THE STRUCTURE AND FUNCTION
OF THE
VERBAL PIECE
IN THE
JEBERO LANGUAGE

Thesis
submitted for the
Ph. D. degree
of the University of London
by
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Abstract

After the preface, table of contents and list of symbols, an introductory chapter gives details about the Jebero people and language, including an account of all previously published material, describes the circumstances and scope of this present study and summarizes some of the general characteristics of the language. The second chapter containing an explanation of the transcription used in the thesis is followed by an outline description of the phonology.

The remainder of the thesis is a grammatical study of the verbal piece considered at different stages of grammatical analysis from the sentence to the morpheme. The function of the verbal piece is first given and this entails a description of the sentence-types found in the material examined since the function of the verbal piece is stated in terms of these sentence-types. The structure of the verbal piece is then taken up and this is set out in terms of the smaller elements of which the verbal piece may be said to be composed, namely the clause, phrase, and word, each of which is dealt with in turn.

The validity of the word as a grammatical element is shown and the basis for the establishment of word classes is described. A full description of each word class follows, giving details concerning stems, roots, and affixes of various classes and subclasses. In this way all the morphemes, words, and larger units which can enter into a verbal piece are classified as members of one or other system of grammatical elements.

Some texts with translations are provided and for the first of these a full grammatical analysis is given. The thesis ends with two appendices and a bibliography.
Preface

This thesis is the first study of an American Indian language to be presented as a thesis to London University. As such, it is particularly significant to acknowledge that this research has grown out of the vision and interest of Professors J. R. Firth and K. L. Pike, for without their initial suggestions and encouragement the work would not have been undertaken. In a very real sense the whole project was of their conception. I am greatly indebted to them both not only for my training in descriptive linguistics but also for their personal interest in this research and for their many helpful suggestions both in London and in the field.

My debt to my supervisor, Mr. R. H. Robins, is also very considerable. In particular his comments throughout the detailed discussion of this material have been invaluable.

Sincere thanks are due to the University of London for a grant from the University Central Research Fund to meet the cost of my travelling expenses and also to my colleagues in the Summer Institute of Linguistics for much help and advice which made it possible to contact and work among this tribe and also for the use of the facilities of the S. I. L. base in the heart of the jungles of Peruvian Amazonia.
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Chapter One

Introduction

11 The Jebero people

The Jebero language is spoken today by about 1,500 people living between the Maranon and Huallaga rivers of North-eastern Peru and concentrated for the most part in and around the village known today as Jeberos at approximately Latitude 5° S. and Longitude 76° W. This settlement is situated not far from a small river which flows into the river Aipena at a point approximately two days upstream from its junction with the Huallaga river. This junction is only a very short distance from the junction of the Huallaga and Maranon rivers.

Records concerning the Jebero tribe go back as far as 1658 when they were first visited by Father Lucas de la Cueva. At that time, it seems, they lived in much the same area as now but were much more scattered since he found them one and a half days travel up the Aipena, scattered in small settlements two to six leagues apart, whereas today very few live on the Aipena and there are no such settlements. In 1640 the Jesuit mission founded a settlement on the site of the present village with 2,000 Indians. The number of Jebero speaking people seems to have been considerably larger than it is now.

References to the Jebero people and some rather isolated details of their history between 1640 and modern times are found in a number of missionary accounts and historical works of which the most important are listed in the Bibliography. For further details see the Handbook of South American Indians, which contains a concise summary of all that is known about this tribe.

Care must be taken not to confuse the Jebero people and language with the much larger group of Jivaro Indians who live to the North and West of them. Unfortunately this confusion has crept into the literature and led D. Brinton to publish a brief but interesting sketch of the Jebero language under the title of 'The Jivaro Language' (see section 12). The Jebero language and people are very variously referred to as the Xebero, Chebero, Shiwila and Jebero people. The spelling used in Peru today is adopted here.

12 The Jebero language

The Jebero language is generally classified as a member of the Cahuapana group of languages of North-eastern Peru, following the classification of Beuchat and Rivet who suggested replacing the name Mayna or Maina previously used for this group by the name Cahuapana.


2 While the connection between the other three commonly found names for this tribe is obvious, this name at first may seem obscure. However, it was found in the field that Jebero speakers always refer to themselves as Jiwilu people. Furthermore when account is taken of phonetic changes in Spanish since the 17th century there would appear to be some connection between this tribal name and the names given the tribe by the Spanish speaking missionaries and since perpetuated in the literature.

3 See Beuchat and Rivet, 'La famille linguistique Cahuapana', Zeitschrift für Ethnologie, Vol.41 Berlin 1909 p.616. The authors propose this change of name so as to avoid both confusions arising out of the different uses of the word Maina, and another set of confusions arising out of the similarity between the names Jebero and Jivaro.
Steward and Metraux question the validity of the whole grouping of the languages usually termed Cahuapana. There is, in fact, quite inadequate linguistic evidence for any classification of these languages into a family. Geographical reasons alone account for the assignment of some of the languages to the Cahuapana group. It is to be hoped that though linguistic material in many of these languages is completely lacking for the past centuries, the descriptive studies recently begun by members of the Summer Institute of Linguistics in the surviving languages of Eastern Peru will provide a basis for a proper synchronic classification of the members of this and other language families of the whole area. Whether any valid grouping into families of languages now extinct will be possible remains unlikely. However, there can be no doubt that a thorough attempt to analyse and describe the present surviving languages is an essential prerequisite for any valid reconstruction of the past and affords the only hope for any such reconstruction.

As far as is known the only Jebero material dating back before the 19th century is in the British Museum, where there are two Jebero MSS. The name of the author of these MSS is not given but it seems probable that he was a German Jesuit who was a member of the Jesuit mission to the Jebero in the second half of the 18th century since he makes references to the pronunciation of German in describing the sounds of Jebero. However, one of the MSS contains material which the author asserts dates from the earliest times of the mission, i.e. the mid 17th century.

The first of these MSS is entitled, 'Vocabulario en la Lengua Castellana, la del Yaga, y Xebera'. This MS is complete and has 55 leaves of a small 8vo size. It begins with a general introduction about the pronunciation of Jebero and then gives the vocabulary and a few more notes at the end. The vocabulary comprises about 1500 Jebero entries, being set out in a double column, in one column the Spanish word followed immediately by the Inca equivalent and in the other column the Jebero equivalent. The introduction is of considerable interest. It describes the sounds of the language as difficult to a European and often fluctuating in character. For instance the author states that d, l, r and h are frequently alternated or an indistinct sound is uttered which may approach any one of them. In this way he seems to be attempting to find sounds in European languages similar to the frictionless continuant of, see section 258, since he refers to words which are now found to contain that sound. He comments on n being uttered so slightly as to be scarcely audible and seems to be referring to the feature of glottalization running through the syllable at one point - both features being treated in chapter 5 as prosodic.

The second MS is incomplete, lacking both the beginning and the end. It is the same small 8vo size. It is catalogued as 'Grammatica de la Lengua Xebera', but contains much more than that. It begins with 12 leaves containing a confession, act of contrition, prayers for the administration of the sacraments and the sacrament of marriage in full. These pages are written in a double column, one column being in Inca and the other in Jebero. There then follow two leaves which the author states are prayers etc., translated by the founder of the mission, Father

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1 See 'Handbook of South American Indians', Vol.5, p.605.
2 Beuchat and Rivet, for example, list some 50 tribes and sub-tribes as members of the Cahuapana family but give linguistic evidence from three tribes only, one of which is Jebero, see op. cit.
3 Beuchat and Rivet suggest the author was Samuel Fritz a German Jesuit who is said to have written a grammar of Jebero, see op. cit. p.622.
4 This MS is No. 25525 in the Spanish collection of MSS.
5 This MS is No. 25524 in the Spanish collection of MSS.
Lucas de la Cueva, in the earliest days of the mission. This section is in Jebero only, without any translation, and contains the Lord's prayer, Ave Maria, creed, ten commandments, commandments of the church, a list of sacraments and the general confession. There then follows a statement in Spanish declaring the need to use Jebero as well as Inca because many do not understand Inca. Then come three more pages of prayers etc., covering almost the same ground as the section attributed to Father Lucas de la Cueva, and which evidently represent a later version then in use. This part is in double column again, with Inca and Jebero.

As far as can be judged these different translations seem to be into good Jebero. In fact, in general this material compiled by the Jesuits compares very favourably with material recorded at a later date.

After these sections there is a new heading, 'Grammatica de la Lengua Jebera', given in the title of the MSS. This comprises 11 pages. The material is set out under a series of headings - Noun,declension,plural, Adjectives, Grades of comparisons, Numerals, Pronouns, Relatives, Prepositions and postpositions, Adverbs, Conjunctions, Interjections, the Verb in general, Tense and mood, Future, Imperatives, Subjunctives, Infinitive and Participle, Verbs sum, soleo and debeo, Plural, Declension of participle, Conjugation of verb, Negative Imperatives and Variations (by which he describes bipersonal verb forms).

It was from this material that Brinton published his article 'The Jivaro Language', which comprises some general remarks on the Jivaras, references to these MSS, a brief sketch of some aspects of Jebero based on them, namely paragraphs entitled, Phonetics, Nouns, Pronouns, Number and Gender, Numerals, Participles, Verbs. His article ends with the two versions of the Lord's prayer of the British Museum MSS and a vocabulary of some 193 entries taken from the same source. The one omission on Brinton's part is the complete lack of reference to the other translated material in Jebero in the original document.

Three documents containing Jebero material date from the 19th century. In 1873 James Orton crossed South America by way of the Amazon and recorded on route very brief word lists of 15 Indian languages. He has 14 Jebero words in his book published in 1876.

Antonio Raimondi in an article published in 1865 gives the Jebero numerals one to five. Beuchat and Rivet used the published material of Brinton, Orton and Raimondi in their article on the Cahuapana family already referred to.

The third 19th Century document is an anonymous MS in the National Library of Rio de Janeiro. It was written in French, and is first referred to by Rivet and Tastevin in 1951.

In 1922 Tastevin recorded a vocabulary of Jebero from informants who came from the river Aipena. This material, together with the MS in the Brazil Library is used by Rivet and Tastevin in their article. In this article the authors give a grammatical sketch of Jebero of some 14 pages and a vocabulary of 29 pages. The material is weak phonetically, and there are many mistakes in the grammatical outline, e.g., the 2nd person singular actual form is given as -kor or -ker, whereas this form is really the 2nd person singular imperative, § 7432. However, the general conclusion of Rivet and Tastevin that the Jebero language has changed little since the 17th Century seems valid.

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2 'The Andes and the Amazons; or Across the Continent of South America', New York, 1876, p.473.
In 1925 the anthropologist Tussman visited Jeberos and later published details of their material and social culture. At the end of his account he has four paragraphs on Jebero grammar and a vocabulary. He mentions the plural suffix, the possessive suffixes, the conjugation of the verb and makes three attempts to give examples of the verb 'to be'. The word list comprises 283 words which he sought to get from a number of tribes in Peru and he also gives 17 additional words in Jebero. In common with all the other Jebero material already mentioned he does not record the glottal stop or any glottal feature which is a serious lack since this is a very common and important feature in Jebero.

This is not the place to attempt to compare these different documents with each other and with the material which was obtained for this present study. It is hoped to do this in another place since such a comparison should be of interest. Indeed, in view of the fact that there is so little recorded material in most of the languages of Amazonia extant from the past such a comparison should prove well worthwhile.

The present study

This thesis is the result of field work which was carried out during the period October 1955 to August 1956. About half of this time was spent in the chief settlement which is named Jeberos, and the other half at the jungle base of the Summer Institute of Linguistics where work continued with an informant. In the course of this stay in Jeberos it was possible to record just over a hundred texts, mostly stories, from some ten persons. The analysis of these texts and the subsequent discussion of points arising during the analysis, which was possible while living in the village, proved particularly helpful and made it possible for a reasonably full understanding of the language to be gained in what was a comparatively brief period.

In carrying out this work, for various reasons, it was necessary to use a number of speakers as language informants. These men were bilingual speakers, being reasonably fluent in Spanish as well as Jebero. However, the analysis presented in this thesis is based on the speech of four men in particular, whose services proved to be more regular than those of others. These men were, Hermándillo Rojas, Ricardo Ortiz, Carlos Tacleo and Eleórvar Ortíz. The analysis presented does not in any sense claim to be more than an account of some aspects of the speech of these men and especially of the one style of speech which may be termed 'narrative'. Though subject to this important double limitation of field, it is hoped that this study will provide material for a proper synchronic comparison of the language with other allegedly Cahuapanan languages and indeed with other languages of the area, when sufficient material is also available in these other languages. This study should provide details of the grammatical structure in such a way that systems and structures may be compared for typological purposes and should also set out adequate material for a more informed genetic comparison with other languages.

It is also hoped that the present study may illustrate principles of grammatical analysis and, to a lesser extent, of phonological analysis which will prove to be of wider application in the analysis of many more of these South American Indian languages. In this connection attention is drawn as much to the analysis as to the language material actually presented in this description.

The aim of this study may be summarised as threefold:

a) to present an analysis of some aspects of the narrative style of speech of four Jebero speakers, and within this delimited field to provide an adequate grammatical description which

b) may serve to exemplify principles which may be applied in the presentation of other studies of these South American Indian languages, and

c) may provide a basis for proper synchronic comparison with other languages of this family.

This thesis is mainly concerned with the analysis at the grammatical level of the verbal piece in Jebero, i.e. the speech of these four Jebero speakers which will be referred to as 'Jebero' throughout the rest of this thesis. A brief outline of Jebero phonology is also given.

The verbal piece itself is a grammatical unit abstracted from the phonetic material and defined in section 52. The statement of the verbal piece in Jebero inevitably covers a very large part of the grammatical structure of the language since Jebero may, with some justification, be called a 'verb' centred language. Any Jebero text reveals this and statistically it is found that a large proportion of words in a text, generally more than half the total number, are verbs or formed from verb stems. The verbal piece comprises a much higher percentage of the forms in any text. These points are illustrated in the texts given in chapter 11.

Since the terms 'function' and 'structure' are used in different ways in modern linguistics, their particular use in this thesis should be stated at the outset. By the function of the verbal piece is meant the distribution of the verbal piece in the sentence and its relations to other pieces in the sentence, e.g. concordial relations between the verbal piece and other pieces. By the structure of the verbal piece is meant the distribution and inter-reations of the various grammatical elements which are found functioning within the verbal piece. These elements range from the larger elements such as the clause and phrase, to elements like the word and morpheme which themselves may function as part of the larger elements. The function of any element in this sense is its relation to and distribution with other elements within a larger element. The structure of any element is its composition stated in terms of the grammatical elements which function within it. Thus the function of any word is stated in terms of the constructions into which it enters and its structure is stated in terms of the classes of morphemes of which it may be composed.

In this way there is set up a hierarchy of levels of grammatical analysis between the sentence on the one hand and the morpheme on the other, and each element in the hierarchy is described in terms of its function - its external distribution as an element within a larger element - and its structure - its internal distribution as an element comprising other grammatical elements. The sentence is the largest piece for which grammatical statements are made, § 42, and hence in this sense the term grammatical function does not apply to it. Similarly the morpheme is the smallest element for which it is possible to make statements at the grammatical level and the term grammatical structure is therefore inapplicable to the morpheme.

1 The term 'level' is here used in a more extended manner than that employed by Prof. J.R. Firth, since the word is used not only for the main divisions of linguistic analysis, e.g. phonetic, phonological, grammatical etc., but also for different stages of analysis within each of these main levels. Thus within the grammatical analysis, which is itself one 'level of analysis' (in the Firthian sense), different levels such as sentence level, clause and phrase level, word level, morpheme level, are recognised in this thesis.
At any one place in the grammatical structure of an element it may be possible to list a number of grammatical units which may be said to form a closed system of terms applicable at this particular place in the structure. The members of each order of suffixes, for example, constitute such a system, or at a higher level, within the nominal phrase the members of the adjective sub-class of the nominal word class constitute a closed system in that every member may function as subordinate member of the endocentric nominal phrase in the way described in section 5513.

While the grammatical analysis is in no way to be considered as dependent upon the phonological analysis, it is convenient and of value to state congruences between the two levels. The grammatical and phonological descriptions may best be considered separate abstractions from the phonetic material at different levels. However, it is sometimes found that the statement of the analysis at one level establishes categories that aid the statement of the analysis at the other level. In view of these considerations and of the desirability of stating certain congruences between the two levels as set up in this analysis it seemed useful to include a brief outline of Jecero phonology in this thesis and this will be found to precede the grammatical study which is the main subject of the thesis.

14 Some general characteristics of Jecero grammatical structure

At the grammatical level Jecero seems best characterised as, in traditional terms, agglutinative with inflectional elements. The number of formally distinguished parts of speech is small - four in all, the verb, nominal, adverb and participle. The great majority of words belong to the first two classes; the number of adverbs and participles being comparatively very small.

Words may comprise a stem with or without other elements. Word stems may comprise a single element or a variety of elements, but always include at least one root. Roots may be combined with other roots to form further stems or affixed by class-changing suffixes to form stems of other word classes and this process may be continued through many changes. For example, a nominal may be suffixed by a verb-stem-forming suffix and then further suffixed by a nominal-stem-forming suffix.

Various types of affixation are found but chiefly suffixation. Prefixation is limited to the verb forms which are also the only word class which is always found to comprise stem and at least one suffix of an inflectional type. Apart from this extensive series of verbal suffixes the majority of other affixes would not generally be regarded as inflectional. Words may comprise one, two or several, affixes from a large number of such non-inflectional suffixes which are arranged in different classes and sub-classes.

The grammatical feature which is traditionally termed 'incorporation' is found. Verb stems may comprise elements which correspond closely to similar forms which function as nominals. The object pronominal is also found incorporated, that is to say, verbs are always found suffixed by one of a series of suffixes which are either unipersonal or bipersonal.


The person system comprises four terms, first person inclusive, first person exclusive, as well as second and third person. The number system comprises two terms, singular and plural, though only the plural is marked morphologically. The first person inclusive singular is one member of the four term singular series formally, though notionally it would be termed plural, or more precisely, dual. Formal and semantic categories are at this point out of phase.

At the syntactical level Jebero sentences may be of a number of patterns. The majority of sentences are of one or two patterns both of which include a verb. The sentence is always marked by one of a series of intonational pitch patterns.

There is considerable congruence of phonological and grammatical boundaries in Jebero, e.g., the sentence corresponds frequently to the intonation tune, and the word which is primarily a grammatical unit has also definite phonological marks.

All these points will be described in detail at the appropriate place in this study.
21 General remarks

In this chapter the symbols used in the transcription of the Jebero materials are set out and their value given. The punctuation marks are also explained.

It will be seen that the symbols used correspond for the most part to the symbols suggested in the I.P.A. chart, except that the symbol $\acute{a}$ is used for the palatal lateral which is written as $\grave{a}$ in I.P.A.

The transcription employed may properly be termed phonemic. It is not a 'narrow' or phonetic transcription, but is designed to serve as a broad reading transcription.

22 The symbols of the transcription

For convenience the symbols employed in this transcription are set out in tabular form. In this way a rough indication of the phonetic value of the symbols is quickly gained and section 23 gives the full phonetic description of the sounds which these symbols represent in various environments.
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<td>ã</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td>n</td>
<td>s</td>
<td>ñ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frictionless</td>
<td>w</td>
<td>ð</td>
<td>y</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Front Central Back

Vowels

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close</td>
<td>i</td>
<td>u</td>
<td></td>
</tr>
<tr>
<td>Half-close</td>
<td>o</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open</td>
<td></td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

Punctuation Marks

. , ' Capitals

23 The phonetic value of the symbols

23.1 General remarks

In this section a description of the sounds which these symbols represent is given. Each symbol will be taken in turn and the different sounds which it symbolizes will be described.

However, certain phonetic features may be stated not just for the sounds represented by the individual symbols but for a series of sounds represented by a corresponding series of symbols. Consequently a more economical statement of the phonetic value of the various symbols is possible by means of a description which states some phonetic features for series of sounds and their corresponding symbols rather than stating many times features which apply to several sounds. In the table in section 22 the symbols of the transcription have been set out so as to group different symbols according to phonetic features which the sounds they represent have in common. The following description of the different symbols will, therefore, utilize this grouping so as to make statements for series of symbols as well as for individual symbols.

23.2 Stops

There are four stops, each with a different point of articulation:

p is bilabial,
t is dental,
c is palatal, produced with the blade of the tongue in palatal position and the tongue tip down behind the bottom teeth, and released with considerable friction such as an affricate.
k is velar, fronted before a front vowel, and back before a back vowel.

All the stops are unaspirated and voiceless in all phonetic environments except that after any nasal all stops are voiced. All stops are released, except that k may or may not be released in word final position.

In a sequence of consonants within the word k followed by k is realised as a geminated k.

Three stops, p, t and c, may, facultatively, be glottalized in syllables ending -all. The glottalization of these stops may be contrasted with the glottalized consonant k. Whereas the glottalized forms of the three stops are limited to the one phonetic environment the glottalized consonant k is not so limited and can never occur in such an environment since it is always final in the syllable.

233 Glottalized consonants

The symbols ّ، and ؤ represent three glottal sounds. These sounds have one feature in common, namely, they all involve closure of the glottis.

ّ is an alveolar flap with closure of the glottis momentarily more or less simultaneously with the contact of the tongue and alveolar ridge.

ٍ is a velar stop with closure of the glottis more or less simultaneously with the velar closure. In word final position neither the release of the velar stop nor the opening of the glottis is usually heard.

ؤ is a glottal stop. There is complete closure of the glottis in all phonetic environments except that between vowels the closure may or may not be complete.

234 Sibilants

The symbols s and j represent two sibilants which contrast in point of articulation as follows:

s is alveolar,

j is palato-alveolar.

Both sibilants are grooved, voiceless and unaspirated in all phonetic environments.

235 Flap

The symbol r represents a voiced alveolar flap in all phonetic environments.

236 Laterals

The symbols l and ـ represent lateral sounds which contrast in point of articulation as follows:

l is alveolar,

ـ is palatal, produced by the blade of the tongue in the palatal region, with the tongue tip down behind the bottom teeth.
237 Nasals

The symbols m, n, fi and η represent four nasal sounds which differ in point of articulation as follows:

m is bilabial,
n is dental,
fi is palatal, produced with the blade of the tongue in the palatal region, with the tongue tip down behind the bottom teeth,
η is velar.

This nasal series parallels the stop series described in section 232. All nasals are voiced in all environments.

238 Frictionless continuants

The symbols w, ŋ, and y represent three frictionless continuants contrasting as to point of articulation, i.e. point of maximum narrowing in the mouth, as follows:

w is bilabial, with some velarisation, i.e. the point of maximum narrowing within the mouth is at the velum,
ŋ is alveolar, with tongue tip right down behind the bottom teeth and point of maximum narrowing between the tongue blade and the alveolar ridge,
y is palatal, with point of maximum narrowing being between the tongue blade and palatal region and with tongue tip down.

All three sounds are voiced and unaspirated in all positions.

Lip features mark w and y. There is considerable lip-rounding with w, though this varies with the following vowel, being most noticeable with o and least with i. There is lip spreading with y and this varies with the following vowel, being most noticeable with o and least with u. These lip features appear to vary from speaker to speaker.

Slight friction may occasionally be heard with ŋ, though this does not seem to be determined by any phonetic environment. It should be emphasised that in the vast majority of instances this sound is frictionless.

239 Vowels

The symbols i, a, 0 and u represent four vowel sounds which contrast in the following manner:

i is close, front and unrounded,
a is open, central and unrounded,
0 is half-close, central-back and unrounded,
u is close, back and rounded.

For purposes of description these four vowels fall into two groups, i, a and u on the one hand and 0 on the other.

i, a and u are always fully voiced and are oral vowels except that when followed by a nasal within the syllable each vowel is nasalised to a varying extent. The degree of nasalisation is most marked when a free form ending with a nasal is suffixed by a further morpheme. These three vowels are also glottalized when a glottalized consonant closes the syllable. Such glottalisation varies considerably, being least apparent within the morpheme and more extensive at points of
junction between morphemes. Tenseness also marks these three vowels in such syllables, and i and u are more open in such syllables.

Before a velar sound a is further back and rather more close, sometimes being half-open, in contrast to open in other environments.

The vowel o contrasts with vowels already described in a number of ways. It is not always fully voiced, being voiced or voiceless in syllables ending with a and voiced in every other phonetic environment. It is never found nasalized nor glottalized. Following w this vowel is more close and further back than it is in other environments and lip rounding is present.

24. Punctuation marks

The following punctuation marks are employed in the transcription: . , ' and capital letters.

. is used to mark the end of a sentence.

, is used to mark the beginning and the ending of a clause and of the vocative piece unless the beginning or ending coincides with the beginning or ending of the sentence itself.

' is used to mark stress whenever the stressed syllable is other than the normal stressed syllable or when emphatic stress occurs. See section 344 for a full discussion of stress.

Capital letters are used initially to mark the names of places and persons.
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Chapter three Outline of phonology

31 General remarks

This outline of Jebero phonology attempts to provide an analysis of the phonological structure to which the great majority of words and sentences may be referred. However, it is not intended to be exhaustive since it is an outline phonological description in a study which is grammatical in emphasis. This limitation is brought out, for example, by the fact that no attempt is made to state the structures of unassimilated loan words, c.f. § 337.

One further general point may be made. It seems clear that any more detailed study of Jebero phonology would profit from the establishment of a number of separate phonological systems for the statement of features which are relevant for parts of the material; for example, a study of the prosodic feature of nasalization in the nominal would be most rewarding and such a study might be contrasted with a study of nasalization in the verb, for more detailed statements would be possible if two systems were set up to handle this feature. However, such studies are quite outside the scope of this chapter which does no more than give a general outline which, it is hoped, is completely accurate but in no sense exhaustive.

32 The elements of the phonological analysis

The phonological analysis is stated by means of certain elements which are set up for this purpose. These elements are the tune, word, syllable, prosodic feature and phonematic unit. All these elements are elements of the phonological analysis and must not be confused with elements established at another level of statement, e.g. the phonetic or grammatical levels, though the phonological elements may correspond to some elements established at other levels.

All utterances are marked by one of a number of pitch patterns at the phonetic level. The phonological element, the tune, is set up for the statement of these pitch patterns. The tune is concerned with features which may extend over one word or over many words. The tune, which is the largest phonological element, corresponds roughly to the sentence which is the largest grammatical element, § 42, though the congruence of these two elements from these two different levels is by no means complete, § 4.72.

The word has status primarily as a grammatical element. However, since every word is delimited by a phonological mark, stress, § 344, the word though primarily a grammatical element is also recognised as having phonological status as an element in the phonological analysis. The structure of the word is described in terms of syllables and prosodic features.

The syllable has status at both the phonological and phonetic levels. The phonetic syllable and the phonological syllable do not always correspond exactly. The alveolar flap in such a word as wansrapali, 'he is standing', is assigned at the phonological level to the syllable -no- as a prosodic feature, whereas at the phonetic level the flap is the initial consonant of the syllable -ra-, § 333. See also § 343 for further examples of non-congruence between the phonological and the phonetic levels. The structure of the syllable is stated in terms of prosodic features and phonematic units.

Prosodic features are phonological elements having phonetic exponents which either extend over more than one place in the syllable or have implications over more than one place in the syllable in that they delimit a structure from preceding and following structures. Prosodic features may be stated for a sentence, a whole word, or for some part(s) of a word, for a whole syllable or for some part(s) of a syllable.

Phonematic units are phonological elements having phonetic exponents which may be referred to one place only in the phonetic structure of the syllable. Phonematic units are of two types; consonantal units and vocalic units. These units will be referred to as C and V units respectively throughout this analysis.

Phonematic units should not be identified with the usual phonemes set up to handle the phonological analysis by many linguists, nor are prosodic features to be equated with the supra-segmental phonemes of phonemic phonological analysis. There will, of course, be some similarity between the phonetic exponents of these two pairs of phonological categories, but since the systems of which they are members are different any attempt to make one for one identifications is bound to be misleading.

The syllable

3.1 General remarks

The structure of the syllable will be described in terms of two systems, the phonematic units system and the prosodic features system, and three places, initial, medial and final place. It will be seen that syllable initial, medial and final places are kept apart, and different statements are made for the systems, whether prosodic or phonematic, which are stated for these places. Sections 3.2, 3.3 and 3.4 describe these two systems and three places.

Two types of syllable are distinguished at the phonological level, the simple and complex syllable. The great majority of the syllables in the material examined are referable to the phonological structure of the simple syllable. Furthermore, the two types of syllable are similar in very many respects. For these reasons, the full description of the syllable is made as for the simple syllable and then section 3.5 adds details applicable to the complex syllable and points out the differences between the two types of syllable.

Certain more common extra-systemic syllable patterns are described in section 3.6 and in section 3.7 some examples of assimilated loan words are given.

3 This is in marked contrast with a phonemic phonological analysis in which one overall system is set up. For example, in such an analysis two phonemes not in complementary distribution at one point in the structure are assigned to two different phonemes and this distinction is maintained even at those points in the structure where no contrast exists and the two phones are in complementary distribution. The treatment adopted in this thesis, however, would set up different systems for the two points of the structure. It is polysystemic whereas the phonemic treatment is monosystemic.

15
The phonematic units system

332.1 The system in general

The phonematic units system is a system of two terms, C and V.

Every syllable has a nucleus which consists of a V unit which is always found in syllable medial place. A syllable may comprise this nucleus alone or a nucleus that is preceded and/or followed by a margin which is always a C unit. Thus four types of syllable are found:

- V nucleus alone,
- VC nucleus followed by a margin,
- CV nucleus preceded by a margin,
- CVC nucleus followed and preceded by margin.

Thus it will be seen that every syllable has a V unit but not every syllable has a C unit.

The most frequently found type of syllable is the third type listed above, namely, CV. Samples of text material suggest that more than 75 per cent of syllables are referable to the structure CV. From 73 per cent to 81 per cent of syllables in different text samples were of this structure. The next most frequently occurring types are the V and CVC structures. V syllables account for about 12 per cent of sample material and CVC for about 10 per cent. VC syllables are very much more infrequent than the other three types and were found to account for about 1 per cent of the sample material.

Syllables of structure V and VC are restricted to initial position in the morpheme and generally to initial position in the word as well. The presence of such syllables is, therefore, prosodically relevant as a mark of morpheme junction.

332.2 Medial place in the syllable

Every syllable comprises a medial place in which the syllable nucleus, a V unit, functions.

There are four V units which together make up a closed system. The members of this four term system are, I, A, U and E. These symbols must not be confused with the symbols of the transcription which have been described in § 239, i.e. i, a, u, and e.

The phonetic exponents of these four phonological units are vowels with the following qualities:

- I - closeness and frontness,
- A - openness and centrality,
- U - closeness and backness,
- E - half-closeness and central-to-back quality.

These four V units may be set out in the following phonological system:

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close</td>
<td>I</td>
<td>U</td>
</tr>
<tr>
<td>Half-close</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>Open</td>
<td></td>
<td>A</td>
</tr>
</tbody>
</table>

Examples:

<table>
<thead>
<tr>
<th>Transcription</th>
<th>Phonological Syllable</th>
<th>V Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>la'ka</td>
<td>CV CV</td>
<td>CU CA</td>
</tr>
<tr>
<td>teška'či</td>
<td>CVC CV CV</td>
<td>CEC CA CI</td>
</tr>
<tr>
<td>itek</td>
<td>V CVC</td>
<td>I CEC</td>
</tr>
</tbody>
</table>
3323 Initial place in the syllable

The great majority of syllables comprise an initial place G unit, whether with or without some initial place prosodic feature.

There are eleven G units which together make up a closed system of phonematic units stated for syllable initial place. The members of this eleven term system are: P, T, K, S, $, L, M, N, W, f t and Y. These symbols must not be confused with the symbols p, t, k, s, j, l, m, n, w, ß, and y, which are described in section 23. The phonetic exponents of these eleven phonological elements are as follows:

P - bilabial stop articulation,
T - dental stop articulation,
K - velar stop articulation,
S - alveolar sibilant articulation,
$ - palatal sibilant articulation,
L - alveolar lateral articulation,
M - bilabial nasal articulation,
N - dental nasal articulation,
W - bilabial frictionless continuant articulation,
f t - alveolar frictionless continuant articulation,
Y - palatal frictionless continuant articulation.

These symbols may be set out in tabular form to illustrate similarities and contrasts as follows:

<table>
<thead>
<tr>
<th></th>
<th>Bilabial</th>
<th>Dental-alveolar</th>
<th>Palatal</th>
<th>Velar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
<td>P</td>
<td>T</td>
<td></td>
<td>K</td>
</tr>
<tr>
<td>Sibilant</td>
<td></td>
<td>S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral</td>
<td></td>
<td>L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasal</td>
<td>M</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frictionless</td>
<td>W</td>
<td>¥</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3324 Final place in the syllable

Some syllables comprise a final place in which a C unit is always found, with or without some final place prosodic feature.

There are three C units which together make up a closed system of phonematic units stated for syllable final place. The members of this three-term system are: k, n and n. These symbols must not be confused with the symbols of the transcription which are described in section 23. The phonetic exponents of these three phonological elements are as follows:

k - velar closure which may or may not be released,
η - velar nasal closure,
n - bilabial or dental nasal closure, bilabial when before a syllable with initial P, except when r-prosody accompanies the syllable in which n is in final place, dental elsewhere.

CV and V syllables constitute structures in which the category of syllable final place is irrelevant as far as the statement of the phonematic units of the syllable is concerned, though not for the statement of prosodic features of such syllables, § 3334.

Examples:

<table>
<thead>
<tr>
<th></th>
<th>Phonological Syllable</th>
<th>Phonematic Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>kwaśa</td>
<td>CV CV</td>
<td>KU FA</td>
</tr>
<tr>
<td>toc̄kañi</td>
<td>CVG CV CV</td>
<td>TEk KA LX</td>
</tr>
<tr>
<td>pełże</td>
<td>CVG</td>
<td>PB3</td>
</tr>
<tr>
<td>seńok</td>
<td>VCV</td>
<td>En TEk</td>
</tr>
</tbody>
</table>
3333 The system in general

Every type of syllable, irrespective of the phonematic structuring of the syllable, may have one or more prosodic features stated either for the whole syllable or for some part of the syllable.

Three types of syllable prosody are found, namely, prosodies relevant for the whole syllable, prosodies relevant for syllable initial place, and prosodies relevant for syllable final place. These may be set out as follows:

- Syllable prosodies: a and o
- Syllable initial prosodies: y
- Syllable final prosodies: ʊ, n and r

Stress may be regarded as a further prosody of the whole syllable by extension, but since it is also a prosody of the word by implication, it delimits the word, it is a prosody of both word and syllable. For convenience it is described as a word prosody in section 344 rather than in this section as a syllable prosody. However, it should be noted that this feature is a prosody of both word and syllable.

The following sections describe each of the three types of prosody which are stated for the syllable in turn, section 3332 dealing with prosodies of the whole syllable, section 3333 with syllable initial prosodies and section 3334 describing syllable final prosodies.

3332 Prosodic features of the whole syllable

Prosodic features of centrality and non-centrality are abstracted from the syllable and stated as prosodies of the whole syllable. These two prosodies are termed the o-prosody and the a-prosody respectively.

The phonetic exponent of the o-prosody is a central-to-back quality in the syllable which may be said to have a focal point at syllable medial place. All syllables whose V nucleus is E are accompanied by the feature of o-prosody. The phonetic exponent of the a-prosody is absence of this central-to-back quality in the syllable. The focal point of the a-prosody is similarly at syllable medial place, and all syllables whose V nucleus is I, A or U are marked by the a-prosody. In this way all syllables of Jebero are assigned to structures containing either an o-prosody or an a-prosody.

These prosodic features though having a focal point at syllable medial place are not treated as syllable medial prosodies but as prosodies of the whole syllable because their occurrence has implications for the whole syllable. It is found that all syllables containing the V units I, A or U as their nucleus comprise one type of syllable which contrasts markedly with syllables containing the V unit E. This contrast is seen in marked differences in the phonological elements, both phonematic and prosodic, which are found at syllable final place according to whether the syllable nucleus is I, A or U on the one hand or E on the other, § 334.

In certain circumstances it is also found that syllables whose nucleus is E have the prosodic feature of glottalization extending throughout the syllable whereas no such extension is found in syllables whose nucleus is I, A or U, § 335. This distinction, then, between the two types of syllable based on the V nucleus may be treated as prosodic in character since it has implications extending throughout the syllable. In the one case the phonetic feature of central-back quality of the V nucleus is the exponent of the prosodic category of o, while in the other instance the absence of this phonetic feature is the exponent of the prosodic category of a. The justification for the
abstraction of these phonetic features as significant features having prosodic function rather than, for example, the features of frontness versus backness, or closeness contrasted with openness, is to be found in the resulting simplicity and clarity of statements which can be made to cover certain features of the whole syllable and especially of features at syllable final place when this particular abstraction is made.

Symbols: Syllable prosodies are written in raised position preceding the syllable and other prosodic symbols, the symbols a and o being used.

Examples:

<table>
<thead>
<tr>
<th>Transcription</th>
<th>Phonological Symbolization</th>
</tr>
</thead>
<tbody>
<tr>
<td>laba</td>
<td>aCV aCV aCV aUK aKH</td>
</tr>
<tr>
<td>tekscayi</td>
<td>aCV aCV aCV aUK aKH</td>
</tr>
</tbody>
</table>

3333 Prosodic features of the initial place

One syllable initial prosody is set up, the prosody of palatalization which is symbolized as y-prosody.

The phonetic exponents of this prosody are the fronting of initial elements in the syllable and the palatalization of certain C units in initial place, namely, T, L, $, N and d. When both a y-prosody and one of these C units is stated for syllable initial place at the phonetic level there is fronting of the V unit of the syllables and palatalization of the C unit as follows:

y with T - closure with blade of the tongue and hard palate, released with considerable friction;

y with L - lateral produced with the blade of the tongue in the palatal region;

y with $ - closure with blade of the tongue and hard palate released with considerable friction, c.f. y with T,

y with N - nasality with closure between the blade of the tongue and palatal region,

y with d - frictionless continuant with point of narrowing being between the blade of the tongue and palatal region. The phonetic exponents of y-prosody with d are, thus, similar to the phonetic exponents of Y. The distinction between Y and d in the system of initial place phonematic units is neutralized in y-prosody syllables.

The combination of the y-prosody with these C units is symbolized in the transcription by the letters c, $, c, f i  and y, 23.

The y-prosody is found to be relevant only for syllables with a structure at the phonematic level comprising a C unit in syllable initial place, i.e., CV and CVC syllables. The y-prosody is found most frequently with syllables whose V nucleus is I, though not all such syllables are marked by the y-prosody, nor is the distribution of the y-prosody limited to I nucleus syllables.

Symbols: y written in raised position immediately preceding first place in the syllable symbolizes the y-prosody.

1 The phonological symbolization only includes symbols already explained and, thus, at the end of each of these sections the symbolization is a little more complete. For the full symbolization see § 3334.
Examples:

tekkada 'he ran'

kay 'manioc'

ulai 'rain'

peq 'fire'

333. Prosodic features of the final place

Three syllable final prosodic features are set up, glottalisation, r-ness, and nasalisation. These three prosodies are symbolized as: 

?-prosody, r-prosody and n-prosody respectively.

The phonetic exponents of these prosodies are as follows:

?-prosody:

a) varying degree of glottalisation of the vowel in the syllable,
b) complete closure of the glottis after the vowel,
c) glottalisation extending throughout the whole syllable in the case of syllables with medial place E and final place k phonematic units.

r-prosody:

a) an alveolar flap when the syllable is followed by any V unit, P, K, S, M, W, n or pause,
b) increased centrality and r-quality of the vowel.

n-prosody:

a) varying degree of nasalization of the vowel in the open syllable,
b) either velar closure with nasalization when the syllable is followed by a V unit or by pause, or varying degree of homorganic closure with nasalization when the syllable is followed by an oral C unit, i.e., bilabial closure before P, dental or alveolar before T, S, L, S, and velar closure before K and W.

