqa ${ }^{\text {i }}$ | Auju | Kati | Kamoro | Ekari | Moni |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| gul | kouk | kab | $g o ̂$ | momkon | été | èmo | éga |
| dèrko | gia | mono | suru | kenekot | iini | ghapa | zawa |
| tjur | bej | kind | kirimogo | tinop | mamé | pèka | senggamu |
| kilpèl | kawa | $m \mathbf{u k u}$ | gha'bâ | kotorok | upa ${ }^{\circ}$ | migho | munggagi |
| tākot | dovéak | kāmo | bidî | woot | pura | agho | tinawi |
| nénggu | dovè | rira | asu | am-kiti | iri | wané | timunggaga |
| tanggé | dozi | tamangk | sinto | kining-kono | mirimu | juma | amu |
| nāmpè $i$ | kwopu | diaqand | sikirè | mim | éna $k^{\circ} a$ | èna | hàgo |
| bètjék | basik | batik | $u \mathrm{i}$ | awor | oo | èkina | wogo |
| amèr | nasam | iném | fagè | ong | maré | èta | dabé |
| tèr | sé | amingèr | maga | ninggambo | titi | ègo | baga |
| jètapae ${ }^{\text {e }}$ | ménas | kaiaqamaére | kurumâ | ajoop | jamané | wia | hiza |
| mir | qaw-wé | tapaq | sawè | aton | $j a^{\text {u }}$ | tani | $t a^{i}$ |
| Jéi | Boazi | Jaqa ${ }^{i}$ | Auju | Kati | Kamoro | Ekari | Moni |

2) the following grammatical items:
a) a special type of compound in nouns in which the first constituent is a qualification of the second, e.g. Marind: $d e g$ - $\overline{\text { n }}$ ém, "bush-native"; ${ }^{2}$ (table n. 1.)
b) the occurrence of a linking-element following the noun to express a relation of the noun to other parts of the sentence, e.g. Makléu: jok bala, "house from", i.e. "from the house" (table n. 2); ${ }^{3}$ in Ekari the data fail; Drabbe is, however, sure that this feature will easily be found;
c) a first person of the personal pronoun characterized by the consonant $n$; in this point the Moni language disagrees (table n. 3); ${ }^{4}$
d) a form of the personal pronoun denoting possession contracted or composed of the subject-form of the personal pronoun and a linkingelement, e.g. Kamoro noanta, "me of", i.e. "of me"; it is important to note, however, that the linking-elements used in this function generally do not resemble formally and in case they do, the forms to which they are added, are not identical (table n. 4); ${ }^{5}$ (the Kimaghama- and Katilanguages have not got this possessive form);
e) the realization of the grammatical categories of tense, aspect, mood, subject and object by elements of conjugation (table n. 5) e.g. Kamoro: $a m a-k e ̀ m e-k-a^{t}-r-\mathrm{i} m i-n-i$, a2-B-lig. l-a1-lig. 2-t-s with r-infix, "I shali be used to give thee"; ${ }^{\prime \prime}$ the analysis of the group of indices surrounding a primary or secondary base was indeed our principal task in each of these languages; the Kimaghama language does not agree in this point; ${ }^{7}$
3) the following syntactic constructions:
a) the sequence of the parts of the sentence S-R-B (table n. 6);
b) the so-called "eventive", e.g. Marind: $a$-huja-na- $v$, "it does me tremble" (table n. 7); (Drabbe does not mention this construction with regard to Jélmèk, Kimaghama, Jéi, Ekari and Moni);
c) the set-phrase, e.g. Morari: kowor ta, "to dream" (table n. 8). ${ }^{10}$ With regard to Kimaghama we do not find examples in the notes of Drabbe.

## Section 2. Features characteristic for special groups occurring in nouns, pronouns and numerals.

I 1) A feature which most languages have in common is the place of the numerals. In all the languages, with the exception of Kanum and Jei, the numerals follow what is counted (table n. 9). ${ }^{11}$
2) The examination of the different ways in whicl the possessive relation is expressed in nouns shows that a linking-element occurs in Marind, Makléu, Jélmèk, Kanum, Moraori, Jéi, Boazi, Jaqa', Auju, Kamoro; ${ }^{12}$ the linking-element of Maklé ${ }^{u}$ and Jélmèk is the same as to form; ${ }^{13}$ the element used in Kanum, Moraori, Jéi, Jaqja' and Auju shows a common sound viz. the consonant $n$ (table n. 10). ${ }^{14}$
3) The pronominal form of the first person contains in all languages, except Moni, the consonant $n$; the second person shows, moreover, a guttural sound in Kimaghama, Moraori, Boazi, Jaqa', Auju, Kamoro, Ekari and Moni, and in Marind a $h$ is found (table $n .11$ ). ${ }^{15}$
4) A comparison of the numerals shows that the following languages possess only two genuine numerals: Marind, Makléu, Jéi, Jaqa', Auju, Kati, Kamoro (table n. 12). ${ }^{16}$
11. So far we indicated groups of languages according to some criterion or other. In the following numbers we shail collect smaller groups of languages which are related in more than one point.

1) The group: Marind, Boazi, Jaga', A"ju and Kati, makes a distinction between two groups of nouns viz. men and animals on the one hand and trees, plant and lifeless things on the other. The distinction is based on features indicating sex, gender and number. ${ }^{17}$ Moreover, the vowelshift, $e / u / i$ occurs in this group, with the exception of $\mathrm{A}^{\mathrm{j} j u}$, to indicate sex and number in nouns and in 3 p. of the pronouns. ${ }^{18}$ Besides in this group only one form of the pronoun is found in the function of the subject and in the function of the object in the sentence ${ }^{1 \theta}$ (except in Auju where two forms are extant); finally the members of this group and also the jéi- and Kamoro-languages have a pronominal prefix in the names of relatives to indicate the possessor (Kati lacks data on this point) (table n. 13-16). ${ }^{20}$
2) Within the group of languages just mentioned, a subgroup Auju-Kati, can be set apart, because they agree in two types of possessor-indication viz. father-his-house, ${ }^{2 \pi}$ and father-house; ${ }^{22}$ secondly, because the plural in these two languages may be expressed by adding a personal pronoun $3 \mathrm{p} . \mathrm{pl}$. to the noun, ${ }^{23}$ while at the same time this personal pronoun has the function of the definite article in English; ${ }^{24}$ finally because in these two languages the plural may occasionally be formed by the repetition of the noun (table $n, 18-22$ ). ${ }^{25}$
3) A small group of two languages is formed by Makléu and Jélmèk; they show a resemblance in form in the linking-element occurring after nouns to indicate a possessive relation, ${ }^{26}$ in the linking-element occurring after the subject-form of the personal pronoun and indicating the objectfunction of the form, ${ }^{27}$ and in the numerals expressing the number "two" (table n. 10; 17; 23). ${ }^{28}$
4) Kanum and Jéi put the numerals before the nouns; ${ }^{28}$ show a formal resemblance of linking-elements after nouns indicating the possessive relation ${ }^{30}$ and of numerals expressing the numbers "one" and "two" (table n. 10; 24). ${ }^{31}$
5) The Mombum- and Kimaghama-languages have an object-form in the personal pronoun composed of the subject-form and a linking-element, ${ }^{32}$ and possess the two types of possessor-indication, already mentioned with regard to the $\mathrm{A}^{0} \mathrm{ju}$-Kati-group (table n. 17-19). ${ }^{33}$
6) It must be noticed that the Ekari and Moni languages have resembling numerals for the numbers three, four and five and both of them possess a decimal and a score system for numerals (table n. $25 ; 26 ; 27$ ). Jélmèk, Mombum and Moni have a quinary system for numerals and Kimaghama, Kanum, Kati and Ekari agree in a senary system (table ก. 28; 29). ${ }^{34}$

Section 3. Features characteristic for special groups occurring in verbs.

1) The distinction between nominal and verbal predicates is extant in all languages except Kimaghama (where it does not occur), Boazi and Ekari, (of which the data fail) (table n. 30-31). ${ }^{35}$
2) A smaller group of languages viz. Auju, Kati, Kamoro is characterized by the occurrence of complex-predicates though slight, differences between these languages are found as well (table 32-34). ${ }^{36}$
3) It is noteworthy that the Kimaghama language shows neither a conjugation of base, nor the distinction between primary and secondary bases (table 5; 30). ${ }^{37}$
4) In all languages, except Kimaghama, the tenses are expressed by an element of conjugation (table n. 35). ${ }^{38}$
5) There is an agreement in the formation of the future tense ( $t-B$ ) in Marind, Makléu, Kanum, Jéi, Boazi, Jaqa, this may point to some relation (table n. 36). ${ }^{39}$
6) Marind, Makléu, Auju, Kamoro and Ekari show each of them two preterit formations to indicate a near and a remote past; ${ }^{40}$ in Marind and Makléu a secondary tense-index is added to the near preterit formation, both indices preceding the base; ${ }^{41}$ the formations of Auju, Kamoro and Ekari do not agree with those of Marind and Makléu, nor do they resemble each other (table n. 37).
7) Marind, Makléu and Jaqa' agree, moreover, in a present tense-formation t-B (table n. 38). ${ }^{\mathbf{4 2}}$
8) The group Makléu, Jelmèk, Kanum, Moraori and Jéi has the following features in common: a nominal primary base in combination with one distinct secondary base for the present and one for the future; ${ }^{43}$ moreover they agree, with the exception of Jéi, in a future formation B-t/s (table ก. 39-41). ${ }^{44}$
9) Kanum and Moraori have the same type of tense-formation in the present, in the three preterit formations and in the future viz. B-t/s (table n. 41-43)..$^{45}$
10) Only one preterit formation occurs in Jélmèk, Kimaghama, Boazi, Jaqa and Moni; ${ }^{46}$ in Marind and Boazi the present and preterit formations B-t have formally identical tense-indices (table n. 44-46). ${ }^{\text {47 }}$
11) A future tense-formation B-t occurs in Mombum, Kati, Kamoro, Ekari and Moni; ${ }^{48}$ Kati and Kamoro agree, moreover, in combining a nominal
primary base with a secondary base in the present and the future, which B2 is used as a separate word as well (table n. 47-49). ${ }^{48}$
12) Mombum agrees in its present and future formations (B-t) with the Kamoro and Ekari languages; ${ }^{50}$ the preterit formations, however, of these languages do not agree (table n. 45-47).
13) So far as the investigations of Drabbe go, aspect is indicated by elements of conjugation except Kimaghama (table n. 50). ${ }^{51}$
14) As data fail in many languages with regard to some aspect, it is not possible to group the languages according to the occurrence of a particular aspect; the combination, however, of some features gives the following divisions. a) Marind, Maklév, Avju and Kati show the use of a distinct secondary base in the indication of the habitual as well as of the durative aspect (table n. 53; 56). ${ }^{52}$ b) Both Marind and Boazi indicate the durative and the perfective aspects by means of aspectindices; the durative indices, however, are quite different; the perfective indices may show some resemblance (table n. 55; 59). ${ }^{53}$ c) Kimaghama has the three aspects but the indices occur as separate words and not as parts of a conjugation (table n. $51 ; 54 ; 58$ ). ${ }^{54}$
15) On the negation of a sentence two groups may be based: a) one negation for the different tenses: Makléu, Kimaghama, Kanum, Jéi, A ${ }^{\text {uju }}$, Kati, Ekari and Moni (table n. 60); ${ }^{55}$ b) one negation for present and preterit formations and another for future formations: Mombum, Moraori, Boazi, Jaqa', Kamoro; the group agrees, moreover, in having the negation expressed by an element of conjugation (except in Moraori) (table ก. 61-62). ${ }^{\text {5 } 6}$
16) Marind, Moraori, Jaqa', Auju and Kamoro show the distinction between yes-or-no questions and the specific interrogations in the interrogative formations (table n. 69). ${ }^{57}$ Marind and Mora‘ri have, moreover, an interrogative word (following the formation) which is, according to us, the same (table n. 70). ${ }^{58}$
17) The imperative and prohibitive formations suggest the following division of languages. a) Marind, Makléu and Jélmèk, Boazi and Jaqa' have the imperative formation: m-B (table n. 64). ${ }^{59}$ b) In Marind, Makléu, Jelmèk the negation of the indicative and prohibitive is indicated by a negative word preceding the predicate (table $1.65-66$ ). ${ }^{60}$ c) In Kanum, Morarr and Jei the negation of the indicative and the prohibitive is indicated in the same way as in the preceding group (Marind, Maklé", Jelmèk), moreover, the imperative formation is analogous to the future formation (table n. 65-67). ${ }^{61}$ d) In $\mathrm{A}^{u}{ }^{\mathrm{j}} \mathrm{u}$ and Kati the imperative formation is: $\mathrm{B}-\mathrm{m} / \mathrm{s}$ and in both languages the prohibitive is analogous to the negative future formation (table n. 63; 68). ${ }^{.2}$ e) Both Mombum and Kamoro have, besides the features mentioned in number 15 under b) the imperative form B $-\mathrm{m} / \mathrm{s}$ (table n. 61-63). ${ }^{\text {cis }}$
18) The subject-indices suggest a division of the languages in two groups:
a) the subject-indices foliow the base: Maklén, Jélmèk, Mombum, Kanum, Morári, Jéi, Auju, Kati, Kamoro, Ekari and Moni (table n. 72); ${ }^{64}$ b) the subject-indices precede the base: Marind, Boazi, Jaqa. (table n. 74). ${ }^{\text {b5 }}$
19) The relation-indices indicate the following group: Marind, Kanum, Jei, Boazi and Jaqai; these languages have relation-indices for the three persons in the singular and relation-indices for a first and a non-first person in the plural; ${ }^{66}$ moreover, the distinction between the singular and the plural is indicated by distinct indices (table n. 81-83). ${ }^{67}$
20) Two groups may be distinguished by combining the features occurring in the subject- and relation-indices: a) the subgroup Kanum-Jei: these languages lack the distinction of persons in the subject-indices, have a special formation for transitive and intransitive use, while the relationindices have influence in the choice of the subject-indices and they have also different relation-indices in the different tenses (table n. 84-86); ; ${ }^{68}$ b) the subgroup Marind, Boazi, Jaqa', which languages agree in the following features: the subject-indices precede the base; the number of the subject is indicated by distinct indices; sex is indicated in 3 p.s. (except Marind) $;^{69}$ resemblance in form of pronoun, subject- and object-indices, the vowel-shift $\delta / u / i .^{70}$ Moreover, Marind and Boazi agree in having the relation-indices in three forms and Marind and Jaqa in having the number of the subject and of the object also indicated by a change of the base (table n. 73-80). ${ }^{71}$
21) Sex is indicated in the relation-indices of Makléu, Morari, Jéi and Kati but there are also differences; ${ }^{72}$ pronouns and relation-indices of the same language sometimes resemble in Makléu and Ekari; ${ }^{\text {³ }}$ relation-indices follow the base in Kati and Kamoro; ${ }^{74}$ all numbers occur in the subjectindices of Maktéu and Kamoro and in some cases in Kanum, Moraori and Jéi; ${ }^{75}$ relation-indices do not occur in Jélmèk, Mombum, Kimaghama, Auju and Moni (table n. 87-90; 92). ${ }^{78}$
22) The examination of the compound sentence does not allow as to give a grouping of languages; it may be noteworthy that $A^{u j u}$ and Kati show some agreements in sentencestructure. The coordination of sentences by means of a conjugated form occurs again in $A^{u j u}$ and Kati, but the two conjugated forms are not of the same formation (table n. 103). 7