Syllable final prosodies are found to be relevant for any type of syllable irrespective of the phonematic structure including syllables not comprising a C unit in final place, i.e. CV and V syllables.

The ?-prosody is stated for syllables comprising the a-prosody and also for syllables comprising the e-prosody only conjointly with the r-prosody or with k in final place.

The r-prosody is stated only for syllables having the e-prosody.

The n-prosody is stated for syllables having the a-prosody, and for syllables with the e-prosody only conjointly with r-prosody and ?-prosody, and then always at the junction of morphemes within the word, § 3433.

Symbols: ?, r and n written in raised position immediately after syllable final place, symbolize these three prosodic features.

Examples:

tekkada 'he ran'

kay 'manioc'

ulai 'rain'

peq 'fire'

Symbols: ?, r and n written in raised position immediately after syllable final place, symbolize these three prosodic features.
Final elements of the syllable

The phonological elements already described as relevant for the statement of syllable final place are limited in their occurrence relative to one another. These restrictions can most clearly be stated in terms of the allocation of all syllables to two groups determined by the presence of a or e-prosody.

Final elements in a-prosody syllables

Syllables marked by the a-prosody may or may not comprise a C unit in the syllable final place. Syllables comprising a C unit in final place are termed closed syllables and those without such a C unit are termed open syllables.

Open syllables with a-prosody may also comprise either ?-prosody or n-prosody, or both ? and n-prosodies. This last structure is found only at junctions of morphemes within the word, § 34.333.

Closed syllables with a-prosody may comprise C units k and ? or n. The ?-prosody is found with closed syllables with k as final C unit. No other prosodic features are found to mark syllable final place in syllables of this type. In the material examined there are, in fact, very few closed syllables with a-prosody and almost all of these are within verb forms. The C unit ? in a-prosody syllables is entirely limited to a group of verb suffixes. A more extensive treatment of Jebero phonology would find definite advantages in separate treatment of the phonological structure of the nominal and of the verb.

These possibilities may be set out in tabular form:

<table>
<thead>
<tr>
<th>Syllables</th>
<th>Final Phonematic Unit</th>
<th>Final Prosodic Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>-</td>
<td>?-prosody</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>n-prosody</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>n and ?-prosodies</td>
</tr>
<tr>
<td>Closed</td>
<td>k</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>k</td>
<td>?-prosody</td>
</tr>
</tbody>
</table>

Examples:

tokka?ki ‚he ran‘

u’lan ‚rain‘

ila?nem? ‚that which is shot‘

ilampasik ‚when he is making a noise‘

Final elements in e-prosody syllables

Open syllables with e-prosody are only found when at least one prosody of syllable final place is found. Such syllables are found with r? or v and n-prosodies conjointly at the junction between morphemes within the word. This last type of syllable is limited to certain verbal forms only, § 34.333.
Closed syllables with r-prosody may comprise C units k, n, or n. Closed syllables may also have t-prosody with k as final C unit, and r-prosody with n as final C unit.

This may be set out in tabular form as follows:

<table>
<thead>
<tr>
<th>Syllables</th>
<th>Final Phonematic Unit</th>
<th>Final Prosodic Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td></td>
<td>r-prosody</td>
</tr>
<tr>
<td></td>
<td></td>
<td>r and ?-prosodies</td>
</tr>
<tr>
<td>Closed</td>
<td>k</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>?-prosody</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>r-prosody</td>
</tr>
</tbody>
</table>

Examples:
- *itek* 'root' əV əCV? closed by k with ?-prosody
- *pey* 'fire' əCV closed without prosody
- *kua* 'manioc' əCV? open with ? and r-prosodies

335 The complex syllable

The details given in the immediately preceding sections apply to the vast majority of syllables in the material examined, and all such syllables which are referable to the structures that have been described are termed simple syllables.

However, some syllables are found which are not referable to such structures and these are termed complex syllables. In all instances complex syllables occur at morpheme junction points in the structure of the words concerned, § 3433.

Complex syllables are referable to structures described in terms of the same phonematic and prosodic elements already described for simple syllables. All the features which characterize both the simple syllable as a whole, and syllable initial, medial and final place, are found in exactly the same way to be applicable to complex syllables, except that two V units may be assigned to syllable medial place. These two V units function as a rising diphthong with prominence on the second V unit.

Complex syllables are only found at points corresponding to morpheme boundaries, and they are never found within the morpheme. They, thus, have prosodic function as markers of morpheme boundaries, § 3433.

Examples:
- *asumi* 'he did not tie' əV əCV? əV_CV
- *encuinlock* 'I will go and cut' əV əCV?əV əCV

336 Extra-systemic syllable patterns

An outline of phonology of the type set out here cannot attempt to state exhaustively all the syllable patterns found in Jebero words apart from the main system which does, in fact, account for the vast majority of words. However, two extra-systemic patterns which occur rather more than other patterns may be stated and some examples of these different types of pattern given.
A few syllables, whose phonematic units are referable to structures already described, comprise prosodic features which are also referable to structures described except that a prosodic feature of labialization is found in syllable initial place. The feature is treated as prosodic because it extends over the whole syllable. This prosodic feature is termed the \textit{w-prosody}.

The phonetic exponent of \textit{w-prosody} is labialization of the syllable and the phonetic exponent of the initial \textit{C} unit of the syllable concerned is particularly labialized. Examples of common words in which this feature is stated are given below.

In as much as words assigned to this phonological structure are, apart from the presence of this \textit{w-prosody}, entirely referable to the structures already described, it would be possible to treat the \textit{w-prosody} as an element of the main phonological system, comparable with the \textit{y-prosody}. This has not, in fact, been done because of the comparative infrequency of the structure in the material examined.

Examples:

\begin{verbatim}
  kwa  'I'  awCV
  tokwa'li 'he fears'  oCV oCV aCV
  pøkwa'la 'you lie down'  oCV oCV aCV
  pødni  'water pot'  awCV øCV
  kwo'la 'you are heavy'  øCV øCV øCV
  mø'æk  'I am full'  øCV øCV øCV
  pwæpædi 'he is fishing'  øCV øCV øCV
\end{verbatim}

\textbf{3362} Syllables with final \textit{Y}

Some syllables are found to be referable to a phonematic structure \textit{VC} or \textit{CVC} in which the phonematic unit in syllable final place is \textit{Y}. At the phonetic level there is considerable diphthongization between the preceding \textit{VC} and final consonant. The phonematic unit \textit{Y} only occurs in final place in these extra-systemic syllables.

Alternatively it would be possible to analyze these syllables as referable to a structure comprising two \textit{V} units and to state that marked prominence is found on the first \textit{V} unit. Such syllables would have to be distinguished from complex syllables which are always inter-morphemic with prominence on the second \textit{V} unit, § 335.

Examples:

\begin{verbatim}
  wey  'far off'  øCV
  u'lay  'large'  øCV øCV
  aytek  'jungle bird'  øCV øCV  c.f. Quechua aytek
  supay  'demon'  øCV øCV  "  supay
\end{verbatim}

\textbf{337} Assimilated loan words

A few examples of assimilated or partially assimilated loan words are given as these illustrate rather well the phonological structure already described.
Each word is given in the Jebero transcription followed by the Spanish or Quechua corresponding word in brackets.

<table>
<thead>
<tr>
<th>Jebero</th>
<th>Spanish</th>
<th>Quechua</th>
</tr>
</thead>
<tbody>
<tr>
<td>afimar</td>
<td>(animal)</td>
<td>'animal'</td>
</tr>
<tr>
<td>cinta</td>
<td>(tienda)</td>
<td>'shop'</td>
</tr>
<tr>
<td>kampana</td>
<td>(campana)</td>
<td>'bell'</td>
</tr>
<tr>
<td>markada</td>
<td>(mercado)</td>
<td>'market'</td>
</tr>
<tr>
<td>misa</td>
<td>(misa)</td>
<td>'table'</td>
</tr>
<tr>
<td>pan</td>
<td>(pan)</td>
<td>'bread'</td>
</tr>
<tr>
<td>sehula</td>
<td>(señora)</td>
<td>'lady'</td>
</tr>
<tr>
<td>simana</td>
<td>(semana)</td>
<td>'week'</td>
</tr>
<tr>
<td>sumpaca</td>
<td>(sombrero)</td>
<td>'hat'</td>
</tr>
<tr>
<td>sunboca</td>
<td>(soldado)</td>
<td>'soldier'</td>
</tr>
<tr>
<td>aróbala</td>
<td>(arroz)</td>
<td>'rice'</td>
</tr>
<tr>
<td>bisina</td>
<td>(vecino)</td>
<td>'neighbour'</td>
</tr>
<tr>
<td>putija</td>
<td>(botella)</td>
<td>'bottle'</td>
</tr>
<tr>
<td>surini</td>
<td>(sobrino)</td>
<td>'nephew'</td>
</tr>
<tr>
<td>vapur</td>
<td>(vapor)</td>
<td>'boat'</td>
</tr>
<tr>
<td>Yurimawa</td>
<td>(Yurimaguas)</td>
<td>'Yurimaguas'</td>
</tr>
</tbody>
</table>

34. The word

34.1 General remarks

As stated in section 32, the word has status as both a phonological and a grammatical unit, cf. § 621.

At the phonological level the structure of the word is described in terms of syllables and prosodic features. The following sections deal with both these aspects. Section 34.2 describes the syllable structure of the word, section 34.3 deals with the prosodic feature of syllable junction, section 34.4 with the prosodic feature of stress and section 34.5 describes the prosodic feature of palatalization associated with the non-verbal suffix -/a.

34.2 Syllabic structure of the word

34.2.1 General syllabic structure

The word may comprise from one to ten syllables. In principle words may comprise more than ten syllables, since the grammatical possibilities involve structures of a greater number of syllables, § 71 and 61. However, in the material examined there were no examples of words with more than ten syllables. In discussion of this material with one informant, examples of words comprising up to fifteen syllables were given by him. But it seems clear that forms of more than ten syllables are outside normal speech. Words of ten syllables are restricted to verb forms. One example of a nominal with nine syllables has been found, and several nominals with eight syllables.

Most commonly verbs contain four syllables and nominals three syllables. Verbs of two, three, five and six syllables are commonly found and nominals of two, four, and five syllables are also common. Adverbs seldom exceed four syllables and particles rarely comprise more than three syllables.

Of the more than thirty syllable structures possible with the phonological elements described in section 33, fourteen syllable structures are found not uncommonly in the material examined though some of these occur very much more frequently than others. The remainder are very severely restricted in their occurrences. These fourteen syllable patterns are as follows:

<table>
<thead>
<tr>
<th>Syllable Structure</th>
<th>Example Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>afimar</td>
</tr>
<tr>
<td>3</td>
<td>cinta</td>
</tr>
<tr>
<td>4</td>
<td>kampana</td>
</tr>
<tr>
<td>5</td>
<td>miza</td>
</tr>
<tr>
<td>6</td>
<td>pan</td>
</tr>
<tr>
<td>7</td>
<td>sehula</td>
</tr>
<tr>
<td>8</td>
<td>simana</td>
</tr>
<tr>
<td>9</td>
<td>sumpaca</td>
</tr>
<tr>
<td>10</td>
<td>sunboca</td>
</tr>
<tr>
<td>11</td>
<td>aróbala</td>
</tr>
<tr>
<td>12</td>
<td>bisina</td>
</tr>
<tr>
<td>13</td>
<td>putija</td>
</tr>
<tr>
<td>14</td>
<td>surini</td>
</tr>
<tr>
<td>15</td>
<td>vapur</td>
</tr>
</tbody>
</table>

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In principle words may comprise any of these syllable structures in any combination except for certain restrictions stated below. In fact many combinations are not found as the language does not exhaust all these possibilities. This fact is emphasised when it is stated that over 75 per cent of syllables are referable to only six patterns and within this group of six, three patterns account for the great majority of syllables. These three patterns are: aGV, aVC.

Certain restrictions on the distribution of syllables within the word are found as follows:

a) All syllables whose phonematic structure is referable to the patterns V and VC are restricted to morpheme initial position within the word.

b) All syllables of the roots of words of any class which include an r-prosody are final in that root, with the exception of the following roots:

- were 'food' and were- 'take food'
- peri 'pin down' e.g. peri 'he struck and pinned'
- meri 'be soft'
- teri 'plant'
- uteri 'sister of a man'

34.22 Syllable structure and grammatical categories

The forms of certain grammatical categories are found to be restricted to certain syllable structures. Thus the occurrence of certain syllable structures marks the grammatical status of the word concerned. The main correspondences of this type between the two levels of analysis are set out in the paragraphs below.

Words containing stems comprising a single syllable of the structure V or VC are always found to be verbs.

Adverb stems are never monosyllabic while there is only one particle stem of one syllable and this of aGVV structure. Monosyllabic nominal stems are always CV or CVC in structure. Monosyllabic words are almost always nominals. However, verbs comprising a stem of structure CV can be monosyllabic when suffixed by -an. Words of more than one syllable can be of any word class.

Verb suffixes frequently contain an initial syllable of V structure. Non-verbal suffixes never have such an initial syllable (with one exception) but always contain an initial CV or CVC syllable. Word suffixes also frequently contain an initial syllable of V structure.

34.3 Prosodic features of syllable junction

The phonological features relevant for the statement of syllable junction are treated as prosodic because they have implications for the whole word, not just for one place in any one syllable. Furthermore, these features mark the boundaries of grammatical elements and in some instances also mark the grammatical status of the elements, i.e. whether bound or free forms.
The four types of syllable junction

Four different types of syllable junction are distinguished:

- **Type one** - intramorpheme junction, that is junction within the morpheme.

- **Type two** - intermorpheme junction when neither morpheme is a free form, i.e., junction between syllables of different morphemes when neither morpheme has the grammatical status of word, § 62.

- **Type three** - intermorpheme junction when one morpheme is a free form, i.e., junction between syllables of different morphemes when one morpheme has the grammatical status of word.

- **Type four** - interword junction, i.e., junction between syllables of different words.

These four types of junction will be referred to as junction one, two, three and four respectively and will be symbolized as J₁, J₂, J₃ and J₄.

In the following sections the statement of these different types of junction is arranged in semi-tabular form according to the phonological features, whether phonematic or prosodic, which are relevant to both the final syllable of the first morpheme and the initial syllable of the second morpheme. For convenience these statements are arranged in four groups of statement according to the phonematic structure of the two syllables involved in the junction. In section 3432 statements are made for the junction of syllables which comprise V of one syllable followed by initial C in the next syllable, section 3433 sets out features relevant for the junction of V and V. Section 3434 states features relevant for the junction of final C and V, while section 3435 states features relevant for the junction of final C and initial C.

The feature of junction is stated in this way rather than by means of a statement of all features of J₁, then all features of J₂, etc., because there are many parallels between junction types, and especially types 2, 3, and 4, and these are best presented together. Thus it is that each section 3432 to 3435 makes statements covering different patterns of all four junction types.

Since J₁ involves no further phonological features than those already stated for the various syllable structures described in section 33, the following sections make little reference to J₁. In all paragraphs it may be assumed that the absence of reference to J₁ implies the particular pattern of junction under description is found with J₁ but that no further phonological statement is necessary. When the particular pattern of junction is not found with J₁ this will be stated.

Symbolization: Throughout this section and subsequently examples involving junction are represented in the transcription with the junction having taken place. In this section, junction features under discussion in the particular section in which examples are found are indicated by underlining in the transcription.

### 34.32 Junction of V with C

Each of the following sections will involve the junction of a syllable with no phonematic unit in final place and with the V unit in medial place consequently the relevant phonematic unit and a syllable with phonematic unit in initial place a C unit. However, each section will involve a different feature relevant either for syllable final place of the first syllable or syllable initial place of the second syllable.
No J2 of this structure are marked by any phonological feature.

All J3 of this structure are marked by one of two prosodic features, termed Nasal Junction Prosody and Non-nasal Junction Prosody. The prosody of Nasal Junction has the phonetic exponent of nasal closure homorganic with the initial C of the second syllable, following the V of the first syllable and preceding the C of the second syllable. The prosody of Non-nasal Junction has the phonetic exponent of the absence of this feature.

Nasal Junction Prosody should be distinguished from n-prosody. No syllable is found marked by both these prosodies. Syllables which are marked by Nasal Junction Prosody in J3 structure are never found marked by n-prosody. Syllables which are marked by n-prosody are never marked by Nasal Junction Prosody, but always by Non-nasal Junction Prosody. For other syllables neither n-prosody nor Nasal Junction Prosody are stated.

Some J4 of this structure are found in rapid speech with the feature of Nasal Junction Prosody. However, words which in J3 patterns are always marked by Nasal Junction Prosody are found sometimes with and sometimes without this prosodic feature in J4 structures. It seems best, therefore, to state that all J4 structures of this pattern have the potentiality of being marked with one of the two prosodies described above.

Symbols: N and — written in raised position after syllable final place and any prosodic features symbolize Nasal Junction Prosody and Non-nasal Junction Prosody respectively. The symbol — will not be written after the examples in this section have been given.

Examples:

J2 itukufi 'he went and said' aCV aCV aCV aCV
J3 tasempiluo 'the old man' aCV aCV aCV aCV
sulampen 'your husband!' aCV aCV aCV aCV
aqimpipla 'he still saw' aCV aCV aCV aCV
qimina 'he saw' aCV aCV aCV aCV
J4 hihihi 'he saw the fire' aCV aCV aCV aCV [mihiipam]

No phonological features besides those already described in section 3334 mark all J2, J3 and J4 of this structure.

Examples:

J2 sakaputki 'he worked' aCV aCV aCV aCV
J3 navampi 'belonging to them' aCV aCV aCV aCV
J4 amana ka 'the tiger ate' aV aCV aCV aCV aCV aCV

All J1, 2, 3 and some J4 of this structure are marked by the prosodic feature of voicing. The phonetic exponent of this prosody is voicing of the C unit unless that C unit is a sibilant. This prosodic feature is termed a V-prosody.
All J2 of this structure are marked by a definite closure with nasalization homorganic with the initial C of the second syllable, as described in section 33.

Some examples of J3 of this structure are marked in the same way as J2, i.e., nasal closure homorganic with following C but other examples of J3 are marked by nasalization of the V unit of the first syllable and incomplete closure with nasalization homorganic with the initial C of the second syllable. In such instances the less complete the closure, the more extensive and vigorous the nasalization of the V unit. The degree of closure and parallel degree of nasalization of the V unit seems to correlate with two factors, the style of speech and the exponent of V in the syllable. The more back the exponent of V in the first syllable the more complete is the nasal closure homorganic with the following C and, conversely, the more front the V the less complete is the closure and the stronger the nasalization of the V. Slower styles of speech are marked by more complete closure with nasalization, while conversely the more rapid styles appear to be marked with less complete closure. One further factor may be mentioned, the grammatical status of the words concerned. It would seem likely that words of the status of nominal, §634, are more frequently marked by incomplete closure etc., than are words of other classes. A more detailed phonological study and statement would profit from an examination of this feature for the nominal as distinct from other words.

The great majority of examples of J4 of this structure are marked by a velar nasal closure following the final V of the first syllable, i.e., the same phonetic exponent as is found for this r-prosody before pause, §3334. However, in rapid speech occasional examples of J4 are found with incomplete closure and nasalization of the final V as described for J3.

Symbol: V written in raised position after syllable final place and any other prosodic feature symbolizes V-prosody.

Examples:

J2 kanakukili 'he went and found' aCV aCVnVeCV aCVnVeCV
pawimpal 'it is lacking' aCV aCVnVeCV aCV

J3 nukok 'in the canoe' aCVnVeCV
nua 'a little canoe' aCVnVeCV
u^lan/a 'a little rain' aCVnVeCV

J4, J2, V^n with C

All J2 of this structure are marked by a Y-junction prosody. The chief phonetic exponent of this prosody is the palatalization of the phonetic exponent of the initial C of the second syllable. A further phonetic exponent is sometimes found, namely, the extension of this Y feature throughout the final syllable of the first word, the V unit being very much closer and further front and the initial C unit also sometimes being palatalized. Examples are given below.

All J3 of this structure are also marked by a Y-junction prosody whose phonetic exponent is the palatalization of the phonetic exponent of the initial C of the second syllable. No examples have been found of the phonetic exponent of this prosody extending throughout the first syllable in J3 as is sometimes the case for J2 as described above.

The great majority of examples of J4 of this structure are not marked by any phonological feature besides features stated in section 3334, i.e., the phonetic exponent of r-prosody before pause is an alveolar flap. However, in very rapid speech very occasional examples of J4 have been found with a Y-junction prosody having the phonetic exponent of slight palatalization of the initial C of the following word.
Symbol: Y written in raised position between the two syllables symbolises Y-junction prosody.

Examples:

J2  ki'Kopa  a\textsuperscript{Y}CV a\textsuperscript{Y}CV  'you came and saw'
  waliysali  a\textsuperscript{CV} a\textsuperscript{Y}CV a\textsuperscript{Y}CV  'he stood in the water'
  wanaar- -3el- -ai  a\textsuperscript{CV} a\textsuperscript{Y}CV a\textsuperscript{Y}CV  'his wife'
J3  ku'wapiqiq  a\textsuperscript{Y}CV a\textsuperscript{Y}CV  'little mosquito net'
  sipoca  a\textsuperscript{Y}CV a\textsuperscript{Y}CV  

3.325 $V'\superscript{2}$ with C

The statements made for J2, J3 and J4 in the preceding section 3.324 are relevant in an exactly parallel manner for J2, J3 and J4 of this structure with the following additional statement.

All junctions of this structure are also marked by complete closure of the glottis immediately after the V and before the initial C of the second syllable. In the case of J4 this glottal closure is simultaneous with the alveolar flap.

Examples:

J2  m\textsuperscript{Y}capaki  a\textsuperscript{Y}CV a\textsuperscript{Y}CV a\textsuperscript{Y}CV
  kasi\textsuperscript{Y}menta\textsuperscript{Y}di  a\textsuperscript{CV} a\textsuperscript{Y}CV a\textsuperscript{Y}CV
J3  ku\textsuperscript{Y}ca  a\textsuperscript{Y}CV a\textsuperscript{Y}CV
  ife\textsuperscript{Y}usa\textsuperscript{Y}  a\textsuperscript{Y}CV a\textsuperscript{Y}CV

3.33 Junction of V with V

Each of the following sections will involve the junction of a syllable whose final place is not filled by a phonematic unit and in which consequently the V unit in medial place is the relevant phonematic unit, with a syllable whose initial place is not filled by a phonematic unit and in which consequently the V unit in medial place is the relevant phonematic unit. However, each section will involve a different prosodic feature relevant for one or other of the two syllables.

For all the structures of this section and sub-sections 3.331-5 there are no examples of J1.

3.331 V with V

The junction of two syllables of this structure in the case of J2, J3 and J4 may be realized as either a single simple syllable, a single complex syllable or as a sequence of two simple syllables.

When realized as a single syllable there is one V unit which varies according to the particular V in both the first and second syllable. The following table sets out the V unit of the single simple syllable of the junction:
This table may be summarized thus: of any two V units, whichever is closer, or, if both V units are equivalent in closeness, whichever is further front, functions as V unit in these junctions.

This may be diagrammed as follows:

```
  front        back
  close
  half-close   
  open
```

Wherever the junction of V with V is a junction of two like V units, the junction is realized as a single V unit of the same quality.

When realized as a complex syllable there are two V units, § 335. In such complex syllables prominence to a greater or lesser extent is on the second V unit and the sequence can be described in phonetic terms as a rising diphthong. The junction of U or A followed by I is more frequently realized with a strongly prominent second V than are other sequences, so much so that in a complex syllable involving U followed by I, the phonetic exponent of U appears to have some of the characteristics of the phonetic exponent of W, a C unit.

When realized as a sequence of two separate syllables there is a varying degree of diphthongal transition between the two syllables.

The majority of examples of J2 of this structure are realized as a single syllable as described above. However, some examples of J2 are found as a complex syllable. A much smaller number of examples of J2 as a sequence of two syllables also occur and these are found only whenever the first syllable of the junction is also initial syllable in the word, in which case stress falls upon the second syllable of the word which is also the second syllable of the junction and this seems to serve as a feature separating the two syllables.

The majority of examples of J3 of this structure are found to be simple syllables, though examples of complex syllables are not uncommon. No examples of J3 as a sequence of two syllables have been found.

The great majority of examples of J4 of this structure are found to be sequences of two syllables, though examples of complex syllables are not uncommon. In rapid speech instances of J4 as a simple syllable are also found occasionally. Such instances are limited and they only occur when stress marks a post-initial syllable of the second word.

These statements apply for all junctions involving an open syllable unmarked by any final prosodic feature followed by a syllable with absence of phonetic unit in initial place irrespective of any other phonological feature of that second syllable. Thus junction of the patterns V and V', V and V", V and V', V and V", V and VC, as well as V and V are marked by patterns as above.
For example, V and V₁ may be realized as a simple syllable, a complex syllable, or a sequence of two syllables. In all cases after the V unit of the simple syllable or the second V unit of the complex or two syllable sequence there is nasal closure as described in section 333. In all these cases the prosodic feature will be stated for the single simple or complex syllable, or for the second syllable of the two syllable sequence.

Examples:

J2 ḍegrapaki 0CV aCV aCV aCV  'he is fighting'
J2 ḍegma-apa-ki 0CV aCV aCV aCV  'I went and gathered'
J3 milalek 0CV aCV aCV  'I went and gathered'
J3 ma-ilak-ilak 0CV aCV aCV  'I went and gathered'
J3 nala'ima 0CV aCV aCV  'tree'
J3 nala-ilima 0CV aCV aCV  'tree'
J3 kepa'ima 0CV aCV aCV  'but you'
J3 kepa-ilima 0CV aCV aCV  'but you'

34332 V with V

The statements made for J2, J3 and J4 in the preceding section 34331 are relevant in an exactly parallel manner for J2, J3 and J4 of this structure with the following additional statements.

All junctions of this structure that are realized as simple or complex syllables are also marked by complete closure of the glottis immediately after the V unit(s) and before the next C unit or pause.

All junctions of this structure that are realized as a sequence of two syllables are also marked by complete closure of the glottis between the two V units.

These statements apply for all junctions involving an open syllable with final 0-prosody followed by a syllable with absence of phonemic unit in initial place irrespective of any other phonological features of that syllable. Thus junction of the patterns V₀ and Vₐ, V₀ and Vₐ, Vₐ and V₀, V₂ and V₀, V₀ and V₂ as well as V₀ and V are marked by features as described above. However, certain additional statements need to be made as follows.

V₀ with Vₐ

The statements already made for J3 and J4 in this section, are relevant for J3 and J₄ of this structure.

Generally examples of J2 are realized as a complex syllable with glottalization to a varying degree throughout the syllable and complete closure of the glottis as already described. When the V units of J2 of this structure are like V units the resulting complex syllable is equivalent to a long V with considerable glottalization throughout with complete closure of the glottis after the V units, and a secondary peak of glottalization sometimes occurring in the middle of the V unit.

V₀ with Vₐ and V₀ with V₂

In junctions of this structure the closure of the glottis is simultaneous with the alveolar flap or precedes the next C when the r-prosody is realized without an alveolar flap, § 333.

V₀ with Vₐ

In junctions of this structure the closure of the glottis precedes the nasal closure which is homorganic with the next C.
Examples:

J2  t[sk]a[impa]li
    t[sk]a- -impa- -li
    [sp]eka[ksa]n
    [sp]eka- -[ksa]n

J3  as[i]na
    asu- -i[na]
    nana- [pu]- -su- -i[la]

34.333  Vn with V

The statements made for J2, J3 and J4 in the section 34.331 are relevant in exactly the same way for J2, J3 and J4 of this structure with the following additional statements.

All junctions of this structure which are found as simple or complex syllables are also marked by complete closure with nasalization homorganic with the first C unit of the second morpheme. When that C unit is a nasal or when no C unit follows there is strong nasalization of the V unit(s) but no closure.

All junctions of this structure which are found as a sequence of two syllables are also marked by velar closure with nasalization between the two V units.

These statements apply for all junctions involving an open syllable with final n-prosody followed by a syllable with absence of phonematic unit in initial place irrespective of any other phonological features of that syllable except that certain additional statements are made for the following structures.

Vn with V9

In junctions of this structure, closure of the glottis precedes the nasal closure which is homorganic with the next C. Thus this junction is realized in the same way as the junction V9 and Vn, § 34.332.

Vn with V9r and Vn with V9

In junctions of this structure the nasal closure, which is homorganic with the following C, follows the alveolar flap and closure of the glottis which is simultaneous with the alveolar flap.

Examples:

J2  aysimpal  a V a CV a n a CV a CV a CV
    asu- -ysa- -li  a V a CV a n a CV a CV a CV

J3  u[pl]a[ima]  a V a CV a n a CV a CV
    u[pl]a- -ima  a V a CV a n a CV a CV

34.334  Vn with V

No phonological features besides those already described in section 33.3 mark all J2, J3, and J4 of this structure.
Examples:

J2 luperecu  aCV oCV aV aCV aCV  'you will be drunk'
J3 nawarape reima  aCV oCV aCV aCV aV aCV  'they all'

3.335 V^r with V

No phonological features besides those already described in section 3334 mark all J2, J3 and J4 of this structure.

Examples:

J2 siwelepalapa  aCV oCV aV aCV aCV  'he is taking away'
J3 irakima  aV oCV aV aCV  'pain'

3.34 Junction of C with V

This section will state all the phonological features which apply to the junction of syllables whose final place is filled by a C unit with syllables whose initial place is not filled by a phonematic unit and in which consequently the V unit in medial place is the relevant phonematic unit for the statement of the junction features.

No prosodic features whether relevant for the first or the second of the two syllables involved in the junction, are found to affect the statement of this type of junction.

There are no examples of J1 of this structure.

With all J2, J3 and an occasional J4 of this structure it is noticeable that the phonological syllable does not coincide with the phonetic syllable. There is marked non-congruence between the phonological and the phonetic syllable. In order to distinguish the phonetic and phonological syllable structure, small c and v are used for the phonetic level while large C and V are used for the phonological level. At the phonetic level the final c of the first syllable functions as the initial c of the second syllable. This resulting syllabification is not congruent with the phonological syllable structure which states the c in question as the phonetic exponent of a C unit which is in final place in the first syllable. This feature of partial congruence of the phonetic and phonological syllables is illustrated below.

No other statements need to be made for this type of junction.

Examples:

J2 pilamala  aCV oCV aV aCV aCV  phonetic syllable division
pilam- -ap -  oCV oCV aV aCV aCV  phonological and morphological division
'you are advising'

J3 pilakima  aCV oCV aV aCV  phonetic syllable division
pilak- -ima  oCV oCV aV aCV  phonological and morphological division
'the house also'

J4 uwak ilali  aV oCV aV aCV aV aCV  phonetic syllable division
uwa- -a- aV oCV aCV  phonological and morphological division
'he shot a jungle hen'
This type of junction concerns syllables whose final place is filled by a G unit when followed by syllables whose initial place is filled by a G unit.

There are frequent examples of J1, J2, J3, and J4 of this structure.

With J1, J2 and J3, whenever the G unit of the first syllable is -n or -m, a prosodic feature of voicing is found. The phonetic exponent of this prosody is voicing of the second G unit unless that G unit is a sibilant. This prosodic feature is termed V-prosody \( \text{3.3.23} \). Very occasionally in rapid speech J4 is marked in the same way.

Whenever the two G units are like G units there is gemination. At the phonetic level the lengthening of the G unit may vary considerably.

Examples:

J1 enka9la \( ^{VOCV}OCV \) 'you gave' \[ \text{enka9la} \]

J2 wa9 tensek \( ^{VOCV}VOCV \) 'wait!' \[ \text{wa9 tensek} \]

J3 pengek \( ^{OCVCVOCV} \) 'in the fire' \[ \text{pengek} \]

J4 pen kanafi \( ^{OCVCVOCV}OCVOCV \) 'he found the fire' \[ \text{pen kanafi} \]

\[ \text{3.4.1} \] The prosodic feature of stress

\[ \text{3.4.1} \] General remarks

The phonological feature termed stress is treated as a prosodic feature because its phonetic exponents extend over more than one phonematic place and because the feature itself has implications for the whole word not just for any one place in any one syllable, e.g. the feature marks out the form as a word, and not just part of a word.

The prosodic feature of stress must not be confused with phonetic stress which is termed prominence in this treatment. The prosodic feature of stress involves other phonetic features besides prominence, and in particular length and pitch.

The exponents of the prosodic feature of stress may extend over more than one syllable but are always focussed on one syllable which is consequently termed the stressed syllable. All statements of stress are made in terms of the stressed syllable.

Three types of stress are distinguished, word stress, word suffix stress and emphatic stress. Sections 3.4.3, 3.4.4, and 3.4.5 deal with each type of stress in turn. However, since certain phonetic exponents are common to all three types of stress, these will be described first in section 3.4.2 and not repeated in the detailed description of the three types of stress.

Symbolization: In the examples given in this section stress is symbolized by ' before the stressed syllable, e.g. 'pengek' is stressed on the first syllable, and the structural symbolization of this word uses the same device i.e. \( ^{OCVCV} \).
Three phonetic features are exponents of all three types of stress, namely, the features of prominence, length and pitch.

Prominence All stressed syllables are articulated with greater loudness and force of utterance in comparison with other syllables of the word. These phonetic features are termed prominence.

Length All stressed syllables tend to be longer in duration than comparable unstressed syllables in the word. At the phonetic level the exponent of the V unit of the syllable is longer in duration in stressed syllables, though other parts of the syllable may also be longer in duration than comparable parts in unstressed syllables. Length is a particularly important exponent of emphatic stress, § 3445, but this phonetic feature is not limited to emphatic stress.

Pitch When the word is spoken in isolation or in sentences marked by pitch patterns which are assigned to tunes 1, 2, 5, 6, 7 or 10, § 35, the stressed syllable is higher in pitch than unstressed syllables in the word. In the other tunes the pitch patterns are independent of the stressed syllables. The pitch patterns of the word in isolation may be stated in terms of the feature of stress as follows:

a) all monosyllabic words are marked by a slightly falling pitch;
b) all bi-syllabic words are marked by a higher pitch on the stressed syllable and a lower pitch with slight final fall on the unstressed syllable;
c) all words of three or more syllables are marked by a higher pitch on the stressed syllable and lower pitch on all syllables following the stressed syllable with a tendency for all these syllables to step down slightly in pitch and for the final syllable to be marked by a definite fall. The pitch of any syllable preceding the stressed syllable is lower in pitch than the stressed syllable but usually a little higher in pitch than syllables which follow the stressed syllable.

Word stress

All words except compound words contain one stressed syllable. Compound words are set up partly on grammatical grounds and partly on phonological grounds, i.e., on the basis of this feature of stress, c.f. § 624.

Except for instances described later in this section and in sections 3444 and 3445, the stressed syllable of any simple word is always as follows:

a) for monosyllabic words the stressed syllable is always the one and only syllable;
b) for bi-syllabic words the stressed syllable is always the first syllable;
c) for words of three or more syllables the stressed syllable is always the second syllable.

The stressed syllables of compound words are the initial syllables of each reduplicated root and the second syllable of the post-root elements unless those elements comprise less than three syllables in which case the first syllable of the post-root elements is stressed, c.f. § 624.

The phonetic exponents of stress of this type are the features of prominence, length and pitch as described in the preceding section, 3442.
Two types of word stress which fall outside the patterns described so far in this section are as follows:

a) any bi-syllabic verb form comprising a monosyllabic stem and the inflectional suffix -aq, § 74.32, is stressed on the second syllable.

Examples: ʰiʔ 'eating' warʔaq 'stinging'

b) Any nominal comprising a bi-syllabic stem and the non-verbal suffix -₁, which is one form of the suffix -kolt, § 833, is stressed on the second syllable.

Examples: taʔnak 'in the jungle' pɨʔmaʔ 'in the house'

3444 Word suffix stress

In all words which are suffixed by the word suffixes listed below, the stressed syllable is the penultimate syllable of the resultant word.

The word suffixes involved in this type of stress pattern are:

-ʔcaʔ, -ʔteʔ, -oi, -ʔteʔ, -untana

These word suffixes are all of orders 7 and 8 of the class of word suffixes, § 673.

The phonetic exponents of stress of this type are similar to those of the word stress; namely prominence, length and pitch features which mark the stressed syllable in the manner described in section 3442.

Examples:

asumpaʔlaʔna ʰaV aCV aCV 'have you tied up?'

ipiʔmaʔ ʰaV aCV aCV 'now indeed'

3445 Emphatic stress

Emphatic stress is distinguished from word stress by the following features:

a) The stressed syllable may be any syllable of the word. Emphatic stress may fall on the same syllable as word stress or on some other syllable in the word, in which case the syllable which would otherwise have been stressed as described in section 3443 is not marked by the feature of stress. However, though emphatic stress may mark any syllable of the word certain preferred patterns for this feature are noticeable. For example, in verb forms containing the extensor -apa- almost always emphatic stress falls upon the syllable of which the initial V of the extensor is the nucleus.

b) The phonetic feature of length which is one of the phonetic exponents of all types of stress, in the case of emphatic stress is different in some respects from its occurrence in the other types of stress. In the case of emphatic stress the feature of length extends so as to include the consonant that is the exponent of either the C unit which closes the stressed syllable or the initial C unit of the next syllable when the stressed syllable is an open syllable. At the phonetic level the length of the V unit of the stressed syllable and the C unit described above is very much greater than the length of the V unit of the stressed syllable of other stress types.

c) The other phonetic exponents of stress are sometimes heightened in the case of emphatic stress compared with the other two types of stress, i.e. the pitch of the stressed syllable is sometimes greater than is normal for the pitch of stressed syllables of other stress types and the force of articulation of the stressed syllable of emphatic stress is also sometimes noticeably greater than that of stressed syllables of other stress types.
Symbol: " is used to mark emphatic stress and is written immediately preceding the syllable with emphatic stress.

Examples:

nam"pipala [ nam"bi:pala] 'you are living'
i"kines [ i"ki:n:s] 'the middle'

34.5 Palatalisation associated with the suffix -/a

One further prosodic feature of the word concerns words which contain the suffix -/a 'diminutive, affectionative', § 833. All such words may be marked by the prosodic feature of palatalization. The phonetic exponent of this prosody is palatalization of the phonetic exponents of C units which precede the suffix in the word concerned. There is no limit to the extension of this prosodic feature in the word, in that the feature may extend through none, some or all of the syllables preceding -/a. The degree to which this feature extends in any word seems to vary from speaker to speaker and from one occasion to another.

Examples:

nalu/a nalu -/a 'a little new object'
siha/a nana -/a 'that little one'
jawalakejaneqima sawelaked -/a -neq -ima 'his small machete'

35 Intonation

351 General remarks

Every Jebero sentence is marked by a pitch pattern. In order to make systematic statements of these patterns, a number of 'tunes' are abstracted from the phonetic material and set up as the units of phonological description of sentence intonation in Jebero.

Each tune will be described in turn below. The tunes fall into two groups, simple and complex.

352 Simple tunes

Tune 1

This is the most frequently occurring tune and is found accompanying a majority of sentences in the material examined.

Tune 1 has the phonetic exponent of a gradually falling pitch over the length of the whole tune. The degree of fall varies considerably both within any one text and more especially between speakers. The fall is an overall intonation pattern and there are considerable intermediate fluctuations with the rise and fall of pitch corresponding to the stressed and unstressed syllables of words, § 34.2.

The beginning of tune 1 has three differing phonetic exponents, which are,

(i) pitch associated with the normal stress patterns of individual words, § 34.2 - 5,
(ii) pitch sustained at the level of the stressed syllable of the initial word, for varying lengths of the sentence, generally only for the first word but up to three words.

(iii) pitch sustained at the level of the syllable preceding the stressed syllable of the initial word, for up to three words of the sentence, but usually only for one word.

The ending of tune 1 has three differing phonetic exponents, which are:

(a) a steep fall,
(b) a fall which is much less steep,
(c) pitch associated with the normal stress patterns of individual words, § 3442.

The majority of examples of tune 1 found in the material examined began with exponent (i) and ended with exponent (a). Exponents (ii) and (iii) are clearly associated with certain types of sentence in narrative style speech. Exponent (b) occurred less frequently than exponent (a) but is not unusual. In the speech of one informant in particular this type of sentence ending was common. Exponent (c) was found only very infrequently, and may be said to have the implication 'more to follow', since this exponent is only found when further sentences follow in a group of connected sentences, e.g. as part of a story.

The beginnings and endings of tune 1 may be diagrammed as below. Stress is symbolized as in the previous section.

\[
\begin{align*}
\text{(i)} & \quad \text{(ii)} & \quad \text{(iii)} & \quad \text{or} & \\
\text{nu'pikima} & \quad \text{nu'sikima} & \quad \text{na'nslma} & \quad \text{nu'pahima} \\
\text{(a)} & \quad \text{nu'isikima} & \quad \text{i'tukima} & \quad \text{i'tukima} \\
\text{nu'pahima} & \quad \text{'nana a'li'lma in'sokita'nu' } & \quad \text{nu'ke}^2li.
\end{align*}
\]

A complete example of tune 1 is given below:

Tune 1 (i) and (a)

\[
\begin{align*}
\text{nu'pahima, 'nana a'li'lma in'sokita'nu' } & \quad \text{nu'ke}^2li.
\end{align*}
\]

'Then he looked for the other who was hidden.'

Tune 2

This tune occurs more often than any other tune except tune 1. It bears a number of similarities to tune 1.

Tune 2 has phonetic exponents which are most easily described by dividing the tune into two parts for the purposes of description. The first part of tune 2 has phonetic exponents which are identical with those already described for tune 1, and include all three types of beginning,
(i), (ii), and (iii), and this part of tune 2 ends with either (a) or (b). The second part of the tune has the exponent of a second gradual fall, and this part of the tune begins at a pitch usually markedly higher than the pitch of the final part of the first part though not as high as the beginning part of the tune. This second part of tune 2 usually falls below the level of the end of the first part but it does not always do so, and it may have exponents similar to any of the three exponents of the end of tune 1. The second part of the tune is usually considerably shorter in length than is the first part. These two parts are always separated by a pause which may vary in duration from quite slight to appreciable.

Tune 2 could be analyzed as a variant of tune 1, or as tune 1 with limited final pattern plus another tune 1 with limited initial pattern. However, this is not done because the pitch pattern allotted to tune 2 corresponds to the grammatical unit, the sentence-type, in a way that a sequence of two pitch patterns of tune 1 does not correspond, c.f., § 4.72.

Diagram:

Tune 2 (i), (b) and (a)

\[ \text{\textbf{Diagram}} \]

\[ \begin{array}{c}
\text{\textbf{Diagram}} \\
\text{Tune 2 (i), (b) and (a)} \\
\end{array} \]

\[ \text{'Suyuq\'kapaq ka\'nafi \ nu\'senkhima \ \&u\'apasik} \]

\[ \text{\textquoteleft Having looked, he found him when he was sitting on high.'} \]

Tune 3

This tune generally occurs accompanying short sentences and in a majority of instances with sentences of one or two words only.

Tune 3 has the phonetic exponent of a simple rising pitch. Sometimes this tune may begin with a fall which extends over one or two syllables before the commencement of the rise. This tune is independent of the prosodic feature of stress, c.f., § 3.42.

Diagram:

\[ \text{or} \]

\[ \begin{array}{c}
\text{\textbf{Diagram}} \\
\text{Tune 3} \\
\end{array} \]

\[ \text{\textquoteleft Saya? \ 'Sister!' \ i\'yali? \ 'Fellow'} \]

Tune 4

This tune also is found generally accompanying short sentences, and most frequently one or two word sentences.

Tune four has the phonetic exponent of a sustained pitch pattern. The pitch is sustained at the level of the first stressed syllable over the whole length of the tune except that occasionally a slight fall of pitch is found at the end of the tune. This tune is independent of the prosodic feature of stress, c.f., § 3.42.

Diagram:

\[ \text{\textbf{Diagram}} \]

\[ \text{\textquoteleft Wi\'ci\'ke\'a! \ 'Go to sleep!'} \]
Tune 5

This tune accompanies a variety of sentences, though it is not found at all frequently.

Tune 5 has phonetic exponents of a pitch pattern which can be described as a succession of pitch fluctuations corresponding to the patterns found with single isolated words, with a rise in pitch on the stressed syllable as described in section 3:4:2. The end of this tune is marked occasionally by a slight fall similar to that described for the end of tune 1 type (b), but more often this tune ends with the pitch pattern associated with the word spoken in isolation.

Diagram:

--- ---------
- - - -------
- - - --------
a'la'za° dek'ilòkima ha'pa'ai.
'The small stream is there.'

353 Complex tunes

Complex tunes are tunes comprising any of the simple tunes followed by tune 3. Complex tunes may be listed as follows:

<table>
<thead>
<tr>
<th>Tune 6 comprising tune 1 followed by tune 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>10</td>
</tr>
</tbody>
</table>

As is described in section 4:7:2, sentences may be accompanied by more than one tune, and it would, therefore, be possible to treat the pitch patterns which are allotted to tunes 6 to 10 as sequences of two tunes. In this way no complex tunes would be set up. This procedure is not adopted for the following reasons:

a) There is frequently no pause between the two parts of the complex tunes corresponding to the simple tunes, whereas a sequence of two tunes accompanying a single sentence is often marked by a pause.
b) Complex tunes, as set up, correspond to certain sentence-types in a way which is not the case for sequences of two tunes.

This combination of grammatical and phonological features suggests a distinction between pitch patterns that are here allotted to complex tunes and patterns that are allotted to sequences of tunes (simple or complex).
Chapter Four  

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Chapter 4. The verbal piece in the sentence

4.1 General remarks

As has been stated in the introduction, the verbal piece is a grammatical unit abstracted from the phonetic material and set up as a convenient unit by means of which part of the grammatical structure of the Jebero language may be stated. The function of the verbal piece is described in terms of its distribution within the Jebero sentence and of its relation to other pieces in the sentence. It is, therefore, necessary to outline the structure of Jebero sentences so that the function of the verbal piece can be seen and compared with the function of other pieces and categories set up to state Jebero syntactical structure.

This chapter, therefore, will outline Jebero syntactical structure. The sentence, favourite and non-favourite sentences, and various sentence-types will be described in turn.

4.2 Definition of the sentence

The sentence in Jebero may be defined both in grammatical and phonological terms.

Phonologically, there is potentiality of silence before and after the sentence. In addition there is a prosodic marker accompanying every Jebero sentence. A limited number of pitch patterns occur and these mark out the sentence as a linguistic unit since every sentence is characterised by one or other of these pitch patterns. In particular, a falling intonation pitch pattern, tune 1, see section 352, delineates the majority of sentences.

The sentence is the largest piece for which systematic statements of grammatical structure and relations are made. This is not meant to imply that it is not possible to set up grammatical features which extend across sentence boundaries, but merely that such features are outside the scope of this thesis which is restricted to a limited study of a particular grammatical unit, the verbal piece. In fact, an examination of the texts given in chapter 11 will reveal that some very interesting statements of features across sentence boundaries may be made. For instance, in a group of sentences of narrative style the first word of every sentence, or the head of the first phrase is found suffixed by the word suffix -ima 'connective' unless that sentence either begins with an included clause, or is followed by a sentence comprising a verb of class 0, in which case the verb of class 0 which always occurs is suffixed by -ima. Occasionally reference is made to such features. For example, in discussing the favourite sentence in Appendix I, reference is made to the fact that within a group of sentences one type of sentence, the nominal piece and verbal piece sentence, occurs frequently as the first sentence of the group, whereas another type of favourite sentence, the verbal piece sentence, is seldom found at the beginning of such a group. Similarly in discussing one class of Jebero sentence, the response sentence, reference is made to the fact that this type of sentence is only found following certain other types of sentence. However, though occasional references are made to such features, no category is established on the basis of these inter-sentence features, and no systematic statement of them is attempted.

To treat these and further such features systematically would greatly widen the scope of this study and carry this thesis far beyond the consideration of the function and structure of the verbal piece.

In this thesis, then, the sentence is taken as the largest unit under examination and its internal structure and relations constitute the highest level of grammatical analysis. That a higher level of statement may be necessary for another purpose is not denied.
Sentence-types and classes of sentence

All sentences are referred to one of a limited number of syntactic patterns. The term sentence-type is used for these, the abstracted syntactic patterns of the sentences. The terms, sentence and sentence-type, should not be confused. The phonetic material is analysed into a number of sentences from which the sentence-types are abstracted. Thus, while sentences are spoken, sentence-types are not.

Certain sentence-types are found to occur much more frequently than other sentence-types. These are termed favourite sentence-types. 1

This distinction between favourite and non-favourite sentence-types is paralleled by a similar division of sentences into two classes, which may be labelled favourite sentences and non-favourite sentences. Favourite sentences are sentences which may be referred to the syntactic patterns of one or other of the favourite sentence-types, in contrast to non-favourite sentences which exhibit the patterns of other sentence-types. The use of these terms, favourite and non-favourite sentence, is not meant to imply any kind of prior or pre-eminent status to any sentence, but merely to draw attention to the fact that the great majority of Jēber sentences of this style may be analysed as having the syntactic structuring of a very few sentence-types. A mere list of sentence-types without any such grouping does not adequately convey this important fact.

Favourite sentences

The favourite sentences of Jēber exhibit two syntactic patterns and may be divided on this basis into two groups of sentences. These two syntactic patterns are set up as two classes of sentence-type, as follows:

I  the verbal piece sentence-type,
II  the verbal piece and nominal piece sentence-type.

A large proportion of favourite sentences are referable to the class I sentence-type, the verbal piece sentence-type. In addition to the fact that many sentences are thus analysed as comprising a verbal piece alone, all favourite sentences may be stated to comprise a structure which always includes a verbal piece, with or without another element. It can be seen, then, that the verbal piece may be regarded as the feature which above all other features characterises the favourite sentence. Indeed the contrast between favourite and non-favourite sentences in Jēber may be stated to be the contrast between sentences referable to structures comprising a verbal piece on the one hand and sentences referable to structures not comprising a verbal piece on the other. An understanding of the function and structure of the verbal piece is of central importance in any study of the grammatical structure of the Jēber language.

Each class of sentence-type will be described in turn in the following sections.

Class I  The verbal piece sentence-type

The verbal piece sentence-type comprises one verbal piece, with or without a vocative piece. The internal grammatical structuring of the verbal piece sentence-type shows the same range of possibilities as the verbal piece alone except that a vocative piece may also be found. See chapter 5 for a detailed description of the internal structure of the verbal piece, and sections 573 and 46 for a description of the vocative piece. In its minimum form the verbal piece sentence-type comprises a

1 cf. Bloomfield's use of these terms, 'Language' New York, 1933, p. 171.
single word only, a verb, but this minimum form of this class of sentence-type is only rarely found, and the vast majority of verbal piece sentence-types comprise a number of words. All these various possibilities are described in chapter 5.

Symbols and Examples:

<table>
<thead>
<tr>
<th>STI</th>
<th>-</th>
<th>sentence-type class I</th>
<th>VP</th>
<th>-</th>
<th>verbal piece</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vas</td>
<td>Vocative piece</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[\text{nanima maga\textsuperscript{a}takina\textsuperscript{a}.} \quad \text{They bought that!} \quad \text{DE.1} \]

\[\text{STI} \quad \text{VP} \quad \text{STI} \]

\[\text{saka\textsuperscript{a}patakaffini\textsuperscript{a}ma kala \textsuperscript{a}baker.} \quad \text{They went to work for three months.} \quad \text{D5.} \]

\[\text{VP} \quad \text{STI} \]

\[\text{mu\textsuperscript{a}rinima, \textsuperscript{a}bukka\textsuperscript{a}yap\textsuperscript{a}la, ipa\textsuperscript{a}nampa\textsuperscript{a}katapilak\textsuperscript{a}ma\textsuperscript{a}pa\textsuperscript{a}k\textsuperscript{a}kunak.} \quad \text{A25.} \]

\[\text{STI} \quad \text{VP} \quad \text{STI} \]

'We then, still looking, he is climbing up the wacrapana tree.'

44.2 Class II The verbal piece and nominal piece sentence-type

44.21 General remarks

This sentence-type comprises a verbal piece and one or more nominal pieces, with/ or without a vocative piece. The internal grammatical structuring of this sentence-type shows the same range of possibilities as the structuring of any verbal piece and any nominal piece, except that a vocative piece may also occur. Thus, in its minimum form, this sentence-type comprises two words, a verb and a nominal. However, the great majority of sentences which are referable to this sentence-type comprise a much larger number of words. The various possibilities for the structuring of the verbal piece are given in sections 51-56, for the nominal piece in section 572, and for the vocative piece in sections 573 and 46.

44.22 Concord of verbal piece and nominal piece

The verb(s) which function as the head of the verbal piece and the nominal(s) which function as the head of the nominal piece exhibit agreement of person and number. In contrast any other nominal in the sentence, e.g. a nominal within the verbal piece, does not exhibit any concordial relation with the verb(s).

44.23 Suffixation by -ler

The nominal which functions as the head of the nominal piece in this type of sentence has the potentiality of suffixation by the non-verbal suffix -ler 'subject indicator'. This potentiality is
significant as it distinguishes the nominal(s) which function(s) as the head of the nominal piece from all other nominals which may be found in the sentence.

4424. Formal basis for the category of subject

The category of subject is formally based, in that the subject may be defined as that nominal in sentence-type class II which, a) exhibits agreement of number and person with the verb, § 4422, and b) has the potentiality of suffixation by -lor, § 4423.

4425. The order of verbal piece and nominal piece in this sentence-type

The order of nominal piece and verbal piece in this sentence-type is not fixed. The whole verbal piece may precede or follow the whole nominal piece, or part of the verbal piece may precede and part follow the nominal piece. Generally the nominal piece is not discontinuous in this way but is found as a unit at some point of the structure, however, occasionally part of the nominal piece may precede and part follow the whole or part of the verbal piece, c.f. § 572.

Though there is no fixed order in sentences of class II sentence-type, certain preferred patterns can be seen in such sentences. The more constant patterns are these:

a) In a group of sentences of narrative style in the first sentence of the group the nominal piece almost always precedes the verb which functions as the head of the verbal piece, and frequently precedes the whole verbal piece, standing in initial position in the sentence.

b) When the verbal piece comprises an included clause, § 5523, the nominal piece frequently follows the whole verbal piece, and almost always follows the verb of class 0 with which the included clause is associated.

c) When the verbal piece comprises other clauses, themselves preceding the verb which functions as the centre of the verbal piece, the nominal piece almost always follows these clauses, except under the circumstances already described in a) above.

Symbols and Examples:

STII - sentence-type of class II  NP - Nominal piece

kwanta° ipa° nawan°la°lek. 'I also have just come' l.26.8
NP  VP

STII

nanaklina na'wana°pina, ina°nanga, ipa°linli wena°di wila. A37.

NP  VP

STII

'al°sa° iyakl°ma, nap° dama°wel° iyalaw°tan, pa°li incilala°lupa°.

NP  VP

STII

'Long ago a man wanting to listen very early in the morning, went along the path.' 10.50.1.
A cross-classification of favourite sentences

All favourite sentences may be referred to these two syntactic patterns described in sections 441 and 442. However, favourite sentences may be classified in another way. The categories of command, question, and statement sentence-types may be set up, each with its own syntactic structuring, and any and every favourite sentence may be referred to one or other of these categories. Each of these categories is set up formally and considered a class of sentence-type. This classification is a cross-classification not a further sub-dividing of the two classes already set up. There are, thus, two sets of classes of sentence-type, each set overlapping with the other. In this way every favourite sentence belongs to two different classes of sentence-type, one from each set.

Class X The command sentence-type

Any sentence-type of class I or II which comprises a verb functioning as the head of the verbal piece which is inflected by a suffix of paradigm 11 or 12, § 74,3, is a member of class X, command sentence-type except when that verb is part of an included clause.

Class Y The question sentence-type

Any sentence-type of class I or II which includes either,

a) a word suffixed by the word suffix -a?ca 'question indicator', § 673, except when that word is part of an included clause,

or

b) an interrogative adjective or adverb § 6646 and 665, except when part of an included clause,

is a member of class Y, question sentence-type.

Class Z The statement sentence-type

Any sentence-type of classes I or II which is not also a member of either class X or class Y, is a member of class Z, statement sentence-type.

In addition to grammatical differences described above, there are phonological differences between sentences of these three sentence-types § 4.72. This combination of grammatical and phonological features provides the justification for the establishment of this further set of classes of sentence-type.

Symbols and Examples:

STI - sentence-type of class X  STY - sentence-type of class Y  STZ - sentence-type of class Z


fima iyana?pici?ni. STI and Z 'She didn’t reply.' 0.47.16.

b?ek manta? STI and X 'Fetch the water.'  A3.

kwale? siw?ccok. STII and Z 'I will take it.' 1.54.3.

ekupa?la?noa keyama? weklama?. STII and Y 'From where have you come?'  B18.
Another treatment of the favourite sentence

Instead of setting up two sentence-types and referring all Jebero favourite sentences to one or other of them, as has been done in sections 441 and 442, it is possible to analyse favourite sentences by setting up only one sentence-type or by setting up a larger number of sentence-types than these two. These different possibilities are outlined and discussed in Appendix I, Alternative treatment of Jebero favourite sentences.

Non-favourite sentences

All sentences which do not exhibit the patterns of favourite sentence-types are termed non-favourite sentences.

All non-favourite sentences are referable to one of five syntactic patterns. These five sentence-types are dealt with below: section 451 treating the deictic sentence-type, section 452 the predicative sentence-type, section 453 the response sentence-type, section 454 the interrogative sentence-type and section 455 the vocative sentence-type.

Class III The deictic sentence-type

Deictic sentences are sentences whose internal grammatical structuring is referable to one of the following five syntactic patterns.

a) A deictic particle, § 663.
b) A deictic particle followed by a nominal or nominal phrase, § 6531.
c) A deictic adjective, § 6646.
d) A nominal phrase including a deictic adjective.
e) Any of the above followed by a vocative piece, § 573 and 46.

The deictic particle and deictic adjective are defined on the basis of their occurrence in deictic sentences. However, to avoid circularity in these definitions these two sub-classes are listed exhaustively, § 663 and 6646.

Symbols and Examples:

STIII - sentence-type of class III  PD - deictic particle
N - nominal  FN - nominal phrase  aD - deictic adjective

'Here it is. Take some!' 1.1.18.
(illustrates a )

'There is my money' 0.46.5.
(illustrates b )

'Is this it?" he said.' 1.7.14.
(illustrates c )

'These are girls.' 1.7.15.
(illustrates d )

'Here it is, uncle,' 1.54.6.
(illustrates e )
Class IV The predicative sentence-type

All predicative sentences are referable to one of three syntactic patterns, and all sentences so referable are predicative sentences. These patterns are:

a) A nominal phrase with or without a pronoun. The nominal phrase contains a nominal centre suffixed by a member of order 14 of the non-verbal suffix class. This nominal phrase is similar in its grammatical structuring to any other nominal phrase except that its head is always simple and never complex, § 55311. The nominal phrase in the predicative sentence may or may not contain an expansion.

b) A sentence including one form of the predicative verb maka’ka, § 76. In addition to the predicative verb this sentence may comprise any of the elements of the verbal piece except that no further verbal head is found, i.e. the predicative verb functions as verbal head.

Occasionally sentences are found which comprise a combination of the features of these two patterns. This is one reason for treating these two quite different grammatical structurings as one type of sentence, since a nominal phrase suffixed by order 14 of the non-verbal suffix class never occurs in a sentence comprising any other verb than one that is a member of the predicative verb series.

c) Either of the above followed by a vocative piece.

Symbols and Examples:

<table>
<thead>
<tr>
<th>STIV - sentence-type of class IV</th>
<th>p - pronoun</th>
<th>Vp - verb of predicative class</th>
</tr>
</thead>
<tbody>
<tr>
<td>kwata’na Taqamaku.</td>
<td>p</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>'But I am Tanguna,' 328.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(illustrates a)</td>
</tr>
</tbody>
</table>

| puka’ nuka’a.                   | N           | Vp                             |
|                                 |             | 'It's a turtle.' 0.29.12.      |
|                                 |             | (illustrates b)                |

| /wilu taserpiku nuka’ka.        | FN          | Vp                             |
|                                 |             | 'I am an Iebero old man.' C20. |
|                                 |             | (illustrates a and b)          |

Class V The response sentence-type

A response sentence-type comprises a single word or phrase, with or without a vocative piece.

Response sentences are found to follow certain types of favourite sentence, namely, question and command sentences, § 443, two types of non-favourite sentence, namely, the vocative sentence and the interrogative sentence, § 454 and 455, and included clauses of these structures, § 5523. The responses of informants when these were not in the patterns of favourite sentence-types or other non-favourite sentence-types were of this structure.

Symbols and Examples:

<table>
<thead>
<tr>
<th>STIV - sentence type of class V</th>
<th>W - word of any class</th>
<th>Gi - included clause</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
"Brother-in-law," he said. "What is it, brother?" 1.34.12.

"O.K.," he said. 0.54.11.

454. Class VI The interrogative sentence-type

The class VI sentence-type comprises either,

a) a word other than a verb suffixed by the word suffix, -a?ca 'question indicator' § 673,

or

b) an interrogative adjective or adverb with or without a further word or nominal phrase, § 664.6 and 669,

or
c) either a) or b) followed by a vocative piece, § 46 and 573.

Occasionally sentences with the characteristics of a) and b) are found.

Symbols and Examples:

STVI - sentence-type of class VI

keywanta?ca, itukufima. "You, too?" he came and said 0.51.16.

(illustrates a)

STVI

STI

W

STV

Ci

s?upa?ca la?dawek, ta?lima... "...saying, "Where is my eye?" "

(illustrates a and b)

455. Class VII The vocative sentence-type

The class VII sentence-type comprises a vocative piece, § 46 and 573.

Very few examples of this sentence-type have been found in the material examined, though this may, in part, be explained by the nature of the material.

Symbols and Examples:

STVII - sentence-type of class VII

ak?/a. itunta?him. "Brother" He went and said. 10.31.3.

Voc VP

STVII

mek/i. itukufima. "Brother-in-law," He went and said. 1.34.12.

Voc VP

STVII

STI
4.6 Sentence-types with vocative piece

Sentence-types of classes I to VI may comprise a vocative piece. The structure of the vocative piece is described in section 573.

There is a fixed order between the vocative piece and the rest of the sentence-type in that the vocative piece follows the rest of the sentence-type and is in sentence final position.

Examples:

flapaša, iyali°... 'Are you there, fellow?...' El7.

ma'ki'ncna keçna pantala, iyali°. 'Why did you go, brother?' E60.

4.7 Phonological characteristics of favourite sentences

4.71 Pause

In a sequence of several sentences, e.g., in a story or conversation, the majority of sentences, irrespective of the class to which they are allotted, are preceded and followed by a pause. This pause may vary in length considerably.

Frequently this pause is accompanied by indrawn breath, though not always since more than one sentence may be spoken before further breath is taken, and very occasionally fresh breath is taken at some point within a sentence. It seems probable that indrawn breath at pause points which do not coincide with sentence boundaries is attributable to extra-linguistic factors.

Pauses, of varying length, are also found within the sentence. Such pauses are generally shorter than those marking sentence boundaries, and often coincide with the boundaries of pieces of the sentence.

4.72 Intonation

All sentences are marked by one or more pitch patterns. Most frequently sentences are accompanied by one pitch pattern only, that is to say, the unit set up for the statement of grammatical structure, the sentence-type, frequently corresponds to the unit set up for the statement of part of the phonological structure, i.e., the tunes set up for the description of the pitch patterns, § 35. This coincidence of grammatical and phonological boundaries is very frequent and, of course, lends support to the analysis at both levels.

However, there is not complete congruence of these two different levels of analysis. Overlapping is noticeable in two respects.

a) Not infrequently the complete grammatical unit, the sentence-type, corresponds to two or more units of the phonological analysis, the tunes. In such instances it is found that the different tunes correspond to various parts of the sentence which are themselves units at a lower level. For example, when a single sentence is accompanied by two tunes, it is frequently the case that the sentence is referable to a structure which includes an included clause, § 5523, and that one tune corresponds to this included clause. This type of overlapping is found
with favourite sentences only. Tunes 1, 3, 4, 6, 8 and 9 are found preceding or within tunes 1, 2 or 5.

b) Much less frequently the complete grammatical unit, the sentence-type, corresponds to only part of the tune set up at the phonological level. In such instances two or more sentences are accompanied by a pitch pattern which is allotted to one tune. It is only very rarely that more than two sentences are found marked in this way. This type of overlapping applies to all classes of sentence. The following tunes may correspond to two or more sentences in this way, 1, 5, 6 and 10.

The various sentence-types are found to correspond to different tunes as set out in the table below:

<table>
<thead>
<tr>
<th>S E N T E N C E - T Y P E S</th>
</tr>
</thead>
<tbody>
<tr>
<td>without Voc.</td>
</tr>
<tr>
<td>T</td>
</tr>
<tr>
<td>----</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
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<td>4</td>
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<td>5</td>
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<tr>
<td>6</td>
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<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>10</td>
</tr>
</tbody>
</table>

Examples:

nu'asi'na a'wasikina, ipa' tentarna', wici'zima' ņekipi'. All.
Tune 1, STI and Z  'Thus later having smoothed out their beds they slept in the night.'

wica'sofima ņekipi', ipa' ke'kulufimi' pokla'zi, iyawektenca' ņekan.
Tune 2, STII and Z  'While they slept at night, the tiger growled, wanting to come to them and eat them.'
Chapter Five  The structure of the verbal piece and other pieces of the favourite sentence

51  General remarks

52  Main divisions of the verbal piece

53  The verbal head

54  Different types of verbal piece
54.1 Classification on the basis of the verbal head
54.2 Classification on the basis of the verbal expansion
54.3 Combinatory classification

55  The verbal expansion
55.1 The composition of the verbal expansion
55.2 The clause
55.21 The concordial clause
55.22 The non-concordial clause
55.23 The included clause

55.3 The phrase
55.31 The nominal phrase
55.31.1 The nominal head
55.31.2 Different types of nominal phrase
55.31.3 The nominal expansion
55.31.4 Nominal phrases in the verbal expansion
55.32 The relative phrase
55.32.1 The relative head
55.32.2 The relative expansion
55.32.3 Difference in structure between the nominal and relative
55.32.4 The relative phrase in the verbal expansion phrases
55.33 The adverb phrase

55.4 The word
55.5 Nominals of the categories of object and of adverbial function
55.51 The category of object nominal and object nominal phrase
55.52 The category of nominal and nominal phrase with adverbial

56  Alternative treatment of the verbal piece

57  Other pieces of the favourite sentence-types
57.1 General remarks
57.2 The nominal piece
57.3 The vocative piece
57.4 Comparison of the nominal piece, vocative piece and nominal phrases of the verbal piece

58  Chart of verbal piece structure
Chapter 5  The structure of the verbal piece and other pieces of the favourite sentence

51  General remarks

This chapter deals with the internal grammatical structuring of the pieces into which the sentence-types to which all favourite sentences are allotted, are divided, namely, the verbal piece, the nominal piece and the vocative piece. Special attention is given to the verbal piece which is described in detail in sections 52-56. Section 57 deals briefly with the nominal piece, and the vocative piece.

The final section in this chapter, section 58, gives a summary of the internal structuring of the verbal piece by means of a diagram.

52  Main divisions of the verbal piece

The verbal piece is an endocentric construction comprising at least one head word which is always a verb, with or without one or more subordinate word(s).

The verbal piece is divided into a verbal head and a verbal expansion. These two parts of the verbal piece are not found in any fixed order relative to each other.

There are two types of verbal piece, the simple verbal piece which comprises one or more head words alone, and the expanded verbal piece which comprises both a head and an expansion. It follows that while every verbal piece comprises a verbal head, not every verbal piece comprises a verbal expansion as well. Any expanded verbal piece, comprising head and expansion, may be substituted by a simple verbal piece, comprising a verbal head only. Thus the verbal expansion may be regarded as subordinate in relation to the verbal head, the two parts together functioning as an endocentric subordinate construction.

Symbols and Examples:

\[ \begin{align*}
VH & - \text{verbal head} \\
VX & - \text{verbal expansion}
\end{align*} \]

\[ \begin{align*}
\text{Su\textsuperscript{?}lima.} & \quad \text{'He sat down.'} \\
VH & \\
VX & \\
VF & \\
pile\textsuperscript{antu}\text{sisikima, lansa?antu?}\text{kua? jaya?}\text{lusa?} & \quad \text{'When he piped the women danced again.'} \\
VX & \\
VH & \\
VF & \\
MP & \\
\text{num\textsuperscript{arima, nana ali\textsuperscript{?}lima insecita?}\text{su?} \text{Sunke?}\text{ki} } & \quad \text{'Then he looked for the other one who had hidden himself.'} \\
VX & \\
VP & \\
VH & \\
\end{align*} \]

53  The verbal head

The verbal head consists of one or more verb forms. Such verb forms are always suffixed by one of a limited number of the verb inflectional suffixes, namely by one of the suffixes of paradigms 1-7, 11 and 12.
Two types of verbal head are distinguished: simple and complex. A simple verbal head comprises one verb form only. A complex verbal head comprises two or more verbs in a co-ordinative relationship to each other.

Within any verbal piece any or all verbs of the verbal head may function as head to a part of or to all the verbal expansion of the particular verbal piece. There is no fixed order between the verbal head and verbal expansion.

Symbols and Examples:

<table>
<thead>
<tr>
<th>VHs - simple verbal head</th>
<th>VHe - complex verbal head</th>
</tr>
</thead>
<tbody>
<tr>
<td>wekilalorima saka'tumunama ala'apinca'silak, wekilalorima saka'tumunama ala'apinca'silak,</td>
<td>0.39.15.</td>
</tr>
</tbody>
</table>

\[ \text{VHs: } \text{VX} \quad \text{VHc: } \text{VX} \quad \text{VHc: } \text{VX} \]

'The lightening almost killed him on the path, when he was coming.'

\[ \text{VHc: } \text{VX} \quad \text{VHc: } \text{VX} \]

'He worked again for one month and when he had worked he bought a gun.'

D22.

54. Different types of verbal piece

A two-fold classification of different types of verbal piece is possible since the various structures of the verbal piece may be grouped together either on the basis of similarities of the verbal head or similarities of the verbal expansion. This two-fold classification may be combined in two different ways.

54.1 Classification on the basis of the verbal head

Every verbal head comprises either a simple head or a complex head. This classification would set up two types of verbal piece, namely, type A, those verbal pieces analysed as having a simple verbal head and type B, those analysed as having a complex verbal head. Type A may be termed simple verbal piece, and type B complex verbal piece.

54.2 Classification on the basis of the verbal expansion

Irrespective of the structure of the verbal head, a verbal piece may contain a verbal expansion in addition. All verbal pieces may, therefore, be grouped into two classes on the basis of the presence or absence of such an expansion. Type 1 comprises all verbal pieces with a verbal expansion and may be termed subordinative verbal piece. Type 2 comprises all verbal pieces without a verbal expansion and may be termed non-subordinative verbal piece.

54.3 Combinatory classification

These two classifications may be combined as follows. Each of the two types A and B may be further subdivided on the basis of the presence or absence of a verbal expansion. Thus type A, the simple verbal piece, is divided into type A1, subordinative simple verbal piece, comprising a verbal expansion, and type A2, non-subordinative simple
verbal piece, where no verbal expansion is present. Similarly type B, the complex verbal piece, is divided into type B1, subordinative complex verbal piece and type B2, non-subordinative complex verbal piece.

A somewhat similar combinatory classification can be made if the classification into types on the basis of the presence or absence of a verbal expansion is taken as primary and a further subdivision is then made of the two types on the basis of the verbal head. Type 1, the subordinative verbal piece, is divided into type 1A, simple subordinative verbal piece, and type 1B, complex subordinative verbal piece. Type 2, non-subordinative verbal piece is divided into type 2A, simple non-subordinative verbal piece, and type 2B, complex non-subordinative verbal piece.

These different classifications may be diagrammed as follows:

```
Verbal piece

Simple
(Type A)  Complex
(Type B)

Non-subordinative  Subordinative  Non-subordinative
(Type A2)  (Type A1)  (Type B2)

Subordinative  Non-subordinative
(Type 1)  (Type 2)

Simple  Complex  Simple  Complex
(Type 1A)  (Type 1B)  (Type 2A)  (Type 2B)
```

Examples:

- Ḫuʔkima.
  VHs A2 or 2A  VP
  wakilalarima ʷiʔtwifi incilalak, waʔapinaʔsik.
  VHs A1 or LA  VX  NP
  'He sat down.'  C10.

- 0,39,15.
  'The lightening almost killed him on the path when he was coming.'

- Ḫuʔkima.
  VHs Bl or LB  VX
  sakaʔtununama, sakaʔtununapima, iʔapa mapaʔtuʔki.
  VX  VHc Bl or LB  VP
  'He worked again for one month and when he had worked he bought a gun.'  D22.

55  The verbal expansion

551  Composition of the verbal expansion

Irrespective of the structure of the verbal head, the verbal piece may include a verbal expansion. This verbal expansion may comprise one or more clauses, one or more phrases, one or more words or unrestricted combinations of clause(s), phrase(s) and word(s). These various grammatical units, clause, phrase and word, are subordinate to the verbal head.
In the case of a complex verbal head, the verbal expansion of clause, phrase or word, may be subordinate to any or all of the verbs comprising the complex head.

552 The clause

The clause is found solely as, or as part of, the verbal expansion of the verbal piece, and is in a subordinate relationship to the verbal head, since it is never found alone but always with a verbal head and the endocentric construction of verbal head and clause is always substitutable by a verbal head alone and never by a clause alone.

Clauses are divided into three types, concordial clauses, non-concordial clauses and included clauses. Each of these is dealt with in detail below; however, some general features of all three types may first be noted.

The internal grammatical structuring of every clause is similar to the structuring of one or other of the sentence-types already described in chapter 2. The structuring of the included clause corresponds to the structuring of any sentence-type and included clauses have been found with a structuring similar to one or other of each of the 7 classes of sentence-type. The structuring of the concordial and non-concordial clause is found always to be similar to the structuring of sentence-types I and II only, i.e., to the sentence-types to which all favourite sentences are allotted except that,

a) no vocative piece is found in the concordial or non-concordial clause, and
b) the verb head in these two types of clause is always found with one of a limited number of the verb inflectional suffixes, namely, a suffix of paradigms 6-10, § 74, in contrast to the verb which functions as the verbal head of the verbal piece of the sentence-type which always comprises an inflectional suffix of paradigms 1-7, 11 and 12.

Besides these morphological features there are prosodic features which also mark the clause as being part of the sentence-type rather than as being an independent unit. The part of the sentence which corresponds to the clause does not have potentiality of silence both before and after it as does the sentence itself, though a pause of varying length may precede or follow the part of the sentence that is allotted to the clause. That part of the sentence which corresponds to the clause frequently does not have a complete sentence intonation pattern, that is, the tunes, the units set up for the statement of the pitch patterns, do not correspond to the grammatical units, the clauses, except in the case of included clauses when the tunes may or may not correspond to the grammatical unit, the clause, § 1.72.

Symbols:

\( C \) - clause
\( C_i \) - included clause
\( C_c \) - concordial clause
\( C_n \) - non-concordial clause

5521 The concordial clause

Concordial clauses may be defined as those clauses which a) always exhibit agreement of person and number between the verb which functions as the head of the verbal piece of clause and the verb which functions as the head of the verbal piece of which the clause is a part, and,
b) which contain as verbal head a verb suffixed by one of the verb inflectional suffixes of paradigm 10. Both criteria are applicable to every concordial clause.

The internal grammatical structuring of every concordial clause is similar to the structuring of either sentence-type I or II, except that
a) no vocative piece is found in the concordial clause, § 441 and 442, and
b) the verb head is limited to different paradigms, see below.
Thus every concordial clause contains an included verbal piece, and
some concordial clauses also contain an included nominal piece.

The term included sentence-type is used to distinguish the
internal structuring of the clause from the internal structuring of the
favourite sentence-types.

The verbal piece of the concordial clause is structured in the
same way as the verbal piece of sentence-types I and II, and is divided
into verbal head and verbal expansion in the same way and with the same
relationships as already described for the verbal piece of the
favourite sentence in section 52.

The verbal head of the concordial clause is similar in structuring
to the verbal head of the verbal piece of sentence-types I and II as
described in section 44, except that the verb or verbs concerned are
always found suffixed by one of the verb inflectional suffixes of
paradigm 10 only, in contrast to the verb which functions as the head
of the verbal piece of sentence-types I and II which is suffixed by
any member of the inflectional paradigms 1-7, 11 or 12.

The verbal expansion of the concordial clause is similar in every
respect to the verbal expansion of the verbal piece of the sentence-
types I and II as described in section 55. Thus there may be further
clauses within the concordial clause and so on in principle without
limitation.

Symbols and Examples:

\[ SV \]

...\( \lambda \nu \alpha \kappa \lambda \alpha \mu \nu \pi \iota \nu \alpha \) ... \( \tau \alpha \lambda \kappa \eta \xi \iota \) ... \( \tau \alpha \lambda \kappa \eta \xi \iota \).

\[
\begin{array}{ccc}
VX & VH & VX & VH \\
STil & VP & VP & STil & STil \\
Co & Co & Co & Co \\
\end{array}
\]

' seizing a torch
and taking his
matches, he came
and ran ... '

5522 The non-concordial clause

Non-concordial clauses may be defined as those clauses which are
not included clauses and which,
a) do not exhibit agreement of person and number between the verb which
functions as the head of the verbal piece of the clause and the verb
which functions as the head of the verbal piece of which the clause is a
part; and,
b) which contain as verbal head a verb suffixed by one of the verb
inflectional suffixes of paradigms 6, 7, 8 or 9.
Both criteria are applicable to every non-concordial clause.

When either the clause itself or the sentence-type of which it is
a part comprises a verbal piece only, some possibility of ambiguity
occurs. For example, the verb head of the verbal piece of the sentence-
type may exhibit exponents of the categories of third person and
singular, and the verb head of the verbal piece of the non-concordial
clause may also exhibit exponents of the categories of third person and
singular, and thus the two verbs concerned may appear to be in agreement
of person and number contrary to the criterion stated in the paragraph
above. However, this type of agreement may be treated as accidental
and not structural, since if the clause and the sentence-type of which
it is a part is substituted by a clause and a sentence-type corresponding
in every respect except that each comprises a nominal piece as well as
a verbal piece, it will be seen that different nominal pieces are found in the sentence-type and in the non-concordial clause. Thus the non-concordial clause may be contrasted with the concordial clause, for if a similar substitution is made in the case of a concordial clause and the sentence-type of which it is a part one and the same nominal piece will be found in the concordial clause and the sentence-type concerned.