## NOTES

1. The division of the chapters in Part II is based on the occurrence of these categories.
2. Part II, ch. I, sect. 4, n. 2.
3. Part II, ch. I, sect. 4, n. 5, a).
4. Part II, ch. II, sect. I, summary; a).
5. Part 11, ch. H, sect. 1, summary: d).
6. Part II, ch. V, summary: n. 1); the example is from Part 1, ch. XIH, sect. 5, part I, n. 5.
7. Part I, ch. V, sect. 5 , introduction.
8. Part II, ch. IV, sect. 1.
9. Part II, ch. XII, n. 1.
10. Part Il, ch. Xll, n. 2.
11. Part II, ch. IH, sect. 3.
12. Part Il, ch. I, sect. 4, n. 5, a) and b).
13. Part II, ch. 1, sect. 4, n. 5, b).
14. Ibidem.
15. Part II, ch. II, sect. I, summary: a).
16. Part II, ch. III, sect. 1, summary: a).
17. Part II, ch. I, sect. 3, a).
18. Part II, ch. I, sect. 2, summary.
19. Part II, ch. II, sect. 1, summary: b).
20. Part II, ch. II, sect. 1, summary: e).
21. Part II, ch. I, sect. $4, \mathrm{n} .4, \mathrm{c}$ ) and d).
22. Part H, ch. l, sect. 4, n. 3, d) and e).
23. Part II, ch. I, sect. 1, summary: c).
24. lbidem.
25. Part II, ch. I, sect. 1, summary: b).
26. Part II, ch. I, sect. 4, n. 5, b).
27. Part II, ch. II, sect. I, summary: b).
28. Part II, ch. Ill, sect. 2, a).
29. Part II, ch. III, sect 3 .
30. Part II, ch. I, sect. 4, n. 5, b).
31. Part II, ch. III, sect. 2, b) and c).
32. Part II, ch. II, sect. I, summary: b).
33. Part II, ch. I, sect. 4, n. 3 and 4.
34. Part II, ch. III, sect. 1, summary, and sect. 2.
35. Part H, ch. IV, sect. 2, summary: b) and c).
36. Part II, ch. IV, sect. 2, summary: f) and $g$ ).
37. Part II, ch. IV, sect. 2, summary: a).
38. Part II, ch. V, summary: 1).
39. Part II, ch. V, summary: 3 C, I b). and $g$ ).
40. Part II, ch. V, sutmmary: $3 \mathrm{~B}, 3$.
41. Part II, ch. V, summary: 3 B, b).
42. Part II, ch. V, summary: $3 \mathrm{~A}, \mathrm{I}$ c).
43. Part II, ch. V, summary: 3 A, II b) and C, H c).
44. Part II, ch. V, summary: 3 C, I a).
45. Part II, ch. V, summary: 3 A, I b); B, c) ; C, 1 a).
46. Part ll, ch. V, summary: $3 \mathrm{~B}, 2$ ).
47. Part II, ch. V, summary: $3 \mathrm{~A}, 1 \mathrm{c}$ ) and $B, a)$.
48. Part II, ch. V, summary: 3 C, I b).
49. Part II, ch. V, summary: $3 \mathrm{~A}, \mathrm{ll}$ c) and $C$, Il c).
50. Part II, ch, V, summary: $3 \mathrm{~A}, \mathrm{I}$ c) and C , I b).
51. Part II, ch. VI, sect. I, summary: b) ; sect. 2, summary: b); sect. 3, summary: b).
52. Part II, ch. VI, sect. 1, summary: c); sect. 2, summary: c).
53. Part II, ch. VI, sect. I, summ. : c) and sect. 3, summ.: c).
54. Part II, ch. VI, sect. 1, 2 and 3 in the summaries: b).
55. Part 11, ch. VIl, summary: 2, a).
56. Part II, ch. VII, summary: 2, b).
57. Part II, ch. VIII, summary: a).
58. Part II, ch. VIII, summary: b).
59. Part II, ch. IX, summary: A, b).
60. Part II, ch. VII, summ.: n. 1 and ch. IX, summ.: A, b).
61. Part II, ch. VII, summ.: n. 1 and ch. IX, summ.: A, c).
62. Part II, ch. IX, summary: A, a) and B, b).
63. Part II, ch. IX, summary: A, a).
64. Part II, ch. X, sect. I, summary: 3).
65. Ibidem.
66. Part II, ch. X, sect. 2, summary: 2) and 3).
67. Part II, ch. X, sect. 2, summary: 5).
68. Part II, ch. X, sect. 1 , summary: 7, a) and sect. 2 , summary: 7, a).
69. Part II, ch. X, sect. 1, summary: 7, b) and c).
70. Part II, ch. X, sect. 3, summary: a).
71. Part I1, ch. $X$, sect. 2, summary: 4 and 7, b).
72. Part II, ch. X, sect. 2, summary: 6).
73. Part II, ch. X, sect. 3, summary: b).
74. Part II, ch. X, sect. 2, summary: 3).
75. Part II, ch. X, sect. 1, summary: 5).
76. Part II, ch. X, sect. 2, summary: 1).
77. Part II, ch. XI, summary.

## CHAPTER XV

## CONCLUSIONS

(continued)
The discussion of the characteristics, indicated in the preceding chapter, will be continued here in order to obtain a division based on the features occurring in nouns, pronouns, numerals and verbs of these languages.

## Section 1. Features characteristic for all the languages.

1) The most important feature, common to all languages, except Kimaghama, is the conjugation of the base in the predicate. We shall have to distinguish between differences in the conjugation, which occur in different languages, but the fact that in the predicate time and subject are always, relation, aspect and mood are mostly expressed by means of indices, which are attached to the base, is the most distinct characteristic of these languages. In all languages, moreover, except in Kimaghama, there is a distinction between nominal and verbal predicates. Boazi and Ekari are supposed to agree with the other languages in this respect, because they have the lexical category of nouns and the category of verbs. In Kimaghama, however, the verb is not characterized by elements of conjugation. It is possible, that the predicate is always a nominal form; in this case the distinction between nouns and verbs, just mentioned, could not be made (table n. 5; 30-31).
2) The fixed place of the linking-elements in these languages seems to be a distinct feature: they always follow the noun or the pronoun which they link up with the other parts of the sentence and, in a compound sentence, they occur at the end of the clauses (table n. 2). The value of the linking-element as a criterion increases by the fact, that in all languages (except Kimaghama and Kati) the linking-element is found after the subject-form of the personal pronoun to indicate the possessive relation of the pronoun (table n. 4). In the same function the linking-element may follow the noun, in all languages, except Mombum, Kimaghama Kati and Moni (in which two other possessive formations are extant). About Ekari the data fail (table n. 10).
3) The occurrence of the consonant $n$ in the first person of the personal pronoun is a feature common to all languages, except Moni. The idea of a relation between these languages is reinforced by the observation that the second person of the personal pronoun has a guttural sound in a number of languages, which as a group are not characterized by other
common features. These languages are: Kimaghama, Moraori, Boazi, Jaqa', Auju, Kamoro, Ekari and Moni, while Marind shows a h. Formal agreement in the three persons of the personal pronoun is only stated for the Marind and Jaqa' and also for the Makléu and Jémèk languages (table n. 3; 11).
4) The type of compound in nouns "deg-ănem" is common to all our languages. It is possible, however, that in one or more languages the type is a loan from an adjacent language (table n. 1).
5) The sequence of the parts of the sentence: S-R-B is typical for these languages, but the value of this criterion is diminished by the fact that, according to Drabbe, in some languages this order may be changed. In the Marind, Boazi, Jaqa languages the subject, relation-indices and the base show the same sequence s-r-B; this matter wants further research (table n. 6).
6) The "eventive" is a remarkable construction in the languages of this region. The construction is, however, found in bases, which express more or less the same idea in all languages viz. "to afflict somebody by"; therefore we may not exclude the possibslity of borrowing between some languages (table n. 7).
7) The set phrase is a feature common to most languages in this area. - Drabbe noted that in the various languages special ideas were always expressed by the combination of two bases. But as the strength of the criterion is based on the absence of a definite meaning of each of the two bases, we are of opinion, that the study of the vocabularies of these languages did not reach such a point that safe conclusions may be drawn (table it. 8).
8) The agreement of all languages, except Kanum and Jéi, in the place of the numerals (they follow the noun) is a distinct feature (table n. 9); the formal resemblance in the numerals "one" and "two" in the Kanumand Jei-languages strengthens the exceptional position of the two languages and the exception proves the rule (table n. 24).
9) The occurrence of only iwo genuine numerals appears to be not a linguistic but a cultural criterion. The fact that only two numerals are found in some languages now-adays only suggests that these languages are not evolved on this point. The languages which have more than two numerals now, may have had new ones added to the primitive two. The way of counting by "two" (e.g. three is two plus one) is, however, a noteworthy feature. It seems inadmissible to conbine the languages with only two numerals to a distinct group (table n. 12).