The internal grammatical structuring of the non-concordial clause is similar in every respect to that of the concordial clause, as described in section 5521, except that the verb or verbs functioning as the verbal head of the non-concordial clause are always found suffixed by one of the verb inflectional suffixes of paradigms 6, 7, 8 and 9, (not paradigm 10). Apart from this the two types of clause are completely parallel in structure.

Examples:

5523 The included clause

Included clauses are those clauses which follow or precede a verb of sub-class 0, § 662, or a form derived from a verb of sub-class 0, the verb, or verb derived form, and the included clause constituting an endocentric construction of which the sub-class 0 form is head and the included clause is an expansion. The sub-class 0 form is either a verb functioning as the head of the verbal piece of either a sentence-type of class I or II or of a clause which is itself a part of such a sentence-type, or a verb derived nominal which is the head of a relative phrase, § 5532.

The included clause may be structured in a similar manner to the internal grammatical structuring of any sentence-type of any class described in chapter four. All such sentence-types are termed included sentence-types.

Any single included clause may correspond to a complete tune, or may correspond to only part of a tune. Thus there is sometimes complete congruence between the grammatical unit, the included clause, and the phonological unit, the tune, § 472.

Examples:

Further examples are given on the next page. The second of these examples uses the symbols, Fr, RH and rX. These are explained fully in section 5532 and stand for the relative phrase, relative head and relative expansion respectively. Similarly the first example uses the symbols, FN, NH and NX standing for nominal phrase, nominal head and nominal expansion, § 5531.
"Having heard this drumming of yours along there we came here saying, 'Perhaps there is a man over there'," they said to the man.

"It night I will come to you let's talk because of what they said to me having seen I came he said..."
There are three types of phrase which are found as part of the verbal expansion, the nominal phrase, the relative phrase, and the adverbial phrase. Each of these will be described in turn in the following sections. Of these three types of phrase the nominal phrase is found much the most frequently in the material examined.

All phrases of these three types have this in common that they comprise an endocentric construction.

Symbols:  
F - phrase  
FN - nominal phrase  
Fr - relative phrase  
FA - adverbial phrase

The nominal phrase

The nominal phrase is an endocentric construction, comprising either one head word which is always a nominal with at least one subordinate word, or two or more head words with or without subordinate word(s). The nominal phrase is divided into the nominal head and the nominal expansion.

The nominal head

The nominal head consists of one or more nominals. Two types of nominal head are distinguished: simple and complex. The simple nominal head comprises one nominal only, whereas the complex nominal head comprises two or more nominals in a co-ordinate relationship, cf. the verbal head, § 53. Within the nominal phrase any or all nominals of the nominal head may function as head to a part of or to all the nominal expansion of the particular nominal phrase.

Members of the nominal sub-classes noun and adjective may function as head of a nominal phrase but not members of the sub-classes pronoun or relative.

Different types of nominal phrase

A two-fold classification of three different types of nominal phrase is possible on the basis of the different types of nominal head and nominal expansion, cf. the classification set out for the verbal phrase in section 54.

On the basis of the nominal head a classification into simple and complex nominal phrase is made. The complex nominal phrase may be further sub-divided into subordinative and non-subordinative complex nominal phrase, on the basis of the presence or absence respectively of a nominal expansion.

Alternatively, if the presence or absence of an expansion is taken as the criterion for the primary classification, then the nominal phrase is divided into two types: subordinative, and non-subordinative. The subordinative nominal phrase is then divided into simple subordinative and complex subordinative on the basis of a simple or complex head to the phrase.

Whichever criterion, composition of the head, or presence of expansion, is taken as primary there are, thus, established three types of nominal phrase. Simple phrase, subordinate complex phrase, and non-subordinate complex phrase established on the one basis correspond to simple subordinative phrase, complex subordinative phrase and non-subordinative phrase on the other basis.
These classifications may be diagrammed:

Phrase

Simple (and subordinative) Complex

Subordinative Non-subordinative

Phrase

Subordinative Non-subordinative

(and complex)

Simple Complex

55313 The nominal expansion

The nominal expansion may comprise either one or more nominals of the sub-class adjective, or a nominal phrase containing a head nominal suffixed by the non-verbal suffix -ki, or a relative nominal, or a relative phrase, or unrestricted combinations of these elements. These four types of nominal expansion are as follows:

a) The nominal expansion may comprise one or more nominals of the sub-class adjective. Generally any such adjective precedes the nominal head. This type of expansion is the most frequently occurring type.

b) The nominal expansion may comprise a nominal, either functioning as head of a nominal phrase or independently, which is always suffixed by the non-verbal suffix -ki which may be roughly translated as 'possession'. Such a nominal may be of any sub-class. No examples of a nominal expansion for this type of nominal phrase have been found that do not fall under type a) described above. In fact, in a large majority of cases only a single nominal is found. This type of nominal expansion generally follows the nominal head to which it is subordinate.

c) The nominal expansion may comprise one or more nominals of the sub-class relative. Generally any such relative follows the nominal head.

d) The nominal expansion may comprise a relative phrase containing a head nominal with at least one subordinate word, § 5532. Generally the relative phrase is found following the nominal head to which it is subordinate.

Symbols: 

\[ \text{NX}_a \] = nominal expansion of type a above 
\[ \text{NX}_b \] = b 
\[ \text{NX}_c \] = c 
\[ \text{NX}_d \] = d

55314 Nominal phrases in the verbal expansion

The verbal expansion of the verbal piece may comprise a number of nominal phrases. All such phrases fall into one of two groups, according to whether or not the head nominal is suffixed by a member of groups B and C of the non-verbal suffixes, § 5532.

Nominal phrases which contain a nominal head which is not suffixed by a member of groups B and C of the non-verbal suffixes fall into the category of object nominal phrases, § 555 for the formal basis of the category of object. The nominal head of such phrases may be suffixed by members of group A non-verbal suffixes. When the nominal head is so
suffixed the nominals of the nominal expansion do not exhibit any type of concord with the head nominal. Nominals of the nominal expansion are not usually found suffixed though they do occur suffixed by members of the word suffix class, and less frequently are found suffixed by members of group A of the non-verbal suffixes.

All nominal phrases of the verbal piece which do not fall into the category of object nominal phrases, § 555, are designated nominal phrases with adverbial function. All such nominal phrases contain a nominal head which is suffixed by a member of groups B and C of the non-verbal suffixes. The nominal head of such phrases may be suffixed by members of group A non-verbal suffixes and by word suffixes, and so, too, may be the nominals of the nominal expansion of such phrases, though suffixation of the expansion is less frequent than suffixation of the nominal head. There is no type of concord between the nominal head and expansion.

Examples:

\[
\begin{array}{cccc}
\text{katuta}\text{p}\text{katu}\text{ta}\text{p}\text{piwala}\text{a}\text{zam}\text{a}\text{mara}\text{taulina}. & \text{DB.} \\
\text{NXa} & \text{NH} & \text{NXa} & \text{NH} \\
\hline \\
\text{FN} & \text{VX} & \text{VP} \\
\end{array}
\]

'They bought two shirts and two pairs of trousers.'

\[
\begin{array}{cccc}
\text{namasu}\text{a}\text{la}\text{zam}\text{a}\text{wilaweski}. & \text{This is my son's voice.} & \text{1.30.16.} \\
\text{NH} & \text{NH} \\
\hline \\
\text{PD} & \text{FN} \\
\end{array}
\]

'sadawuk cimia\text{a}\text{sa}\text{mp}\text{a}\text{a}\text{ok}\text{wokli} \ldots' 0.52.14.

\[
\begin{array}{cccc}
\text{rH} & \text{rX} & \text{rX} \\
\text{NH} & \text{NXFr} & \text{VX} & \text{VH} \\
\end{array}
\]

'My wife who died before came here.'

5532 The relative phrase

The relative phrase is an endocentric construction comprising at least one head word which is always a relative nominal with at least one subordinate word, of any word class,

The relative phrase is divided into the head and the expansion.

Symbols:  \( rH \) - relative head  \( rX \) - relative expansion

55321 The relative head

The relative head consists of one relative nominal, § 6644.

55322 The relative expansion

The relative expansion comprises one or more words of any word class, in a subordinate relation to the head. The relative expansion most commonly comprises one or more nominals which may or may not be suffixed by members of groups A, B, C and E of the non-verbal suffixes. Occasionally the relative expansion comprises one or more included clauses, § 523. In such instances the relative head is always derived from a verb stem of sub-class 0, § 662.
The relative expansion almost always precedes the relative head in the sentence.

When the relative expansion contains a nominal there may be concord between the head and the expansion, in that there may be agreement of person and number between the nominal of the expansion and the relative head which always exhibits exponents of the categories of person and number, § 828. Such a nominal is similar to the subject nominal of the nominal piece in sentence-types of class II, § 47.8.

55323 Difference in structure between the nominal and relative phrases

Since both the nominal phrase and the relative phrase contain heads which are members of the nominal word class, it is important to draw attention to the fact that these two types of phrase are clearly distinguished.

The chief differences between these two types of phrase can be roughly indicated by stating that the relative phrase is much more like a clause or sentence than is the nominal phrase. Besides this rough general distinction, specific ways in which the two types of phrase are differentiated may be stated as follows:

a) The expansion of the relative phrase may comprise a nominal of the sub-class noun with or without a non-verbal suffix of groups A, B and C, whereas the expansion of the nominal phrase may not comprise a nominal of the sub-class noun unless that noun is suffixed by a member of group C of the non-verbal class of suffixes.

b) The expansion of the relative phrase may comprise an included clause whereas the expansion of the nominal phrase never does.

c) The expansion of the relative phrase may comprise words of other word classes than the nominal whereas the expansion of the nominal phrase comprises words of word classes other than the nominal only when those words are themselves part of the expansion of a relative phrase which is functioning as part of that nominal expansion.

d) The head of a nominal phrase may be a nominal of sub-class noun, or adjective, whereas the head of a relative phrase is always a nominal of the sub-class relative.

These differences give formal justification for the establishment of these two different types of phrase and this is important since the sub-classes of the nominal are established in part on the basis of their distribution in these two phrases so that if these two types of phrase were not formally distinct the analysis would be open to the charge of circularity, c.f. § 664.

55324 The relative phrase in the verbal expansion

The relative phrase is found as part of the verbal expansion in two different ways:

a) as directly subordinate to the verbal head, and

b) as part of the nominal expansion of a nominal phrase which is itself part of the verbal expansion.

In this first instance the relative phrase may be in a co-ordinative relationship to any nominal or nominal phrase in the verbal expansion. In this second instance the relative phrase is directly subordinate to the head of the nominal phrase, the whole nominal phrase of which it is a part being subordinate to the verbal head.

When found as part of the nominal expansion, i.e., as in b) above, the relative phrase contains a head which may or may not be suffixed by members of group A non-verbal suffixes and by word suffixes, but which may not be suffixed by members of groups B and C of the non-verbal suffixes. In contrast, when found directly subordinate to the verbal head, i.e., as in a) above, the head of the relative phrase may be suffixed by members of groups B, A and C of the non-verbal suffixes and by word suffixes.

Examples: see next page.
They bought poison, good poison, that which they call Ticuna poison, that which came formerly in a small vessel.

Having done that, he looked for the other one who was hidden.
The adverb phrase

The adverb phrase is an endocentric construction comprising one head word which is always an adverb of the sub-class phrasal adverb and an expansion comprising one subordinate word, which is always a nominal of the sub-class adjective, §§ 665 and 664.6.

There is a fixed order between the head and expansion within the adverb phrase; the expansion being found always preceding the head.

It is rare for any verbal expansion to comprise more than one adverb phrase, though occasionally two phrases in a coordinate relationship to each other have been found in the verbal expansion.

Symbols and Examples:

AH - adverb phrase head
AX - adverb expansion

iñet ḡekpliʔma incialak pa=wižitapaži.
AX  AH
FA  N
VX  VH
VP

Vi.51.2.

iñet wa=lima iñet ḡekpliʔma ḡekwamerapaži.
AX  AH  AX  AH
FA  N
VX  VH
VP

1.45.9.

The word

There are three classes of word which are found as part of the verb expansion, namely the nominal, the particle and the adverb.

All these classes of word are found both with and without suffixes in the verb expansion. Any type of suffixation which occurs with these word classes is also found when they are functioning as part of the verb expansion, except that the nominal is never found suffixed with members of groups D and E of the non-verbal suffixes.

Symbols and Examples:

P - particle
A - adverb

muʔtami, ipe=limi aʔamʔuʔtuki.
Co  A
VX  VH

10.16.11.

Then having done that, he made it fall to the ground.

Nominals of the categories of object and of adverbial function

Within the verbal expansion all nominal phrases and nominals which are not members of any nominal phrase are in one of two categories. Such nominals and phrases are either object nominals and object nominal phrases, or nominals with adverbial function and nominal phrases with adverbial function. These two categories are formally based.
Any nominal in the verbal expansion which is either the head of a nominal phrase or is not a subordinate member of a nominal phrase and which is not suffixed by a member of groups B and C of the non-verbal class of suffixes is designated an object nominal and the phrase of which it is the head is an object nominal phrase, § 55314.

The object nominal phrase seldom occurs in the verb expansion of a verbal piece whose head is a bipersonal verb, though it has been found to do so occasionally and in such instances there is agreement of person and number between the second person of the bipersonal verb and the object nominal.

A verbal piece in which an object nominal of the sub-class pronoun, of first or second person, singular or plural, is found as, or as part of, a verb expansion and whose verb head is a unipersonal verb, corresponds to a verbal piece identical with this verbal piece except that no object nominal is found and the verb head is a bipersonal verb whose secondary person is first or second person, singular or plural, according to the person and number of the object nominal of the expansion of the verbal piece which comprised a unipersonal verb.

These two types of construction seem interchangeable though stylistic differences may be noted. In general the construction comprising a unipersonal verb plus nominal would appear to be more emphatic than the construction comprising a bipersonal verb. Probably the construction mentioned in the previous paragraph comprising bipersonal verb and object nominal differs from these other two constructions stylistically as well. Certainly all these variations have no grammatical significance though they probably have significance at another level, stylistic or situational.

Any nominal in the verbal expansion which is either the head of a nominal phrase or is not a subordinate member of a nominal phrase and which is suffixed by a member of groups B and C of the non-verbal class of suffixes is designated a nominal with adverbial function and the phrase of which it is the head is a nominal phrase with adverbial function, § 55314.

A somewhat different analysis would set up two types of verbal piece, the simple verbal piece and the expanded verbal piece. The simple verbal piece would comprise a single word only, namely a verb. The expanded verbal piece would comprise a verbal expansion of which there would be two types, a co-ordinative expansion and a subordinative expansion. The co-ordinative construction would comprise two or more verbs functioning as head with the potentiality of occurrence of other words in a subordinative satellite relationship to these verbs. The subordinative construction would comprise a single verbal head with a subordinative satellite which might be either one or more clauses or one or more phrases, or one or more words or unrestricted combinations of these.
The chief difference between the treatment already outlined and this alternative lies in the use of the term expansion. In the earlier treatment this term is used only for the words in a subordinative satellite relationship to the head, whereas in the alternative treatment this term is used for all constructions apart from the simple verb, i.e., it is used to include expansions of the head as well as expansions of subordinate words, and thus covers co-ordinative as well as subordinative constructions. Co-ordinative constructions are treated in the earlier description as constructions involving a complex head and are not termed expansions.

This alternative treatment of the verbal piece may be diagrammed:

\[ \text{Verbal piece} \]

\[ \text{Simple VP} \quad \text{Expanded VP} \]

\[ \quad \text{Co-ordinative} \quad \text{Subordinative} \]

It would seem that this alternative treatment and the different treatments suggested in section 54, each have a use in that each serves to draw attention to different structural features of the verbal piece. In this way the contrasts of simple as against expanded verbal piece, verbal piece with simple or complex verb nucleus, and verbal piece with subordinative as against non-subordinative features may each be stressed, the primary divisions in each case drawing attention to one or other of these contrasts.

Since all these features are relevant to the Jeboro verbal piece each of these treatments adds to the complete understanding of the grammatical structure. They may, therefore, be considered alternatives.

57 Other pieces of the favourite sentence-types

571 General remarks

The two favourite sentence-types both contain a verbal piece and may also contain a vocative piece while one of the two sentence-types always contains a nominal piece. There are, thus, two other pieces besides the verbal piece and this section describes these two other pieces briefly. A comparison of the nominal piece, vocative piece and nominal phrases of the verbal piece is also made.

572 The nominal piece

The nominal piece only occurs in the class II sentence-type, § 442.

The nominal piece comprises one or more nominals or nominal phrases functioning as subject in the manner described in section 442. Usually the nominal piece comprises only one nominal or nominal phrase but occasionally it is found to comprise two, or rarely, three nominals or nominal phrases. Such nominals or nominal phrases are in a relationship of apposition to each other, and may be found either following each other or discontinuously in the sentence.
The nominal phrase which is (part of) the nominal piece is similar in every respect to the nominal phrase of the verb expansion as described in section 551, except that the head of the nominal phrase of the nominal piece may be suffixed by members of groups A and E but not B and C and D of the non-verbal suffixes, § 83.

For other details of the nominal piece see section 442.

Examples:


\[
\begin{array}{c|c|c|c|c|c}
A & Fv & N & N \\
\hline
\text{VX} & \text{VX} & \text{VH} \\
\hline
\text{VP} & \text{VP} \\
\end{array}
\]

'Formerly a certain man fought with a tiger at Jeberos.'


\[
\begin{array}{c|c|c|c|c|c}
D & A & V & N & \text{VX} & \text{VH} \\
\hline
\text{VP} & \text{VP} \\
\end{array}
\]

573 The vocative piece

The vocative piece may occur by itself as a non-favourite sentence, or as part of a sentence, i.e. as a part of sentences of sentence-types classes I to VI, § 43-46.

The vocative piece comprises a nominal phrase or a single nominal of the sub-class noun. Examples of a nominal phrase functioning as the vocative piece are very infrequent and always limited to a single nominal as head and a single adjective as expansion. In theory any noun may function as a vocative piece but in the material examined a very restricted number of nouns are found as the vocative piece. This may, in part, be due to the nature of the material and it is probable that situations could be envisaged in which many more nouns might function as the vocative piece. For this reason this restricted distribution of the noun is not treated as a structural feature and a separate class of noun is not set up; instead this limitation is treated as situational in character.

When the vocative piece is part of sentence-types of class I - VI, it is found to be in a paratactical relationship to the other pieces of the sentence structure. For example, in class I sentence-type the vocative piece is in no sense part of the verbal piece as it clearly cannot be regarded either as head of the verbal piece since this is always a verb or as part of the expansion of the verbal piece since it is not in a subordinate relationship to the verb which is the head of this endocentric construction.

\[
\begin{array}{c|c|c|c|c|c}
\text{N} & \text{Voc} & \text{CI - STIT} & \text{VX} & \text{VH} \\
\hline
\text{VP} & \text{VP} \\
\end{array}
\]

''Are you there, brother?'' he went and said.''

\[
\begin{array}{c|c|c|c|c|c}
\text{V} & \text{Voc} & \text{CI - STIT} & \text{VX} & \text{VH} \\
\hline
\text{VP} \quad \text{VP} \\
\end{array}
\]

''What's the matter ... nephew?'' his aunt said.'
A comparison of the nominal piece, vocative piece and nominal phrases of the verbal piece

The nominal piece, vocative piece and nominal phrases of the verbal piece might seem to be very similar in structure in that all three comprise a nominal phrase. However, certain formal distinctions clearly mark out each as separate from the other in structure as well as in function.

a) The nominal phrase of the nominal piece is distinguished from the nominal phrases of the vocative and verbal pieces in that it is in a subject relationship to the verbal piece and this is marked formally by agreement of person and number between the nominal piece and verbal piece and by the potentiality of suffixation by -ler, § 442, whereas the nominal phrases of the vocative and verbal pieces stand in no such relationship to the verb head of the verbal piece with which they occur.

b) The nominal phrase of the vocative piece is distinguished from the nominal phrases of the nominal and verbal pieces in that the vocative piece is almost always in final position in the sentence whereas the position of the other two types of nominal phrase is relatively free. Furthermore sentences referable to a structure comprising a vocative piece are marked by different intonation tunes from sentences referable to structures comprising nominal and verbal pieces, § 472.

c) Some nominal phrases of the verbal piece, namely those with adverbial function, § 55314, are distinguished from nominal phrases of the nominal and vocative pieces in that the head nominal of such phrases is always found suffixed by members of groups B and C of the non-verbal suffixes, § 832, whereas the head nominal of phrases of the nominal and vocative pieces are never found suffixed by any member of the groups B and C of the non-verbal suffixes.
Chapter Six  The word, word classes, word suffixes and interjections

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Chapter 6  The word, word classes, word suffixes and interjections

61  General remarks

This chapter takes up the word and shows how it is formally established as a linguistic element; § 62. Different classes of word are set up and within these classes sub-classes. All classes and sub-classes are formally based; § 63, 65 and 66. Thus all words are assigned to one or other word class and to one or other sub-class.

The chapter also distinguishes the different types of suffix found and deals in full with one class of suffix, the word suffix, which may be found with words of any class, § 64 and 67. The last section of the chapter deals with the interjection and pause form.

62  The word

621  Definition of the word

The word is defined on the basis of both grammatical and phonological criteria.

6211  Phonological criteria

Every form having,

a) one full stress, or, in the case of compound words only, at least two full stresses, § 624,

b) potentiality of pause immediately before or after it,

is a word.

The great majority of words may occur as one word sentences in sentence-types of all classes except class II, so that a further phonological criterion is potentiality of silence before and after most words.

6212  Grammatical criteria

The word is defined as a minimal free form and the tests of independence, relative fixity of internal structure and absence of interruption by other forms, though not wholly applicable, are largely so.

a) Independence. As has been stated above most words may occur as sentences. Any form that may be preceded and followed by silence is a word unless, of course, it is several words together.

b) Relative fixity of the internal structure of words. The internal parts of Jebro words may be grouped into five main categories: prefixes, stems, extensors of the stem, class suffixes and word suffixes, § 64, 71 and 81. A Jebro word may comprise morphemes from any, or all, of these categories and may contain more than one morpheme of each category, subject to certain limitations which are stated in the relevant sections. The order of morphemes within the word is fixed in that morphemes of these different categories always occur in the order listed above, though when words comprise two or more morphemes of the same category the order of the morphemes is not always fixed though for a majority of morphemes it is fixed.
Thus there is relative fixity of the internal structuring of the word, though this is not the case within certain restricted and well-defined limits. The sections dealing with each of these categories of morpheme give full details of the circumstances under which transposition is possible, e.g., § 73.

c) Relative constancy of internal structure. There is, to a large degree, absence of interruption of the internal structure of words by other forms, or by pause.

Certain words comprising two or more morphemes may be said to correspond to other words whose internal structuring is identical except that an additional morpheme is found between the morphemes corresponding to the two morphemes which the shorter word contains. Thus, for example, verb forms including one extensor may correspond to verb forms identical in every respect except that a second extensor is found, either between the stem and the extensor or between the extensor and the inflectional suffix. Similarly verb forms containing one expanding prefix correspond to verb forms identical in every respect except that a second prefix is found between the morphemes corresponding to the prefix of the shorter word and the stem corresponding to the stem of the shorter word.

Furthermore, in the description of verb stems, § 72, it is stated that certain stems contain a verb root and a nominal root. These stems may be said to correspond to stems containing a verb root only and the nominal root which follows the verb root in the larger stems and precedes the inflectional suffix may be said to be an interruption of the shorter words. As will be seen in the sections dealing with the stems of the different word classes this type of interruption is not common, c.f. § 72 and 82.

For the majority of words, then, it is true to say that their internal structuring is constant, there being no possibility of interruption by other free forms.

d) Substitution. In a single word there is normally only one element for which a large number of substitutions can be made. When this test is applied to Jebere words it is found that there is only one element in any word which can be substituted by a large number of other morphemes and that other elements in the word may be replaced by members of limited series of morphemes only.

622 Types of word

There are two types of word, the simple word and the compound word.

623 The simple word

Every word which has one full stress only is a simple word.

The prosodic feature of full stress is found on certain fixed syllables only in the simple word. Full stress occurs on the first syllable of monosyllabic and bisyllabic words and on the second syllable of all other simple words except

a) when such words are suffixed by the following word suffixes, -a-ta, -a-ta, -a-ci, -a-te, and -a-untana, § 673 and 3444,

b) when emphatic stress occurs, § 3445,

and

c) instances noted in section 3443.
The compound word

Every word which has more than one full stress is a compound word.

Compound words occur comparatively infrequently. In the texts examined there have been a little over a hundred examples. In each case the compound word has a verb with a suffixed root stem, § 7232.

Full stress falls upon the first syllable of the single or reduplicated stems of these words and upon the second syllable of the post-stem elements of the word unless those elements are of two or less syllables in which case full stress falls upon the first of these syllables.

The stress pattern of compound words bears resemblance to simple words in that the post-stem elements are stressed in a similar manner to that of the simple word, i.e. stress falls on the first syllable of monosyllabic and bisyllabic words and on the second syllable of all other words. Since each reduplication of the stem element is also marked by stress it would be possible to treat the compound word as a series of words or a word phrase from the phonological point of view, each repetition of the stem and the post-stem elements alike being treated as individual words, each having full stress. However, this treatment is rejected since neither the stems nor the post-stem elements occur in isolation elsewhere. As regards the stems this argument is hardly sufficient since these stems do not, in fact, occur elsewhere, but as regards the post-stem elements this feature seems conclusive since these elements occur frequently as part of verb forms which are simple words. Since the post-stem elements are everywhere else bound forms, they are treated as such when found with the reduplicated stems, and so the compound word is set up and these forms are referred to this rather than to some sort of phrase which might otherwise be set up.

Compound words are distinguished orthographically from simple words in that the reduplicated stems are followed by a hyphen as below:

suʔ-suʔ-suʔ-aʔtapaki 'he made the noise of sucking' A20

Criteria for word classes

The verbal piece and other parts of the sentence have been described in terms of structures which are made up of words. Every Jebero word is assigned to one of four word classes and the structuring of units larger than the word is stated in terms of these word classes.

The term word class is used deliberately though in some respects the term stem class could be used as adequately. Some linguists would deny the word any status as a unit in the linguistic system, and treat the word only as a unit in the sentence. This point of view is not adopted here, though the material could very easily be re-written from this standpoint. The approach here, for example on the analysis of the text, has been to assign every word to some word class rather than to assign the stems of each word to stem classes. However, if the use of word classes is rejected, four stem classes could be set up with exactly the same criteria as are used to set up these word classes. This analysis does establish stem classes but on a rather different basis. In chapters 7-9 classes of stems are set up on morphological grounds, as part of the description of the internal structuring of the members of the different word classes. These stem classes completely overlap the sub-classes of the word classes set up in this chapter and do not represent a further sub-division of these sub-classes. Thus the members of word classes of this chapter are sub-divided in two different ways. On the grounds of syntactic function sub-classes termed sub-classes of the word classes are set up, while on the basis of morphological structuring sub-classes termed stem classes are established.
The following sub-sections discuss first the general criteria used in the establishment of the four word classes and then give the detailed criteria for each word class and sub-class in turn.

631 General criteria

Grammatical criteria provide a basis for the formal establishment of word classes. Though phonological features serve to furnish a basis for the definition of the word as such in the language, such features do not distinguish different classes of word. However, when grammatical criteria have marked out stem and affix and provided a basis for word classes differences in the phonological structure of the stems of different word classes may be noted, § 3422.

Syntactic function has been traditionally, and is in this analysis, the chief criterion for the establishment of word classes. However, morphological features are used to give a formal definition of the four word classes, while syntactic features are used to define further sub-classes of the four main classes.

This is not meant to imply that word classes are set up on the basis of morphological considerations to the exclusion of syntactic considerations. In fact, word classes are primarily syntactically based. As a secondary factor it may be stated that the present analysis has sought to establish word classes so as to give the greatest possible degree of clarity and comprehension for the statement of both the morphological and syntactic features of the material. Traditionally, syntactic considerations have always been the chief factor in the setting up of word classes, or parts of speech, and this analysis is not discarding syntactic considerations. However, it has been found that the word classes that seemed necessary for the analysis are more simply defined on the basis of their morphological features, though this does not mean that these classes could not be differentiated syntactically, as indeed they have been in the preceding chapters, and, if necessary, defined syntactically. There is here, then, a distinction between the syntactic factors which have largely determined the word classes and the morphological features which have been used to provide a formal definition of these classes.

The morphological criteria involved in the establishment of these four word classes concern the distribution of the word stems with various suffixes and, in particular, with three groups of suffixes. The detailed particular criteria of each of the four word classes are given in the following sections.

632 The verb

Every word comprising a stem and an inflectional suffix of the paradigmatic closed series of suffixes described in section 74, is a member of the verb word class.

There is a second criterion for the establishment of the verb as a word class, namely, potentiality of prefixation. Every word which is, or has the potentiality of being, prefixed is a verb. This prefixation is facultative not obligatory since verbs are not always found containing a prefix. Every prefixed form is found to be a verb according to the definition given above, with one group of exceptions. Certain nominal stems are derived from verb stems, and comprise a verb stem and nominal derivational suffix, §824. These nominal stems may comprise a verb stem which itself is preceded by a verb expanding prefix; prefix, verb stem and derivational suffix forming a nominal stem. Apart from this all prefixed forms are verb forms and conversely all verbs may be found prefixed, with the exception of one verb. There is one stem which occurs with an inflectional suffix of the paradigmatic series and is thus by definition a verb stem, but which is never found preceded by a prefix. Forms with this stem also show very extensive limitations in
syntactic function and in morphological structure, § 76. It would, therefore, seem best to treat this word as a defective verb.

Suffixes which are found as part of verb forms are of two classes, verb suffixes, including both extensors and inflectional suffixes, and word suffixes. Verb suffixes are those which are found always with verb stems and never with stems of other word classes, § 71, 73 and 74. Word suffixes are found as elements of all classes of words, § 64 and 67.

633 The particle

Every word which may occur, either without suffixation, or suffixed with the word suffix class only, is a particle.

All particles comprise a stem which frequently occurs as a word without any affixation, § 94. All particles have the potentiality of suffixation by the members of the word suffix class and are never found suffixed by any member of the other classes of suffix, § 64 and 67.

634 The nominal

Every word which may occur without suffixation and
a) has the potentiality of suffixation by any and every member of the non-verbal class of suffixes, and/or,

b) has the potentiality of suffixation by order 8 of the non-verbal class of suffixes only when a member of order 7 of that class of suffixes precedes the member of order 8, § 833,

is a nominal.

Non-verbal suffixes form a class of suffixes distinguished from the other two classes of suffix already mentioned in their distribution. Non-verbal suffixes are only found with stems of nominals and adverbs, never being found with the stems of verbs or particles, § 64.

The criteria a) and b) stated above are not in complementary distribution. Either of the two criteria is sufficient to establish the word class of any one word even if the other criteria is inapplicable. Two criteria are given since in a number of instances one or other of the two is inapplicable owing to collocational limitations. In no instance are these two criteria contradictory. In all cases if criteria a) or b) is applicable from the structural point of view it may be assumed the absence of forms exemplifying the alternative criterion is due solely to collocational or stylistic limitations, i.e. not to structural factors. It would, therefore, seem best to treat these two criteria as collocational sub-classes of criteria with an overlapping application determined solely by collocational factors. Alternatively it would be possible to set up three sub-classes of nominals on the basis of the applicability of criteria a) or b) or both criteria. But since these differences in distribution can be handled at the collocational level and do not appear to reflect any significant structural feature, it seems advisable to treat them as sub-classes of criteria, collocationally determined.

1 see Appendix II 'The term collocational'
The adverb

Every word which may occur without suffixation and
a) has the potentiality of suffixation by any member of the non-verbal
   class of suffixes, except suffixes of orders 2, 3, 4, 10, 13, 14,
   and 16 of this class of suffixes,
   and/or,

b) has the potentiality of suffixation by order 8 of the non-verbal
   class of suffixes without a member of order 7 preceding the member
   of order 8,

is an adverb.

In the case of adverbs, as in the case of nominals, these criteria
a) and b) are not in complementary distribution. Either criterion
is sufficient to establish the class of any word but since in a number
of instances one or other criterion is inapplicable owing to collocational
limitations it is necessary to state both criteria. In no
instance has any word exhibited characteristics which would establish
a conflicting variance between criteria a) and b). These two criteria
are, therefore, treated as collocational sub-classes of criteria.

Adverbs and nominals share certain morphological features: both
alike comprise stems which may occur alone without further suffixation,
and both may be suffixed by the non-verbal class of suffixes. They are
distinguished, however, by the fact that adverbs are not found suffixed
by members of groups D and E and a few members of group A of the non-verbal
class of suffixes and by a difference in the distribution of
order 8 of the non-verbal suffixes with these stems, as stated above.

Adverbs and nominals are further distinguished syntactically,
since they may function in different types of phrase as described in
section 553. A further syntactic difference may be stated. Whereas
all nominals may be found as part of a nominal phrase only a small
number of adverbs are found functioning in adverb phrases, § 5533.

Correlation of the suffixial system and word class system

By way of summary the correlation of the suffixial system and word
class system may be stated.

Suffixes are grouped into three classes, word suffixes, verb
suffixes; and non-verbal suffixes. The distribution of these classes is
as follows:

members of the word suffix class occur with all word classes,
" " verb " " verbs only,
" " non-verbal " " " nominals and adverbs only.

Theoretical statement of the word class system

The word class system of the Jebero language may be stated as a
series of binary oppositions as follows:

Obligatory/optimal suffixation. This criterion divides words into
verbs and non-verbs, all verbs having
obligatory suffixation whereas other words have facultative suffixation.

Potentiality/non-potentiality of non-verbal suffixation. This criterion
divides non-verbs
into nominals and adverbs on the one hand as opposed to particles on the
other, since particles have no potentiality of suffixation by the non-verbal
class of suffixes whereas nominals and adverbs have this potentiality.
Potentiality/non-potentiality of groups D and E non-verbal suffixation, and/or occurrence/non-occurrence of 7th order suffixes whenever 8th order non-verbal suffixes are found.

This criterion divides into nominals and adverbs, nominals having potentiality of Groups D and E suffixation and occurrence of 7th order suffixes whenever 8th order occur, whereas adverbs have no such potentiality and no such distribution with 7th and 8th order suffixes.

This may be presented in tabular form:

<table>
<thead>
<tr>
<th>OBLIGATORY SUFFIXATION</th>
<th>OPTIONAL SUFFIXATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-potentiality of non-verbal suffixation</td>
</tr>
<tr>
<td></td>
<td>Potentiality of group D and E suffixation and/or obligatory 7th order with 8th order suffixes</td>
</tr>
</tbody>
</table>

VERB | PARTICLE | NOMINAL | ADVERB

66 Sub-classes of word classes

661 General

In general, syntactic criteria are used to establish the different sub-classes of the various word classes.

662 Sub-classes of the verb

Two sub-classes of the verb are established and all verbs are referred to one of them.

Sub-class 0 comprises all verbs which may be preceded or followed by an included clause and comprises the following members: itu- 'say', kama/i- 'order', laweke- 'hear', ki?e- 'see', tu- 'say', wintu- 'tell'.

Sub-class N comprises all verbs which are not associated with an included clause, § 5523, i.e. all verbs which are not members of sub-class 0.
663 Sub-classes of the particle

Particles are divided into two sub-classes, deictic and non-deictic.

Sub-class D, deictic particle,
comprises all particles that are found in deictic sentences. See section 451 on deictic sentence-types. This sub-class contains a relatively small number of members and the sub-class may be listed exhaustively as follows:

ma?ama? 'here', ma?ata? 'here it is', ma?ata?na 'there it is',
ma?namasu? 'there it is', ma?ataasu? 'here it is',
namasu? 'that is...

Sub-class N, non-deictic particle,
comprises all particles that are not members of sub-class D.

664 Sub-classes of the nominal

Four sub-classes of the nominal are established and one of these has further sub-classes.

These four sub-classes are the noun, adjective, pronoun and relative. They are established on the basis of function in the nominal phrase.

664.1 The noun

Every nominal which functions as head of a nominal phrase, but only functions as, or as part of, the expansion of such a phrase when suffixed, is a member of the noun sub-class.

664.2 The adjective

Every nominal which functions as head of a nominal phrase and which may also function as, or as part of, the expansion of a nominal phrase without suffixation, is a member of the adjective sub-class.

664.3 The pronoun

Every nominal which never functions as head of a nominal phrase and which functions as, or as part of, the expansion of the nominal phrase only when suffixed, is a member of the pronoun sub-class.

664.4 The relative

Every nominal which never functions as head of a nominal phrase and which functions as, or as part of, the expansion of the nominal phrase without suffixation, is a member of the relative sub-class.
Table of sub-classes

This division of the nominal word class into four sub-classes may be shown in tabular form as follows:

<table>
<thead>
<tr>
<th>FUNCTIONS AS HEAD</th>
<th>NEVER FUNCTIONS AS HEAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functions as expansion only with suffixation</td>
<td>Functions as expansion only without suffixation</td>
</tr>
<tr>
<td>NOUN</td>
<td>ADJECTIVE</td>
</tr>
</tbody>
</table>

Symbols and Examples:

n - noun, a - adjective, p - pronoun, r - relative.

mug n 'mace', kula a 'three', kana?ma? r 'that which he ate', kma p 'I', kuma p 'you', ma?kasu? r 'that which I gathered', pidek n 'house', a?kapi a 'large'.

Sub-classes of the adjective

The sub-class of adjectives is further divided into three sub-classes, deictic, interrogative, and general adjective.

Sub-class D, deictic adjective,
comprises every adjective that, while occurring freely in many sentence-types is also the obligatory component of class III deictic sentence-type, § 451.

This sub-class has only two members:
asu? 'th{s, nana 'that'.

Sub-class I, interrogative adjective,
comprises every adjective that has the potentiality of occurring as the obligatory component of a class V interrogative sentence-type. This sub-class is very small and may be listed exhaustively as follows:

empu?i 'how many', empu?ni 'however large', apkasu? 'which', ma? 'what'.

The category of interrogative used here and for the description of sentence-types of classes Y and V, § 443 and 453, and for the interrogative adverb, § 665, is not to be equated with the notional category of question, for though in the great majority of sentences where the category is relevant the notional category of question is also relevant, in some sentences the notion of surprise and exclamation rather than question is relevant. This is particularly the case where the interrogative adjective empu?ni is found, since its translation meaning is almost always exclamatory.

Sub-class G, general adjective,
comprises all adjectives which are not members of sub-classes D and I.
Three sub-classes of the adverb are established, namely, phrasal, interrogative and general adverb.

Sub-class F, phrasal adverb,
comprises all those adverbs which are found as head of an adverb phrase, § 5533. This class contains a comparatively small number of members and the sub-class may be listed exhaustively. The members of this sub-class though few in number are amongst the most frequently occurring adverbs.

\[ \text{basu}^{la} \text{ 'morning', basu}^{walek} \text{ 'very early morning',} \]
\[ \text{skepiki}^{a} \text{ 'night', sukor 'month', ekkilala 'summer',} \]
\[ \text{fwa 'afternoon, late', ekki 'tomorrow', ya 'yesterday',} \]
\[ \text{ilkinkili 'middle of the night', napi 'long ago', tamutu 'noon',} \]
\[ \text{uta 'evening'}. \]

Sub-class I, interrogative adverb,
comprises every adverb which while occurring freely in many sentence-types is also the obligatory component of class Y and V sentence-types. This sub-class is very small and may be listed exhaustively as follows:

\[ \text{empulu 'at what hour?', eka 'where'.} \]

Sub-class G, general adverb,
comprises all those adverbs which are not members of sub-classes F and I.

The word suffix

General remarks

The class of affix designated word suffix is a closed system of suffixes comprising some 17 members which are listed below.

All words, of whatever class, may be suffixed by a member of the word suffix class, and a very great variety of words of all classes have been found so suffixed in the material examined. This suffixation is in addition to any suffixation by suffixes of the classes of verb or non-verb suffix. Only collocational restrictions limit the distribution of the word suffix with individual words in particular sentences.

Any suffix which is found with every class of word is a word suffix.

Classes of word suffix

The 17 members of the word suffix series are arranged in eight classes. Each class comprises one or more suffix and the members of each class are mutually exclusive with any other member of the same class.

These classes are termed orders. An order is a class of mutually exclusive affixes occurring in a fixed position in relation to other orders.

The different orders are numbered in a manner that indicates their position in relation to each other and to the stem of the word concerned. This numerical arrangement is according to the linear position of each order counting from the stem outwards. Thus, for example, a member of order 7 will precede a member of order 8 when both occur in any one word, unless otherwise stated in the next section, 673, dealing with each order in turn.
In principle any member of one order may occur with any member of another order, except when the contrary is stated in the next section, 673, and with the limitation already stated that such combinations do not usually exceed three word suffixes in any one word.

The eight classes, or orders, of word suffix may be set out in tabular form as follows:

<table>
<thead>
<tr>
<th>ORDERS of the WORD SUFFIX CLASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>-inci</td>
</tr>
<tr>
<td>-la()a</td>
</tr>
<tr>
<td>-ip()a</td>
</tr>
</tbody>
</table>

Members of the word suffix class always follow any member of the other two suffix classes. Thus in the case of verbs, members of the word suffix class when present always follow the obligatory verb inflectional suffix. In the case of nominals and adverbs, word suffixes always follow any optional non-verbal suffixes present. In the case of particles members of the word suffix class always follow the stem of the particle and no other type of suffixation is possible.

Any word may include more than one word suffix though in the majority of instances when they occur one word suffix only is found. However, words with two word suffixes are not uncommon and some occur with three word suffixes. Words having more than three word suffixes are rare, though theoretically combinations with up to seven word suffixes are possible.

673 The orders of word suffix

The 8 orders of word suffix are listed below and the following details concerning each order are given:

a) its membership,

b) any relevant comment with regard to its distribution with words,

c) any relevant details regarding its distribution with other orders and in particular,

(i) any other order which is always found with the particular order being treated, i.e. any other order which the occurrence of the particular order presupposes but not necessarily vice versa,

(ii) any other order which never occurs with the particular order, i.e. which the occurrence of the particular order excludes,

d) some examples. In these examples the particular word suffix being illustrated is underlined.
Order 1

Order 1 comprises one member, -inc. 'truly, indeed.'

This suffix is found suffixed to the stems of nominals more frequently than to the stems of other word-classes.

Order 1 is not found with the members of orders 3 and 4 except when both 3 and 4 are found together.

Examples:
'Having arranged his bed, in the late afternoon indeed he ran to Jebbos.'
puka? filunta?ninc.  0.31.19.
'He is again indeed a charapa.'
'Wanting to eat that very thing indeed that he had shat!'

Order 2

Order 2 comprises one member, -ta?la 'at least, even,'

This suffix has been found only very infrequently in the material examined.

Order 2 is not found with orders 3 or 4, except when order 3 is followed by order 5.

Examples:
 'Give me water even.' (when nothing else available)
ñita?la a?r?n?ki luz electrica  0.37.1.
'It does not even have electric light.'

Order 3

Order 3 comprises one member, -pi? 'though'

Order 3 is always found with a member of either order 4 or 5.

Order 3 is not found with a member of order 1 except when followed by order 4. Order 3 is not found with a member of order 2 except when followed by a member of order 5.

Examples:
'Even yet while looking we found a house.'
'though still far away they heard...'
'I will give them also a little bit.'

Order 4

Order 4 comprises one member, -i?la 'still'

Order 4 is frequently preceded by order 3 and is not found with order 2.

Examples:
'I have still not bought my wife a blouse.'
'There in that very place her bones having fallen, there now she is finished.'
'Wait for me here still for a moment.'
Order 5

Order 5 comprises the following members, -unta? ~ -nta?, 'also, too',
-nta? is found after words ending with a vowel,
-unta? after words ending with a consonant,
-IPA? 'perhaps';
-la? 'presently, in a moment'.

The suffix -unta? is not found with verb stems except when preceded by a suffix of order 3. The suffix -la? is found most frequently suffixed to verb forms comprising in addition to other elements an inflectional suffix of paradigms 11 or 12 § 743.

The suffix -unta? is frequently preceded by order 3.

Order 5 is divided into two sub-classes on the basis of its distribution with other orders as follows:

5a comprises -unta? and -IPA?, 5b comprises -la?.

Order 5b is never found with orders 6-8 whereas order 5a is found with these orders.

Examples:

mana iyake?nti?ma nantapi... mana?pi?ima 0.42.8
'And the man also taking courage replied....'

cimpi asunta? kaqapa?si?ta, tukima. 0.53.2
'This one also is dead just like us, he said.'

'He also was going wherever it was he lived.'

ma?neqip?ma ... kanqili. 'Whatever has he found?' 0.47.8

aseki?lala? we?ntapi. 'Let it for me here still for a while!' 1.42.5

wenca?qika? we?sekpatana. 'When she comes presently, don't cry.' 10.6.9.

Order 6

Order 6 comprises two members,
-
-lma 'and, connective',
-
-lneq 'contrastive',

The suffix -lma is found exceedingly frequently with all classes of words. Within the sentence this suffix is usually found with the head word of phrases and clauses. As stated in § 42 this suffix clearly has an inter-sentence function, linking together different sentences. Its use seems also to add emphasis. The suffix -lneq on the other hand is only found very rarely in the material examined.

Examples:

ama?larineq wqika?i .... R.77.53
'This man (as opposed to some one else) gave ....'

damesineq muka?a. R.77.55
'It is salt.' (i.e., not something else.)

kaufineqineq.

'I should have carried...!' (Food which was prepared for journey was not taken, later when hungry speaker made this comment).

'They bought two shirts and two pairs of trousers.'

'Having done that, and having lain down, and now having licked his paws, now he seized one man.'

'Sat down, she said. He sat down. She saw man whom she had never seen before.'
Order 7

Order 7 comprises six members,

-ina   'but'
-ana   'question indicator'
-a?ta  'question with surprise, -ever,'
-a?ka  'indeed, contrastive'
-apa   'intensifier'
-untana 'emphatic affirmative'

-untana is found after words ending with a vowel
-untana after words ending with a consonant.

Some members of order 7 are found very much more frequently
than others. The two suffixes -ina and -ana occur very fre-
quently, -a?ta and -a?ka are not uncommon, whereas the suffixes
-apa- and -untana are quite rarely found.

Examples:

makiyama pili?apala. 'But why did you catch it?' 10.17.3.
apalama?oca?jaya, itulunima. 'Are you there, lady? he went and said.'

Order 7 (continued)

kudema wencaridik asat. 'We in fact came here.' 1.16.2.
iyadi?lamu?kupa. 'You are wanting to see me indeed.' 10.28.20.
sake?tukintana. 'Yes, he has worked.' R.62.1.
u?countana. 'Yes, thus it will happen.' 10.28.7.

Order 8

Order 8 comprises two members,

-ci   'emphatic used by men'
-teq  ' by women'

There are a number of variant forms of -ci, including
-ci? and -ci?. Any one speaker tends to use only one form
habitually and any analysis of any one dialect would
probably reveal only one of these forms.

These suffixes are not found very frequently in the material
examined though some speakers use them much more often than do other
speakers.

Examples:

ipi?maci arwapilaski. ... 10.3.4.
'm now indeed when it is getting late.'
asima supay muka?maci. 'But this is a demon indeed.' B4.0.
'm whatever shall I do with this deer indeed.'

Order 8 (continued)
sake?tukintana. 'You have worked.' (when husband ill and can't)
674 Chart of word suffixes

<table>
<thead>
<tr>
<th>ORDERS of the WORD SUFFIX CLASS</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>-inci</td>
<td></td>
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<td>-insi</td>
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<td>-untana</td>
</tr>
</tbody>
</table>

Presupposes 4 or 5

Excludes 3 3 1 2 5b 5b 5b 5b
except except except excludes with 4 with 5 with 4
with 6-8
except
with 5

68 The interjection and pause form

Occasionally some of the phonic material of the sentence is not allotted to any word of the sentence-type. The category of interjection is established and all such sequences of sounds are referred to this category. Interjections are not words since, phonologically, though they may be marked by stress, the stress pattern is not that of the word and they are not found both preceded and followed by silence, and grammatically, they are not found with the morphological pattern or syntactic functions that all words show.

The interjection should be distinguished from the pause form ma?i ‘. . . er . . . ’, which functions as a form which may substitute for the root of any word class.

The pause form is treated as a word since, phonologically it is marked by stress in exactly the same way as the simple word, and grammatically, it has the same syntactic function and morphological pattern as the members of the other word classes. Thus, it is found functioning as a verb stem, followed by verb extensors and one member of the inflectional paradigmatic series of verb suffixes and in this form may function as the verbal head of a verbal piece. Similarly it is found as a nominal stem of any sub-class, with the non-verbal suffixes exactly as described for the nominal in chapter eight, and entering into nominal phrases as described in section 553. Similarly it may be considered as an adverb or a particle. Very frequently when the pause form occurs it is followed by a word exhibiting a morphological structuring and having a syntactic function exactly similar to the pause form itself, in that particular occurrence.

Symbols and examples: I - interjection  FF - pause form

<table>
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</thead>
<tbody>
<tr>
<td>FF(H)</td>
<td>N</td>
<td>V</td>
</tr>
<tr>
<td>VX</td>
<td>VI</td>
<td></td>
</tr>
</tbody>
</table>

'Let's go to my . . . er . . . to my house.'
Chapter Seven  The structure of the verb

71  Elements within the verb
72  The verb stem
721  Definition of the verb stem
722  Classes of verb stem
723  Class I stems
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7232  Sub-classes of class I stems
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7241  Definition of class II stems
7242  Sub-classes of class II stems
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Chapter 7  The structure of the verb

71. Elements within the verb

The Jebero verb may comprise the following elements, expanding prefix, stem, extensor of the stem, inflectional suffix and word suffix. Subsequent sections in this chapter will deal with each of these elements in turn and state any limitations in the distribution of the various elements with each other. Section 72 will describe verb stems, section 73 verb extensors, section 74 verb inflectional suffixes and section 75 verb expanding prefixes. Word suffixes are treated in section 67.

In its minimum form the verb always comprises stem and one member of the class of inflectional suffixes. Every verb includes these two elements, irrespective of any other element that may be found. The maximum form of the verb is never found since in its most expanded form the theoretical maximum would be a form comprising 5 expanding
prefixes, one stem, which might comprise several morphemes, 16 extensors, 1 inflectional suffix and 6 word suffixes. In fact, no such forms are found. Verbs comprising up to 10 morphemes are found, e.g. two prefixes, stem comprising two morphemes, three extensors, one inflectional suffix and two word suffixes. Longer forms are very rare.

Symbols and Examples:

VS - verb stem
VE - verb extensor
ViSx - verb inflectional suffix
VePx - verb expanding prefix

pa?ái pa?- -ái 'he went'

72 The verb stem

721 Definition of the verb stem

The stem of a verb is that element which together with a member of the inflectional suffix class only and without further affixation may function as a verb.

722 Classes of verb stem

Verb stems always comprise a nucleus element and may also comprise a satellite element or elements. There are three types of nucleus.

Stems are divided into three classes on the basis of the types of nucleus which are found as parts of stems.

Class I Verb stems are those whose nucleus is a verb root. This class is described in section 723.
Class II Verb stems are those whose nucleus is a nominal stem. This class is dealt with in section 724.
Class III Verb stems are those whose nucleus is an adverb root. This class of stems is treated in section 725.

The satellite elements of verb stems will be described in conjunction with the different nuclei with which they are found.

Symbols and Examples:

VSI - verb stem of class I, verb root nucleus stems
VSII - II, nominal stem nucleus stems
VSIII - III, adverb root nucleus stems

pa?ái pa? - -ái 'he went'

píša?wái píša?wá?n -ái 'he has a house'

waypu?ái waypu? - -ái 'it is like something far away'

723 Class I stems - verb root nucleus verb stems

7231 Definition of class I stems

All verb stems which comprise a verb root, with or without other elements, are verb root nucleus verb stems.
Class I stems are divided into a number of sub-classes according to the different nuclei and satellite elements of which they are comprised.

Sub-class a, single root stem, comprises a single verb root without any other element. Any verb root of verb root class Ia or Ic or IId may be found in a Ia verb stem, § 7263.

Sub-class b, suffixed root stem, comprises a verb root which is usually repeated two or more times and always followed by a member of the class I verb stem forming suffix series, § 7232. Any verb root of verb root class Ib or Ic may be found in a Ib verb stem.

Sub-class c, double root stem, comprises two verb roots of different root classes, the first of which functions as nucleus and the second as satellite element, without any other element. The first verb root is a member of the root class Ia, and the second verb root is a member of root classes IId or IIdb, § 7263-5.

Sub-class d, prefixed root stem, comprises a verb root prefixed by a member of the verb stem forming prefix series, § 7268. Any verb root of root class II or III may occur in a Ia verb stem.

Sub-class e, verb root and nominal root stem, comprises a nucleus which is a verb root followed by a nominal root in a satellite relationship. There may also be other satellite elements in these stems depending upon the type of verb root, since verb roots may or may not be prefixed, reduplicated or doubled. The verb root in such stems may be of root classes I, II or III but must be of root class A, § 7266-5. The nominal root is limited to those of class A nominal roots, § 8266.

Sub-class e may, therefore, be regarded as an expansion of sub-classes a, b, c and d, since any stems of these sub-classes may be paralleled by stems identical in every respect except that a nominal root is found in final position in the stem.

Symbols and Examples:

<table>
<thead>
<tr>
<th>VSIsa</th>
<th>VSIsb</th>
<th>VSIsb</th>
<th>VSIsd</th>
<th>VSIsd</th>
<th>VSIsd</th>
<th>VSIsd</th>
</tr>
</thead>
<tbody>
<tr>
<td>pa?st</td>
<td>pa?st</td>
<td>-zt</td>
<td>'he went'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VSIsa</td>
<td>VSIsb</td>
<td>VSIsb</td>
<td>VSIsb</td>
<td>VSIsb</td>
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<td>VSIsb</td>
</tr>
<tr>
<td>su?-su?-su?-a</td>
<td>tapa?</td>
<td>su?-su?-su?-a</td>
<td>tapa?</td>
<td>apa-</td>
<td>'he made a sucking noise'</td>
<td></td>
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<tr>
<td>VSIsa</td>
<td>VE</td>
<td>VSIsa</td>
<td>VE</td>
<td>VSIsa</td>
<td>VE</td>
<td>VSIsa</td>
</tr>
<tr>
<td>kof?</td>
<td>kof?</td>
<td>-zt</td>
<td>'it is grey'</td>
<td></td>
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<tr>
<td>VSIsa</td>
<td>VSIsa</td>
<td>VSIsa</td>
<td>VSIsa</td>
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<td>VSId</td>
<td>VSId</td>
<td>VSId</td>
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<td>aru</td>
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<td>VSIsd</td>
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<td>VSId</td>
<td>VSId</td>
<td>VSId</td>
<td>VSId</td>
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<tr>
<td>'he straightened by hand'</td>
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<tr>
<td>'he fell into the water'</td>
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</tbody>
</table>

724 Class II stems - nominal stem nucleus verb stems

724.1 Definition of class II stems

All verb stems which comprise a nominal stem followed by a verb stem forming suffix are nominal stem nucleus verb stems. All class II stems comprise these two elements, the nominal stem and the verb stem forming suffix. Generally the nominal stem consists of a single nominal root but any type of nominal stem may be found including those whose nucleus is a verb stem. Furthermore, the nominal stem may be followed by a non-verbal suffix preceding the verb stem forming suffix.
7242 Sub-classes of class II stems

Class II stems are re-divided into a number of sub-classes according to the different satellite elements which are found with the nominal stem nucleus.

Sub-class a stems comprise a nominal stem followed by a member of class 2 of the verb stem forming suffixes, § 7292. Any nominal stem may occur in class IIa verb stems and the only limitations are collocational.

Sub-class b stems comprise a nominal stem followed by a class 3b verb stem forming suffix. Only certain nominals occur in class IIb verb stems, i.e. nominals with roots of class J, § 8267. A small number of IIb verb stems comprise a non-verbal suffix in addition to the nominal stem and verb stem forming suffix. Only one member of the non-verbal suffixes is found, -ksk 'at, by, on' and it is always found following the nominal stem and preceding the verb stem forming suffix. It should be stressed that very few instances of this type of class IIb stem have been found.

Sub-class c stems comprise a nominal stem followed by a class 3a verb stem forming suffix, § 7292. Any nominal stem may occur in class IIc verb stems.

A few Jëbero verb stems comprise a single element which might be regarded as either a verb or a nominal root nucleus verb stem. The present analysis treats these forms as verb roots which are paralleled by an identical homophonous nominal root. It would also be possible to treat these elements as nominal roots which may occur in class II nominal stem nucleus verb stems. In this case it would be necessary to set up a fourth sub-class of class II stems, sub-class d, comprising nominal root alone and such roots would constitute a further sub-class of the nominal root. This would also necessitate redefining a number of terms, e.g. verb root, § 7296. As these forms are few in number it seems that a clearer picture of the language results from regarding them as homophonous verb and nominal roots than by setting up new categories and classes which would otherwise be unnecessary. Such an alteration would only serve to distort the main structural picture.

Symbols and Examples:

\[ VSIIa - \) verb stems of class IIa  \\
\[ VSIIb - \)  \\
\[ VSIIc - \)  \\
\[ nanapu9li - nanapu9- -li 'he is like him'  \\
\[ tanluwatusik - tanluwatu- -sik 'when it is windy'  \\
\[ kušikełwañi - kušikełwan- -ñi 'he has money'  \\

725 Class III stems — adverb root nucleus verb stems

7251 Definition of class III stems

All verb stems which comprise an adverb root are adverb root nucleus verb stems. Class III stems always comprise two elements, the adverb root and the verb stem forming suffix.

7252 Description of class III stems

All class III stems comprise an adverb root and a class 2 verb stem forming suffix. Any adverb root may occur in class III verb stems.

Symbols and Examples:

\[ wàyàpùñi - wàyàpù- -ñi 'it is like something far away'  \\

91
726 The verb root

7261 Definition of the verb root

Any part of a verb which cannot be sub-divided into further morphemes and which may occur with or without reduplication or prefixation by a verb stem forming prefix, as a stem, is a verb root. This definition serves to distinguish verb roots from roots of all other classes.

7262 Classes of verb root

Three sets of classes of verb roots are set up. Each set of classes is not a further sub-division of a previous division but a cross-classification at the same level as the other two sets. One set of three classes is established on the basis of the distribution of the roots with the verb stem forming prefix series, § 7263 and 728. This set is labelled I, II and III and is further subdivided into Ia,b,c,d, IIa,b, IIIa,b, § 7263-5. Another set of two classes is set up on the basis of the distribution of the roots with the nominal roots within the verb stem. This set is labelled A and B and is not further subdivided, § 7266. The third set of two classes is established on the basis of the distribution of the roots within the nominal stem, § 824. This set is labelled X and Y and is not further sub-divided § 7267.

This cross-classification of the verb roots may be illustrated in diagram form:

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<th>I</th>
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<tr>
<td></td>
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<td>o</td>
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<tr>
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<td>X</td>
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</tr>
</tbody>
</table>
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All possibilities occur

N.B. The relationship between A or B and X or Y is not the same as between I and a, b, c, d, or II and III and a, b. Whereas a,b,c,d, are subdivisions of I and a,b, of II and III, X and Y are not subdivisions of A and B, but categories of a cross-classification.

The three classes of root set up on the basis of the distribution of the roots with the verb stem forming prefix series are,

class I, non-prefixed roots,
class II, obligatorily prefixed roots,
class III, facultatively prefixed roots.

7263 Class I roots

All roots which are only found in verb stems without a member of the verb stem forming prefix series are members of this class.
Class I verb roots are divided into four sub-classes:

Sub-class a, single non-prefixed roots, always occur alone in stems, or with a nominal root. Class Ia roots are found in class Ia and Ie verb stems.

Sub-class b, reduplicated non-prefixixed roots, occur singly or reduplicated in stems with a class I stem forming suffix, with or without a nominal root, but with no other satellite elements within the verb stem. Class Ib roots are found in class Ib and Ie verb stems only.

Sub-class c, single or reduplicated non-prefixixed roots, occur either singly or reduplicated in stems of classes Ia, Ib, and Ie. When occurring singly the distribution of class Ic roots within the stem is the same as that of class Ia roots, and when occurring reduplicated their distribution in the verb stem is identical with that of class Ib roots.

Sub-class d, single or double non-prefixixed roots, occur either singly or as the first root in double root stems. Roots of this sub-class are found in stems of classes Ia, Ic or Ie.

Symbols and Examples:

<table>
<thead>
<tr>
<th>VsSx</th>
<th>verb stem forming suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>VRla</td>
<td>verb root of class Ia</td>
</tr>
<tr>
<td>VRlc</td>
<td>verb root of class Ic</td>
</tr>
<tr>
<td>VRID</td>
<td>verb root of class Id</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>pa2xi</th>
<th>VRIa VsSx</th>
<th>'he went'</th>
</tr>
</thead>
<tbody>
<tr>
<td>s10-su0-su0-upa</td>
<td>VRIb VsSx VE ViSx</td>
<td>'he made a sucking noise'</td>
</tr>
<tr>
<td>a073apaki</td>
<td>VRI0 VE ViSx</td>
<td>'he is sneezing'</td>
</tr>
<tr>
<td>piperasawa02xi</td>
<td>VRIIa VRIIb VsSx</td>
<td>'it is light red'</td>
</tr>
</tbody>
</table>

7264 Class II roots

All roots which never occur except either when prefixed by a member of the verb stem forming prefix series or as second root in a double root stem are members of this class.

Class II verb roots are divided into two sub-classes:

Sub-class a, comprises those roots which only occur with a member of the verb stem forming prefix series. Class IIa roots are found in classes Ia and Ie verb stems.

Sub-class b, comprises those roots which may occur either prefixed by a member of the verb stem forming prefix series or as second root in a double root stem. Class IIb roots are found in stems of classes Ia, Id, or Ie.

Symbols and Examples:

<table>
<thead>
<tr>
<th>VsPx</th>
<th>verb stem forming prefix</th>
</tr>
</thead>
<tbody>
<tr>
<td>VRla</td>
<td>verb root of class Ia</td>
</tr>
<tr>
<td>VRID</td>
<td>verb root of class Id</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>pa-3apakapi</th>
<th>VsPx VRla VE ViSx</th>
<th>'he is smoothing out'</th>
</tr>
</thead>
<tbody>
<tr>
<td>kor-kor-apa-</td>
<td>VRID VRIB VE ViSx</td>
<td>'you are finishing carrying'</td>
</tr>
<tr>
<td>liko-apa-</td>
<td>VsPx VRIB VE ViSx</td>
<td>'you are finishing cutting'</td>
</tr>
</tbody>
</table>
Class III roots

All roots which may occur either prefixed by a member of the verb stem forming prefix series, or as second root in a double root stem, or alone as a stem, are class III verb roots.

Class III verb roots are divided into two sub-classes:

Sub-class a, comprises those roots which are found either prefixed by a member of the verb stem forming prefix series or alone as stems. Class IIIa roots are found in stems of classes Ia, Id or Ie.

Sub-class b, comprises those roots which are found either prefixed by a member of the verb stem forming prefix series or as second root in a double root stem, or alone as stems. Class IIIb roots are found in stems of classes Ia, Ie, Id or Ie. There are very few roots of this class.

Symbols and Examples:

VRIIla - verb root of class IIIa  VRIIib - verb root of class IIIb
solttkupinok s s i t — kupin- -nslc *1 enlarge by hand'
VaPx VRIIla ViSx
saktmaufoi sakt- mukun- -fi 'he pressed into a ball'
VaPx VRIIib ViSx

Class A and B roots

The two classes of root set up on the basis of the distribution of the roots with nominal roots within the verb stem are:

class A, comprising all roots which are found with nominal roots within the verb stem, and

class B, comprising all roots which never occur with nominal roots within the verb stem.

Both these classes of root include roots of all three classes already described, classes I, II, and III and all their sub-classes.

Class A roots are found in all class I verb stems, while class B roots are found in all class I stems except Ie.

Symbols and Examples:

VRA - verb root of class A  VRB - verb root of class B
li9c i s l t l i  li9- -Sslt -li 'he saw the water'
VRA NR ViSx
na9pila na9pi- -la 'you answered'
VRB ViSx

Class X and Y roots

The two classes of root set up on the basis of the distribution of the roots with nominal roots within the nominal stem, § 82R2, are:

Class X, comprising all roots which are found with nominal roots within the nominal stem, and

Class Y, comprising all roots which never occur with nominal roots within the nominal stem.

Both these classes of roots include roots of all five classes already described, classes I, II, III, A and B, and are found in verb stems of class I.
Symbols and Examples:

VEX - verb root of class X

\[\text{VEX} \quad \text{ViSx}\]

\[i/\text{afi} \quad i/\text{an}- \quad \text{ki}\]

'it is dried up'

c.f. \(i/\text{anskli}\) 'summer'

\[\text{neripali} \quad \text{neri}- \quad \text{apa-} \quad \text{ki}\]

'he is breathing'

c.f. \(\text{neri} \hat{\text{c}} \hat{\text{ek}}\) 'breath'

\[\text{ka} \hat{\text{e}} \hat{\text{ek}} \quad \text{ka} \hat{\text{o}}- \quad \text{-ek}\]

'I ate'

727 Chart of verb stems and roots

A chart showing the correlation between the different classes of stems and roots illustrates the preceding sections 723-726.

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
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<td>lst</td>
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</tr>
<tr>
<td>b</td>
<td>√</td>
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</tr>
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<td>c</td>
<td>√</td>
<td>lst</td>
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<tr>
<td>d</td>
<td>√</td>
<td>lst</td>
<td></td>
</tr>
<tr>
<td>a</td>
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<td></td>
<td></td>
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<tr>
<td>b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>√</td>
<td>lst</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>√</td>
<td>lst</td>
<td></td>
</tr>
</tbody>
</table>

This chart does not show the cross-classification of verb roots described in § 7266 and 7267. All Ia stems have class A roots while stems of Ia - Id have roots which may be either of class A or class B. Class I stems may have roots of class X or Y.

728 Verb stem forming prefixes

Verb stem forming prefixes may be defined as those prefixes which are found immediately preceding a root of the verb root classes II or III; prefix and root forming a verb stem. These prefixes form a closed system of mutually exclusive members which may be listed exhaustively.
The following are members of this class of prefixes:

- a- 'perform an action with the foot, but not by kicking'
- bag- 'action associated with entering'
- 8a9- 'action performed by falling'
- 8ol- 'pressing'
- 8iy- 'associated with one object crossing another'
- 8ur- 'hunting'
- ak- 'accompany an action'
- i- 'action associated with thrusting one object behind or into another object'
- in- 'reflexive action'
- la- 'action performed by the teeth'
- 8ik- 'striking'
- 8nu- 'without visible cause'
- 8pa- 'by stabbing'
- 8pa9- 'throwing'
- 8par- 'a brushing motion'
- 8pl- 'by hand using the palm of the hand'
- 8ol- 'fingers and thumb'
- 8lo- 'rubbing'
- tek- the meaning of this prefix is indefinite, but it is connected with actions done a good deal.
- tu9- 'action performed by kicking'
- 8u- 'pulling'
- 8vel- 'embracing'

The meanings assigned to each prefix may be regarded as provisional, in that while they cover examples in the texts collected, some of the prefixes do not occur very frequently. This applies especially to the following: 8a9, 8nu, 8ur, i-, and tek-. More extended material might well add to or alter in some way the meanings assigned to these prefixes. In any case a translation such as those listed above is an artificial abstraction from the sentences in which these elements are found. It may be convenient to use such abstractions, but these remain highly artificial and reference back to the sentence needs to be made frequently.

This list may be regarded as an exhaustive list of this series of stem forming prefixes, and though possibly one or two additions to it might be made with more Jerebero material, it does seem clear that it cannot be extended indefinitely or to any extent in contrast to the class of roots already described. This series of prefixes is, in fact, a closed system.

This inner layer class of verb stem forming prefixes may be contrasted with the outer layer class of verb expanding prefixes described in section 75. Whereas the stem forming prefixes function as elements within the verb stem, the verb expanding prefixes are not part of the verb stem but always precede it. Furthermore, whereas verb forms are found with two or more members of the verb expanding class of prefixes, no forms are found with more than one member of the stem forming prefixes since the members of this class constitute one closed system with mutually exclusive members.

Symbols and Examples:

- VaEx - verb stem forming prefix
- paSiperapa9i pe- -3iper- -apa- -ki 'he is smoothing out'

Compare the following forms with the same verb root - -3iper-:

- pilSiperapa9i, tu9Siperapa9i, tekSiperapa9i, 8ekSiperapa9i, 8ikSiperapa9i, adSiperapa9i, sodSiperapa9i, su9Siperapa9i

All these words describe the action of arranging something, the different prefixes give a more specific meaning.

96
Verb stem forming suffixes

Definition of verb stem forming suffix

Verb stem forming suffixes may be defined as those suffixes which are found either immediately following a verb, nominal or adverb root (suffix and root forming a verb stem), or immediately following a nominal root and non-verbal suffix (nominal root, non-verbal suffix and verb stem forming suffix together forming a verb stem).

Classes of verb stem forming suffix

Classes of verb stem forming suffix are established according to the class of root with which they occur. Three classes are set up.

Class 1

Class 1 comprises suffixes which are always found with a verb root. There are two members of this class:

- aʔtu - -aʔt-,
- tu - t-,

- aʔtu- and -tu- are found before morphemes with C initial structure - aʔt- and -t- before morphemes with V initial structure. It is not possible to state any translation meaning for these two suffixes. They function in a similar way, though it is noticeable that the form aʔtu- has a sort of causative meaning frequently. It is interesting to note the correlation with the verb expanding prefix, aʔ- 'causative'. Syntaxically these two elements, the one a prefix and the other a suffix, are quite different. The two affixes are never found in one verb.

Class 2 (derivational)

Class 2 comprises suffixes which are found with either a nominal or an adverb root. There is one member of this class:

- puʔ- 'to be like...'

Class 3 (derivational)

Class 3 comprises suffixes which are found with a nominal root only. There are two sub-classes of this class.

Sub-class 3a, is found with any nominal root and comprises the suffix,

- wan- 'to be in possession of...'

Sub-class 3b, is found with only certain nominal roots, i.e. roots of class J, § 8267, and comprises the suffix,

- tu - -t-,

- tu- is found before morphemes with C initial structure, and -t- before morphemes with V initial structure. No translation meaning may be assigned to this suffix.

The three classes of suffix fall into two groups, one group being derivational in character and the other not. Suffixes of class 1 are not derivational whereas suffixes of classes 2 and 3 are derivational.

Symbols and Examples:

VsSx - verb stem forming suffix

- manapaʔki
- nam-
- puʔ-
- -ki 'he is like him'

- tanluwanusk
- tanluwa-
- -tu-
- -sik 'when it is windy'

- meqmiwanusk
- meqmi-
- -wan-
- -nek 'I have a chacra.'
73 Verb extensors

731 Definition of the verb extensor

Any verb, in addition to comprising the obligatory elements of stem and one member of the inflectional suffix series, may also comprise one or more suffix of the series called 'extensors'.

Any suffix which occurs as an element of any verb and
a) never occurs in final position in the verb, and
b) always is found immediately following the verb stem and immediately preceding the member of the verb inflectional suffix series

is a verb extensor. These suffixes could also be defined by exhaustive listing.

This group of suffixes must be distinguished from the group of suffixes called verb inflectional suffixes, § 74. The chief differences are that whereas
a) one member of the inflectional series is found in every verb, many verbs do not comprise any member of the extensor series,
b) only one member of the inflectional series is found as part of any verb, more than one extensor is often found,
c) any member of the inflectional series may be final in the word, no extensor is ever found final in the word.

732 Classes of extensor

Certain extensors may occur with some other extensors but not with others. This limitation in the distribution of the extensors is the basis for their grouping into classes. Furthermore the different extensors, when found with a second extensor, occur in a certain fixed order relative to each other, so that it is convenient to number the classes of extensor according to this relative sequence of distribution.

1 This term is used since the function of these suffixes is to extend the stem. It is not particularly helpful to label this group of suffixes as either derivational or inflectional, since the group does not fit into any of the usual distinctions between derivation and inflection. On the one hand these suffixes are derivational in that verbs comprising extensors have the same syntactic valence as verbs similar in every respect but without extensors, for these more complex forms including one or more extensors function in the sentence very much as simpler forms without extensors. However, even this is not completely clear cut as the extensor of order 10, -dofe-, has syntactic implications since the object of verbs comprising this extensor is never first or second person or third person singular. None the less, in general, the application of this criterion suggests derivational status for these suffixes. On the other hand these suffixes have some characteristics which suggest inflection. One of the criteria for inflectional as against derivational elements is that inflectional elements tend to occur with a larger number of forms than do derivational. This group of suffixes occurs with a very large number of stems - in fact all stems except for collocational limitations. In this respect their distribution is as extensive as that of the inflectional suffixes treated in § 74, whose status as inflectional is not in any doubt. These different criteria seem to conflict in this way and instead, therefore, of labelling these suffixes as derivational or inflectional the term extensor has been applied to them.
The different classes of extensor are termed 'orders', see section 672 for the definition and use of this term. The numbers given the orders of extensors in the next section indicate their usual sequence in relation to each other. In some instances the sequence is not fixed and in such cases the numbering reflects the most usual sequence while a statement is made to cover other possible sequences in the paragraphs dealing with the particular orders affected.

Any extensor may occur with any verb stem unless there are collocational limitations. Members of any order may occur with a member of another or of several other orders except where stated below in the next section. In principle, a verb may comprise any possible combination of the orders, subject to the limitations in the distribution of some orders with certain other orders. Since there are 19 orders of extensor, theoretically, verb forms may contain a large number of extensors; however, in the material examined, whereas verb forms containing one or two extensors are very common, forms with three or four extensors are infrequent and forms with five or more extensors are very rare. Longer forms with a larger number of extensors were elicited from the informant who accepted them and repeated them as good Jebero. But such longer forms were never heard unelicited or found in text material and it is probable that though they violated no structural principle and were thus acceptable to the informant they are not in fact in current use by Jebero speakers. Up to 7 extensors were accepted in this way in a form like ancunlapitapalumunta9mpu9dekki, which has the meaning 'he is not again going and cutting them leaving someone behind'. It was noticeable that older speakers tended to use extensors more than younger speakers and the influence of Spanish, the 'prestige' language of the area, may account for this.

Except where otherwise stated the extensors are found with any member of the inflectional suffixes and any member of the word suffixes.

**TABLE OF ORDERS OF VERB EXTENSORS**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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</thead>
<tbody>
<tr>
<td>-w4i-</td>
<td>-lap</td>
<td>-</td>
<td>-qim-</td>
<td>-wa-</td>
<td>-tu-</td>
<td>-ja-</td>
<td>-apa-</td>
<td>-ila-</td>
<td>-unta?-</td>
</tr>
<tr>
<td></td>
<td>-pa9-</td>
<td>-i-</td>
<td>-ler-</td>
<td>-enca?-</td>
<td>-jm-</td>
<td>-kor-</td>
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<td>14</td>
<td>15</td>
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<td>17</td>
<td>18</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>-sa9la-</td>
<td>-oin-</td>
<td>-lau?oin-</td>
<td>-ku9-</td>
<td>-ni?an-</td>
<td>-ja-</td>
<td>-vin-</td>
<td>-dek-</td>
<td>-i?n-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-la9-</td>
<td>-lap?-</td>
<td>-i9n-</td>
<td>-impa9-</td>
<td>-pi9-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Symbolisation: VE followed by the number of the order symbolizes these suffixes, e.g. pa?wi?ikubi 'he went by night' pa9- -w4i- -tu- -ja |

The 19 orders of extensor are listed below and the following details concerning each order are given:

a) its membership
b) any relevant comment with regard to its distribution with verb stems,
Order 1
Order 1 comprises one member,
-wili- 'by night'

There are extensive collocational limitations to the distribution of this extensor with verb stems.

In every verb form where this extensor occurs, an extensor of order 5 is found.

Order 1 is never found with orders 3,4, and 13a.

Examples:
pe?wili'tali pe? -mii- -tu- -li
'I walked at night' VS VEL VEB VISX

Order 2
Order 2 comprises two members,
-lapi- 'leave behind'
-pa?- 'help another'

Order 2 is never found with order 4.
Order 2 may precede or follow order 15.

Examples:
ame?9iapoli
ame? -lap? -li
'he bathed, having left someone.' VS VE2 VISX

Order 3
Order 3 comprises one member,
-Smii- 'think of doing, or do slightly'

There are extensive collocational limitations to the distribution of this extensor with verb stems, and verb forms comprising this order are only very infrequent in the material examined.

Order 3 is never found with orders 1,6,8,9,11, 12, and 13.
Order 3 may precede or follow order 15.

Examples:
iyatu?uki? dimii
iyo -tek? -Smii -li
'he thought of running' VEPX VS VEB VISX

Order 4
Order 4 comprises two members,
-wa- 'motion towards'
-i- 'do something for another person'

Order 4 is always found with order 5.
Order 4 is never found with orders 1 and 2.
Order 4 may precede or follow order 15.

Examples:
pipekuyubik eke
pipek -wa- -tu- -le
'I carried towards' VS VEB VISX

Order 5
Order 5 comprises one member,
-ku- 'find someone, or find something'

Order 5 is always found with order 4.
Order 5 is never found with orders 2 and 3.
Order 5 may precede or follow order 11.

Examples:
paya?baka
pel? -i- -tu- -le
'you placed something' VS VEB VEB VISX

Order 6
Order 6 comprises one member,
-pa?- 'help another'

Order 6 is never found with order 2.
Order 6 may precede or follow order 11.

Examples:
paya?baka
pel? -i- -tu- -le
'he went towards' VS VEPX VISX

Order 7
Order 7 comprises one member,
-lapi- 'leave behind'

Order 7 is never found with order 4.
Order 7 may precede or follow order 11.

Examples:
name?9iapoli
name? -lap? -li
'he bathed, having left someone.' VS VE2 VISX

Order 8
Order 8 comprises one member,
-wa- 'motion towards'

Order 8 is never found with order 4.
Order 8 may precede or follow order 11.

Examples:
paya?baka
pel? -i- -tu- -le
'you placed something' VS VEB VEB VISX

Order 9
Order 9 comprises one member,
-i- 'do something for another person'

Order 9 is never found with order 4.
Order 9 may precede or follow order 11.

Examples:
paya?baka
pel? -i- -tu- -le
'you placed something' VS VEB VEB VISX

Order 10
Order 10 comprises one member,
-ku- 'find someone, or find something'

Order 10 is always found with order 4.
Order 10 is never found with orders 2 and 3.
Order 10 may precede or follow order 11.

Examples:
paya?baka
pel? -i- -tu- -le
'you placed something' VS VEB VEB VISX

Order 11
Order 11 comprises one member,
-wa- 'motion towards'

Order 11 is never found with order 4.
Order 11 may precede or follow order 15.

Examples:
paya?baka
pel? -i- -tu- -le
'you placed something' VS VEB VEB VISX

Order 12
Order 12 comprises one member,
-lapi- 'leave behind'

Order 12 is never found with order 4.
Order 12 may precede or follow order 15.