## Section 2. Features characteristic for special groups.

1) In the Maklé", Jélmèk, Mombum, Kanum, Moraori, Jèi, Auju, Kati, Kamoro, Ekari and Moni languages the subject-indices follow the base while in the Marind, Boazi and Jaqa languages the subject-indices pre-
cede the base. This contrast in the place of the subject-index is very important in order to make a division in the languages we discuss. The reason is, that in all the languages (except Kimaghama) the conjugation of the base is most important; the place of the various indices of tense, aspect, mood, subject and relation is definite and distinct for each language. Moreover, as we shall see (cf. conclusion of this chapter), the opposition between the Marind, Boazi, Jaqa group and the other languages is the most evident conclusion we arrived at (table n. 72; 74).
2) The relation between the Marind, Boazi and Jaqar languages may be described as follows: in the nouns they have a) the distinction in two groups b ) the vowelshift $\varepsilon / u / i$, which is found in the pronouns and the subject-indices as well (table n. 13; 14; 78); in the pronouns they have a) the same form in the subject- and the object-function and $b$ ) pronominal prefixes in the names of relatives (table n. 15-16); in the subject- and object-indices they have a) subject- and objectindices which precede the base, b) distinct subject-indices in the singulat and the plural and c) they distinguish in the subject-indices three persons in the singular and three in the plural but in the object-indices they show forms for three persons in the singular, and for a first and nonfirst person in the plural; and d) the subject- and object-indices resemble in form with the pronouns (table n. 73; 74; 77; 81-83); in the tenses they agree in the future by the formation t - B ; it is noteworthy that the tense-index in Marind is ndam; in Boazi either nd or $m a$; in Jaqar nan (table n. 36); in the imperatives they agree in the use of the formation m-B (tablen. 64); intheinterrogatives they have the distinction between the yes-or-no-questions and the specific interrogations (table n. 69).
Moreover, we come across some agreements between either Marind and Boazi or between Marind and Jaqa ${ }^{1}$ or between Boazi and Jaqat. a) Both Marind and Boazi have in the present and the preterit a tense-index which is formally identical; the tense-index is optional in Marind, compulsary in Boazi. The same two languages express their durative and the perfective aspect by an index attached to the base; in Jaqa these aspects do not occur according to Drabbe. Both Marind and Boazi, moreover, have three sets of object-indices; it is a striking fact that in this point no analogous feature is found in the Jaqa-language (table n. 45; 46; $55 ; 59 ; 79$ ). b) Both Marind and Jaqa ${ }^{1}$ have the number of subjects and objects indicated by a change of the base (table n. $75 ; 80$ ) ; with regard to the Boazi-language the feature is not mentioned by Drabbe. New investigations may find this characteristic in bases unknown to Drabbe. c) Both Boazi and Jaqa ${ }^{1}$ have only one preterit; Marind has two preterits; Boazi and Jaqa' show the remarkable distinction in the negation viz. one form for the present and the preterit and another for the future; moreover, in Boazi and Jaqa the negation is expressed by elements of conjugation;
in these features the two languages differ from the Marind-language (table n. 44; 61; 62).
3) The Marind-Boazi-Jaqa group was opposed to the following group in which the subject-indices do not precede but follow the base: Makléu-Jélmèk-Mombum-Kanum-Moraori-Jéi-Auju-Kati-Kamoro-Ekari-Moni (table n .72 ) ; within this group some characteristics enable us to distinguish the following sub-groups.
a) The subgroup Makléu. Jélmèk which is characterized by the following features. The linking-element used after nouns to indicate possessive relations is formally resembling; the linking-element occurring after the subject-form of the personal pronoun to indicate the object-form is formally identical; the numerals of the two languages expressing the number "two" strongly resemble in form (table n. 10; 17; 23). The tense-formations of the present and future in the nominal predicates show an agreement in the use of a distinct secondary base, while in both languages this future has the formation $\mathrm{B} 2-\mathrm{t} / \mathrm{s}$ (table n . 39-41). The imperative occurs in the formation $\mathrm{m}-\mathrm{B}$; the negation in the indicative and in the prohibitive is a negative word preceding the predicate (table n. 64-66). b. The subgroup Kanum-Moraori-Jéi, which is characterized by the following features. The object-form of personal pronoun is the subjectform plus a linking-element. The nominal predicates have a distinct secondary base for the present and for the future. There are three preterits. The negation in the indicative and prohibitive is expressed by a negative word preceding the predicate. The imperative-formation is analogous to that of the future. The number of the subject is indicated either in all numbers or in the singuiar and plurai only, while the occurrence of an object is decisive for the use of the number (table n. 17; 39-40; 42; 65-67; 73; 90).
Besides the features just mentioned, which are common to the three languages, there are characteristics in which only two of the three languages show agreement.
aa) Kanum and Moraori have in the present, the three preterits and the future the same tense-formation: $\mathrm{B}-\mathrm{t} / \mathrm{s}$ (table 41-43).
bb) Kanum and Jèi have for numbers one and two, numerals which strongly resemble in form and occur before the noun; they have the future-formation t -B; they have subject-indices which do not distinguish the different persons and occur in all numbers when the formation is used intransitively but only in the singular and the plural when the formation is used transitively; in the latter case the plural forms are different according to the number of the object; they have relation-indices, which precede the base and occur in the singular in the three persons and in the plutal in the first and non-first person; the number of these relation-indices is indicated by distinct forms; moreover, the relationindices are different in the different tenses (table n. 24; 36; 81-86). The
agreement of so many features and so intricate formations suggests an intimate relation between these two languages, but there is a striking difference between them as well. The Jéi-language always shows a complex-predicate; the Kanum-language never does so.
cc) Both Moraori and Jei indicate sex in the relation-index of $3 \mathrm{p} . \mathrm{s}$. but in Moraori the relation-index is infixed in the base and in Jei the relation-index precedes the base. In both cases vowel-shift occurs: in Morårì $\dot{e} / o$, in Jéi : $\dot{e} / u$ (table n. 87).
c) The subgroup Auju-Kati, which is characterized by the following features. In nouns they show the possessive formations: father-his-house and father house; they form the plural formation by adding the personal pronoun of 3 p . plural after the noun (which pronoun has, moreover, the function of the definite article), or by repeating the noun (table $n$. 18-22). In nouns they have the distinction in two groups (table n. 13). In verbs these two languages show complex predicates in which sometimes a whole construction may occur as the primary base; the durative and habitual aspects are expressed by a distinct secondary base; the imperative formations are $\mathrm{B}-\mathrm{m} / \mathrm{s}$; the prohibitives are analogous to the negative future formations (table n. $32 ; 34 ; 53 ; 56 ; 63 ; 68$ ). In compound sentences the rejected condition is expressed by means of linking-elements at the end of the clauses; the final clause is found; and in order to coordinate clauses conjugated forms may be used (table n. 101-103). We mention also table n. 48; 49; $91 ; 98$.
4) It is rather difficult to determine whether the agreement between two or more languages in one or more features is a sufficient criterion to speak of a subgroup. Therefore we shall now indicate a number of features common to some languages not mentioned before.
a) Kamoro agrees with Mombum in the following characteristics. In nouns the possessive form father-his-house occurs (table n. 18). In the present and future the tense has the formation B-t; in Kamoro, however, a ligature is extant; the negation is expressed by a common form for the present and preterit and another for the future; in these cases the negation is an element of the conjugation; the imperativeformations are of the type $\mathrm{B}-\mathrm{m} / \mathrm{s}$ (table $\mathrm{n} .45 ; 47 ; 61-63$ ).
b) Kamoro agrees with Makléu, Kanum-Moraori-Jéi as to the occurrence of the dual number (table n. 90); with Mombum, Boazi and Jaqai in the use of two negative forms, which are elements of conjugation at the same time (table n. 61-62); with Marind, Makléu, Auju and Ekari in having two preterit formations (table n. 37); with Kati as to the place of the relation-indices viz. after the base (table n. 89); but in this feature the differences between these languages are great as well; with the Auju-Kati-group in the use of the possessive form father-his-house (table n . 18); as to the occurrence of complex predicates (table n. 32) and the use of a secondary base in a nominal predicate, which secondary base
may occur by itself as well (table n. 48); and with Marind, Moraori, Jaqa ${ }^{i}$ and $A^{u} j u$ having the two types of interrogation (table n. 69).
c) Ekari agrees with Marind, Maklén, Auju and Kamoro in having two preterit formations; with Marind, Mombum, Boazi and Kamoro in the indication of the present tense by a tense-index which follows the base; with Mombum, Kati, Kamoro and Moni in the future B-t; with Makleu by the fact that in the two languages the relation-indices resemble the personal pronouns of the respective language (table n. $37 ; 45 ; 47 ; 88$ ).
d) Moni agrees with Jètmèk, Boazi and Jaqai in having only one preterit; with Mombum, Kati, Kamoro and Ekari in the future-formation B-t; with Jelmèk, Mombum and $\mathrm{A}^{u j u}$ in having the relation not expressed in the predicate; with Ekari in the use of formally resembling numerals for the numbers three, four, five; in the use of a decimal and scoresystem (table n. 25-27; 44; 47; 66; 92).
5) The different subgroups, indicated in the preceding paragraphs, have, as a group, some features in common with another subgroup; or sometimes languages of one subgroup show agreements with languages of another subgroup.
a) The Makléu, Kanum, Jèi, Auju, Kati, Ekari and Moni languages have only one negative word for all different tenses (table n. 60).
b) Maklév-Jélmèk agrees with Kanum-Moraori-Jéi by the use of a distinct secondary base to indicate the tense in the nominal predicates (table n. $39 ; 40$ ) and in having the negation in the indicative and prohibitive expressed by a negative word preceding the respective formation (table n. 65; 66) ; Maklén-jélmèk agrees with Kanum-Moraori in the future formation $\mathrm{B}-\mathrm{t} / \mathrm{s}$; Jélmèk, moreover, in the present formation $\mathrm{B}-\mathrm{t} / \mathrm{s}$ (table n. 41; 43).
c) Makléu and the Kanum-Moråri-Jéi-group have the use of the dual number in common (table n. 90); Makléx and Moraori-jéi the sexindication in the 3 p.s. of the relation-index (table n. 87); Makléu and Moraori the indication of the number of the object by the use of different bases in the predicate.
d) Maklév and the $A^{u j u}$-Kati-group have the durative and habitual aspects indicated by a distinct secondary base; the durative aspect by the formations B-a/s in Makléu and Kati (table n. 53; 56; 57).
e) Makléu and Ekari show an agreement of the relation-indices with the personal pronoun of the respective languages (table n. 88).
f) Mombum and Kamoro have the future formation B-t and so have Kati, Ekari and Moni (table n. 47); Mombum and Kamoro also have the present formation B-t in common with Ekari (table n. 45); Mombum, Kanum, Morari and Jéi have three preterits (table n. 42).
g) Jélmèk, Mombum and Moni have in counting a quinary-system and lack the indication of the relation in the predicate; as to the latter feature they agree with the Auju language (table n. 28; 92).

Conclusion:
The agreement in so many details between the subgroups or between the languages of the subgroups suggests a relation between all the languages which have the subject-indices following the base; the disagreement on so many points between the groups and the languages within the groups suggests also that the primitive pattern has been torn to pieces when the people spread over the country and lost contact.
6) So far we discussed a first division of the languages of South-Western N. Guinea. We stated two groups viz. Marind-Boazi-Jaqai on the one hand and Makléu-Jèmèk, Kanum-Moråri-Jéi, Auju-Kati, Kamoro, Mombum, Ekari and Moni on the other. This division is, however, crossed by very important agreements between the Marind-Boazi-Jaqa ${ }^{i}$ group and the other languages just mentioned.
a) The Marind- ${ }^{\circ}{ }^{\circ}$ azi-Jagai-group is often in touch with languages of the Kanum-Moraori-Jéi group. Marind-Boazi-Jaqai agree with Kanum and Jei in the future formation $t-B$; in the relation-indices which precede the base and occur in the singular in the three persons and in the plural in a first and non-first person, while number is indicated by distinct indices (table n. 36; 81-83). Marind-Jaqai agree with Morari as to the two types of interrogation and having the number of the subject indicated by a change of the base (table n. 69; 75). Boazi and Jaqai agree with Moraori in the occurrence of two negations: one in the present and preterit, the other in the future (table n. 61).
b) The Marind-Boazi-Jaqai group agrees with the Maktéu-Jélmèk group in the following features. In the nominal predicate Marind, Makléu and Jelmèk have the future indicated by a distinct secondary base; the imperative is expressed by the formation $\mathrm{m}-\mathrm{B}$; the negation in the indicative and prohibitive by means of a negative word which precedes the predicate (table n. $40 ; 64-66$ ). Marind and Maklés agree in the present and future formations $\mathrm{t}-\mathrm{B}$; in the occurrence of two preterit formations; in the indication of the durative and habitual aspects by a distinct secondary base; in the use of distinct relation-indices to indicate the number of the object (table n. $36-38 ; 53 ; 56 ; 83$ ).
c) The Marind-Boazi-Jaqa ${ }^{i}$ group is in touch with the Makléu-Jélmèk group as well as with the Kanum-Moraori-Jéi group in the following cases. The nominal base shows a distinct secondary base to indicate the future tense (Marind, Makléa, Jélmèk, Kanum, Moråri, Jéi) (table n. 40). The negation expressed by a negative word preceding the predicate (Marind, Makléu, Jélmèk, Kanum, Morari, Jéi) (table n. 65).
d) The Marind-Boazi-Jaqa ${ }^{i}$ group agrees with the Auju-Kati group in the following respects. All these languages have the distinction of nouns into two groups; the vowelshift $\dot{e} / u / i$ (except $\mathrm{A}_{\mathrm{j} j u}$ ), one pronominal form for the subject- and the object-function (except Auju), possessive prefixes in the names of relatives (except Kati) (table n. 13-16). Marind,

Auju, Kati have the possessive form: father house (table n. 19) and have the durative and habitual aspects indicated by a distinct secondary base (table n. 53; 56).
7) Only one language has not been compared with the other ones up till now. This language is the Kimaghama language. The reason is that it differs so strongly from the other languages that a separate discussion is preferable:
a) The Kimaghama language has not got the conjugation of the verbal base; therefore we do not find any indices in the predicate which indicate tense, aspect, mood, subject and object; formally speaking, there is no difference between a noun and a verb (table n. 5).
b) This language, however, has the following features in common with the other languages.
aa) The linking-eJement follows the noun (table n. 2).
bb) The consonant $n$ occurs in the first person of the personal pronoun and a guttural sound in the second (table n. 3; 11).
cc) The type of compound "dég-ăném" is extant (table n. 1).
dd) The sequence of the parts of the sentence is also S-R-B (table n. 6).
ee) The numerals follow the noun (table n. 9).
ff) The object-form of the personal pronoun is subject-form plus linkingelement (table n. 17).
gg) The possessive form father-his-house occurs (cf. Mombum, Auju Kati and Kamoro; table n. 18).
hh) The possessive form father house is extant (cf. Mombum, Auju and Kati; table n. 19).
ii) In the numerals the score-system is found (cf. Ekari and Moni; table n. 27).
ji) In the numerals the senary system occurs (cf. Kanum, Kati and Ekari; table no. 29).
kk) The durative, habitual and perfective aspects are expressed (table ก. $51 ; 54 ; 58$ ).
iI) One negation is extant in the different tenses (cf. Makléu, Kanum, Jéi, Auju, Kati, Ekari and Moni; table n. 60).

## Conclusion:

Generally speaking we may distinguish the languages of South-Western N. Guinea as follows :

1. Languages in which conjugation is found:
group I Languages in which the subject-index precedes the base: Marind--Boazi--Jaqa;
group II Languages in which the subject-index follows the base : subgroup I Makléu--jélmèk;
subgroup II Kanum--Morarì--Jéi;
subgroup III Auju--Kati;
IV the remaining languages:
Mombum--Kamoro--Ekari--Moni;
2. Languages in which conjugation is not found:

Language: Kimaghama.

This conclusion is mapped out alongside.
Group I of the languages with conjugation, is marked by horizontal shading.
Group II of the languages with conjugation, is marked by vertical shading.
The languages without conjugation are marked by checked shading.


## TABLE

1. dég-aném
2. linking element following the noun
3. 1 pers, of pers. pronouns contains the consonant $n$
4. possessive form of pron. = subj.-form plus linking-element
5. conjugation of the verbal base
6. word-order of the sentence: S-R-B
7. eventive
8. set-phrase
9. numerals following the noun
10. possessive relation in nouns by linking-element
11. 2 pers. of pronouns contains: $k, g, n g, q, g h$ or $h$
12. two genuine numerals
13. in nouns group I and II
14. vowel-shift $e ́ / u / i$ in nouns and pronouns
15. one pronominal form for subject and object
16. possessive prefixes in names of relatives
17. object-form $=$ subject-form plus linking-element
18. possessive form: father his house
19. possessive form: father house (i.e. house of the father)
20. plural formation by pers. pron. 3 p . pl.
21. personal pronoun $=$ definite article
22. plural formation by repetition of the noun
23. numeral 2
24. numeral preceding the noun: one and two
25. numerals: three, four, five
26. decimal system
27. score system
28. quinary system
29. senary system
30. nominal primary base plus verbal secondary base
31. nominal base without secondary base
32. complex predicate
33. complex predicate: B1-suffix-B2
34. complex predicate: B1 (phrase) -B2
35. tense indicated by elements of conjugation
36. future tense: $t-B$
37. two past tenises
38. present tense: $t-B$
39. nominal base with distinct B 2 for the present
40. nominal base with distinct B2 for the future
41. future tense: B-t/s
42. three past tenses
43. present tense: B-t/s
44. one past tense
45. present tense: B-t
46. past tense: B-t
47. future tense: B-t
48. nominal B and present $\mathrm{B} 2=$ verbal base
49. nominal $B$ and future $B 2=$ verbal base
50. aspect-indication by elements of conjugation
51. habitual aspect
52. habitual aspect: B-a
53. habitual aspect indicated by distinct B2
54. durative aspect
55. durative aspect indicated by an index
56. durative aspect indicated by distinct B2
57. durative aspect indicated by B-a/s
58. perfective aspect
59. perfective aspect indicated by a-B

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|  | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ |  |  | $\times$ | $\times$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $x$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ |  | $\times$ |  |
|  | x | $\times$ | $\times$ | $\times$ | x | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ |  | 3 |
|  | $\times$ | $\times$ | $\times$ | .- | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ |  | $\times$ |  | X |  |
|  | $\times$ | $\times$ | $\times$ | .. | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | 5 |
|  | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ |  |
|  | $\times$ | . | $\times$ | ... | $\times$ | $\times$ | ... | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ |  | ... |  |
|  | $\times$ | $\times$ | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | 8 |
|  | $\times$ | $\times$ | $\times$ | $\times$ | $\cdots$ | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | 9 |
|  | $=$ | $=$ | ... | ... | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ |  | $\times$ |  |  | 10 |
| $\times$ | ... | ... | ... | $\times$ | ... | $\times$ |  | $\times$ | $\times$ | $\times$ |  | $\times$ | $\times$ | $\times$ | 11. |
| $=$ | $=$ | ... |  | ... | ... | ... | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ | ... | ... | 12 |
|  |  |  |  |  | ... | ... | $\ldots$ | $x$ | $\times$ | $\times$ | $\times$ |  | ... |  | 13 |
|  | ... | ... | $\ldots$ | ... | ... | ... | ... | $\times$ | $\times$ | ... | $\times$ | ... | $\ldots$ | - | 14. |
| $\times$ | ... | ... | ... | ... | ... | ... | $\cdots$ | $\times$ | $\times$ | - | $\times$ | $\cdots$ | X | $\chi$ | 15 |
| $\times$ |  | ... |  |  |  |  | $\times$ | $\times$ | $\times$ | $\times$ |  | $\times$ |  |  | 16 |
| ... | $=$ | $=$ | $\times$ | $\times$ | O | $\times$ | $\times$ | ... | ... | $\bigcirc$ |  | $x$ | ... | $\times$ | 17 |
|  |  |  | $\times$ | $\times$ |  | ... | ... | ... | ... | $\times$ | $\times$ | $\times$ | $\ldots$ | $\cdots$ | 18 |
| $\times$ | ... | ... | $\times$ | $\times$ | ... | ... | ... | ... | ... | $\times$ | $\times$ |  |  | X | 19 |
|  | ... | ... | ... | ... | ... | ... | $\cdots$ | $\cdots$ | $\ldots$ | $\times$ | $\times$ | $\ldots$ | ... | ... | 20. |
| .. | ... | ... | $\ldots$ | ... | ... | ... | ... | ... | ... | $\times$ | $\times$ | .. | ... | ... | 21 |
| .. | $\cdots$ | $\ldots$ | ... | ... | ... | $\ldots$ | $\ldots$ | ... | ... | $\times$ | $\times$ | ... | $\ldots$ |  | 22. |
|  | $=$ | $=$ | ... | ... | ... | $\cdots$ | ... | $\cdots$ | ... | ... | ... | ... | ... | $\cdots$ | 23 |
| .. | .. | ... | ... | ... | $=$ | ... | $=$ | $\ldots$ | ... | ... | ... | ... | $\ldots$ | ... | 24 |
| .. | $\cdots$ | ... | ... | $\ldots$ | ... | ... | ... | ... | ... | $\cdots$ | $\ldots$ | $\cdots$ | $=$ | = | 25 |
|  | $\ldots$ | ... | $\cdots$ | $\cdots$ | ... | ... | $\cdots$ | $\cdots$ | ... | ... | ... | $\ldots$ | $\times$ | $\times$ | 26 |
| .. | ... | . | $\cdots$ | X | ... | ... | ... | ... | ... | ... | .. | $\ldots$ | $\times$ | $\times$ | 27 |
|  | ... | $\times$ | $\times$ | $\ldots$ | $\cdots$ | ... | ... | ... | ... | ... | $\ldots$ | $\cdots$ | $\cdots$ | $\times$ | 28 |
|  | $\cdots$ |  |  | $\times$ | $\times$ | $\cdots$ | $\cdots$ | $\ldots$ | $\cdots$ | $\cdots$ | $\times$ | $\ldots$ | $\times$ | ... | 29 |
|  | $\times$ | $\times$ | - | $\ldots$ | $\times$ | $\times$ | $\times$ | ... | $\times$ | x | $\times$ | $\times$ | $\ldots$ |  | 30 |
| $\times$ | $\ldots$ | ... | $\times$ | ... | ... | $\ldots$ | $\cdots$ | ... | ... | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | ... | $\bigcirc$ | 31 |
|  | $\ldots$ | ... | ... | $\ldots$ | ... | ... | $\times$ | ... | ... | $\times$ |  | $\times$ | $\cdots$ | ... | 32 |
|  | ... | $\ldots$ | $\ldots$ | $\cdots$ | ... | ... | ... | $\ldots$ | $\cdots$ | $\ldots$ |  | $\times$ | $\ldots$ | ... | 33 |
|  | $\cdots$ | $\cdots$ | $\cdots$ | ... |  | $\cdots$ | - |  | $\ldots$ | $\times$ | $\times$ | $\ldots$ | $\cdots$ | $\ldots$ |  |
|  | x | $\times$ | $\times$ | ... | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | 35 |
|  | $x$ | $\ldots$ | ... | ... | $\times$ | $\ldots$ | $\times$ | $\times$ | $\times$ | ... | $\cdots$ | ... | . | ... |  |
|  | 入 | $\ldots$ | ... | $\ldots$ | ... | $\ldots$ | $\cdots$ | $\ldots$ | $\cdots$ | $\times$ | $\ldots$ | $\times$ | X | .. |  |
| $\times$ | $\times$ | $\cdots$ | ... | ... | $\cdots$ | $\cdots$ | $\cdots$ | $\ldots$ | $\times$ | $\ldots$ | .. | $\ldots$ | $\ldots$ |  |  |
|  | $\times$ | $\times$ | $\ldots$ | ... | $\times$ | $\times$ | $x$ | .. |  | .. | . | .. | ... |  | 39. |
| $\times$ | 入 | $\times$ | ... | ... | $\times$ | - | $\times$ | $\cdots$ | $\ldots$ | ... | $\cdots$ | ... | . |  |  |
| .. | $\times$ | $\times$ | $\cdots$ | ... | $\times$ | $\times$ | $\ldots$ | .. | ... | .. | $\times$ | ... | .. |  |  |
|  | ... | $\cdots$ | $\times$ |  | $=$ | $=$ | O | .. |  |  | ... | .. |  |  |  |
|  | $\ldots$ | $\times$ | $\ldots$ | $\cdots$ | $\times$ | $\times$ | $\cdots$ | $\cdots$ | $\cdots$ | $\ldots$ | $\cdots$ | ... | ... |  |  |
|  | ... | $\times$ | ... | $\times$ | ... | $\ldots$ | $\ldots$ | $\times$ | $\times$ | $\ldots$ | $\ldots$ | $\cdots$ | $\ldots$ | $\times$ | 4 |
|  | ... | $\ldots$ | $\times$ | $\ldots$ | ... | ... | $\ldots$ | $=$ | $\ldots$ | $\ldots$ | ... | $\times$ | $\times$ |  |  |
|  | $\ldots$ | $\ldots$ | $\cdots$ | ... | $\cdots$ | $\cdots$ | $\cdots$ | - | ... | - | . | … | $\cdots$ |  |  |
|  | ... | ... | $\times$ | ... | ... | $\ldots$ | $\ldots$ | $\ldots$ | ... | $\ldots$ | $\times$ | $\times$ | X | $x$ | 47 |
|  | $\cdots$ | ... | ... | $\ldots$ | ... | $\cdots$ | ... | ... | ... | $\times$ | $\times$ | $\times$ | $\cdots$ | , |  |
|  |  |  | - | ... | ... | $\ldots$ |  |  |  |  |  | $\times$ |  | ... |  |
|  | $\times$ | $\ldots$ | $\times$ | $\cdots$ | $\ldots$ | $\ldots$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | ... |  |
| $\times$ | $\times$ | ... | $\times$ | $\times$ | ... | ... | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ |  |  |
|  | $\ldots$ |  | $\times$ |  | . | . | $\cdots$ | $\times$ | $\times$ |  |  | $\times$ | $\times$ |  |  |
|  | $\times$ |  | $\ldots$ | $\cdots$ | $\cdots$ | $\ldots$ | $\times$ |  | ... | $\times$ | $\times$ | $\cdots$ | $\cdots$ |  |  |
|  | $\times$ | ... | ... | $\times$ | ... | ... | ... | x | ... | $\times$ | $\times$ | ... | ... |  |  |
|  | $\ldots$ |  |  |  | ... | $\ldots$ | ... | $\times$ | ... | $\cdots$ |  | ... | ... |  |  |
| $\times$ | $\times$ | $\ldots$ | ... | $\cdots$ | $\cdots$ | $\ldots$ | ... | $\ldots$ | ... | $\times$ | $\times$ | ... | $\ldots$ |  |  |
|  | X | $\cdots$ | ... | $\cdots$ | $\cdots$ | $\cdots$ | . | $\cdots$ | . | . | $\times$ |  |  |  |  |
|  | $\ldots$ |  |  | $\times$ | $\cdots$ | . |  | X |  |  | $\times$ |  |  |  |  |
|  | ... | ... | .- | .. | ... | $\ldots$ | ... | $\times$ | ... |  |  |  |  |  |  |