Examples:
name?9iapoli
name? -lap? -li
'he bathed, having left someone.' VS VE2 VISX

Order 13
Order 13 comprises one member,
-wa- 'motion towards'

Order 13 is never found with order 4.
Order 13 may precede or follow order 15.

Examples:
paya?baka
pel? -i- -tu- -le
'you placed something' VS VEB VEB VISX

Order 14
Order 14 comprises one member,
-i- 'do something for another person'

Order 14 is never found with order 4.
Order 14 may precede or follow order 15.

Examples:
paya?baka
pel? -i- -tu- -le
'you placed something' VS VEB VEB VISX

Order 15
Order 15 comprises one member,
-lapi- 'leave behind'

Order 15 is never found with order 4.
Order 15 may precede or follow order 11.

Examples:
name?9iapoli
name? -lap? -li
'he bathed, having left someone.' VS VE2 VISX

(4) any relevant details regarding its distribution with other (ii) order here. The particular order is always found with the particular order preceding the above order, and is therefore not listed in the column for the particular order preceding it. Any other order which may occur with the particular order, but not necessarily vice versa, is listed in the column for the particular order preceding it, if it is found.
Order 5

Order 5 comprises one member,
-tu- ~ -t- 'definitive'
-t- is found preceding V initial suffixes
-tu- preceding C initial suffixes.

This order is one of the most frequently occurring orders, being found with numerous stems, with many other extensors and every inflectional suffix.

Order 5 may precede or follow order 15

Examples:
kanantecd 'I will find out'
kana- -t- -sok

saka?tu:paciq 'you are working a little'
saka- -tu- -paciq

Order 7

Order 7 comprises one member,
-apa- 'continuative'.

This order is one of the most frequently occurring orders, being found with numerous stems, with many other extensors and every inflectional suffix.

Order 7 may precede or follow orders 15 and 19b.

Examples:
telka?paele 'I am running'
telka- -apa- -leq

pe?watempi 'going towards'
pe- -ma- -t- -apa- -ila- -aq

Order 6

Order 6 comprises one member,
-ta- 'diminutive'.

Order 6 is never found with order 3.

Examples:
saka?tu:al 'you are working a little'
saka- -tu- -fa- -la

Order 8

Order 8 comprises two members,
-ila- 'action when passing on an outward journey'
-iler- -ir- 'inward'

Order 8 may precede or follow orders 15 and 19b.

Order 8 is subdivided into two sub-classes on the basis of its distribution with other extensors.

Order 8a comprises -ila- 8b comprises -iler-

Order 8a is never found with order 9b, and order 8b is never found with order 9a.

Order 8 is never found with orders 3 and 9c.

Examples:
mi:le:ek 'I will gather'
ma- -iler- -sok

ilampilalina 'they are shooting'
ila- -apa- -ila- -kina

sek:upira 'he having arrived'
sek:u- -apa- -ir- -aq
Order 9
Order 9 comprises four members,
-unta- 'going away from the speaker on a return journey'
-mao- 'coming towards''
-kan- 'going away from the' 'an outward'
-ker- 'coming towards'

Order 9 is sub-divided into three sub-classes on the basis of its distribution with other extensions, as follows:
9a comprises -unta-
9b " " -mao-
9c " " -kan- and -ker-

Order 9 is not found with order 3.
Order 9a is not found with orders 8b and 10, and order 9b is not found with orders 8a and 10. Order 9c is not found with order 8.
Order 9 may precede or follow orders 1a, 15 and 19.

Examples:
Kapatunta?lu kapat- -unta- -lu
'he went and met me'
VS VE9 VI6x
Taka?ma?llu taka?- -mao- -llu
'you came and ran'
VS VE9 VI6x

Order 10
Order 10 comprises one member,
-manta- 'repetitive'.
Order 10 is never found with orders 9a and 9b.
Order 10 may precede or follow orders 14, 15 and 19.

Examples:
'seating again.'
VS VE7 VE10 VI6x
'I waited again'
VS VE10 VI6x

Order 11
Order 11 comprises one member,
-sa?ln- 'rapidly'.
Order 11 is never found with order 3.
Order 11 may precede or follow orders 14, 15, and 19.

Examples:
Taka?sa?lalita taka?- -sa?ln- -lita
'you ran quickly'
VS VE11 VI6x
Wata?sa?lakita wata?- -sa?ln- -lakita
'hurry quickly'
VS VE11 VI6x
Order 12
Order 12 comprises one member,
- Cin- 'habitual, regularly'.
This order occurs only infrequently.
Order 12 is never found with orders 3 and 13a.
Order 12 may precede or follow orders 14, 15 and 19b.
Examples:

ama? pacinesk  ama? - cne - cin - mek
'I am bathing as usual'  VS  VE7  VE12  ViSx

taxa? pa? cifi  taxa? - cni - cin - met
'he helped atc regularly'  VS  VE12  VE12  ViSx

Order 13
Order 13 comprises four members,
- la? cin- 'very much'  - la? pi? - 'without knowledge...
- la? - 'only'  - pi? - 'in vain'
Order 13 is sub-divided into two classes on the basis of
its distribution with other orders, as follows:
13a comprises - lau?cin-,
13b  the remaining members of this order.
Order 13 is never found with order 3, and order 13a is never
found with orders 1 and 12.
Order 13 may precede or follow orders 14, 15 and 19.
Examples:

'he ate very much'  VS  VE13  ViSx
iyame?  ka?  - la? - ki
'he only laughed'  VS  VE13  ViSx

Order 14
Order 14 comprises one member,
- ku? - 'person concerned now dead'.
Order 14 may precede or follow orders 8 to 13; 15 and 19b.
Examples:

'he (now dead) ran'  VS  VE14  ViSx

'he (now dead) said'  VS  VE14  ViSx

'they (now dead) ate'  VS  VE14  ViSx

Order 15
Order 15 comprises one member,
- misa- 'all the same...
Order 15 is never found with inflectional suffixes which
are singular in number category.
Order 15 may precede or follow orders 2 to 14, and 19b.
Examples:

'They all ate'  VS  VE15  ViSx
ama? misa? cifi  ama? - misa? - cni-
'we all bathed'  VS  VE15  ViSx
'you all gave'  VS  VE15  ViSx
Order 16
Order 16 comprises one member, 
-đa- 'poor person'.
This order is found very infrequently in the material examined.
Order 16 may precede and follow order 19b.
Examples:
epka?đašek epka- -đa- -šek
'I gave (to the poor person)' VS VEL6 Višx
a?ka?đala a?-ka- -đa- -la
'you made someone poor eat' VePx VS VEL6 Višx

Order 17
Order 17 comprises one member,
-win- 'in vain, almost'.
Order 17 precedes or follows order 19b.
Examples:
iyaka?winfixi iya- -ka- -win- -ni
'he wanted to eat in vain' VePx VS VEL7 Višx
we?winmekwa? wef- -win- -mekwa?
'we were almost lost' VS VEL7 Višx

Order 18
Order 18 comprises one member,
-ček- 'them (object)'.
Order 18 precedes or follows order 19b.
Order 18 is never found with suffixes of the class B inflectional suffixes.
Examples:
itučekima itu- -ček- -ki- -ima
'he said to them' VS VEL8 Višx VELx
pečlučekelkaŋ pečlu- -apa- -ček- -an
'calling them in vain' VS VEL7 VEL7 VEL6 VIŠx

Order 19
Order 19 comprises two members,
-ı?n- 'negative'
-impu?- 'it'
Order 19 is divided into two classes on the basis of its distribution with the other extenders and with the suffixes of the inflectional series, as follows:
Order 19a comprises -ı?n- and
19b 'impu-'
Order 19b may follow or precede orders 7 to 18.
Order 19a is never found with inflectional suffixes of paradigms 4, 5, 7, 11 and 12, whereas 19b is found with all members of the inflectional series of suffixes.
Examples:
ilampi?fi ilan- -apa- -ı?n- -ni
'he was not shooting' VS VEL7 VEL9a Višx
nantapimpumęŋ nanta- -apa- -impu- -an
'not having strength' VS VEL7 VEL19b Višx
<table>
<thead>
<tr>
<th>Presupposes</th>
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<tr>
<td>Excludes</td>
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<td>4</td>
</tr>
<tr>
<td>13a</td>
<td>9,11</td>
<td>12,13</td>
</tr>
<tr>
<td>8a not 9a not with 9b with 8b,10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8b not 9b not with 9a with 8a,10</td>
<td></td>
<td></td>
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<tr>
<td>9c not with 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May proceed or follow</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>
The verb inflectional suffixes

4.1 Definition of the inflectional suffix

Every verb, in addition to comprising a stem, comprises one member of the verb inflectional suffix series, and only one member. These suffixes thus make up one large mutually exclusive class of suffixes.

Any suffix which occurs as an element of a verb and
a) is found final in the verb or followed only by one or more suffixes of the word suffix class, and,
b) is found as the only element apart from the verb stem, is a verb inflectional suffix.

This group of suffixes can also be established by exhaustive listing.

Symbols: ViSx - Verb inflectional suffix

4.2 Classes of inflectional suffix

All inflectional suffixes fall into one of two classes, unipersonal suffixes and bipersonal suffixes. These two classes constitute two series of parallel suffixes, both of which will be described in turn. These two classes are labelled A and B respectively.

4.3 Class A - unipersonal suffixes

4.3.1 Definition of class A suffixes

Any inflectional suffix which has the potentiality of occurrence with order 18 of the verb extensors is a member of the class A series of suffixes.

4.3.2 Class A paradigms

The different suffixes of class A form a series of paradigms. Each paradigm has eight members, except paradigms 11 and 12 which comprise six and four members respectively.

Exponents of tense, person and number, whether realised cumulatively or serially, may be abstracted from the class A unipersonal suffixes, except that there is no overt exponent of number with the singular forms. The grouping of class A suffixes into paradigms may be formally justified in that the members of each paradigm share a common exponent of tense and at the same time are mutually exclusive as regards the exponents of the categories of person and number. Each paradigm comprises eight members, each with concord with a different pronoun, except paradigms 11 and 12.

Another reason for setting up the unipersonal and bipersonal suffixes in paradigms is that in this way it is possible to make statements covering the distribution of the suffixes in the different sentence-types and clauses. The members of each paradigm function similarly in the various sentence-types and clauses. Thus in chapters four and five the distribution of the inflectional suffixes in the different sentence-types and clauses has been stated by referring to the paradigms. It is found that the paradigms fall into two main groups which can be labelled subordinative and non-subordinative. The subordinative group consists of paradigms 8-10 which are never found as verbal head of the verbal piece of a favourite sentence. The non-subordinative group consists of paradigms 1-7, 11 and 12 which are found as verbal head of the verbal piece of a favourite sentence.
Members of some paradigms occur much more frequently than members of other paradigms. In order of frequency members of paradigm 1 are found most commonly, then 10 and 2, followed by 8, 11 and 12, then much less commonly 6, 7 and 9, while 3, 4 and 5 are only found very infrequently.

Paradigm 1 - 'actual or non-future'
-lek first person exclusive singular
-lek second inclusive singular
-la third singular
-ľišk first exclusive plural
-ľekw second inclusive plural
-ľina third plural

This series has a parallel series of phonologically determined allomorphs namely, -nek, -neň, -na, -ľišk, -neľekw, -nej, -ľime, which are found when the preceding syllable contains a final nasal.

Examples: tupilek tupi- lek 'I followed' VS Viís1
vaľtišk vaľtenššiľ 'he waited' VS Viís1

Paradigm 2 - 'future or non-actual'
-seček first person exclusive singular
-ater second inclusive singular
-seču second singular
-sečšek first exclusive plural
-sťera second inclusive singular
-sćuna third plural

Examples: tupiseč tupi- seček 'I will follow' VS Viís2

Paradigm 3 - 'unfulfilled wish'
-a?ka first person exclusive singular
-a?ka second singular
-a?a third singular
-a?ľukšč first exclusive plural
-a?ľeka second plural

Examples:
tupišČka tupi- a?ka 'I would have followed but VS Viís3 didn’t... (I wanted to but couldn’t)

Paradigm 4 - 'desiderative'
-inička first person exclusive singular
-iniča second singular
-iničn third singular
-iničšč first exclusive plural
-iničšča second plural

Examples: nuj šiča nuj šiča 'if you played we would dance'

Paradigm 5 - 'obligative'
-piščak first person exclusive singular
-pišča second singular
-pišča third singular
-piščašč first exclusive plural
-piščašča second plural

Examples: tupipisačka tupi- pišča 'I should have climbed' VS Viís5

Paradigm 6 - 'conditional'
-nansku first person exclusive singular
-nansšč second singular
-nansšč third singular

Examples: tupinansku tupi- nansšč 'I would follow (if...)' VS Viís6
### Paradigm 7 - 'subjunctive'

<table>
<thead>
<tr>
<th>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ateku</td>
<td>first person exclusive singular</td>
</tr>
<tr>
<td>-atek</td>
<td>&quot;           inclusive  &quot;</td>
</tr>
<tr>
<td>-aciŋ</td>
<td>second &quot; singular</td>
</tr>
<tr>
<td>-aci</td>
<td>third &quot;               &quot;</td>
</tr>
<tr>
<td>-atekuŋ</td>
<td>first &quot; exclusive plural</td>
</tr>
<tr>
<td>-acina</td>
<td>second &quot; plural</td>
</tr>
<tr>
<td>-acinaŋ</td>
<td>third &quot;               &quot;</td>
</tr>
</tbody>
</table>

**Examples:**
- tupiteku 'If I follow'
- wa?teqaçiŋ 'If you wait'

### Paradigm 9 - 'intermittent action'

<table>
<thead>
<tr>
<th>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-seku</td>
<td>first person exclusive singular</td>
</tr>
<tr>
<td>-sik</td>
<td>&quot;           inclusive  &quot;</td>
</tr>
<tr>
<td>-siŋ</td>
<td>second &quot; singular</td>
</tr>
<tr>
<td>-siŋ</td>
<td>third &quot;               &quot;</td>
</tr>
<tr>
<td>-sekuŋ</td>
<td>first &quot; exclusive plural</td>
</tr>
<tr>
<td>-siŋa</td>
<td>second &quot; plural</td>
</tr>
<tr>
<td>-siŋaŋ</td>
<td>third &quot;               &quot;</td>
</tr>
</tbody>
</table>

**Examples:**
- tupiseku 'when I followed'
- saka?busiŋ 'when you worked'

### Paradigm 11 - 'imperative'

<table>
<thead>
<tr>
<th>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-a</td>
<td>first person inclusive singular</td>
</tr>
<tr>
<td>-keŋ</td>
<td>second &quot; singular</td>
</tr>
<tr>
<td>-i</td>
<td>third &quot;               &quot;</td>
</tr>
<tr>
<td>-awo</td>
<td>first &quot; inclusive plural</td>
</tr>
<tr>
<td>-ku</td>
<td>second &quot; plural</td>
</tr>
<tr>
<td>-ina</td>
<td>third &quot;               &quot;</td>
</tr>
</tbody>
</table>

**Examples:**
- nempeka 'let's climb!'  
- wa?teŋka 'wait!'  

### Paradigm 8 - 'durative'

<table>
<thead>
<tr>
<th>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-a?seku</td>
<td>first person exclusive singular</td>
</tr>
<tr>
<td>-a?sik</td>
<td>&quot;           inclusive  &quot;</td>
</tr>
<tr>
<td>-a?siŋ</td>
<td>second &quot; singular</td>
</tr>
<tr>
<td>-a?siŋ</td>
<td>third &quot;               &quot;</td>
</tr>
<tr>
<td>-a?sekuŋ</td>
<td>first &quot; exclusive plural</td>
</tr>
<tr>
<td>-a?siŋa</td>
<td>second &quot; plural</td>
</tr>
<tr>
<td>-a?siŋaŋ</td>
<td>third &quot;               &quot;</td>
</tr>
</tbody>
</table>

**Examples:**
- nempeka?seku 'while I climbed'
- wa?teŋa?siŋ 'while you wait'

### Paradigm 10 - 'particle'

<table>
<thead>
<tr>
<th>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-a?seku</td>
<td>first person exclusive singular</td>
</tr>
<tr>
<td>-ak</td>
<td>&quot;           inclusive  &quot;</td>
</tr>
<tr>
<td>-aŋ</td>
<td>second &quot; singular</td>
</tr>
<tr>
<td>-aŋ</td>
<td>third &quot;               &quot;</td>
</tr>
<tr>
<td>-a?sekuŋ</td>
<td>first &quot; exclusive plural</td>
</tr>
<tr>
<td>-a?ŋa</td>
<td>second &quot; plural</td>
</tr>
<tr>
<td>-a?ŋaŋ</td>
<td>third &quot;               &quot;</td>
</tr>
</tbody>
</table>

**Examples:**
- pileŋamu 'advising....'
- nakumau 'passing....'

### Paradigm 12 - 'negative imperative'

<table>
<thead>
<tr>
<th>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-a?seku</td>
<td>first person exclusive singular</td>
</tr>
<tr>
<td>-ak</td>
<td>&quot;           inclusive  &quot;</td>
</tr>
<tr>
<td>-aŋ</td>
<td>second &quot; singular</td>
</tr>
<tr>
<td>-aŋ</td>
<td>third &quot;               &quot;</td>
</tr>
<tr>
<td>-a?sekuŋ</td>
<td>first &quot; exclusive plural</td>
</tr>
<tr>
<td>-a?ŋa</td>
<td>second &quot; plural</td>
</tr>
<tr>
<td>-a?ŋaŋ</td>
<td>third &quot;               &quot;</td>
</tr>
</tbody>
</table>

**Examples:**
- deŋama 'don't fight.'  
- pileŋpana 'don't let them advise.'
74.33 Exponents of tense, person and number

Exponents of tense, person and number may be abstracted from all the class A inflectional suffixes except that there is no overt exponent of number in the singular forms of the paradigms. These exponents are realised sometimes serially and sometimes cumulatively. Furthermore these exponents are not to be regarded as exhausting the particular suffix from which they are abstracted as if the sum of the exponents was equivalent to the suffix. Thus, for example, from the suffix -li of paradigm 1, an exponent of tense, 1, and an exponent of person, 1, is abstracted, but the feature of y-prosody with its phonetic exponent of palatalization is not allocated to any exponent. This feature is stated for the suffix -li as a whole. Neither 1 nor 1 is regarded as a syllable, but merely as a convenient symbol for phonetic features which are similar to the phonetic features symbolized by the transcription. It should be emphasized that these exponents are not morphemes. Each inflectional suffix is regarded as one morpheme not as several as would be the case if these exponents of tense, person and number were each regarded as morphemes.

74.331 Exponents of tense

The exponents of tense may be set out for each paradigm in turn as follows:

Paradigm

1  l ~ n,  l alternates phonologically with n, the latter being found as exponent only when the preceding syllable has a final nasal phonematic unit or prosodic feature and the former being found elsewhere.

2  s c o a t,  s c alternates morphologically with at, the latter being found only with the first person inclusive form.

3  a? } In third person plural forms the open vowel of each of these exponents is not found but a central vowel is found.

4  i n a? } i n is nata's, form, a being found with the third person singular form and nans being found elsewhere.

5  p n a k

6  n a s c o n a t a s, n the third person plural form, a being found with the third person plural form.

7  a t

8  a s c o s, a being found as exponent only with the third person singular form.

9  s c a s, a being found only with the third person plural form.

10  a

11 and 12 It is not possible to state separate exponents of tense for paradigms 11 and 12 since these exponents are cumulative with the exponents of person and number.
The category of person has four members. Each of the paradigms already given has included 8 members, i.e., a singular and plural form for each of the four persons. However, it is possible to abstract from the verb inflectional suffixes separate exponents of the categories person and number and when this is done it is found that the exponents of the four persons when the category of number is plural and when the category of number is singular while not identical show very many parallels, so that it is necessary to set up only four categories of person not eight. All the exponents of person are, therefore, stated for singular forms and only the variations with the plural forms are given and it may be assumed that the category of person is realized with the same exponent with both singular and plural forms unless the contrary is stated.

The four persons are first exclusive, first inclusive, second and third. The first person inclusive is inclusive of the person speaking and the person addressed, and is, thus, notionally a dual form translated in English by 'we', whereas the first person exclusive is exclusive of the person addressed.

The exponents of person may be stated as:

First exclusive:

Paradigms

1-4, 6-9 velar closure, preceded by central vowel in paradigms 1, 2, 6-9, followed by open vowel in paradigms 3 and 4, followed by back vowel in paradigms 6-9.

5 no overt exponent

10 bilabial nasal followed by back vowel

1-2 with plural forms, front vowel

3-5 " " "", velar closure followed by back vowel

First inclusive:

Paradigms

1, 3, 4, 7-10 velar closure, preceded by central vowel in 1 and 7 " " front " 6 " 9 followed " open " 3 " 4

2 central vowel and alveolar flap

5 no overt exponent

6 back vowel and glottal stop

11, 12 cumulative with number and tense

Second:

Paradigms

3-10 nasal closure, bilabial and followed by open vowel in 3-5 velar and preceded by front vowel in 6-9 velar in 10

1 open vowel

2 back vowel

11, 12 cumulative with number and tense
Third:

Paradigms

1, 7 and 8 front vowel, followed by velar closure in 8
2, 6 and 9 back vowel, followed by nasal closure in 2
3, 4 open vowel
5 no overt exponent
10 velar nasal closure
11 and 12 cumulative with number and tense
3-6, 8, 9 with plural forms: when cumulative with number
central vowel, alveolar flap and glottal closure, followed by velar closure and open vowel in 3 and 4
central " and velar closure in 5.

7.333 Exponents of number

The category of number has two members, singular and plural.

There is no overt exponent of the category of singular throughout the verb inflectional series.

The exponent of plural may be stated as,

waʔ ṣeʔ maʔ naʔ
ṣeʔ occurs when the category of person is first person exclusive,
waʔ " " " " " " " inclusive,
maʔ " " " " " " " second ",
except for paradigm 11 when exponents of tense, person and number are cumulative, and
naʔ occurs when the category of person is third person,
except in paradigms 3, 4, 5, 8 and 9, when the exponents of person and number are cumulative.

It should be noted that the category of singular in Jebere is not a notional category, but a formal one. It does, in fact, include one member, the first person inclusive, which would not be accepted notionally as singular, since the first person inclusive has reference to two persons, the person speaking and the person addressed.

7.334 Chart of exponents

For convenience the various exponents of the categories of tense, person and number abstracted from the inflectional suffixes may be set out in tabular form. It should be stressed that this style of presentation does not imply that these exponents may be added together to equal the particular suffixes from which they are abstracted. The symbols of the transcription are used whenever possible and have the same phonetic values as already described in chapter two.
<table>
<thead>
<tr>
<th>Paradigm 1</th>
<th>tense person number</th>
<th>Paradigm 2</th>
<th>tense person number</th>
</tr>
</thead>
<tbody>
<tr>
<td>-lek or -nek</td>
<td>1 or n ek</td>
<td>-ook</td>
<td>ec ek</td>
</tr>
<tr>
<td>-lek or -nek</td>
<td>1 or n ek</td>
<td>-ater</td>
<td>at er</td>
</tr>
<tr>
<td>-la or -ma</td>
<td>1 or n a</td>
<td>-oeu</td>
<td>ec u</td>
</tr>
<tr>
<td>-ti or -ti</td>
<td>1 or n i</td>
<td>-eauy</td>
<td>ec uy</td>
</tr>
<tr>
<td>-liksek or -lišeck</td>
<td>1 or n i šek</td>
<td>-colšek</td>
<td>ec i šek</td>
</tr>
<tr>
<td>-lekva? or -nekva?</td>
<td>1 or n ek va?</td>
<td>-aterva?</td>
<td>at er va?</td>
</tr>
<tr>
<td>-lama? or -nana?</td>
<td>1 or n a na?</td>
<td>-ecuwa?</td>
<td>ec u na?</td>
</tr>
<tr>
<td>-kmi? or -šišma?</td>
<td>1 or n i na?</td>
<td>-ecuma?</td>
<td>ec un na?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paradigm 3</th>
<th></th>
<th>Paradigm 4</th>
<th>cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>-a'ka</td>
<td>a? ka</td>
<td>-ina'ka</td>
<td>ins? ka</td>
</tr>
<tr>
<td>-a'ka</td>
<td>a? ka</td>
<td>-ina'ka</td>
<td>ins? ka</td>
</tr>
<tr>
<td>-a'ma</td>
<td>a? ma</td>
<td>-ina'ma</td>
<td>ins? ma</td>
</tr>
<tr>
<td>-a'a</td>
<td>a? a</td>
<td>-ina'a</td>
<td>ins? a</td>
</tr>
<tr>
<td>-a'kušek</td>
<td>a? ku šek</td>
<td>-ina'kušek</td>
<td>ins? ku šek</td>
</tr>
<tr>
<td>-a'ka</td>
<td>a? cumulative</td>
<td>-ina'ka</td>
<td>cumulative</td>
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<table>
<thead>
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<th>Paradigm 5</th>
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<tr>
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<td>pi'mak</td>
<td>-nansema?</td>
<td>nans iŋ</td>
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<td>-pi'makma</td>
<td>pi'mak ma</td>
<td>-nansemig</td>
<td>nans iŋ ma</td>
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<td>pi'mak ku šek</td>
<td>-nansemakšek</td>
<td>nans eku ku šek</td>
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<td>pi'mak va?</td>
<td>-nansemakva?</td>
<td>nans u va?</td>
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<td>pi'mak ma ma?</td>
<td>-nansemakšma?</td>
<td>nans iŋ ma</td>
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<td>-pi'makšek</td>
<td>pi'mak ešek</td>
<td>-nanta'še</td>
<td>nanta'še' s eʃ</td>
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<td>at ešu</td>
<td>-a'šetu</td>
<td>a's ešu</td>
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<td>-ašk</td>
<td>at šk</td>
<td>-a'sig</td>
<td>a's iŋ</td>
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<td>at iši</td>
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<td>a's iši</td>
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<td>-ašakšek</td>
<td>at ešak šek</td>
<td>-a'sešakšek</td>
<td>a's ešak šek</td>
</tr>
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<td>-ašakva?</td>
<td>at ešak va?</td>
<td>-a'sešakva?</td>
<td>a's ešak va?</td>
</tr>
<tr>
<td>-ašakšma?</td>
<td>at ešak ma ma?</td>
<td>-a'sešakšma?</td>
<td>a's ešak ma ma</td>
</tr>
<tr>
<td>-ašakšek</td>
<td>at ešak ešek</td>
<td>-a'sešakšek</td>
<td>a's ešak ešek</td>
</tr>
<tr>
<td>-ašašma?</td>
<td>at ešaš ma ma?</td>
<td>-a'sešašma?</td>
<td>a's ešaš ma ma</td>
</tr>
<tr>
<td>-ašašek</td>
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<td>-a'sešašek</td>
<td>a's ešaš ešek</td>
</tr>
<tr>
<td>-ašašva?</td>
<td>at ešaš va?</td>
<td>-a'sešašva?</td>
<td>a's ešaš va?</td>
</tr>
<tr>
<td>-ašaššma?</td>
<td>at ešaš ma ma?</td>
<td>-a'sešaššma?</td>
<td>a's ešaš ma ma</td>
</tr>
<tr>
<td>-ašaššek</td>
<td>at ešaš ešaš ešek</td>
<td>-a'sešaššek</td>
<td>a's ešaš ešaš ešek</td>
</tr>
<tr>
<td>-ašaššva?</td>
<td>at ešaš ešaš va?</td>
<td>-a'sešaššva?</td>
<td>a's ešaš ešaš va</td>
</tr>
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<td>at ešaš ešaš ma ma?</td>
<td>-a'sešašššma?</td>
<td>a's ešaš ešaš ma ma</td>
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<tr>
<td>-ašašššek</td>
<td>at ešaš ešaš ešaš ešek</td>
<td>-a'sešašššek</td>
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<table>
<thead>
<tr>
<th>Paradigm 9</th>
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<th>Paradigm 10</th>
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<tr>
<td>-seku</td>
<td>s eku</td>
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<td>s šik</td>
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<td>a's iši</td>
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<td>s šig</td>
<td>-aš'šig</td>
<td>a's iŋ</td>
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<td>s šiš</td>
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<td>-aš'šekšek</td>
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<td>-aš'škšmašek</td>
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<thead>
<tr>
<th>Paradigm 11</th>
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<th>Paradigm 12</th>
<th>cumulative</th>
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<tbody>
<tr>
<td>-'a</td>
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<td>-ta</td>
<td>cumulative</td>
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<td>cumulative</td>
<td>-pacš</td>
<td>cumulative</td>
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<td>-i</td>
<td>cumulative</td>
<td>-tamaš</td>
<td>cumulative</td>
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<tr>
<td>-awa?</td>
<td>cumulative</td>
<td>-pacašina?</td>
<td>cumulative</td>
</tr>
<tr>
<td>-ina?</td>
<td>cumulative</td>
<td>-pacašina?</td>
<td>cumulative</td>
</tr>
</tbody>
</table>

112
Symbolization of tense, person and number

The symbol for the verb inflectional series, ViSx, is extended to symbolize the categories of tense and of person and number as follows:

a) a number indicates the tense,
b) a letter indicates the person and number combined.

The paradigm numbers are used to refer to the tense.

The eight categories of person and number combined are referred to by the use of a letter as follows:

- a) any first person exclusive singular form
- b) any first person inclusive singular form
- c) any second person singular form
- d) any third person singular form
- e) any first person exclusive plural form
- f) any first person inclusive plural form
- g) any second person plural form
- h) any third person plural form

Examples:

nalai
'he passed' VS ViSxld 'I will follow VS ViSx2a
kal kor 'eat!' VS ViSxllc

class B - bipersonal suffixes

Class B inflectional suffixes are suffixes comprising exponents of five categories, either cumulatively or serially in the following sequence, tense, person and number (subject), person and number (object), except that there is no overt exponent of number in singular forms.

Whenever in sentences which contain a bipersonal verb there is a nominal functioning as subject, § 442b, as is the case for all sentences of class STII, there is agreement of person and number between that nominal and the exponents of the first person and number of the bipersonal suffix. Similarly, whenever in sentences which contain a bipersonal verb there is a nominal functioning as object, § 555, which is only rarely the case, there is agreement of person and number between that nominal and the exponents of the second person and number of the bipersonal suffix.

Definition of class B suffixes

Any inflectional suffix which never occurs with order 18 of the verb extensors is a member of the class B series of suffixes.

Class B paradigms

Class B suffixes are arranged in a number of paradigms in the same way as class A suffixes. Each paradigm has in common an exponent of tense, while the exponents of person and number are mutually exclusive within each paradigm. The exponents of tense in class B paradigms are parallel to the exponents of tense in class A paradigms and the numbering of class B paradigms reflects this similarity of form. Thus the exponent of tense in class B paradigm 2 is parallel to the exponent of tense in class A paradigm 2.

Though there are some similarities, the categories of person required for the statement of the class B paradigms are not identical with the categories of person required for the class A paradigms. Whereas the
class A paradigms require a system of four persons, the class B paradigms require two systems of person, each with three members. One system is set up for the category of person (subject) and the other for the category of person (object). The former comprises the following three members: first person (exclusive), second person and third person. The latter comprises the following three members: first person exclusive, first person inclusive and second person. These two systems have points of similarity with the four term system of the class A paradigms with first person exclusive, first person inclusive, second person and third person, but the three systems are clearly not identical. For the purpose of comparison it is convenient to label the persons of the class B paradigms in a similar manner to the persons of the class A paradigms, a first person exclusive singular, b first person inclusive singular, etc., § 74,335.

Since all class B forms comprise two persons, two letters are used, the first referring to the subject person and the second to the object.

Only certain combinations of persons are found and these may be set out in chart form as follows:

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<tr>
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The combinations marked on the chart are the only combinations that occur. Some combinations are naturally impossible for situational reasons. For instance, it is scarcely possible to conceive of a situation in which the first person inclusive forms could be subject and the first exclusive and second persons could be object, or vice versa, e.g., 'We (inclusive) saw me' or, 'you saw us (inclusive)'. There are similar situational limitations with the first exclusive. Even where there are gaps in the series of forms for combinations which are situationally possible this does not mean that there are gaps in the language as if there were no equally convenient ways of saying, for example, 'I hit myself' or 'he saw them'. These formal gaps are covered by a number of other structures as follows:

a) Reciprocal-reflexive form of the verb. This is the form containing the prefix in- 'reciprocal-reflexive', § 753. This covers all combinations, bb, cc, etc., e.g. inskikulek 'I hid myself'.

b) The extensor -dok- 'them'. This covers all combinations involving h as second person (object) e.g. ah, bh, etc., e.g. sskitadokle 'I hid them'.

c) The third person singular, d, as second person may be considered as zero. All unipersonal forms may be considered to have a third person singular object unless otherwise indicated grammatically by an (object) nominal of a different person and number, or unless situationally inappropriate.

It will be seen that these three structures account for all the gaps which are not situationally impossible.

Furthermore it should be noted that all bipersonal verbs may be substituted by a unipersonal verb and separate object nominal with parallel persons and numbers.
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Paradigm 4 is identical with paradigm 3 except for the exponent of tense, which in both paradigms is the same as in class A paradigms. Examples of class B forms of paradigm 4 are given to illustrate the complete parallel with paradigm 3 forms, apart from the different tense exponent:

- ina'nu (4 ca), ina'ku (4 da), ina'ku (4 ha).

Paradigm 9

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</table>

Paradigms 6 and 8 are identical with paradigm 9 except for the exponent of tense which in each case is the same as the exponent of tense in the class A paradigms. Examples of class B forms of paradigms 6 and 8 are given to illustrate the complete parallel with the paradigm 9 forms, apart from the different tense exponent:

- a'sin'ku (8 ca), a'sek'yu (8 ac), a'nes'ku (6 ca).
Paradigm 7

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When the verb extensor 7 immediately precedes suffixes of Paradigm 7, this paradigm is as follows:

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Paradigm 10

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Paradigm 11

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Paradigm 12

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</table>
7443. Exponents of tense, person and number

Exponents of tense, person and number (subject and object) are abstracted from the class B inflectional suffixes in the same way as from class A suffixes, § 7433. These exponents of the five categories concerned in the class B suffixes are not to be regarded as additive in any sense.

7443.1 Exponents of tense

A comparison of class A and class B paradigms shows that the exponents of tense in the paradigms of class B are similar to the exponents of tense in class A paradigms. It is, therefore, not necessary to restate these exponents. However, the paradigms 11 and 12 do not show such complete correspondence and these are, therefore, stated separately. Paradigms 11 and 12 exhibit cumulative exponents for the categories of tense and person (subject) and these cumulative exponents are set out in the tables of section 7443. Tense is symbolized in class B paradigms in a similar manner to class A, namely by means of a number which is the paradigm number.

7443.2 Exponents of person (subject)

The exponents of person (subject) show considerable correspondence to the exponents of person in the class A paradigms, and the statement of the exponents of person (subject) is, therefore, most easily made with reference to the statement of exponents of person already made in section 7433.2.

First (exclusive)

Paradigms

1, 2, 5, 6, 10 as stated in section 7433.2.
3, 4
7

except that no vowel follows the velar closure with singular form.
except that with plural forms the front vowel also occurs as a further freely fluctuating exponent.

Second

Paradigms

2, 6, 8, 12 as stated in section 7433.2.
1 and 5
3, 4
7

except that there is no overt exponent in the singular form.
except that in the singular form the exponent is bilabial nasal only.
except that an alternative exponent is found, the back vowel followed by nasal closure.

Third

Paradigms

8, 11, 12 as stated in section 7433.2.
1
2
3 and 4
5
6 and 9
7
10

except that there is no overt exponent in the forms -ku and -kapkałek.
except that there is no overt exponent in the forms -seey and -seecnma.
except that the exponent in the plural form is central vowel followed by alveolar flap, glottal closure, and velar closure.
except that the exponent in the forms -píneka and -pínekałek is central vowel, alveolar flap and glottal closure.
except that the singular form has an exponent of front vowel followed by velar closure.
except that there is no overt exponent in the alternative forms -acujaa, -acujak, -acuyama and -acuyama.
nasal closure, either velar articulation or bilabial articulation followed by the front vowel.
74433 Exponents of number (subject)

The exponents of number (subject) show considerable correspondences with the exponents of number in the class A paradigms in section 7433. There is no overt exponent of number in the singular form. The exponent of the plural category of number is as stated in section 7433, except that, where the exponent nasal closure, open vowel and glottal closure is found in paradigm A suffixes, the exponent nasal closure, central vowel, glottal closure and alveolar flap is found in paradigm B suffixes.

74434 Exponents of person (object)

The three categories of person (object) required for the statement of class B paradigms have the following exponents except when these exponents are cumulative with the exponents of other categories.

First person exclusive:
velar closure followed by back vowel, except for exponent in the suffixes
-ðu, -mu, -u and -tu, in paradigms 1, 3, 11 and 12 when the back vowel is exponent.

First person inclusive:
velar nasal closure followed by bilabial nasal, back vowel, and glottal closure and which is preceded by central vowel in paradigms 1, 2, 5, 7, 12 and in the third person plural (subject) forms of paradigms 3, 4, 6, 8-11

Second person:
velar nasal closure preceded by central vowel in paradigms 1, 2, 5, 7, 12 and in the third person plural (subject) forms of paradigms 3, 4, 6, 9-11.

74435 Exponents of number (object)

The exponents of number (object) in the class B paradigms are similar to the exponents of number in the class A paradigms, § 7433.

74436 Chart of exponents

For convenience the various exponents of the categories of tense, person and number (subject and object) abstracted from the inflectional suffixes may be set out in tabular form. This style of presentation is not meant to imply that the linear sequence of exponents may be added together as if the exponent of tense, plus the exponent of person (subject), plus the exponent of number (subject), plus the exponent of person (object), plus the exponent of number (object), equalled the particular inflectional suffix. For example, from the suffix -ðen is abstracted the exponent of tense, 1, of person (subject), ak, i.e., central vowel followed by velar closure, and of person (object) en, i.e., central vowel followed by velar nasal closure, thus the phonetic exponents of central vowel and velar closure are assigned as exponents of both person (subject) and person (object). On the other hand from the suffix -ðinefken is abstracted the exponent of tense, 1, of person (subject), i, of number (subject), net, and of person (object) en. Thus not all the phonetic material is assigned to a particular exponent of a specific grammatical category. It should be stressed that these exponents are not morphemes.
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<td>u</td>
<td></td>
<td>ku</td>
<td></td>
</tr>
<tr>
<td>d -ēcniʔu</td>
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<td>unŋ</td>
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<td>ku</td>
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</tr>
<tr>
<td>g -ēcniʔuʔu</td>
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<td>ec</td>
<td>unŋ</td>
<td>maʔ</td>
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<td>pi?nak k</td>
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<tr>
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<td>-pi?nakku</td>
<td>pi?nak k</td>
<td>cumulative</td>
<td>ku</td>
<td></td>
</tr>
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</table>

| C P t t J          |       |        |        |        |

| AO AO AO AO        |       |        |        |        |

| AO AO AO           |       |        |        |        |

| 120                |       |        |        |        |
### Paradigm 6, 8, and 9

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<td>s</td>
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<tr>
<td>d - seḳ</td>
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### Paradigm 7 (with ve7)

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</tr>
<tr>
<td>d - aciŋ̣</td>
<td>s</td>
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<td>g - aciŋ̣?ku</td>
<td>s</td>
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<tr>
<td>h - aciŋ̣?m</td>
<td>a?e</td>
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<table>
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<th>Person Number</th>
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</thead>
<tbody>
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</tr>
<tr>
<td>d - atuŋ̣</td>
<td>s</td>
</tr>
<tr>
<td>e - atuŋ̣</td>
<td>s</td>
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<tr>
<td>h - a?so?m</td>
<td>a?e</td>
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<table>
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<th>Tense Person Number</th>
<th>Person Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
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<tr>
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<td>s</td>
</tr>
<tr>
<td>d - aciŋ̣</td>
<td>s</td>
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<tr>
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<td>ḫ</td>
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<tr>
<td>g</td>
<td>a</td>
<td>ḫ</td>
<td>ṭu</td>
<td>ṭu</td>
</tr>
<tr>
<td>h</td>
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<td>ḫ</td>
<td>ṭu</td>
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### Paradigm 11
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<td>ṭu</td>
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</tr>
<tr>
<td>d</td>
<td>a</td>
<td>ḫ</td>
<td>ṭu</td>
<td>ṭu</td>
</tr>
<tr>
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### Paradigm 12
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<th>Number</th>
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</thead>
<tbody>
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<td>ṭu</td>
<td>ṭu</td>
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<tr>
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<td>ṭu</td>
</tr>
<tr>
<td>g</td>
<td>a</td>
<td>ḫ</td>
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<td>a</td>
<td>ḫ</td>
<td>ṭu</td>
<td>ṭu</td>
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75 The verb expanding prefix

751 Definition of the verb expanding prefix

Verb forms may comprise one or more verb expanding prefix. Verb forms having more than three prefixes are infrequent, though in principle up to five prefixes may occur. Forms with one or two prefixes are found frequently.

Any affix which precedes a verb stem is a verb expanding prefix.

752 Classes of the verb expanding prefix

Prefixes are found with any verb stem except class 2b and any combination of verb extensors or with any inflectional suffix or word suffix, except where otherwise stated in section 753 and subject only to collocational limitations. Such collocational limitations are extensive.

Some prefixes are found more frequently and with a greater number of verb stems than others and this will be noted as each is treated.

Five classes of prefix are set up. The members of each class are mutually exclusive with each other in any one verb form. However members of different classes are found in the same verb form, subject to certain limitations which will be stated for each class or member in turn.

These five classes are numbered, counting outwards from the stem. Except where otherwise stated this numbering indicates the only possible sequence of the prefixes when more than one prefix is found in any one verb form. These five classes are termed 'orders', § 672.

Symbolization:

VeFx followed by a number symbolizes the verb expanding prefix and the particular order of the prefix.
Order 1
Order 1 comprises one member, 1n- 1in- 1m- 1ng- 'reciprocal-reflexive' before bilabial stops, 'flexive'
in- 1m- 1ng- velar stops,
ing- 1m- 1ng- elsewhere.
This form is not found with any bispensal suffixes, § 744.

Forms comprising this prefix are very commonly found. When preceded by any member of order 4, this prefix may be preceded by either a member of order 2 or of order 3 but not both.

Certain other combinations of other prefixes are found with this prefix, namely,
Order 2 with order 4a with order 1
's 3 ' 4a 1
's 3 ' 4a 1
These various possibilities are illustrated in this table, (read from stem outward, i.e. right to left).

5 4a 3 2 1 VS
4d 3 2 1 VS
3 2 1 VS
3/2 4a 1 VS
3 4d 1 VS

Examples:
inap'leak in- apu- -lek
'I released myself' VePxl VS ViSxl
insepemahina in- 8eq- -eq- -ma?
'they are fighting each other' VeP xl VS Ve7 ViSxl

Order 2
Order 2 comprises one member, ek- 'accompany... be with someone or something'

This prefix is found frequently in Jeker material.

This prefix may be followed by a member of order 3 or of order 4a.

The combinations of prefixes including order 2 are set out in the following table:

5 4a 3 2 1 VS
4d 3 2 1 VS
5 2 4a 1 VS
5 3 VS

Examples:
eK{kunec aK- 8i< -lan- -cek
VoPxl VS VE10 ViSxl
'I will go and see with someone else'
eK{cmi Ikatug eK- cim- -mi
VoPxl VS ViSxl
'he died in his shirt'

Order 3
Order 3 comprises one member, a< - 'causative'

Forms comprising this prefix are found frequently.

This prefix is found preceding order 4a either when that order is followed by order 1 or 2 or neither. It also precedes order 4b either when that order is followed by order 1 or not. Order 3 prefix may be preceded by order 2.

The following table illustrates the various combinations of prefixes into which order 3 enters.

5 4a 3 2/1 VS
4d 3 2 1 VS
5 3 4a 2/1 VS
5 3 4b 1 VS

Examples:
a< {esk-{eek a< - eka< -t- -eek
VePxl VS VE5 ViSxl
'I will make ... work'
iya< tera< tapa<i yia- a< - tera< - t- -apa- 8i
VePxl VePxl VS Ve5 VE7 ViSxl
'you are wanting to make me plant'}
Order 4

Order 4 comprises the following six members,
mu- 'well'
ninci- 'know how to...'
n- 'recently'
intak- 'pretend to do, do something ineffectively'
per- 'be tired of doing'
tek- 'do many times'
All these six prefixes are found much less frequently than the members of orders 1 - 3.

Four sub-classes of this order are set up on the basis of the distribution of these prefixes with other prefixes:

4a comprises mu-
4b * niinci-
4c * n-
4d * intak-, per-, tek-

Sub-class 4d is never found preceded by any other prefix.
Sub-class 4a and 4b may be preceded by order 2.
Sub-class 4a may be preceded by order 2.

The following table illustrates the distribution of these prefixes:

<table>
<thead>
<tr>
<th>4</th>
<th>3</th>
<th>2</th>
<th>VS or 4</th>
<th>3/2</th>
<th>1</th>
<th>VS</th>
<th>5</th>
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<td></td>
</tr>
<tr>
<td>4b</td>
<td>3</td>
<td>4ab</td>
<td>1</td>
<td>VS</td>
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<td>3</td>
<td>4b</td>
<td>2</td>
<td>VS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Examples:

intakana'tuki              intak- saka- -tu- -ki
'the pretended to work'

okmusaka'tuki              ok- mu- saka- -tu- -ki
'he worked well with someone'

iya'inci'tera'tek           iya- niinci- tara- -tek
'I want to know how to plant'

Order 5

Order 5 comprises one member,
iya- 'want to!
This prefix occurs more frequently than any other prefix.

Order 5 is never preceded by any other prefix.
It may precede various combinations of the other prefixes, except that it never precedes sub-class 4d.

All the various possibilities are illustrated in the following table:

<table>
<thead>
<tr>
<th>5</th>
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<th>3</th>
<th>2/1</th>
<th>VS</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2</td>
<td>1</td>
<td>VS</td>
</tr>
<tr>
<td>5</td>
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</tr>
<tr>
<td>5</td>
<td>3</td>
<td>4b</td>
<td>2</td>
<td>VS</td>
</tr>
</tbody>
</table>

Examples:
iya'iimpasuntakia iya- a°- im- pasum- -tu- -ki
VePx5 VePx3 VePx1 VS VE5 VIsx1
'he wanted to make stick'
iya'grupa'ki             iya- mi- pa°- -ki
'he wanted to go well'
VePx5 VePx4a VS VIsx1
### Chart of verb expanding prefixes

A summary showing the distribution of the verb expanding prefixes is presented in the following chart:

<table>
<thead>
<tr>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>iya-</td>
<td>mu-</td>
<td>in-</td>
<td>2/3</td>
<td>4 a/b</td>
</tr>
<tr>
<td>1/2</td>
<td>nuka-ka</td>
<td>nuka-ka</td>
<td>nuka-ka</td>
<td>nuka-ka</td>
</tr>
<tr>
<td>'predicative 1st exclusive singular'</td>
<td>1st inclusive</td>
<td>2nd singular</td>
<td>3rd</td>
<td>1st exclusive plural</td>
</tr>
<tr>
<td>nuka-ka</td>
<td>nuka-ka</td>
<td>nuka-ka</td>
<td>nuka-ka</td>
<td>nuka-ka</td>
</tr>
<tr>
<td>3rd</td>
<td>1st inclusive</td>
<td>2nd plural</td>
<td>3rd</td>
<td></td>
</tr>
</tbody>
</table>

Members of the predicative verb series occur in sentences of sentence-type IV only, § 452.

The predicative verb comprises the following forms only:

- **nuka-ka**: 'predicative 1st exclusive singular'
- **nuka-ka**: 1st inclusive
- **nuka-ka**: 2nd singular
- **nuka-ka**: 3rd
- **nuka-ka**: 1st exclusive plural
- **nuka-ka**: 1st inclusive
- **nuka-ka**: 2nd plural
- **nuka-ka**: 3rd

These forms are analyzed into verb stem nuka- and a series of inflectional suffixes comparable to class A paradigms 3 and 4, § 7432.

Symbol and examples:

- $V_p$ - predicative verb
- *tasorpi nuka-ka* 'I am an old man'
- *sindilukoyanu?we? nuka-ka* 'we are Jebero people'
- *subrinnuwekaen nuka-ka* 'you are my nephew'

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A verb form may comprise prefixes, stem, extensors, and inflectional suffixes. Every verb contains one stem and one member of the inflectional suffixes, which comprises 347 suffixes arranged in 2 sets of twelve paradigms; one unipersonal set and one bipersonal. In addition a verb may contain: up to three members of the verb expanding prefixes which comprise a class of ten prefixes arranged in 5 orders, up to four members of the extensor class of suffixes which consists of 29 suffixes arranged in 19 orders and up to three members of the word suffix class which comprises 17 members arranged in 8 orders.

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Stem</th>
<th>Extensor</th>
<th>Inflectional Suffix</th>
<th>Word Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of terms in system</td>
<td>10 in 5 orders</td>
<td>unlimited in 19 orders</td>
<td>347 in 2 sets of 12 paradigms</td>
<td>17 in 8 orders</td>
</tr>
<tr>
<td>No. of elements in any one verb</td>
<td>up to 3</td>
<td>1</td>
<td>up to 4</td>
<td>1</td>
</tr>
</tbody>
</table>
Chapter Eight

The structure of the nominal

81 Elements within the nominal
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821 Definition of the nominal stem
822 Classes of nominal stem
823 Class I stems
8231 Definition of Class I stems
8232 Sub-classes of Class I stems
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8241 Definition of Class II stems
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Elements within the nominal

The Jebero nominal may comprise the following elements, stem, non-verbal suffix, and word suffix.

The great majority of nominal stems are found with or without suffixation, and thus the minimum form of the nominal may be said to be the nominal stem alone. However, a very small number of nominal stems never occur alone but are always found with suffixation. In view of the small number of such stems, it seems best to regard the minimum form of the nominal to be the stem alone, and to consider these stems as a small class with a more limited distribution than the vast majority of nominal stems. They are, therefore, set up as a sub-class of stems, see section 8252, sub-class Ib.

The theoretical maximum form for the nominal is never found, since in its expanded form in theory the nominal may comprise, a stem itself comprising three roots, up to 11 non-verbal suffixes and up to 6 word suffixes. In fact no forms like this are found. In the material examined a very great variety of combinations of the different elements within the nominal is found, but nominal forms with more than six suffixes are very rare. From this it can be seen that the theoretical maximum is never approached.

Subsequent sections of this chapter will deal with each of these elements in turn and state any limitations in the distribution of the various elements with each other. Section 82 will describe nominal stems, and section 85 non-verbal suffixes. Word suffixes are treated in section 67.

Symbols: NS - nominal stem
         nvSx non-verbal suffix
         NdSx nominal derivational suffix

82 The nominal stem

821 Definition

The stem of a nominal is that element which either standing alone without affixation, or, (in the case of a small number of stems which may be exhaustively listed) when suffixed by one member of the non-verbal suffix class without further affixation, may function as a nominal. See § 5551, 554 and 572 for the function of the nominal.

822 Classes of nominal stem

Nominal stems always comprise a nucleus element and may also comprise a satellite element.

There are two types of nucleus and nominal stems are divided into two classes on the basis of the type of nucleus of which they are comprised.

Class I nominal stems are those whose nucleus is a nominal root. This class is described in section 823.

Class II nominal stems are those whose nucleus is a verb stem. This class is described in section 824.

The satellite elements of nominal stems will be described in conjunction with the different nuclei with which they are found and in section 825.

Nominal stems may comprise more than one root, and more than one type of root, and such instances are treated as complex nuclei.
Symbols and examples:

Nominal = nominal stem + non-verbal suffix + word suffix

N = NS + nvSx + WSx

NS

nucleus - nominal root

NSI - Class I

NSII - Class II

nucleus - verb stem

pi:eklusaŋ

pi:ek

-lusaŋ

'houses'

ok

NSI

nvSx

ok

NSII

nvSx

'because of that which I had given'

823 Class I stems - nominal root nucleus nominal stems

8231 Definition of class I stems

All nominal stems which comprise as their first element a nominal root nucleus nominal stems, except when such a first place nominal root is an element of a verb stem, which is itself functioning as the nucleus of a nominal stem see section 824.2 on class II stems, sub-class b.

8232 Sub-classes of class I stems

Class I stems are divided into a number of sub-classes according to their internal structure.

Sub-class a, single root stem, comprises a single nominal root without any other element. Any nominal root of root class I may be found in a Ia nominal stem. Class Ia stems are the most frequently occurring type of nominal stem.

Sub-class b, single bound root stem, comprises a single nominal root without any other element. Sub-class b differs from sub-class a in that b stems never occur alone but are always suffixed. This class of stems is a very small one and has already been referred to in sections 81 and 82. Any nominal root of root class II may be found in a Ib nominal stem. See section 824.2.

Sub-class c, double root stem, comprises two nominal roots as complex nuclei without any other element. The first root of Ic stems is a member of root classes Ib, Ic, or Id. The second root of these stems is a member of root classes Ic, Id, IIa, IIb or III. Though not as common as class Ia stem, plenty of examples of class Ic have been found.

Sub-class d, treble root stem, comprises three nominal roots as complex nuclei without any other element. The first root of Id stems is a member of root classes Ib, Ic, and Id. The second root is a member of root classes Ic, Id, IIa, IIb or III. The third root is a member of root classes Ia, IIb or III. This class of stem is found quite often though not as frequently as classes Ia or Ic.

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Symbols and Examples:

NSIa - nominal stem of class Ia
NSIb - nominal stem of class Ib
NSIo - nominal stem of class Ic
NSId - nominal stem of class Id

pisokklusa?  pisok - -lusa?  'houses'
    NSIa    NSx

pinoq     pi - -noq  'his body'
    NSIb    NSx

/jiwilupanlusa? /iwilupan - -lusa?  'Jobero men'
    NSIo    NSx

824. Class II stems - verb stem nucleus nominal stems

824.1 Definition of class II stems

All nominal stems which comprise a verb stem followed by some other
element are verb stem nucleus nominal stems.

824.2 Sub-classes of class II stems

Class II stems are divided into sub-classes on the basis of the
satellite elements which follow the verb stem nucleus.

Sub-class a, verb stem and nominal root stem, comprises a verb stem
followed by a nominal root.

Verb stems found in class IIa nominal stems are always from verb
stem classes Ia, and Id. Not every stem of these classes may occur in
IIa nominal stems, but only those stems whose nucleus is a verb root
of class X, § 7257.

Any nominal root of root classes Ia, Iib, Iic or III, may be
found as a satellite element in class IIa nominal stems.

Sub-class b, verb stem and derivational suffix stem, comprises a verb
stem followed by a member of the nominal derivational
suffix class, § 828. Any such form may also contain a verb expanding
prefix immediately preceding the verb stem element of the nominal.

Any verb stem of any verb stem class may be found as nucleus of
class Iib nominal stems. Any member of the nominal derivational suffix
class may occur with any verb stem as the satellite element of class
Iib nominal stems, subject only to collocational limitations.

Symbols and Examples:

NSIIa - nominal stem of class IIa
NSIIb - nominal stem of class IIb

u?lan?kki  u?lan- -kki  'winter'
    NSIIa    VS    NR

pipe?lu?  pi - -lu?  'rod earth'
    NSIIa    VS    NR

kalu?pi  kalu?- -pi  'something cooked'
    NSIIb    VS    NSx

peq?tuma  peq?tu- -na  'bridge'
    NSIIb    VS    NSx
A small number of nominal stems comprise an element which may be regarded as either a nominal root or an adverb root. The present analysis treats these forms as nominal roots which may be paralleled by an identical homophonous adverb root. However, it would also be possible to treat them as adverb roots and to set up a third class of nominal stems, comprising adverb root nucleus with or without satellite elements. The chief disadvantage of this treatment is that it involves setting up a large number of sub-classes of adverb root and making a number of structural statements for a very limited group of stems. For example, napi⁹ 'old, long ago', functions syntactically as a nominal (adjective) and as an adverb, and in morphological form shows characteristics of both classes.

\[
\begin{align*}
\text{napi}^9 & \text{ pa}^9\text{li} \quad \text{'he went a long time ago'} \\
\text{napi}^9\text{ka}^9\text{lu}^9\text{sa}^9 & \quad \text{'the old man now dead'}
\end{align*}
\]

### Definition of the nominal root

Any part of a nominal which cannot be further subdivided into further morphemes, and which either
a) may function alone as a nominal stem, or
b) together with a preceding nominal root (which may function alone as a nominal stem) may function as a nominal stem, and is not a member of the non-verbal or word classes of suffix, is a nominal root.

### Classes of nominal root

Four sets of classes of nominal root are set up. Each set of classes is not a further sub-division of a previous division but each set is a cross-classification at the same level as the other three sets. One set of three classes is established on the basis of the distribution of the roots within the nominal stem. This set is labelled I, II, and III. § 8263. Another set of two classes is set up on the basis of the distribution of the roots in class I verb stems. This set is labelled A and B. § 8266. A third set of two classes is set up on the basis of the distribution of the roots in class IIb verb stems. This set is labelled J and K. § 8267. The fourth set of three classes is established on the basis of the distribution of the roots with the adverb derivation suffixes, § 925. This set is labelled X, Y, Z, § 8268.

There is complete overlapping of these four sets of root classes, § 8269 for a diagram illustrating this.

The three classes of root set up on the basis of the distribution of the roots within the nominal stem are:

- Class I, free roots,
- Class II, bound roots,
- Class III, complex nucleus roots.

These are dealt with in turn in the following sections.

### Class I nominal roots - free roots

All roots which may be found as nominal stems which may function as words without any other elements, are class I nominal roots. The great majority of nominal roots are of this class.
Class I roots are divided into four sub-classes.

Sub-class a, single free roots, always occur alone in nominal stems. Roots of this class are found in stems of class Ia only.

Sub-class b, first place free roots, may occur either alone or as first root in nominal stems. Roots of this class are found in stems of classes Ia, Ib, and Id.

Sub-class c, second place free roots, may occur either alone, or as first root, or as second root in nominal stems. Roots of this class are found in stems of classes Ia, Ib, Id, and Ida.

Sub-class d, third place free roots, may occur either alone, or as first root, or as second root, or as third root in nominal stems. Roots of this class are found in stems of classes Ia, Ib, Id, and Ida.

Symbols and Examples:

<table>
<thead>
<tr>
<th>Root</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRIa</td>
<td>nominal root of class Ia</td>
</tr>
<tr>
<td>NRIb</td>
<td>&quot; &quot; &quot; &quot; Ib</td>
</tr>
<tr>
<td>NRIc</td>
<td>&quot; &quot; &quot; &quot; Ic</td>
</tr>
<tr>
<td>NRIId</td>
<td>&quot; &quot; &quot; &quot; Id</td>
</tr>
</tbody>
</table>

Examples:
- pi 'house'
- NRIa
- tampe 'arm, branch'
- NRIb
- kala 'three'
- NRIc
- lada 'face'
- NRIId

8264 Class II nominal roots - bound roots

All roots which may be found as nominal stems which may function as words only with some suffixial element, are class II nominal roots.

Class II roots are divided into two sub-classes.

Sub-class a, second place bound roots, always occur either alone or as second root in nominal stems. Roots of this class are found in stems of classes Ib, Ic, Id, and Ida.

Sub-class b, third place bound roots, always occur either alone, or as second root, or as third root in nominal stems. Roots of this class are found in stems of classes Ib, Ic, Id, and Ida.

Class II roots are a small class but roots of this class occur frequently.

Symbols and Examples:

<table>
<thead>
<tr>
<th>Root</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRIIa</td>
<td>nominal root of class Ila</td>
</tr>
<tr>
<td>NRIIb</td>
<td>&quot; &quot; &quot; &quot; IIb</td>
</tr>
</tbody>
</table>

Examples:
- pi- 'body'
- NRIIa
- supina- 'behind, back'
- NRIIb

8265 Class III nominal roots - complex nucleus roots

All nominal roots which never function as a simple nucleus in nominal stems are class III nominal roots.

All class III roots always occur either as second root or as third root in nominal stems. Roots of this class are found in stems of classes Ic, Id, and Ida.

Class III roots are a small class, some 20 or so roots having been found, but these roots occur frequently.
The two classes of root set up on the basis of the distribution of the roots in class Ie verb stems are:

Class A, comprising all nominal roots which are found in class Ie verb stems, that is, following a verb root as described in section 7232.

Class B, comprising all nominal roots which never occur in class Ie verb stems.

There is considerable overlapping between classes I, II, and III, and classes A and B. Class A includes roots of classes I, II and III. Class B includes roots of class I only. Or, stated conversely, class I includes roots of classes A and B, whereas classes II and III include only roots of class A.

Class A roots are found in all classes of nominal stem, except class IIIb, while class B roots are found in stems of class I only.

Class A roots are a comparatively small class of roots, of which some fifty have been found but this class includes a number of very common roots. The majority of these roots have a semantic similarity, being names of parts of the body.

Class J includes roots of classes A and B and so does class K. Conversely classes A and B include roots of classes J and K.
Class J and K roots are found in stems of all sub-classes of class I, the nominal root nucleus nominal stem, and sub-class IIIa nominal stem.

The number of class J roots is quite small. In the material examined some forty or so roots have been noted, though it seems likely this may be extended in further material.

Symbols and Examples:

NRJ - nominal root of class J
NRK - " " " " K

nalutusik nalu -tu- -sik 'when it is now'

8268 Class X, Y and Z nominal roots

The three classes of root set up on the basis of the distribution of the roots with the adverb derivational suffixes are:

Class X, comprising all nominal roots which are found in class IIIa adverb stems, that is, suffixed by the adverb derivational suffix -lu9, § 9252.

Class Y, comprising all nominal roots which are found in class IIIb adverb stems, that is, suffixed by the adverb derivational suffix -pi9, § 9252.

Class Z, comprising all nominal roots which never occur in adverb stems.

There is considerable overlapping between classes I, II and III, and classes X, Y, Z, between classes A and B and classes X, Y, Z, and between classes J and K and classes X, Y, Z.

Classes X and Y include roots of class I only, whereas class Z includes roots of classes I, II, and III. Conversely class I includes roots of classes X and Y, while classes II and III include roots of class Z only.

Classes X and Y include roots of class B only, whereas class Z includes roots of classes A and B. Conversely class A includes roots of class Z only whereas class B includes roots of classes A and B.

Class X includes roots of class J only, and class Y includes roots of class K only, whereas class Z includes roots of classes J and K. Conversely class J includes roots of classes X and Z, while class K includes roots of classes Y and Z.

Class X roots are found only in nominals of the sub-class adjective. It would, therefore, be possible to set up a further sub-class of adjectives which could be defined as those whose roots are of class X or as those which can be suffixed by the adverb derivational suffix -lu9, and to call this sub-class 'numerals'. However it should be noticed that such a sub-class would include a few other words in addition to counting words, e.g. wapi9 'many'.

Symbols and Examples:

NRX - nominal root of class X
NRY - " " " " Y
NRZ - " " " " Z

kalalu9 kala -lu9 'three times'
All the possible combinations of root classes are diagrammed in the chart above. Those squares ticked indicate the combinations that do actually occur.

From the chart it will be seen that all nominal roots in Jebero belong to one of nine groups of classes; namely, groups comprising classes,

- LIJZ
- LIKZ
- LBJX

This chart summarises the correlations between the different nominal stem and root classes. It does not, however, include the cross-classification of root classes dealt with in sections 8266 - 8269.
Nominal derivational suffixes may be defined as those suffixes which are found following a verb stem, verb stem and suffix together forming a nominal stem.

These suffixes form a closed system of mutually exclusive members which may be listed exhaustively. Two sub-classes are set up on the basis of the presence of exponents of person.

Sub-class 1 comprises suffixes from which no exponent of person may be abstracted, while sub-class 2 comprises those suffixes from which exponents of person may be abstracted.

The nominal derivational suffix sub-class 1 comprises the following members:

-\( -na \) 'instrumental, object used for specific action'
-\( -pi \) 'object in the state described by verb stem'
-\( -lusa \) 'those that do or are something described by verb stem'
-\( -an \) 'one that is or does something very often'
-\( -tek \) 'one who does something habitually'

Symbols and Examples:

<table>
<thead>
<tr>
<th>NdSx</th>
<th>nominal derivational suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>saka?tutek</td>
<td>saka?tun- -tek</td>
</tr>
<tr>
<td>pegtuna</td>
<td>pegtu- -na</td>
</tr>
</tbody>
</table>

The nominal derivational suffix sub-class 2 comprises the following members which are arranged in paradigmatic form, in a similar manner to the verb inflectional suffixes dealt with in section 74. Like those suffixes, the nominal derivational suffix sub-class 2 may comprise exponents of one or of two persons. Unipersonal suffixes are set out in paradigm A below, while bipersonal nominal derivational suffixes are set out in paradigm B below.

Paradigm A 'object affected by the verb stem concerned'

<table>
<thead>
<tr>
<th>a</th>
<th>b</th>
<th>c</th>
<th>o</th>
<th>f</th>
<th>g</th>
</tr>
</thead>
<tbody>
<tr>
<td>( -a?kamu)</td>
<td>( -a?kamu)</td>
<td>( -a?kamu)</td>
<td>( -a?kamu)</td>
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</table>

Exponents of person and number may be abstracted as follows. The exponents of person are similar in every respect to the exponents of person found in the verb paradigms 3 and 4, § 74.33. The exponents of number are similar in every respect to the exponents of number found throughout the class A verb paradigms, except that the exponent with the first person exclusive exponent is 3\( a \) not 3\( a \).

Paradigm B

<table>
<thead>
<tr>
<th>a</th>
<th>b</th>
<th>c</th>
<th>o</th>
<th>f</th>
<th>g</th>
</tr>
</thead>
<tbody>
<tr>
<td>( -a?kamu)</td>
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</tr>
</tbody>
</table>

Exponents of person and number may be abstracted as follows. The exponents of person are similar in every respect to the exponents of person found in the verb paradigms 3 and 4, § 74.33. The exponents of number are similar in every respect to the exponents of number found throughout the class A verb paradigms, except that the exponent with the first person exclusive exponent is 3\( a \) not 3\( a \).
All the forms in column e have alternative forms in which the syllable \( \text{c S s k} \) is replaced by the syllable \( \text{Sin} \), e.g. "\( a^\text{m} \text{idSka} \) or "\( a^\text{m} \text{idSin} \)", except for the form "\( a^\text{g} \text{ka} \text{dSka} \)" for which there is no alternative form.

The exponents of person and number (subject and object) are identical with the exponents of paradigm 3 of series \( B \) \( 3^\text{1} \text{L} \) except for the form "\( a^\text{m} \text{kU} \text{d} \text{a} \text{Ska} \)", and for the alternative forms of column e.

There may or may not be a relationship of concord between the persons and numbers of these nominals and the persons and numbers of other forms in the sentence.

Examples:

- "\( a^\text{m} \text{gka} \text{a} \text{Ska} \)" VS "\( a^\text{m} \text{gka} - a^\text{m} \text{Ska} \)"
  'that which he gave'

- "\( a^\text{m} \text{kU} \text{a} \text{Ska} \)" VS "\( a^\text{m} \text{kU} - a^\text{m} \text{Ska} \)"
  'my money which I have'

- "\( a^\text{m} \text{luwanta} \text{Ska} \)" VS "\( a^\text{m} \text{luwanta} - a^\text{m} \text{Ska} \)"
  'I will give you what you want'

829 Correlation of the nominal stem and root classes with the sub-classes, noun, adjective, pronoun and relative

Nouns may contain stems of all classes of stem listed above, and these stems comprise nominal roots of all classes except class \( X \), and verb stems of all classes.

Adjectives may contain stems of all classes of stem, except \( \text{Ib} \) and \( \text{IIa} \). Adjective stems comprise nominal roots of all classes except \( \text{Ib} \), \( \text{Io} \), \( \text{Ia} \), \( \text{A} \) and \( \text{X} \).

Pronouns may contain stems of class \( \text{Ia} \) only. Pronoun stems comprise nominal roots of class \( \text{Ia} \), \( \text{B} \), \( \text{K} \) and \( \text{Z} \).

Relatives may contain stems of class \( \text{IIb} \) only and so always comprise a verb stem and nominal derivational suffix sub-class 2.

These correlations are illustrated in the following chart.

<table>
<thead>
<tr>
<th>STEMS</th>
<th>ROOTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
</tr>
<tr>
<td></td>
<td>I</td>
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<tr>
<td>a b c d</td>
<td>a b</td>
</tr>
<tr>
<td>Noun</td>
<td>✓✓✓✓</td>
</tr>
<tr>
<td>Adj ective</td>
<td>✓✓✓✓</td>
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<tr>
<td>Pr onoun</td>
<td>✓✓✓✓</td>
</tr>
<tr>
<td>Rel ative</td>
<td>✓✓✓✓</td>
</tr>
</tbody>
</table>

83 The non-verbal suffix

831 Definition of the non-verbal suffix

Any nominal, whether noun, adjective, or pronoun, may contain in addition to a nominal stem one or more suffixes of the non-verbal class of suffixes. Any suffix which is found with a nominal or adverb stem but not with a verb or particle stem unless that verb stem is functioning as part of a nominal stem, is a non-verbal suffix.
Any non-verbal suffix may be found with any nominal stem apart from collocational limitations, and any non-verbal suffix may be found with any word suffix except for similar restrictions. Certain non-verbal suffixes may occur with some other non-verbal suffixes but not with others, and, furthermore, the different non-verbal suffixes when found with a second suffix occur in a certain fixed order relative to each other. These limitations in the distribution of the non-verbal suffixes are the basis for the separate classes which are set up and for the grouping of some classes together.

The different classes of non-verbal suffixes are termed 'orders'. The numbers of the different orders indicate their relative distribution, the numbering being outward from the stem. For the most part this order is fixed, but any exceptions to this general rule will be stated for each order in turn below. Within each order the members are mutually exclusive c.f. § 672.

**TABLE OF ORDERS OF NON-VERBAL SUFFIXES**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 목</td>
<td>-라</td>
<td>-목</td>
<td>-무</td>
<td>-도</td>
<td>-사</td>
<td>-무</td>
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</table>

As certain orders have a similar distribution with other orders, a number of groups of orders are established in order to state this distribution economically.

- **Group A** comprises orders 1, 2, 3, 4, 5, 6, 10, 13, 15, and 17.
- **Group B** comprises orders 7, 8 and 9.
- **Group C** comprises orders 11 and 12.
- **Group D** comprises order 14.
- **Group E** comprises order 16.

Orders of group A may occur with orders of groups B, C, D, and E, but orders of groups B, C, D, and E are mutually exclusive with orders of any other group that is, no member of orders of group B have been found with members of the orders of groups C, D, or E etc. The only exception is that order 9 has been found with order 12. Within each group the orders are not mutually exclusive, only between groups, so that orders 7 and 8 are found together but not 7 and 11.

Since members of any order may occur with a member of another or of several other orders, except as stated above, in principle a nominal may comprise various combinations of these orders up to 12 in number. In fact very many combinations of these orders are found but whereas forms containing one non-verbal suffix are very common indeed, and forms with two non-verbal suffixes are also common, forms with three non-verbal suffixes are less frequent, forms with four non-verbal suffixes are infrequent and forms with a larger number of non-verbal suffixes are very rare.

It may be stated that whereas suffixes of the orders within groups B, C, D, and E and of orders 5 and 6 within group A are inflectional in character, since forms with one or other of these suffixes are dissimilar from each other in syntactic function, suffixes of the orders of group A, except 5 and 6, are more derivational in character. On the one hand they have a similar syntactic valence, but on the other hand they have an equally wide distribution as the suffixes which are clearly
Order 1
Order 1 comprises one member, -\(-a\) 'diminutive'.

Numerous examples of this suffix are found with a very large number of stems.

This order is found both before and after orders
Examples: 7 and 17.

-\(\text{pišek}a\) p\(\text{šek}\) -\(a\) 'small house' NS n\(\text{vš}x\)1
-\(\text{naq}a\) n\(\text{aq}\) -\(a\) 'a little canoe' NS n\(\text{vš}x\)1

Order 2
Order 2 comprises one member, -\(\text{-la}\) 'diminutive with affection or esteem'.

This order frequently occurs with order 1.
Examples:
-\(\text{pišek}a\) la p\(\text{šek}\) -\(a\) -\(\text{-la}\) NS n\(\text{vš}x\)1 n\(\text{vš}x\)2

'adair little house'

Order 3
Order 3 comprises the following members:
-\(\text{-wek}\) 'first person excl. sing., possessive'
-\(\text{-map}\) 'incl.'
-\(\text{-pq}\) 'second sing.'
-\(\text{-naq}\) 'third'
-\(\text{-atcher}\) 'first excl. plural'
-\(\text{-map}\) 'incl.'
-\(\text{-pq}\) 'second plural'
-\(\text{-naq}\) 'third'

Members of this order are found very frequently in Jokero material, suffixed to a wide variety of stems.

Examples:
-\(\text{matu}\)wek matu\(\text{-wek}\) 'my head'
NS n\(\text{vš}x\)3
-\(\text{ilap}\)en il\(\text{ap}\) -\(\text{-nq}\) 'his shotgun'
NS n\(\text{vš}x\)3

It is noticeable that some of these suffixes show very considerable similarities to the exponents of person and number already described for the verb inflectional suffixes and nominal derivational suffixes in sections 7433, 7443 and 827. In particular the exponents of number are identical.
Order 4.

Order 4 comprises one member, -ku? 'now dead'. There are extensive collocational limitations to the distribution of this order with nominal stems.

This suffix may precede or follow orders 3-8 and 13, though it generally precedes them.

Except for orders 3, 6 and 16, order 4 is found with other orders only infrequently.

Examples:

amana?ku? amana? NS nvsx4
iyali?ku? iyali? NS nvsx4

Order 5.

Order 5 comprises one member, -'apar 'plural, (sometimes with an inclusive sense)'.

Order 5 may follow or precede orders 4, and 7-13, though the usual sequence is indicated by the numbering of these orders.

Examples:

ifesta'apar'masa? ifesta? -'apar -lusa? 'all of them' NS nvsx5 nvsx6
kata?-'apar kata? -'apar 'we two' NS nvsx5

Order 6.

Order 6 comprises one member, -'lusa? 'plural'.

This suffix occurs more frequently and with a greater variety of stems than any other suffix of this series.

Order 6 may precede or follow orders 4 and 7-13, though the usual sequence is indicated by the numbering of these orders.

Examples:


Order 7.

Order 7 comprises three members, -lupa? 'by, along, in the direction of'; -tak 'by the side of'; -kek 'at, in, on, to1

-kek occurs following a stem ending with a vowel, or k, -kek occurs elsewhere.

This order occurs frequently and with a wide variety of stems.

Order 7 may precede or follow orders 1, and 4-6, though the usual sequence is indicated by the numbering of these orders.

Examples:

ama'wina lupa? ama'wina -lupa? munkek mun -kek 'along the stream' NS nvsx7 'in the canoe' NS nvsx7

1. A few irregular forms are analysed as comprising a stem and this suffix. For example, pišek 'at the house', may be analysed as comprising -k 'at', and the stem pišek 'house' may be considered one of two alternative forms the second of which, pišek, being found with the suffix -k.
Order 8
Order 8 comprises three members,
-‘la 'from'
-la‘k 'right from'
-laalk 'as far as, up to'

Order 8 may follow or precede orders 4-6, though the usual sequence is indicated by the numbering of these orders. Order 8 is always preceded by order 7 when suffixed to a nominal stem though not when suffixed to an adverb stem, § 635 and 95.

Examples:
pišekwekikle
‘from my house'

marola
'me to the chaara'

Order 9
Order 9 comprises one member,
-‘la 'from, with the implication of possession or of the place of origin, in contrast to -‘la 'from which is always purely locational.'

Order 9 may follow or precede orders 4-6, though the usual sequence is indicated by the numbering of these orders. Order 9 is always preceded by order 7 or 8 when suffixed to a nominal stem though not when suffixed to an adverb stem, § 635 and 93.

Examples:

du‘ka
‘from yesterday'

sima?hi‘na
‘but from where'

Order 10
Order 10 comprises one member,
-tuk 'pure, unalloyed, just so and no more'.

Order 10 may follow or precede orders 4-6, though the usual sequence is indicated by the numbering of these orders.

Examples:

-šek -tuk 'water and no more' NS nvSx10
-nawa‘tuk 'they only' NS nvSx10

Order 11
Order 11 comprises the following two members,
-‘leak 'with'
-‘lealk 'for the sake of, because of'

These suffixes occur frequently with a wide variety of stems.

Order 11 may follow or precede orders 4-6 and 15, though the usual sequence is indicated by the numbering of these orders.

Examples:

-sawešek saweši -leak 'with the machete' NS nvSx11
-wilamešek wilam-leak 'for the child's sake' NS nvSx11

Order 12
Order 12 comprises one member,
-ki 'belonging to, of'

Order 12 may follow or precede orders 4-6 and 15, though the usual sequence is indicated by the numbering of these orders.

Examples:

marina nanaki nem -ki 'his chaara' NS nvSx12
amana ‘ki amana -ki 'of the tiger' NS nvSx12

Order 13
Order 13 comprises one member,
-ma‘tu 'first of all'

Order 13 may follow or precede orders 4-6 and 15, though the usual sequence is indicated by the numbering of these orders.

Examples:

kwamama papecu kwa -ma‘tu 'bury me first of all'
Order 14
Order 14 comprises the following members,
-ku 'predicate, first person excl. sing.'
-kepm 'second sing.'
-kep 'first excl. plural'
-kemsa? 'second plural'
-lusa? 'third'

Stems suffixed by a member of order 14, are found in
predictive sentences, § 452. Syntactically nominal forms
suffixed by one of this order resemble verb forms in func-
tion, however, morphologically these forms are like nom-
inals not verbs. For instance, no verb prefix is ever found
prefixed to one of these nominals, nor are any verb exten-
sors found with these forms.

With order 14, as with order 3, it is noticeable that
these suffixes show considerable similarities to the ex-
ponents of person and number already described for the verb
inflational suffixes and nominal derivational suffixes,
§ 743, 744, and 828. The exponents of number are identi-
cal except for the exponent with the third person which is
a cumulative form from which it is not possible to abstract
different categories of person and number. The exponents
of person show most resemblance to the exponents of person (ob-
ject) in the class 3 paradigm, § 744.34.

It will be observed that this series, order 14, does
not include a member of the category third person singular.

There are considerable collocational limitations to
the distribution of this order with nominal stems.
Examples:

<table>
<thead>
<tr>
<th>Stem</th>
<th>Suffix 1st</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>taserpiku</td>
<td>-ku</td>
<td>'I am an old man'</td>
</tr>
<tr>
<td>jiwilukemuwa?</td>
<td>-ku</td>
<td>'We are Jebero people'</td>
</tr>
</tbody>
</table>

Order 15
Order 15 comprises one member,
-se? 'only'
This suffix occurs frequently and with many stems.

Order 15 may follow or precede orders 11-13, though the numbering
of the orders shows the usual sequence.
Examples:

'my house only' NS nsx13 nsx15 'with a machete NS nsx11 nsx15 only'

Order 16
Order 16 comprises one member,
-leš 'subject indicator'
This suffix marks the nominal which is functioning as subject, and every
form suffixed by this suffix is in concord of number and person with the
verb in the sentence or clause, § 422-4.