60. one negation in different tenses
61. two negations: 1) present-past, 2) future
62. negation by elements of conjugation
63. imperative: $\mathrm{B}-\mathrm{m} / \mathrm{s}$
64. imperative: $m-B$
65. negation by negative word preceding the predicate
66. prohibitive by negative word preceding the predicate
67. imperative formation analogous to future tense
68. prohibitive formation analogous to negative future tense
69. interrogation: type I and II
70. interrogative word ai or $a \dot{e}$
71. interrogation not type I and II
72. the base followed by subject-index: B-s
73. the number s./pl. indicated by distinct subject-indices
74. the base preceded by subject-index: s-B
75. number of the subject indicated by change of the base
76. sex-distinction in subject-index 3 p. s.: élu
77. resemblance in form of pronoun, subj--rel.-index
78. vowelshift $\dot{e} \mid u / i$ in pronouns, subject- and relation-indices
79. three sets of relation-indices
80. number of object indicated by change of the base
81. relation in three persons: r-B
82. relation in plural 1 p./non 1 p.: r-B
83. the number s./pl. by distinct object-indices
84. no person-distinction in subject-indices
85. transit./intransit. formation and influence of object
86. different relation-indices in different tenses
87. sex-distinction in relation-indices $3 \mathrm{p} . \mathrm{s}$.
88. pronoun and relation-indices resemble in the same language
89. relation-indices following the base
90. number s./d./pl. by distinct subject-indices
91.1 p. pl. and non 1 p. pl. in subject-indices
91. relation not indicated in the predicate
92. priority expressed by conjugation and linking-element
93. suppositional mode of speaking
94. open condition
95. open condition: protasis followed by demonstrative pron.
96. open condition: protasis has mood-index
97. open condition: apodosis has future formation
98. rejected condition
99. rejected condition: mood-indices
100. rejected condition: linking-element
101. final clause construction
102. coordination of sentences by conjugated forms

## Explanation to the Table:

1. The symbol $X$ indicates the agreement of the languages;
2. The symbol $=$ indicates a formal agreement;
3. The symbol O indicates agreement as well as difference on the same point;
4. The absence of a symbol indicated by the use of dots means either difference between the languages, or absence of data in the material of Drabbe.

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## CHAPTER XVI

## CONCLUSIONS

(continued)
The examination of the languages of S. W. New Guinea enabled us to state the characteristics common to all the languages or to a special group of them. It may be interesting to compare these results with the characteristics, which have been laid down by W. Schmidt S.V.D., S. H. Ray and A. Capell with regard to the two main language-groups, found in the eastern half of N . Guinea viz. the Melanesian and the non-Melanesian languages. Possibly we shall be able to determine the character of the languages we examined, and the linguistic position of South Western N. Guinea in the Austro-Asiatic language group.

## Section 1. The Characteristics of the non-Melanesian languages.

## I. Schmidt-Ray-Capell.

We do not propose to weigh the different data of the Professors Schmidt, Ray and Capell;' it would take us too long. A list of characteristics with regard to the non-Melanesian languages will be drawn up and the data of the preceding chapters, which correspond to one or other of these characteristics will be collected here.

1) Before entering into the discussion of the "Papuan" features, W. Schmidt and A. Capell explicitly warn their readers that the application of the term "Papuan" to the non-Melanesian languages does not imply any relationship whatever between any two or more of them.
2) Schmidt and Ray state the striking disagreement between the vocabularies of the "Papuan" languages; Schmidt says: „Im geraden Gegensatz zu der Einheitlichkeit der austronesischen Sprachen weisen sie besonders im Wortschatz so tiefgehende Verschiedenheiten auf, dass bei dem heutigen Stande der Forschung zumeist keinerlei Verwandischaft entdeckt werden kann. Die geographische Sprachemmannigfaltigkeit ist dabei so gross, dass in Neuguinea, wo diese Sprachen in geschlossener Reihe aneinander stossen, jedes Gebiet von ein paar Meilen in Durchmesser seine eigene von denen der anstossenden Gebiete radikal verschiedene Sprache aufweist, so dass hier wohl führ die ganze Erde der Gipfelpunkt extensiver und intensiver Sprachenzersplitterung erreicht ist".
Ray writes: "words generally and formative particles are distinct in the several languages".
3) With regard to the nouns Capell states the absence of "articles", words answering to "a" or "the" in English.
4) Number in nouns is expressed, according to Capell, either by addition of a suffix which varies with the language, or by addition of the pronoun $3 \mathrm{p} . \mathrm{pl}$.; in some cases the word may be reduplicated; often nouns do not vary for number, but in all cases number will be indicated by the verb.
5) "Gender", - again according to Capell -, "is usually shown by separate words added after the noun, but some languages have regular inflections to show the gender of a word, and these inflections are carried over into dependent adjectives, pronouns and verbs".
Ray says: "Some tanguages show grammatical gender".
"In other languages" - Capell goes on to say - "there are so many groupings of nouns that the term "gender" becomes inapplicable and "class" is a better term....".
6) In the discussion of the indication of the possessive relation Schmidt states first: „Ein grundlegender Unterschied zwischen Papua- und austronesischen Sprachen ist gegeben in der Stellung des Genitivs: Voranstellung bei den ersteren, Nachstellung bei den letzteren; das Vorkommen von Postpositionen oder Kasussuffixen bei den ersteren, von Präpositionen (oder Kasuspräfixen) bei den letzteren".
Capell adds the following examples: .... "the Man's son" in a purely Papuan language becomes "mann of son", sometimes "man him-of son"; Ray only writes: "Cases of nouns are shown by suffixes or postpositions, and rarely by prepositions".
7) With regard to the pronouns Capell and Ray mention the absence of a common basis of the pronouns in the various languages as contrasted with the Melanesian pronouns which are remarkably homogeneous in Indonesia, Melanesia, Polynesia and Micronesia.
8) The number in pronouns is indicated - according to Schmidt and Capell - "as a rule in three numbers: singular, dual and plural, sometimes also a trial, that is, three or four persons". Schmidt adds the following: "Während in den austronesischen Sprachen der Dual vom Plural abgeleitet ist durch Hinzufügung des Zahlwortes für „zwei", so sind in den Papuasprachen die Dualformen viel origineller: auch sind sie meistens nicht vom Plural, sondern wie der Plural selbst, vom Singular abgeleitet". Schmidt goes on: ...., ziemlich viele von ihnen ken* nen nicht den Unterschied von inklusiver und exklusiver Form in der 1 p.pl. (und Dual oder Trial....)".
9) Gender is - according to Schmidt and Capell - often found in the third person singular of the personal pronoun.
10) The possessive form of the pronoun is formed from the personal pronoun by means of a suffix (cf. Ray and the example given by Capeli from the Bongu-language: adji, " 1 "; adji-m, "my"). Schmidt also mentions a pronominal prefix occurring in nouns, ...., Der Possessivausdruck
selbst wird bei den Papuasprachen entweder.... oder durch eigene Possessivformen gebildet in denen.... der pronominale Teil einer Partikel nicht suffigiert, sondern präfigiert wird."
The pronouns are used to express the possessive retation in the following ways: a) "the third person is placed between the two nouns: pig its fodder; land its head i.e. the chief of the land" (Capell) ; b) "durch einfache Voranstellung des Pronomen personale" (Schmidt).
11) Schmidt observes moreover: „Keine der Papuasprachen kennt die Einteilung der Substantive in zwei Klassen, die eine (Körperteile und Verwandtschaftsgrade) mit unmittelbarer, die andere mit mittelbarer Possessivanfügung".
12) "The numerals are scarce; only distinctive numerals are in use for "one" and "two", rarely for "three". Higher numbers may be recalled by using parts of the body as tallies" (Ray). „Beim Zahlwort herrscht in den meisten Papuasprachen in der ersten Pentade das Paarsystem, d.h. es sind Zahlwörter nur für „eins" und „zwei" vorhanden, , drei" und ,vier" werden durch Zusammensetzung gebildet" (Schmidt). "Special systems of numeration are found: in twos; in threes; in fours; five is hand; ten is two hands; twenty is one man, forty is two men" (Capell). „Statt des Dezimalsystems herrscht uberwiegend das Vigesimalsystem" (Schmidt).
13) "The order of words in the sentence in a non-Melanesian language is usually that of Latin, i.e. the verb comes last in its clause, the object preceding it" (Ray).
14) Schmidt, Ray and Capell agree when observing "the extreme complication in the tense and mood scheme of the verb" (Capell); "Sowohl in den Nominalverhältnissen (,Deklination") als in den Verbalverhältnissen (,Konjugation") findet sich zumeist eine bedeutend grössere Reichhaltigkeit und Kompliziertheit der Formen" (Schmidt).
"The verb is complex. Modifications of Person, Number and Tense are commonly shown by suffixes or infixes. These may be combined" (Ray).
15) With regard to the moods and tenses Capell only states: "The moods and tenses may be numerous, and to give lists of examples would take too much space".
16) Person is indicated in all languages, in some cases by suffix in others by prefix (Capell and Ray)..."Valman has the second and the third person plural prefixes the same, and this method of conjugation is found far to the south in the Kiwai of the Fly River delta". ...."In that language (Kiwai) there is a prefix for the $1 \mathrm{p} . \mathrm{pl}$., another for the nonfirst person; number and tense and many other distinctions are shown by suffixes" (Capell).
In the Siwai or Motuna language gender also enters into the verb. The formation in the mouth of a male speaker differs from that in the mouth of a female (cf. Capell).
17) In most non-Melanesian languages the object of a transitive verb is incorporated into the verb itself (Capell and Ray) .... "There are, as in Bongu, certain simple verbs which take prefixes to indicate the object, the subject being indicated in the suffix...." (Capell).
18) "The relationship between the pronouns of the object and those of the subject may be shown in a table as they combine with certain verbal roots...." (Capell).
19) "There are certain simple verbs which take prefixes to indicate the object (the subject being indicated in the suffix), but these can be combined with other roots in order to be used as compound verbs...." (Capell).
20) "None of these languages has a passive voice...." (Capell).
21) "Words that in Europe would be prepositions follow their noun, and are thus postpositions: "Ground-on" is the Papuan expression for "on the.ground". Very frequently there is also a special suffix (the agentive form) to distinguish the subject of a transitive verb from that of an intransitive one" (Capell).
II. A Comparison with the data of the tanguages of S. W. New Guinea.

In the following discussion we follow the numbers of the list given under part I of this section.
ad 1 . As to the relationship of the languages of South-Western N. Guinea, we are inclined to admit a stronger resemblance in the languages of this region, than is accepted by Schmidt, Ray and Capell, with regard to the languages they compared. We think we are allowed, because we had many more data at our disposal. Uur comparison of the grammatical features of these languages suggests either: that these languages originated in one territory, where they were spoken for a long time, possibly forming one family, or that all these languages underwent the influence of one substratum before or after splitting up. Time has not yet come to give a definite solution of this problem. With regard to the Kimaghama language we are more reserved.
ad 2) The disagreement between the vocabutaries is also indicated by us in Part Il, chapter XIV, in the introduction preceding section 1.
ad 3) The article is not found but the function of an article is extant in the Auju and Kati languages (table n. 21).
ad 4) Number in nouns indicated by a suffix is found in Kimaghama; ${ }^{2}$ by the addition of $3 \mathrm{p} . \mathrm{pl}$. in $\mathrm{A} \mathrm{u}_{\mathrm{j} u}$ and $\mathrm{Kati}^{3}$ by reduplication in Auju and Kati; ${ }^{4}$ by a zero-modification partly in Marind, completely in Kamoro; and with regard to the other languages exact data fail (except about Kimaghama, Auju and Kati); by the subject-indices in the verb in all languages except Kimaghama (table $n .73$ ), and by a change in the base itself in Marind, Moraori and Jaqa (table n. 75).
ad 5) The term "gender", we suppose, covers the distinction we made between sex and gender. Sex and gender occur in Marind, Boazi, Jaqai
and Kati; Capell distinguishes the expression of the gender by separate words and by regular inflections; the latter method is used in the languages just mentioned as they use vowelshift to indicate sex and gender; moreover, this feature is found in dependent adjectives, pronouns and verbs as well (table n. 13).
ad 6) The possessive relation in nouns by ,Voranstellung" (father house) is found in Marind, Mombum, Kimaghama, Auju, Kati and Moni (table n. 19) ; by "Postpositionen" in all the languages, except Mombum, Kimaghama, Kati, Ekari and Moni (table n. 10).
ad 7) The absence of a common basis of the pronouns has not been observed in our examination, on the contrary we stated the agreement for the first person in all the languages except Moni (the consonant $n$ ), for the second person in Marind, Kimaghama, Mora ${ }^{\circ} \mathrm{ri}$, $\mathrm{B}^{\circ}$ azi, Jaqa', $\mathrm{A}^{\mathrm{u} j u}$, Kamoro, Ekari and Moni (a guttural sound or h) (table n. 3 and 11); the forms of the three persons resemble in Marind, Jaqa', and Maklé ${ }^{\text {u }}$, Jélmèk. ${ }^{5}$
ad 8) The dual number of pronouns is only found in the Kamoro-language ${ }^{8}$ but this dual form contains the numeral two and this addition is - according to Schmidt - a Melanesian feature. The distinction of an inclusive and exclusive form in the first person plural is nowhere observed by Drabbe or Geurtjens.
ad 9) Gender in the third person singular (i.e. sex and gender) occurs in Marind, Boazi, Jaqa and Kati. ${ }^{7}$
$a d$ 10) The possessive form of the personal pronoun is formed by a suffix (we call it a linking-element) in all the languages except Kimaghama, Kati and Ekari (table n. 4); a pronominal prefix denoting a possessive relation occurs in Marind, Jéi, Boazi, Jaqa', Auju and Kamoro (table n. 16); the possessive formation father his house is found in Mombum, Kimaghama, Auju, Kati and Kamoro (table n. 18); the possessive formation ,durch einfache Voranstellung des Pronomen personale" is extant in Kati, Moni. ${ }^{8}$
$a d$ 11) The distinction between "alienabile" and "inalienabile" possession is not expressed in these languages in the Melanesian way but possession in names of relatives has a distinct expression by a pronominal prefix in Marind, Jéi, Boazi, Jaqai, Auju and Kamoro (table n. 16).
$a d$ 12) Distinct numerals only for "one" and "two" are noticed in the Marind-, Maklév-, Jéi-, Jaqai-, Aujur-, Kati- and Kamoro-languages; the system in twos occurs in Marind, Jéi, Boazi, Kati and Kamoro; ${ }^{9}$ a quinary system occurs in Jémèk, Mombum and Moni; a senary system is found in Kimaghama, Kanum, Kati and Ekari; a score system in Kimaghama, Ekari and Moni (table n. 12; 27-29).
$a d$ 13) The sequence of the parts of the sentence S-R-B is found in all the languages we examined (table n. 6).
ad 14) We fully agree with Schmidt, Ray and Capell with regard to the languages of S . W. New Guinea showing an extreme complication in the verb. We must, however, except the Kimaghama language, in which the verb has no conjugated formations.
ad 15) Capell does not mention the distinction between aspects and moods; we suppose that he indicates the two together by the term "moods"; if so, we state that the same observation holds good for these languages.
ad 16) The indication of the subject in the verb by suffixes or prefixes is what we have called the indication of the subject in the predicate by subject-indices; this feature is found in all the languages except Kimaghama (table n. 72;74). The place of these indices has proved to be a valuable criterion for the grouping of the languages; it would be very interesting if the value of this criterion would be investigated in the languages of Eastern New Guinea. The distinction between a 1 and non $1 \mathrm{p} . \mathrm{pl}$. in subject-indices is found in Morari, Auju, Kati (table n. 91); in relationindices in Marind, Kanum, Jéi, Boazi, Jaqa', Ekari (table n. 82). Sex and gender are expressed in the verb in the subject-indices in Maklér, Boazi, Jaqa', Kati (table n. 76) ; in the relation-indices in Makléu, Morari, Jéi, Kati (table n. 87). A distinction in form according to the sex of speaker is not observed by Drabbe or Geurtjens.
$a d$ 17) The incorporation of the object is what we have indicated by the object or relation-indices. This feature is found in all the languages, except Jélmèk, Mombum, Kimaghama, Auju and Moni (table n. 92).
ad 18) The relationship between the pronouns of the subject and of the object and - we add - of the subject- and the object-indices may be shown in a table in the Marind, Boazi and Jaqar languages (table n. 77).
ad 19) Compound verbs occur in Jéi, Auju, Kati and Kamoro; the setphrase construction may enter into comparison as well (table n. 32; 8).
$a d$ 20) The passive voice is not found in these languages.
$a d$ 21) The postpositions to which we gave the name "linking-elements" occur in all the languages, with the exception perhaps of Ekari. The indication of the subject by a linking-element (the agentive form) is found in Kanum, Auju, Kati, Kamoro and Moni; moreover, the linking-element occurs to indicate the object-function in all the languages except Marind, Boazi, Jaqa, Kati and Ekari (table n. 17). ${ }^{10}$

Summary.
The characteristics of Schmidt-Ray-Capell turned out to be applicable to the languages of S. W. New Guinea; therefore we may call them "Papuan" languages in the sense we indicated in this section under II) ad 1) viz. we state a more intimate resemblance between the languages of this region (except Kimaghama?) without saying that they are of one family.

## Section 2. The Characteristics of the Melanesian languages.

## I. Schmidt-Ray-Capell. ${ }^{\text {nt }}$

W. Schmidt distinguishes in the Melanesian languages: „Sprachen welche in unmittelbarer Nachbarschaft von.... Papuasprachen gesprochen werden" (he calls them ,Mischsprachen') and ,die grosse Masse der melane~
sischen Sprachen.... (die) als wirkliche austronesische Sprachen aufzufassen seien". Ray does not mention this distinction; Capell speaks of a non-Melanesian element in the Melanesian languages.

We draw up a list of the characteristics of the Melanesian languages as we did with regard to the non-Melanesian ones and afterwards we shall give the special characteristics with regard to the "Mischsprachen".

1) "Many words", Ray writes, "are the same, or phonetically equivalent, in all the languages. The same formatives occur in many languages".
2) Schmidt and Capell mention the occurrence of "articles" in nouns. Schmidt says ... „bei Personenbezeichnungen wird in manchen Sprachen durch Vor-oder Nachsetzung des nach Zahl and Geschlecht wechselnden persönlichen Artikels ein Numerus- und Genusausdruck geschaffen, der besonders bei den suffigierenden Sprachen von Neuguinea und den nordwestlich vorliegenden Inseln die Form von Pluralsuffixen annimut". Capell: "There is also a common article, $a$ or na, which marks a word as a noun. It is not exactly the English "the", but may sometimes answer to "a" or "an" in English, and sometimes to no English at all". "Commonly, however, Melanesian languages posess a "personal" article, showing that a person is referred to".... "Occasionally one comes across in Melanesia a type of article that is common in Indonesia, that is the ligative article. It is a syllable, generally $n g$ or ang joining adjective and noun" (Capell).
3) "There is no form of plural for nouns as a rule. The third person of the personal pronoun is sometimes used, as in the "Papuan" Bongu, but more often the context must decide the number" (Capell).
4) With regard to sex and gender Capell writes: "Melanesian languages do not show gender in nouns". Schmidt and Capell mention, however, that sex may be indicated in the article, preceding the names of persons.
5) "In Melanesia several types of genitive construction exist. Sometimes we find, e.g. "the man his son", at other times "his son the man", again at other times "son of man" (Capell). „Der Genitiv wird.... dem zu bestimmenden Worte stets nachgestellt, und im Zusammenhang damit werden die Kasusbezeichnungen durch Präpositionen ausgedrückt, von denen insbesondere $n i$, ne, na als Genitivzeichen zu erwähnen ist" (Schmidt).
6) With regard to the pronouns Ray states: "In most of the languages the pronouns are formed from a common nucleus". Capell says: "The pronouns are derived from one original set of Indonesian pronouns".
7) ...."The distinction of inclusive and exclusive in the first person plural, is, ..... original (Indonesian)" (Capell) ....Schmidt emphasizes the indication of the number in pronouns: ,Wie in den indonesischen Sprachen sind zunächst Singular- and Pluralformen vorhanden. Während die indonesischen Sprachen, vom Dayak abgesehen, sich damit begnügen, entwickeln die melanesischen Sprachen ausserdem einen Dual....; die grosse Mehrzahl bildet auch einen Trial.... einige selbst einen Quatral.