There are collocational restrictions on the distribution of this
suffix with some nominal stems.
Examples:

amančleš amane? -leš 'the tiger'
NS nsx16

Order 17
Order 17 comprises one member,
-impu? 'negative, reversive'
This suffix occurs frequently with a wide variety of stems.

Order 17 may follow or precede order 1.
Examples:

poša saškeš? fi žekerčepulempu? žekerčepu? -leš -impu
'he went with a machete only, not with a shotgun' NS nsx11 nsx17

pišekmpu? asu? NS nsx17
# Chart of non-verbal suffixes

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<th></th>
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<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-'a</td>
<td>-la</td>
<td>-sék</td>
<td>-ku</td>
<td>-dapar</td>
<td>-lusa</td>
<td>-luna</td>
<td>-la</td>
<td>-da</td>
<td>-taci</td>
<td>-lok</td>
<td>-ki</td>
<td>-megtu</td>
<td>-ku</td>
<td>-sa</td>
<td>-ler</td>
<td>-impa</td>
</tr>
<tr>
<td>Excludes</td>
<td>9,11,12</td>
<td>9,11,12</td>
<td>7-8</td>
<td>7-9</td>
<td>7,8</td>
<td>7-9</td>
<td>7-9</td>
<td>14,16</td>
<td>14,16</td>
<td>11,14</td>
<td>12,14</td>
<td>11,14</td>
<td>11,12</td>
<td>11,12</td>
<td>16</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Presupposes</td>
<td>7</td>
<td>7-8</td>
<td></td>
<td></td>
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</tbody>
</table>

May precede or follow | 7 | 17 | 3-8 | 4 | 4 | 4-6 | 4-6 | 4-6 | 4-6 | 4-6 | 4-6 | 4-6 | 4-6 | 11-13 | 1 |
|----------------------|---|-----|-----|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
Chapter Nine  The structure of the adverb and the particle

91  Elements within the adverb

92  The adverb stem

921  Definition of the adverb stem

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9231  Definition of class I stems

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943  Suffixation by the word suffix
Elements within the adverb

The adverb in Jebero may comprise the following elements, adverb stem, non-verbal suffix, and word suffix.

The minimum form of the adverb consists of an adverb stem, since all adverb stems may be found alone as words without any affixation.

The maximum form in theory would comprise stem, and up to a large number of non-verbal suffixes and further word suffixes. In fact while adverbs with many different non-verbal suffixes and every word suffix are found long forms with many suffixes do not occur. Forms with one non-verbal suffix and/or one word suffix are very common, forms with two non-verbal suffixes and/or two word suffixes are infrequent and forms with three or more suffixes of either class are very rare.

Subsequent sections of this chapter will deal with each of these elements within the adverb and will state any limitations in the distribution of the elements with each other. Section 92 will treat the adverb stem, and section 93 will deal with suffixation by the non-verbal suffixes. Word suffixes are treated in Section 67.

Symbols: AS - adverb stem

The adverb stem

Definition of the adverb stem

The stem of an adverb is that minimal element which when standing alone without affixation may function as an adverb. For the function of the adverb see § 555 and 554.

Classes of adverb stem

Adverb stems always comprise a nucleus element and may also comprise a satellite element.

There are three types of nucleus and adverb stems are divided into three classes on the basis of the type of nucleus of which they are comprised.

Class I adverb stems are those whose nucleus is an adverb root. This class is described in section 925.

Class II adverb stems are those whose nucleus is a verb stem. This class is treated in section 924.

Class III adverb stems are those whose nucleus is a nominal stem. This class is described in section 925.

The satellite elements of adverb stems will be described in conjunction with the different nuclei with which they are found and in section 928.

Symbols and examples:

\[
\text{Adverb} = \text{adverb stem} \pm \text{non-verbal suffix} \pm \text{word suffix}
\]

A \quad \text{AS} \quad \text{nvSx} \quad \text{wSx}
nucleus - adverb root  nucleus - verb stem  nucleus - nominal stem
ASI - Class I  ASII - Class II  ASIII - Class III

' in the afternoons'
three times'

923  Class I stems - adverb root nucleus adverb stems

9231  Definition of Class I adverb stems

All adverb stems which comprise an adverb root are stems of class I.

Though this class is not as large in number as class II, members of this class are found very much more frequently than the members of either of the other two classes of stems. In fact in a very large majority of occurrences of adverbs the stems are found to be class I stems.

9232  Sub-classes of class I stems

Class I stems are divided into three sub-classes on the basis of their internal structure,

Sub-class a, single root stems, comprise a single adverb root without any other element. Any adverb root, of any class, may be found in a class Ia adverb stem. The great majority of class I stems are of this sub-class.

Sub-class b, double root stems, comprise two adverb roots without any other element. The first and second roots of class Ib stems are both members of class II adverb root. This sub-class is a very small one.

Sub-class c, adverb and nominal root stems, comprise an adverb root followed by a nominal root without any other element. The adverb root is a member of root class II, and the nominal root is a member of root classes II or III. This stem-class is a very small one.

Symbols and Examples:

ASIa - adverb stem of sub-class Ia
ASIb - "  "  "  "  Ib
ASIc - "  "  "  "  Ic

'night'  ASIa
in the early
ASIIb  'hours of the
morning'

924  Class II adverb stems - verb stem nucleus adverb stems

9241  Definition of class II stems

All adverb stems which comprise a verb stem are stems of class II.
Class II stems are divided into two sub-classes on the basis of the derivational suffixes which are found within them.

Sub-class a comprises any verb stem followed by an adverb derivational suffix of class 1a, see section 928.

Sub-class b comprises any verb stem followed by an adverb derivational suffix of class 1b, see section 928.

Since both sub-classes comprise any verb stem, the number of members of this class is limitless in theory, but in fact members of this class though more numerous than those of the other two classes, do not occur as frequently as those of class one.

Examples:

- ciks=no "straightway"
  VS AdSr
- eqns=pi=pi= "the day he gave" VS AdSr

Class III stems - nominal stem nucleus adverb stems

Definition of class III stems

All adverb stems which comprise a nominal stem are stems of Class III, except when that nominal stem is preceded by an adverb root.

Sub-classes of class III stems

Class III stems are divided into two sub-classes on the basis of the derivational suffixes which are found within them.

Sub-class a, comprises a nominal stem followed by an adverb derivational suffix of class 2a, see section 928. The nominal stem is always of class 1a and comprises a nominal root always of class X, see section 926.

Sub-class b, comprises a nominal stem followed by an adverb derivational suffix of class 2b, see § 928. The nominal stem is always of class 1a or IIa, comprising a nominal root of class Y, see § 926, and a verb root of class X, see § 726.

The members of both sub-classes of class III stems are few in number and are not found very frequently in Jebero material.

Examples:

- wapu=lu= "many times" NS AdSr
- u=larweskipi= "winter time" NS AdSr

Adverb roots

Definition of adverb root

Any part of an adverb which cannot be further sub-divided into further morphemes, and which can function alone without affixation as an adverb stem is an adverb root.
Classes of adverb root

Two classes of adverb root are set up on the basis of the distribution of the roots within the adverb stem.

Class I adverb roots are those roots which are only found singly in adverb stems. Roots of this class are found in class I stems only. The great majority of adverb roots are of this class.

Class II adverb roots are those roots which are found either singly, or with another root (whether adverb or nominal) in adverb stems. Roots of this class are found in stems of classes Ia, Ib, or Ic. The number of roots in this class is very small.

Symbols and Examples: 
ARI - adverb root of class I
ARII - adverb root of class II

ina ARI 'far side' · 3alpili ARII 'night'

Chart of stems and roots

This chart summarizes the correlations between the different adverb stem and root classes.

<table>
<thead>
<tr>
<th>A</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>✓</td>
<td>1st</td>
<td>1st</td>
</tr>
<tr>
<td>c</td>
<td>2nd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>2nd</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>N</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>X</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Y</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>V</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Adverb derivational suffixes

Definition of the adverb derivational suffix

Adverb derivational suffixes may be defined as those suffixes which are found following a stem of another class, stem and suffix forming an adverb stem.
Sub-classes of adverb derivational suffix

Two sub-classes are set up on the basis of the distribution of the suffixes with different classes of stems.

Symbolization: AdSx followed by a number symbolizes the sub-class of the adverb derivational suffix

Sub-class 1

Sub-class 1 comprises those adverb derivational suffixes which are suffixed to a verb stem, stem and suffix forming an adverb stem.

Sub-class 1 is divided into two further sub-classes, la and lb, on the basis of the abstraction of exponents of person and number.

Sub-class la comprises suffixes from which no exponent of person may be abstracted and includes one member,

-\(\text{sa}^9\) 'adverbializer'

Symbols and Examples:

\(\text{AdSx}_{\text{la}}\) - adverb derivational suffix of class la
\(\text{AdSx}_{\text{lb}}\) - adverb derivational suffix of class lb

\(\text{wiw\text{sa}^9}\) \(\text{wiw\text{sa}^9} \text{\_} \) quickly

Sub-class lb comprises suffixes from which exponents of person and number may be abstracted. Suffixes of this sub-class are arranged in paradigmatic form, in a similar manner to the verb inflectional suffix paradigms, § 74, and the nominal derivational suffixes class 2, § 828. Like these other series the adverb derivational class lb may comprise exponents of one or two persons. The two sets of unipersonal derivational suffixes are set out first and then the third set, the only bipersonal adverb derivational suffixes are set out.

Paradigm A1

-\(\text{ak}\) 'locational, first person exclusive singular'
-\(\text{ak}\) 'inclusive'
-\(\text{ak}\_\text{ka}\) 'second singular'
-\(\text{ak}\) 'third'
-\(\text{ak}\_\text{kua}\) 'first exclusive plural'
-\(\text{ak}\_\text{ma}\) 'inclusive'
-\(\text{ak}\_\text{mama}\) 'second plural'
-\(\text{ak}\_\text{fik}\) 'third'

The exponents of number are identical with the exponents of number found throughout the verb paradigms, except for the cumulative exponent of person and number for the third person plural.

The exponents of person are identical with the exponents of person found in paradigm 5 of the class A verb inflectional suffixes, § 74.332

Examples: \(\text{saka}\_\text{ta}\) \(\text{saka}\_\text{t}\) 'where he worked'

Paradigm A2

-\(\text{ak}\_\text{kap}\) 'the day when..., first person exclusive singular'
-\(\text{ak}\_\text{kap}\) 'inclusive'
-\(\text{ak}\_\text{map}\) 'second singular'
-\(\text{ak}\_\text{pi}\) 'third'
-\(\text{ak}\_\text{kua}\) 'first exclusive plural'
-\(\text{ak}\_\text{kawa}\) 'inclusive'
-\(\text{ak}\_\text{mama}\) 'second plural'
-\(\text{ak}\_\text{fik}\) 'third'

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The exponents of person which may be abstracted are identical with
the exponents abstracted from paradigms 3 and 4 of the verb inflectional
suffixes class A, § 74332. The exponents of number are identical
with the exponents of number which are found throughout the verb inflectional
suffixes.

This whole paradigm is very similar to the paradigm already set
out for the nominal derivational class 2, § 826. The resemblance is
complete if the final syllable -su9 of the nominal series is replaced
by the syllables -pi9pu9 for the adverb derivational suffixes.

Paradigm B 1 The bipersonal forms corresponding to the unipersonal
forms of paradigm A 2

a b c d e f g

a \-a\?-pi9pu9 
\-a\?-pi9pu9 
\-a\?-pi9pu9 
\-a\?-pi9pu9 
\-a\?-pi9pu9 
\-a\?-pi9pu9 
\-a\?-pi9pu9 
\-a\?-pi9pu9 

Paradigm B 2 The bipersonal forms corresponding to the unipersonal
forms of paradigm A 2

a b c d e f g

The exponents of person and number (subject and object) are iden­
tical with the exponents abstracted from the members of paradigms B 3
and 4, § 74432.

This whole series of suffixes is very similar to the nominal
derivational series sub-class 2, paradigm B, § 826.

Examples:
ogka\-a\?kupi9pu9 'the day he gave me'
VS AdSx2b
iyapa\-a\?kapi9pu9 \-a\?kapi9pu9 'the day I wanted
VePx VS AdSx2b to go'

9284. Sub-class 2

Sub-class 2 comprises those adverb derivational suffixes which
are suffixed to a nominal stem, stem and suffix forming an adverb stem.

Sub-class 2 is divided into two further sub-classes, 2a and 2b,
on the basis of distribution with the nominal stem.

Sub-class 2a comprises those suffixes which are found suffixed to a
nominal stem comprising a nominal root of class X, § 8268,
and includes one member,

-\-lu9 'times'

Sub-class 2b comprises suffixes which are found suffixed to a nominal
stem comprising a nominal root of class Y, § 8268, and
includes one member,

-\-pi9 'the day when, the
time when'

Symbols and Examples:
AdSx2a - Adverb derivational suffix of sub-class 2a
AdSx2b - " " " " " " " " 2b
Suffixation by the non-verbal suffixes

Any adverb may contain, in addition to an adverb stem, one or more suffixes of the non-verbal class of suffixes, of orders 1, 5-9, 11, 12, 15 and 17. Any member of these orders of suffixes may be found suffixed to an adverb stem except for one member of order 7, -kek. All these suffixes are members of groups A, B and C of the non-verbal suffixes. Adverbs are never suffixed by members of groups D and E.

All the details of the distribution of these suffixes with the nominal stem apply in the same way to their distribution with the adverb stem, § 633, except that members of orders 8 and 9 are not found to be preceded by order 7 when suffixed to adverb stems as is the case when they are suffixed to nominal stems.

Examples:

- dekpliki9lusa9 dekpliki9 -lusa9 swasa9 swa -sa9
  'at night' AS nsvx6 'in the afternoon only' AS nsvx15
  inapa9 ina -sa9
  'from over there' AS nsvx9

94. The particle

94.1 General remarks

All particles comprise a stem with or without one or more suffixes of the word suffix series. See sections 633 for the definition of the particle, 663 for sub-classes of the particle, 67 for the word suffix class and 451 and 554 for the syntactic function of the particle.

Section 94.2 will deal with the particle stem and 94.3 with the suffixation of the particle by the word suffix class of suffixes.

94.2 The particle stem

All particle stems comprise one morpheme only. There are no particle stems which are derived from stems or roots of other classes, nor are stems of particles found as part of the stems of the words of other word classes.

94.3 Suffixation by the word suffix

In principle any particle may be suffixed by any member of the word suffix class and several such suffixes may be found with particle stems, though in the material examined usually only one suffix is found in any one word. In the majority of cases in which particles are found in suffixed form the suffix is -ima 'and', § 673.

Symbols and Examples:

P - particle

\[\text{fi kalui}\text{pi}\text{?}\text{nina}\text{?} + P - V\]

\[\text{an}\text{?}\text{la}\text{?}\text{pi}\text{?}\text{ekapata}\text{ma}\text{?} + P - WSx - V\]

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Chapter Ten

Summary

The structure and function of the verbal piece in Jebero have now been described and may be summarized as follows.

The verbal piece functions within the two favourite sentence-types of the language. Indeed, the verbal piece marks the favourite sentence-type as against the non-favourite sentence-type, for all favourite sentence-types include a verbal piece and no verbal piece is found in any of the non-favourite sentence-types. There is, thus, complete congruence between verbal piece and favourite sentence-type.

The structure of the verbal piece has been stated in terms of elements which function within it, namely, the clause, phrase, and word. The structure of these elements has been stated in terms of the elements which function within them. In this way all these elements are successively broken down into single words. The word itself is described not only in terms of its function in these different larger elements, which is, in fact, the basis for the establishment of word classes, but also in terms of its internal structuring of morphemes, which is the basis for stem, root, and affix classes.

The verbal piece has, thus, been viewed as a complex grammatical element whose function and structure can best be described by means of a series of statements at different levels working down from the level of the sentence structure to the level of the single morpheme. These levels may be presented diagrammatically:

Sentence

Piece

Clause

Phrase

Word

Morpheme

A higher element may consist of, or include, any lower element but not vice versa, except that a clause may comprise an included sentence or piece, and a relative phrase may comprise an included clause.
The following texts were collected in the field and are given together with a translation of each. A full grammatical analysis of the first text is provided.

TEXT A  "The boy and the black tiger"  Carlos Talexio

   Long ago men now dead to a hunt they went four of them

2. B pa'agi'ima 6, ka'ani'ima 7 aal'a?e 8 wila 9, pa'kar 10, going they ordered a boy go

   water fetch saying they made go to the shore

4. D pa'apili'ima 16, kananta'ki 17 ka'alu'nifi 18, when he was going he found a black tiger

5. wana'apani'ima 19, B ma'neqa'ta 20 am' 21, supay 22
   when he was standing whatever this demon

6. nuka' 23, taxima 24, adencia'ima 25, papinaq 26 wanta'ki 27. it is saying returning his father he came and told

7. F ma'neqa 28 supaya'29 kananeq 30. G ka'alu'nifi'pa 31, what demon I found a black tiger perhaps

8. pe'eq 32, itukama 33. H ma'neqa'ta 34 kaqpa 35 tekima'yan 36, father he said whatever you fearing

9. tumu'pala 37, tula'pima 38, lateki'mina 39 wila 9, you are deceiving saying they did not believe the boy

10. I ma'sima 40 s'wasakima 41, ipa'42 taqata'mu 43, thus when it is late now smoothing their beds

11. wi'kina 44, dekpi'i 45. J wi'kina'gina 46 dekpi'i 45, they slept in the night when they slept in the night

12. ipa'42 ka'alu'nifi 48 ma' 47 pakahi 48, iyawa'mante'gana 49 now the black tiger .....
    growled wanting to come towards them

13. iyana'gana 50, K ma'sikima 51, pelli'pawende'gana 52 wanting to eat them when it is done calling them in vain

14. nana 52 wilalera 54, tekima'pani'de'gana 55 kadayalinuk 56 the boy running and leaving them to the fork of a wacra-pona tree

15. nampi'gana 57, kupafi'gana 58 de'ka'ifi 59. L ma'qima 60, climbing at the top shoot he went and sat doing this

16. naneq 61'japa'kina 62, wana'gana 63, nana 53 ka'alu'nifi 18 from there he was seeing coming the black tiger

17. pakwana'gana 64, tama'como'gana 65. M nana 53 stretched out at the side of their shelter he

18. ma'qima 66, pakwapi'gana 66 ipa'lini 67 inlu'-inlu'-inlu'-
    doing this stretching out now when he is licking

19. tutu'mapa'gana 68, ipa'lini 67 pilin'ni 69 aala'sa 8, his paws from now he seized one

20. N lavala'papa'gana 70, kau'a'atuma'gana 71, aal'a'?a'?a'papa'gana 72, he was hearing crushing his head he sucked

21. wakla'de'neg 73 uwa'gu 74. O ma'sikima 51, ali'la 75 his blood drinking when it is done another

22. ma'qampa'gana 76, de'kime'gana 77. F ma'qima 60, nana 53 doing he killed them all doing this the

23. ali'gana 78 inseka'ani 79 de'kime 80, other one which had hidden himself he looked for
TRANSLATION

Long ago four men went hunting. When they went they ordered a boy to go and fetch some water. They made him go to the water-shore, when he was going he found a black tiger standing.

'Whatever is this? It's a demon,' he said, and returned and came and told his father.

'Whatever demon did I find? Perhaps it's a black tiger, father!', he said.

'You are deceiving us being afraid of whatever it is,' they said, and did not believe the boy. Then when it is late, after they had made their beds, they slept in the night. When they slept in the night the black tiger growled wanting to come to them, wanting to eat them. Then, having called the men in vain, the boy ran leaving them and climbing up a wacrapona tree he went and sat down at the top shoot. Having done this, from there he saw the black tiger coming and stretching out by their shelter. Then, having stretched himself and licked his paws, he seized one of them. Kau! Si! he heard the tiger crush his head and suck up and drink his blood. When he had done this he did the same to another and so he killed them all. Then he looked for the other one who had hidden himself. Having looked he found him when he sat on high.
Then still looking he came towards him, climbing up the wacrapona tree. When he climbed he met him with a spear at his throat. The spear pierced and entered completely. When he did that now he killed him and the black tiger fell close by the trunk of the wacrapona tree. Thus it was when it dawned. The boy sitting on high when it dawned saw the black tiger sitting dead.

'How shall I get down now? Perhaps he is still alive,' the boy said, and was sitting on high. When it is getting late, wanting to come down and descending slowly, he saw the black tiger is dead. Then coming down and jumping now the boy came back. Now I have finished, Don Juan.

**GRAMMATICAL ANALYSIS:**

This analysis takes each sentence in turn, states the sentence-type and then the structure of the sentence and the lower-level elements down as far as the stem of each word. In the case of stems comprising more than one morpheme the analysis goes down to the root level.

Figures refer to the words in the text except that reference to the relevant section is given when any element is first introduced. The word 'comprising' is symbolised by ·. Series of statements are shortened to avoid unnecessary repetition by the use of commas as follows:

Co - STII, STI - VP, VP - VI, VI - pa'ayni'ima V etc., is abbreviated to read, Co - STII, VP, VI, pa'ayni'ima etc.
The analysis of words which have already been analysed is not repeated,

The semi-colon is used to separate between the breakdown of the two or more heads of a VHc.
'The rubber tapper on the Paulayacu'

Carlos Talexio

1. alasia iyali'ma napi? jirinka pawekladik
   a man long ago a rubber tapper on the Paulayacu

2. napi? saha'sasa? saka'tapalai, itulak Ascensio Maka
   long ago alone he was working I speak of Ascensio Maka

3. nana iyali'ku', mupala, pil'apalu empu'yu
   that men now dead having done this now how many.

4. ekkilalipa? saka'tuši saha'sasa? nanak jirinka, ifieč
   years he worked alone there rubber every

5. a'wala-usi'ma, wanca'g, pil'amcapali, pil'ekantanto
   afternoon having come he struck his drum playing the flute

6. mupala saha'sasa? nanak ipa? empu'yu
   thus he was living alone there now however many

7. ekkilalipa? kushi saka'tapalai jirinka nana
   years he is there working rubber that

8. pawekladikhok iteškek, nana sajini'ma
   on the Paulayacu river where they say that lake

9. wakapi me'la nana pawekladik. pawinerapili
   was coming ... on that on the Paulayacu it was going upstream

10. cilenkupal aYNAM, a 'ku empu'ni yutekipalma nana
    from below the lake huge very fierce that

11. sagnal, nanini'ma ipal'incile ifiš a'wala-usi'ima
    lake but he then every afternoon now

12. pil'ekantanto'sa? lawešanqa, nana ñehmiña'sapar
    that which he piped they hearing the water demons

13. alasia yunomo'sakikina?
    one afternoon they left the lake towards that men now dead

14. mupal'ini'ma, ipal'incile pil'amcapasikimak, having done this then when he was drumming

15. a'wafinici pa'wataši katu'ka' aqutapinešla, in the late afternoon went towards him two men

16. pil'ekantapasikimak, ipa? saka'talai wanca'an, nanapu'si'la.
    when he was piping now from work having come again

17. mupal'apakimak, saha'i, iyali', itukusfinimak.
    when he was doing that are you there fellow they went and said

18. anci, saha'la'na kojikoma? wakalama, itukusfinimak.
    yes I am here from where you have come he said to

19. uđanta? jirinka sùnjkešamšek aseš pa'apakšek, iyali'.
    then we also rubber looking for here we are going fellow
from there to here we came out from the jungle we also he said
well this that which you drummed we having heard here
along there we came wo saying then perhaps a man there is
they said to the man now dead I here I am I alone
let's talk he said to them but you what are your names
he said he was seeing them they entered the jungle very much
over bad ground the two men entering the jungle
there they were lost when it is done then whatever
demon this coming me he came and saw me saying then the
that which he struck having placed now he prepared his bed
having prepared his bed in late afternoon he came and ran
fiwuluk. tuntuexc alur'la'aq a'kunla'kq, pileuang having placed having made hang his pipe
having tucked in his mosquito net he left and came only his shot-gun
seising only his shot seising a torch seising
his matches taking with that he came and ran thus now
in late afternoon by the Paucar region he was coming thus

he came he came running where the path was open

the path thus coming the Supayacu he reached in the after
noon

now when it is dark thus then from there

now his torch having lit now he came at night now

about 9 p.m. he reached Jeberos doing this the man

that man long ago the demon did not carry off having come

what's the matter nephew said his aunt whatever

demon aunt yesterday saw me returning I here

from there at night I came \ldots in the night

I will come to you let's talk because of what they said to me

having seen I came he said when he slept he said Ho\ldots!

why you returned brother if you had not returned

it is thus with us we would be walking because of your disturbing

that which you struck we having this we yesterday

we went to you in vain wanting to go and take you they said

that man long ago that man Ascensio

which they called he escaped the from the lake

TRANSLATION

Long ago a man, a rubber tapper, was working alone on the Paulayacu. I speak of a man now dead, Ascensio Maka. He worked rubber there alone for very many years. Every afternoon when he came back he used to play his flute and drum. Thus he was there alone. He was there very many years, working rubber on the Paulayacu, as they say. A lake was forming on the Paulayacu. The lake was growing from down stream. That lake was large and very fierce.

But when every afternoon the water demons heard his piping, one afternoon they left the lake and came to the man. Then when he was drumming in the late afternoon two men went towards him when he was piping once again, having come back from work. When he was doing that they went and said, "Are you there, brother?" "Yes, I am. From where have you come?" he said to them. "We also are journeying here looking for rubber, brother. From there we also came out of the jungle here," he said. "Well." "Having heard this drumming of yours along there we came here saying, 'Perhaps there is a man over there,'" they said to the man. "I am living here and all alone I also
am working here," he said to them. Then they said to the man, "Then we will come later, brother, let's talk." "O.K. Then come and let's talk," he said to them. "But what are your names?" he said to them. "I am Languna," he said. "And you, what is your name, brother?" he said to the other. "Me, my name is Wawuniri," he said. Then they said, "We will return, brother. Stay here, later we will come." "Do it, brother. Come back," he said to them.

When they returned he saw them go along the path. The two men entered the jungle over very bad ground and so were lost there. Then he returned saying, "Whatever demon is this that has come to see me?" Then he went and looked, saying, "They will have left footprints in the mud."

No, he did not see any footprints. "But this is a demon. Perhaps a water demon came to me here," he said, and having put away his drum he prepared his bed. After preparing his bed he came and ran to Jeberos in the late afternoon.

When he had put his drum away, hanging it up, and when he had tucked his pipe into the roof, he came, leaving his mosquito net behind. Having seized just his shot-gun, his shot, a torch and his matches, he ran with them. Thus in the late afternoon he was coming by the Paucaj region. He went on and on, running where the path was open. Coming in this way he reached the Supayacu in the late afternoon. From there, when it got dark he lit his torch and came on. He reached Jeberos at night about 9 p.m.

His aunt said, "What's the matter that you have come, nephew?"

"Whatever demon saw me yesterday, aunt? So I came here from there during the night. I came, after I had looked, because of what they said, 'I will come to you at night, let's talk!'" he said.

When he slept he said, "Hoi! Why did you return brother? If you had not returned it would be like this. We would be walking together. Because you disturbed us by this drumming of yours which we heard, yesterday, we went to you unsuccessfully wanting to go and take you," they said. It was in this way that long ago that man when they call Ascensio Mako escaped from the lake.

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TEXT C 'Marcel and the Cocama woman'  Ricardo Ortiz

1 napa'ima ala'sa? faya? kukama'luima, tan dik! Long ago a woman a Cocama woman on the Marafion

2 flapasikima, pa'watu ki ala'sa? wapukar. pa'watarima, when she was living went towards a boat going towards

3 pasungutukimi, pasungu'ulima iipa'lini mima'papakima, it went and tied up when it tied up then she was seeing

4 ma'upa'su'on asta? asek pasunpakasu' what sort is here that which has come and tied up

5 wapur. fi empi'j a asek pasuqakari?Hi tukima nana boat not ever here it has not tied up said that

6 faya?, taqima?iipa'lini ma'i da'apasikima woman having spoken then ... or... when she is sitting

7 yu'nesatukima ala'sa? iyapima taserci u'nilatu?ima. came out towards a man an old man with a large forte-

8 nana pa'wataq iipa'lini, sapala'ona, faya?, itukuma, he goingtowards then are you there? lady he went and said

9 da'enco, itukima nana faya?turu?i, tulwatasu' come in said the woman when she was afraid
sit down she said he sat down she saw a man not
not ever that she had not seen having done this
being afraid seeing then masato I will give to drink
saying she wanted to give him to drink masato not
he did not doing that then rising here lady I drink
I came to you no along here I am not living but I
playing alikwa maik lupak nana ake
I am living another in here in a part because of that I
your milk wanting to ask I came lady that
if you would put it into my eye I well I would see
then I will leave by water I want to return
to my town I from Jeberos I am Jebero
I am an old man I there you if you will put
it into my eye the your milk well I would see
in my town those which are the men I want to go
and see them however is my town saying because of that
here you because of your being here lady I left by water for you
but I I am Marcel I am I am a Jobero saying why
you are afraid of me lady he said no I am not afraid of you
brother said she if it is thus you do not want to put it into my eye
you milk I will return that wanting in vain
I tied up and came to you here lady I will return
I will go down stream saying entering the in the boat
having gone and entered he went down stream a little way
having gone down stream it went under the water she was seeing
the boat.
Long ago a boat went towards a woman, a Cocama woman, when she was living on the Marañon. Then it went and tied up. When the boat tied up, then she was looking. "What sort of boat is this that has come and tied up? Never has it tied up here," the woman said. Saying this when she was sitting, a man, an old man with a large forehead, came out towards her. He went towards her and said, "Are you there, lady?" "Come in," said the woman who was afraid. "Sit down," she said. He sat down. She saw a man whom she had never seen before. Then being afraid and saying, "I will give you some masato," she wanted to give him some masato to drink. He did not want to drink.

Then rising he said, "I came here to you, lady. I do not live in these parts but I am from another part. Because of that I came wanting to ask for your milk, lady. If you would put that into my eye then I would see well, I will leave. I want to return to my town. I am from Jeberos. I am an Jebero old man. If you would put your milk into my eye I would see well. I want to go and see the men who are in my town, saying, 'However is my town?' Because of that I left by water, because of your being here, lady. I am Marciel. I am a Jebero. Why are you afraid of me, lady?" he said.

"No, I am not afraid of you, brother," she said. "Then if it is that you do not want to put your milk into my eye, I will return. Wanting that in vain I tied up and came to you here, lady. I will return. I will go down stream," saying, having gone and entered his boat, he went down stream. When he went down stream a little way she saw the boat go down under the water.

TEXT D 'Eusebio buys a shot-gun'

ELEODOR ORTIZ

1. nanapu?si?a nawa?pi?lima papinpka Eusebiokai?ma papinpka again they still the old man Eusebio the old man
3. sakpa?ta?kanim髓ma kala kucer. iyata?ku?keraima they went to work three months four months
7. kaper ite?kasa? u?cpa?akima napi? poison that which they call in a small vessel formerly
9. ali?la?aparina woklapina?ka?za?. ali?la?aparina the others were coming leaving behind the others
10. papinpka Eusebiokai?wa woklapina?ka?za?. the old man Eusebio they were coming leaving behind
11. woklapina?ka?za?, kwina kiyas cock, kutum?quer?ek kutunag when they were coming but I I will remain my wife her blouse
12. mapa?si?nekil?la, tar?ima, kiyak, nanekima kiyam?ima, I have not bought yet saying he remained there remaining
TRANSLATION

Once again the same ones, the old man Eusebio and the old man Saraphin journeyed wanting to work for someone down stream. They went to work for three months. Having worked for four months they bought a shirt and trousers. They bought two shirts and two trousers. Then they bought poison, good poison, that which they call Ticuna poison, that which came formerly in a small vessel. They bought that. When they had bought that the others were coming leaving one behind. The others were coming leaving Eusebio behind. When they were coming he remained, saying, "I will remain. I have not yet bought a blouse for my wife.”

Then when he stayed behind and was working a boat arrived. Having arrived the boat tied up there where he was working. When the boat tied up the master for whom he worked took out a container, a shotgun. Having taken out the shotgun at dawn, he said, "How much does this shotgun cost?" "How much does this shotgun cost, sir?" "It costs seven soles," he said. "Then if you work just one month you will buy this shotgun," he said. He worked again just one month and having worked bought the shotgun. Having bought the shotgun he came back wanting to see his wife in Jeberos.
Appendix I Alternative treatment of Jebero favourite sentences

Jebero favourite sentences may be analysed in a number of other ways besides the analysis presented in chapter four. Some other treatments are outlined below.

1. It would be possible to treat all favourite sentences as referable to one basic syntactic pattern, by combining the two sentence-types set up in chapter four. Thus all favourite sentences would be analysed as comprising a verbal piece and the nominal piece would be regarded as an expansion of this basic structure. This would entail treating the nominal piece as part of the verbal piece, i.e., as one part of the verbal expansion of the verbal piece.

One disadvantage of this treatment would be the added complexity of the verbal piece which would consequently embrace every favourite sentence.

Furthermore it might be argued that the relationship between the nominal of the nominal piece, which functions as subject of the sentence, and the verb of the verbal piece is rather different from the relationship between other nominals in the sentence, and the verb of the verbal piece. The agreement of person and number between the nominal which functions as nucleus of the nominal piece and the verb which functions as nucleus of the verbal piece, and the potentiality of suffixation of the nominal by -ler, are features which give formal expression to this difference of relationship since neither feature is applicable to other nominals in the sentence.

A factor which correlates with the division of Jebero favourite sentences into two types as against an analysis which would set up only one sentence-type is the external distribution of the sentences. There is a marked tendency for favourite sentences of the syntactic pattern verbal piece and nominal piece to occur at the beginning of a conversation or other piece of connected discourse, whereas sentences exhibiting the structure of a single verbal piece seldom occur at such points.

These various features seem to uphold the analysis given in chapter four rather than any treatment of all Jebero favourite sentences in terms of one sentence-type.

2. Another treatment would be to divide Jebero favourite sentences not into two pieces, the verbal piece and nominal piece, but into three pieces, the verbal piece, the nominal piece functioning as subject and the nominal piece functioning as object. Thus four sentence-types would be set up, namely, verbal piece sentence, verbal piece and nominal piece (subject) sentence, verbal piece and nominal piece (object) sentence, and verbal piece, nominal piece (subject) and nominal piece (object) sentence. For categories of subject and object see sections 4424 and 555.

This type of approach to Jebero sentence-types could be extended further so that additional sentence-types would be set up on the basis of a division of the sentence-type into other pieces in addition to the verbal piece and two types of nominal piece, e.g., adverbial piece, c.f. § 5533. These additional primary divisions would serve as the basis for a correspondingly increased number of sentence-types.

This treatment was not adopted since in cases such as this where a number of divisions in a syntactic structure are possible and when a correspondingly large number of sentence-types may be set up, it seems useful to treat certain divisions as primary and others as secondary, thus grouping together many of the possible sentence-types. This has been done in the analysis in chapters 4 and 5. Thus, it is not denied that the favourite sentence could be further divided into a number of pieces each with its own function and structure, in addition
to the verbal piece and nominal piece. These further divisions, however, are not treated as primary breaks in the structure serving as the basis for setting up a large number of sentence-types, but are treated at a different level of analysis, not at the sentence and piece level, but at the clause and phrase level, i.e. the next level below the piece level.

3. Yet another alternative may be mentioned. It would also be possible to divide the Jebero favourite sentence into two pieces, the verbal piece and the nominal piece, retaining the terms used in the present analysis, but re-defining the nominal piece to refer not to the piece functioning as subject but to the piece functioning as object.

This would seem to raise a question of immediate constituents. In a structure, verb, noun, and noun, when both verb with noun and verb with noun are substitutable by the verb alone, where should the division into immediate constituents be made?

In Jebero the internal structure provides little basis for the decision but the fact that though the structures V N1 and V N2 are both common yet the second V N2, is found more widely than the other, seems to favour the analysis given in the main body of the thesis. Furthermore, there is a certain congruence of pressure towards such a conclusion since external distribution as stated in section 1 of this appendix suggests the grouping of the object nominal rather than the subject nominal with the verb.

Appendix II The term 'collocational'

At a number of points in this thesis the term 'collocational' is used. Collocation was first suggested and used as a technical term by J.R. Firth in his article 'Modes of meaning'. In that article the collocational level is one of a number of levels of analysis which are set up. The collocational level is established for the description of the way in which words, as individual lexical items as distinct from words as exponents of grammatical categories and classes, keep company with each other. The term is expressly used for the company which words keep with each other. Thus the word 'ass' is said to collocate with 'you silly ...' or with 'don't be an ...' etc.

This level of analysis is kept distinct from both the grammatical and the situational levels. For example, the fact that 'ass' as a noun occurs after adjectives, 'silly' etc., is irrelevant at the collocational level and is treated at the grammatical level.

There would seem to be many advantages in this procedure. Certain words are often found together while other combinations are never found though at the grammatical level there are no differences of grammatical categories to account for this difference found in the sentences. Clearly such differences are not to be treated at the grammatical level. It is, of course, possible to sub-divide grammatical categories setting up sub-classes so as to cover some of these differences by means of

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1 See 'Essays and studies' 1951, p. 120. For further details see also J.R. Firth, 'A Synopsis of linguistic theory,' 1930-1955 in 'Studies in linguistic analysis', 1957, pp. 7-13.
statements of the type that sub-class A of category X does not occur with sub-class B of category Y. But there are limits to the applicability of this approach and it seems clear that many of these mutual limitations cannot be brought within the compass of general rules but must be stated in connection with stylistic and situational factors and are, therefore, best treated not at the grammatical level but at the higher level of collocation.

This is found to be the case at a number of points in this thesis. For example, in describing the two criteria which are used to establish the word classes, nominal and adverb, it is found that in some instances only one or the other criterion can be applied. It would be possible to set up three sub-classes of the nominal and three of the adverb on this basis. But this would be pointless since these differences are not based on the grammatical structure of the language, since at the grammatical level it is completely insignificant that certain nominals are not found with suffixes of order eight. This fact is treated at the collocational not the grammatical level.

In this way the term collocation is extended to cover the occurrence of affixes with stems and not just words with other words. For example, at the grammatical level it is found that verb stems may be followed by one or more suffixes which are termed extensors, § 73. In describing the extensors it is found that certain extensors never occur with certain other extensors and this is treated at the grammatical level and a system of a number of mutually exclusive classes is set up. It is also found in the case of any one extensor that some verb stems are found suffixed by the particular extensor while others are never suffixed by it. It would be possible to divide verb stems into sub-classes on this basis but this would achieve little and lead to a very confused description with a very large number of overlapping sub-classes. Furthermore these sub-classes would not tie in with other parts of the grammatical analysis. Instead of this these differences are assigned to the collocational level of analysis, e.g., a form like pišıkwiditi 'he builds a house by night', is grammatically acceptable but unacceptable on collocational grounds because the extensor -wili- 'by night' does not collocate with the stem piSö-I- 'to build a house'. This is dictated by the context of the culture concerned in which there is no possibility of building a house by night. To insist on setting up sub-classes of verb stems on the basis of distribution with -wili- and further sub-classes on the basis of distribution with the other 28 extensors would only serve to confuse the grammatical analysis and submerge under a mass of irrelevant categories those distinctions and categories which do have grammatical significance. This is, therefore, assigned to the collocational level. At this level adequate categories and classes need to be set up. These categories will probably be found to criss-cross the categories of this present grammatical study though any attempt to handle the collocational level lies outside the limits of this thesis. Any such collocational categories would be much more fluid than grammatical categories because of their relationship to different contexts of situation and different stylistic factors, varying, for example, from speaker to speaker to a very much greater extent than would grammatical categories.
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