Alle diese Formen werden gebildet durch Anfügung der Zahlformen für ,"zwei", „drei" bzw. „vier" an die Pluralformen, schmetzen aber oft so eng mit diesen zusammen, dass ihr eigentlicher Ursprung undeutlich wird."
8) The possessive relation is indicated by the use of the pronouns in the following way: "In Melanesian languages all parts of the body and parts of objects take suffixed pronouns.... in words that are not parts or relationterms the same suffixes are added to one of a series of possessive nouns" (Capell). Schmidt writes: „Die Possessivbezeichnung wird durch Anfügung von Suffixen bewirkt, die von den Personalpronomina abgeleitet sind.... Man kann eine zweifache Art der Anfügung unterschieden, eine unmittelbare, wenn das Suffix unmittelbar dem Substantiv selbst angefügt wird, und eine mittebare, wem das Suffix zanächst einer Partikel angefügt und das Ganze dann erst dem Substantiv nachgesetzt wird.... Die melanesischen Sprachen teilen demnach alle Substantive in zwei Klassen. Von diesen umfasst die eine, allgemein gesprochen, alle diejenigen Substantive, die ein engeres, unveräusserliches Besitzverhältnis bezeichnen.... jedenfalls gehören dahin die übergrosse Mehrzahl der Substantive, weiche Körperteile und solche, die Verwandtschaftsnamen bezeichnen.... Alle übrigen Substantiva gehören zur zweiten Klasse. Hier wird das Possessivsuffix nicht dem Substantiv unmittelbar angefügt, sondern einer Partikel". Ray says briefly: "Possession is indicated by suffixing a personal pronoun to the noun when possessor and possession are closely related, or in other cases by a separate descriptive word with the suffixed pronoun, or by preposition."
9) With regard to the numeration Schmidt gives no data; Ray says: "Numbers are named at least as far as five, and higher numbers are used in many languages. Though counting may be done on the fingers, parts of the body are not named as tallies". Capell is of opinion that: "The numerals in Melanesia and Polynesia are traceable back to a common series.... Not in all cases, however, has the entire set been taken over, for not all tribes think in terms of a decimal system. In point of fact, nowhere in northern New Guinea does a decimal system appear in the north coast; most systems are quinary, while some have a separate word for ten, others have not. After five one, two, three and four are added in various ways till nine is reached, and then ten is either "two hands" or very occasionally a special word is used". Vigesimal system may be found as well (Capell).
10) "Melanesian word-order", Capell writes, "in its purest state, is not greatly different from that of English".... e.g. "he saw boats two they floated".
11) "The verb is again characteristic, but not nearly so complicated as in non-Melanesian languages.... Person in the subject is indicated by a particle preceding the verb, sometimes changing for tense, sometimes
invariable. The subject-forms are really short pronouns, the radical element of the original pronouns, and the cardinal pronoun is only used in front of them for the sake of emphasis" (Capell).
12) "The object is not incorporated, but indicated at the same point of the phrase as in English, by an independent pronoun" (Capell).
13) "In insular Melanesia, there is usually a particle of tense, and the short pronoun may combine with this to form a verbal pronoun e.g. Wedau, Bartle Bay, Papia, where na is a sign of the future, and the short pronouns combine with it thus: sing. $1, a-n a ; 2, u-n a ; 3, i-n a .$. all placed before the verb" (Capell) ...., sie (die Bezeichnung der Tempusunterschiede) erfolgt zumeist durch Hinzufügung entsprechender Adverbien" (Schmidt). Ray states briefty: "Person and number are usually indicated by a prefixed or preceding pronoun. Tense may be shown by a prefixed particle, or by a following adverb. Tense is sometimes shown by a change in the initial of the wordbase".
14) "An important feature in most languages is the suffixes to verbs. In nearly all there is a series of suffixes which serve to make a verb transitive, but these are not so marked in New Guinea as in the islands to the east" (Capell). Schmidt says: „...Bedacht ist genommen auf die Bezeichnung des transitives Charakters durch Suffigierung von $i$ (oder $a$ ) und der Beziebung der Handlung auf irgendwen oder irgend etwas durch Suffigierung von aki (oder aka)".
15) "Prefixes are also important, and certain prefixes are original Austronesian property and almost universal in Melanesia. Such are va- (originally pa and paka, which occurs less commonly in Melanesia as vagha) and vara-, vari, vei, originally baghi. The former of these indicates causation, the latter is reciprocal. These two prefixes are rare on the main land of New Guinea, where in so many instances the ordinary processes of conjugation are carried out by means of prefixes" (Capeli).
16) "There is also commonly a form of verbal noun, generally ending in ana or anga. This in Laewomba, for instance, is eran, and a is prefixec' to the verb mar, "to die", a-mar-eran, "dying", "death". This form is used with the verb bin, "to repeat", i bin $a$-tsen-eran, "he repeated the asking", "he asked again" (Capell).
17) ,Bei einigen (intransitiven) Ausdrücken der Gemütsstimmung und des körperlichen Befindens wird der Subjektausdruck dem Wortstamm als Possessivsuffix angehängt, das ja eigentlich im Genitiv steht, so dass das Ganze nominalen Charakter trägt" (Schmidt).
18) ,Ein eigentliches Passivum kennen die melanesischen Sprachen nicht" (Schmidt).
19) "Prepositions in Melanesia are of three types:

1) simple words, such as the locative " $q$ ". (This locative means accord ing to us that the vowel $a$ indicates a place) ; 2) nouns used as prepositions; 3) verbs used as prepositions" (Capell).
2) With regard to the "Mischsprachen" it is noteworthy to observe: „In den meisten melanesischen Sprachen...., die in der Nähe von Papuasprachen sich befinden, ist durch deren Einfluss ihre ursprüngliche Nachstellung des Genitivs in Voranstellung umgewandelt worden, was zur weiteren Folge hatte, dass statt der Präpositionen mehr und mehr Postpositionen eintraten und der früher vorwiegend präfigierende Aufbau der Sprache sich in einen suffigierenden umwandelte" (Schmidt).

## II. A Comparison with the data of the languages of S.W. N. Guinea.

In the following discussion we again follow the numbers of the list just given.
ad 1) The disagreement of the languages of S . W. New Guinea with regard to their vocabularies is striking as was stated already. ${ }^{\mathbf{1 2}}$
$a d$ 2) In $A^{u} j u$ and Kati the 3 p . of the personal pronoun, following the noun, has the function of a definite article (table n. 21); we are of opinion that there is no connection with the article of the Melanesian languages, as neither form nor place agree.
ad 3) Most languages of S. W. New Guinea have no plural forms in nouns. Distinct plural forms occur in Marind, Boazi, Jaqar and Kati, where the vowelshift $\dot{e} / u / i$ is found; $i$ indicating the plural (table n. 14); the use of the third person plural of the pronoun as a plural indicator occurs in Auju and Kati (table n. 20); Capell mentions this feature with regard to the Papuan languages as well;13 therefore we are not sure whether a pure Melanesian characteristic is extant or not. Generally speaking the absence of plural forms corresponds to the criterion for Melanesian languages, laid down by Capell.
$a d$ 4) The sex expressed in the article is not extant in these languages as the article is not found here.
ad 5) The type of "genitive" the man his son is found in Mombum, Kimaghama, Auju, Kati and Kamoro but without an article (father his house table n. 18). But the same type is mentioned by Capell as a Papuan possessive form; ${ }^{14}$ the other types his son the man and son of man do not occur in these languages; the "Genitiv durch Nachstellung" is not found and "Prapositionen" are unknown.
ad 6) The pronouns have a common nucleus with regard to the first person in all the languages except Moni (table n. 3) and in second person in Marind, Kimaghama, Morari, B॰azi, Jaqa', Auju, Kamoro, Ekari and Moni (table n. 11); and in third person of Marind and Jaqa ${ }^{1}$ and in Maklé ${ }^{\text {a }}$ and Jélmèk, ${ }^{15}$ but the nucleus does not agree with those of the Indonesian languages with the exception of the guttural sound in the second person. ${ }^{\text {t }}$
ad 7) The co-existence of an inclusive and exclusive first person plural is not noticed for these languages; the occurrence of the dual form in Kamoro in which the numeral two is found, corresponds to the Melanesian phenomenon.
ad 8) The distinction of two classes of nouns with regard to the ,mittelbare und unmittelbare Anfügung von Suffixen" is not extant in these languages; it is, however, noteworthy that the possessive relation in names of relatives has a distinct form, viz. the pronominal prefix (table n. 16). The distinction between "alienabile" and "inalienabile" seems, however, to exist in the Marind language; the possessive relation may be expressed sometimes by a nominal predicate. In this case a relation-index occurs when the possession is a part of the body and a possessive index in all other "genitives", e.g.
duèt ip- $\alpha$-namb, "money-present tense-it-mine", "I have money";
mbavak ip- $\alpha$-na, "hair-present tense-it-me", "I have hair". ${ }^{17}$
ad 9) The numerals occur in a decimal system in Ekari and Moni and according to Drabbe the numerals for seven, eight and nine in Ekari agree with the Indonesian forms; in Moni the quinary system, as described by Capell, ${ }^{15}$ is used. The occurrence of the quinary system, however, is also mentioned by Capell with regard to the Papuan languages. The latter observation also holds good for the vigesimal system, which is mentioned in both types of languages.
ad 10) The wordorder in all the languages of S. W. New Guinea does not correspond to the Melanesian criterion.
ad 11) The language group Marind-Boazi-Jaqa ${ }^{1}$ suggests some agreement with the Melanesian languages with regard to the predicate formations; we are, however, not sure whether there is any real Melanesian element in these languages: on the one hand we state: the subject-indices in these three languages strongly resemble the personal pronouns and, moreover, only in these three languages the subject-indices are preceding the base; on the other hand, however, we observe that the relation is incorporated between the subject and the predicate and in the predicate itself the relationindices are incorporated between the subject-indices and the base. It is a striking feature that the relation-indices belong to the pronominal system; in all the other languages the subject- and relation-indices do not resemble the pronouns (with an exception perhaps in Makléu and Ekari, table n. 88). In Papuan languages of eastern New-Guinea subject-indices preceding the base occur as well. We are of opinion that the question cannot be decided as yet and wants further inquiry. Possibly we have here one of the „Mischsprachen". The languages of eastern New Guinea in which the subjectindices precede the base, might be examined with a view to the possibility of Melanesian influence.
ad 12) The incorporation of the object is found in all the languages except the languages in which the relation-index is not extant (table n. 92).
ad 13) The combination of a particle of tense with the subject-indices occurs in the languages of S. W. New Quinea but here it is a common feature of the conjugation (following the base) and not an exceptional form preceding the base as it is in the Melanesian languages.
ad 14) A suffix indicating the transitive character of the base is not found in these languages. Geurtjens, however, mentions that the end of the base of some verbs changes when the base is used transitively e.g. Marind: hanggab, "to tear", hanggak, "to tear to pieces". ${ }^{18}$
ad 15) Prefixes indicating "causation or reciprocity" are not extant in these languages.
ad 16) Such verbal nouns, as referred to above are not known in these languages. ${ }^{20}$
$a d$ 17) A possessive suffix after bases to indicate the subject is not found in these languages.
ad 18) A passive construction is unknown.
ad 19) Prepositions do not occur in these languages.
ad 20) There is no Melanesian language in S. W. New Guinea.
Summary.
Though there are some doubtfull Melanesian elements in some languages ${ }^{21}$ and some certain Melanesian features in others, ${ }^{22}$ we may say the languages of S. W. New Guinea are non-Melanesian. We are more reserved as to the Marind-Boazi-Jaqa' group as has already been stated. ${ }^{23}$

To students of Papuan languages some formations are given here which occur in the languages of S. W. New Guinea to enable them to solve the question whether such features as are stated by us but not mentioned by Schmidt, Ray and Capell are found in eastern New Guinea or not viz.

1) The "eventive" which may, in a sense, be considered a counter part of such German expressions as: „es friert mich"; ${ }^{24}$
2) The set phrase i.e. the combination of two bases which always occur together to express one idea. ${ }^{25}$

## Section 3. The Linguistic position of South-Western New Guinea.

The characteristics of the languages of S. W. New Guinea have shown these languages to be "Papuan" languages. As a final observation we should like to draw a sketch of the distribution of the Papuan languages in New Guinea and the surrounding Islands.

1) With regard to the territory of Papua, Ray writes:28 "My last estimate of the number of vocabularies collected in the Territory was two hundred and sixty eight and even this cannot be regarded as final ..... in many of these groups little is known of the Grammar beyond pronouns and numerals but the structure of at least fifty languages is farely well known. These are :

- Western division: Kunini, Miriam, Kiwai, Tirio and Goaribari or Kerewa.
- Delta division: Namau and Orokolo.
- Gulf division: Toaripi.
- Mamba division: Binandele.
- Central division: Ambo or Afoa, Fuyuge or Mafulu, Koiari and Koitapu, Mulaha, and Kwale. Eastern division: Magi of Mailu.

2) The Papuan languages of Northern Papua have been indicated on the language map, published by A. Capell; ${ }^{27}$ these languages are: Kate, Ono, Tsia, Bongu, Bogadjim, Mindiri, Bagesin, Amele, Nobonob, Musarere, Monumbo, Arapesh, Tshuosh, Valman, Vanimo, Tshambuli, Mundugumor, fatmül and Kamanugu.
3) The Papuan languages of the Islands to the east of New Guinea are, according to A. Capell, ${ }^{28}$ on Bougainville: Telei, Nasioi, Koromira, Koianu, Motuna (Siwai), Kongara; on New Britain: Evo, Baining, Taulil, Gaktai, Tumuip, Sulka.
4) The Papuan languages of S. W. New Guinea are: Marind, Maklé, Jélmèk, Mombum, Kimaghama, Kanum, Moråri, Jéi, Boazi, Jaqa', Auju, Kati, Kamoro, Ekari and Moni. ${ }^{29}$
5) In his dissertation H. van der Veen ${ }^{30}$ speaking about the languages of Northern Halmahera, states that this language group is to be detached from the Austronesian languages and to be connected with the group of Papuan languages, as they show important features of relation with several Papuan languages. He mentions the following characteristics: a) the distinction between persons and animate or inanimate things; ${ }^{31}$ b) the indication of sex in the article, the pronouns and in the subjectand object-exponent; the exponents show gender as well; ${ }^{32}$
c) the indication of the possessive relation shows the type father his house; the "genitive" precedes the word it determines; in the "qualifying compounds" the qualification forms the latter constituent of the compound; ${ }^{33}$
d) the relations in nouns are expressed by means of postpositions; ${ }^{34}$
e) in the sentence the object is placed between the subject and the verb and in the predicate the object-exponent is incorporated between the subject-exponent and the verb; ${ }^{35}$
f) the object-exponent occurs in two forms, one form indicating a direct object, the other an indirect object or a relation (instrumental use etc.); ${ }^{36}$
g) the combination of two processes is not expressed by a "participle" and a conjugated form but by two conjugated forms which are coordinated; ${ }^{37}$
h) the construction $i$ ni sapi, "it does thee feel hungry", i.e. thou art hungry; ${ }^{38}$
i) the vocabulary does not agree with the Austronesian nor with the Papuan languages. ${ }^{38}$
When we compare these characteristics with the list of characteristics of Papuan languages drawn up by Schmidt-Ray-Capell and with the results of our study we observe that:
ad a) the distinction between persons and animate or inanimate things is extant in the group Marind, Boazi, Jaqa', Auju and Kati (table n. 13); ad b) the indication of sex and gender in pronouns and in subject and object-indices is stated in the Papuan languages of Eastern and Western New Guinea;40
ad c) the precedence of the "genitive" is a Papuan feature;" but the apposition of a qualification following the noun is not found in S . W. New Guinea, where the qualification always forms the first constituent of the compound, (table n. 1), except Kati: on-Karao, "bird Karao", i.e. the bird that is a Karao.
ad d) the use of postpositions (linking-elements) is a Papuan characteristic; ${ }^{42}$
ad e) the place of the object in the sentence and the incorporation of the object exponent is a feature common to the Papuan languages of New Guinea; ${ }^{33}$
ad f) the two forms of the object-index do not occur in S. W. New Guinea;
ad $g$ ) in Papuan languages we come across forms which suggest the idea of participles; the matter wants further inquiry; ${ }^{44}$
ad h) the construction $i n i$ sapi is analogous to what we have called the "eventive". ${ }^{48}$ Van der Veen mentions the occurrence of this construction in the Nasioi and Telei languages of Bougainville which are regarded as Papuan; ${ }^{48}$
ad i) the disagreement in the vocabulary between these languages and the Papuan languages of S . W. New Guinea is no objection to the admittance of their Papuan character, as Papuan languages always disagree totally in vocabulary. ${ }^{47}$

## Summary.

We are of opinion that the languages of Northern Halmahera belong to the Papuan group and because of the conjugation, in which the subject- and object-indices precede the base, we suggest that the statement of a more intimate resemblance to the Marind-Boazi-Jaqa group might be the result of further examination. Also the occurrence of several features which are non-Papuan (e.g. the article) points to Melanesian influence; a detailed comparison of these languages with those of S. W. New Guinea may be accomplished in the future.
6) "It has fallen to the present author" Capell writes, ${ }^{48}$ "to demonstrate that in Timor also there exists a group of "Papuan" languages..... These non-Indonesian languages of Timor exhibit all the normal features of "Papuan" languages: complete departure in vocabulary from the Indonesian, very little agreement in vocabulary amongst themselves, a more complicated grammar than the Indonesian, with features that the object tends to precede the verb (the pronoun does even when the noan-
map of＂papuan＂Languages

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object does not), while in some instances there is a definite form of conjugation lacking in the Indonesian languages around them, and postpositions are used instead of prepositions....".
These languages are: Bunak, Makasai, Waimaha and Kairui.

## NOTES.

1. W. Schmidt: „Papuasprachen" in: Deutsches Kolonial-Lexikon, hrsg. von Dr. Heinrich Schnee, Ill band p. 17. Leipzig 1920.
S. H. Ray: "The Papuan languages" in: Festschtift Meinhof, Hamburg 1927 p. 377.
A. Capell: "The structure of the Oceanic languages", in: Oceania Volume III 1932-1933, p. 418.
"Language study for New Guinea Students", The Oceania Monographs n, 5.
2. Part II, ch. I, sect. 1, b).
3. Part II, ch. I, sect. 1, e) and f).
4. Ibidem.
5. Part II, ch. II, sect. 1, summary a).
6. Part II, ch. II, sect. 2, f).
7. Part II, ch. II, sect. 3, summary.
8. Part II, ch. Il, sect. 4, 1).
9. Part II, ch. III, sect. 1.
10. Part II, ch. XIII.
11. W. Schmidt : „Melanesische Sprachen" in: Deutsches Kolonial Lexikon II band p. 538.
S. H. Ray, cf. note 1).
A. Capell, cf. note 1).
12. Part II, ch. XIV in the introduction.
13. Part II, ch. XVI, sect. 1, I, n. 4.
14. Part II, ch. XVI, sect. 1, I. n. 10.
15. Part II, ch. II, sect. 1, summary a).
16. In the Malayan language we find second person singular kau; 2 p.pl. kamu.
17. Part I, ch. 1, sect. 5, part 1if, n. 4.
18. Part II, ch. XVI, sect. 2, I, n. 9.
19. Geurtjens H. Spraakleer der Marindineesche taal, p. 76.
20. Part I, ch. XI, sect. 5, part IH, and ch. XII, sect. 5, part III.
21. Part II, ch. XVI, sect. 2, II, n. 3; 9.
22. Part II, ch. XVI, sect. 2, II, n. 7; 9.
23. Part II, ch. XVI, sect. 2, II, n. 8; 11 .
24. Part II, ch. XII, n. 1; this construction is mentioned by Schmidt with regard to the Nasioi and Telei Ianguages in Bougainville.
25. Part II, ch. XII, n. 2.
26. Ray: "The Papuan languages" in „Festschrift Meinhof", p. 380.
27. A. Capell: "Language study for New Guinea Students", p. 44; Nota Bene: In the monograph, reprinted from Oceania vol. 11 n. 1, that Drabbe received from $A$. Capell himself, the following numbers have been changed: 77 Arapesh $>$ Washkuk; 78 Tshuosh $>$ Arapesh; 79 Valman $>$ Abelam; 80 Vanimo $>$ Valman; 81 Tshambuli $>$ Vanimo; 82 is not found in the list; 83 Mundugumor $>$ Tshambuli. On our Map the languages are indicated according to this correction.
28. Ibidem.
29. There are several other languages or dialects known to Drabbe; the publication of these languages is noticed in the introducing chapter of this book.
30. H. van der Veen: De Noord-Halmahera'se taalgroep tegenover de Austronesiese talen. Leiden 1915.
31. o.c. pg. 12.
32. o.c. pg. 34 sq.
33. o.c. pg. 92.
34. o.c. pg. 100.
35. o.c. pg. 44.
36. o.c. pg. 57.
37. o.c. pg. 224.
38. o.c. pg. 91.
39. o.c. pg. 226.
40. Part II, ch. XVI, sect. I, I, n. 5 and II, ad 5.
41. Part II, ch. XVI, sect. 1, I. n. 6.
42. Part II, ch. XVI, sect. 1, I, n. 21.
43. Part II, ch. XVI, sect. 1, I, n. 13; 17.
44. Part I, ch. XI, sect. 5, part III and ch. XII, sect. 5, part III.
45. Part II, ch. XII, n. 1.
46. H. van der Veen, o.c. pg. 91.
47. Part II, ch. XVI, sect. 1, I, n. 2.
48. A. Capell: "Peoples and languages of Timor", Oceania vol. 14, n. 3.

## FINAL CONCLUSION

When concluding this examination we are aware of the fact that this study has a preliminary character only. The conclusions are rather unsatisfactory, because it proves to be impossible to come to a definite pattern of the languages of S. W. New Cuinea.
We are rather inclined to say: the languages of this fairly small area are enormously intricate and the pattern inextricably confused, though it was possible to indicate some agreements, sometimes even pointing in the direction of a more or less striking resemblance in structure; but there are always, even between such languages as show most resemblances, such differences that the investigator becomes very cautious when tempted to draw more sweeping conclusions.

Besides, we are aware that many points in this material are open to a different interpretation. Again and again this became evident, when in formulating our conclusions certain features were dropped in order to bring other ones forward. New investigations may arrive at somewhat different conclusions from this material with the help of different criteria. It has been our intention to open up the material collected by the Fathers H. Geurtjens and P. Drabbe. A high appreciation of what is most valuable in a people urged these pioneers to study the languages of South-Western New Guinea; for us the study of these languages will prove to be a great help in getting to understand and to appreciate this people and its culture.
"The aim of life is appreciation".

## LANGUAGE MAP OF SOUTH-WESTERN NEW GUINEA

KEY.
This language map is based on the so-called Sketch Map of New Guinea (Schetskaart van Nieuw Guinea; Reproductiebedrijf Topografische dienst, Batavia 1938) scale $1: 2.500 .000$.

The names indicated on our map are given in set I; set II refers to the corresponding names of the map published in : De bevolking van Zuid-Nieuw-Guinea onder Nederlandsch Bestuur: 36 jaren (Tijdschrift voor Ind. Taal-, Land- en Volkenkunde, Dl. LXXIX - Jrg. 1939 Afl. 3) by Dr. J. van Baal ; set IIl refers to part IV of the Sketch Map of New Guinea (Schetskaart van Nieuw-Guinee (Nederlandsch gebied) scale 1: 1.000.000; published in: Verslag van de Militaire Exploratie van Nederlandsch-Nieuw-Guinee 1907-1915; Landsdrukkerij Weltevreden, 1920); set IV refers to the Sketch Map of New Guinea (Schetskaart van Nieuw Guinea; Reproductiebedrijf Topografische dienst, Batavia 1938) scale $1: 2.500 .000$.

| Set I | Set II | Set III | Set IV |
| :---: | :---: | :---: | :---: |
| Asüwé |  |  |  |
| Bapai |  | Oewamba | Oewamba |
| Mbian | Bian | Bian | Bian |
| Bibikem Bulaka | Bibikem |  |  |
|  | Boelaka | Boelaka | Boelaka |
| Cooks-bay |  | Cooks-baai |  |
| Digul | Digoel | Digoel | Digoel |
| Dudaling | Doedali | Doedalien |  |
| Eilanden |  | Eilanden | Eilanden |
| Fly | Fly | Fly | Fly |
| Frederik-Hendrik | Frederik-Hendrik | Frederik-Hendrik <br> (P. Dolak) | Frederik-Hendrik |
| Jaba |  |  |  |
| Jèlwajab | Ilwajab | Ilmek |  |
| jénggalntjur | Janggandoer |  |  |
| Jénimu |  | Bamgi |  |
|  |  | Kampong | Kampoeng |
| Karumuga |  | Koepera Poekwa | Newerip-b. Kimaän |
| Kimaghama | Kimaam |  | Kimaan |
| Kolopom | Komolom | P. Komoran (P. Silam) | P. Komoran |
| Kowo | Kau | Oewimmerah | Oewimmerah (Kaoh) |
| Kugapa |  | Koembe | Koembe |
| Kurmbe | Koembe | Koembe | Koembe |
| Maburamara |  |  |  |
| Makléw | Wekboeti | Wilboeti Mappi | Mappi |
| Maro | Maro | Merauke | Merauke |
| Mbur (Manggat) | Boed (Manggatrik) |  |  |
| Merauke | Merauke | Merauke | Merauke |
| Metomka |  |  | Mimika |
| Mimika |  | Mimika | Mimika |
| Mombum Muju | Momboen | Momboem Inggivahkee | Moejoe |
| Nambéomön Niinati |  |  |  |
|  |  | Ninati |  |
| Onggaja | Onggaja | Onggaja |  |
| Opa |  | Omba | Omba <br> Otakwa |
| Paniái Pasüwé |  | Paniai |  |
| Qobamarao <br> Qodaqa-móqon <br> Queen Juliana |  | Obaä | Obaä |
|  |  | Odammoen | Odammoen |
| Sanggase Sjiagha | Sangase | Sanggase | Sam Sanggase |
| Tanah-Merah Tigi |  | Tanah-Merah | Tanah-Merah |
| Wanam <br> Welbuti <br> Wildeman Woboju |  | Dajawal |  |
|  | Maklew | Mauwekere | Mauwekere |
|  | Wobojoe | Wildeman | Wildeman |



