

THE LUTUAMI LANGUAGE (KLAMATH-MODOC),

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INTRODUCTION.

The following presentation lays no claim to exhaustiveness. It is rather a survey of the language, with the aim of enabling prospective students of Lutuami to know which aspects of the language need further investigation and are more likely to repay their efforts.

The reader is invited to make use of A. S. Gatschet's work as a check on the present study¹. This work, in two ponderous volumes, proved of very little value to the present authors. Gatschet evidently knew the language very well, and he was a faithful recorder. But he seems to have been unable to resist a desire to endow this language which he knew so well, and loved, with a high degree of complexity. As a matter of fact, Lutuami is a very simple language. After laboring in vain through the labyrinth of Gatschet's grammatical exposition, it was deemed more expedient to obtain the language at first hand. A good opportunity offered itself during a field trip among the Indians of northeastern California in the summer of 1926, and with this purpose in view a special trip was made to Beatty, in the Klamath Indian Reservation, in southeastern Oregon, where one of us had an old friend in the person of Mac Williams. Thanks to the latter's willingness to work without rest, enough material was collected in two weeks to get a good bird's eye view of the language, and a fair amount of vocabulary.

The term Lutuami, now sanctioned by ethnological practice, is the word used by the Achumawi Indians to designate the Modoc Indians living around what became known as Tule Lake (or Rhett Lake), but which the Achumawi called *lútlám*. For the other ethnic division of the Modoc-Klamath tribe, namely the Klamath, the Achumawi used the term *álámi*. Although this division of the Klamath-Modoc tribe into two

1. "The Klamath Indians". Cont. N. Amer. Ethnol., Vol. II, parts 1 and 2, Washington 1890.

groups was a real enough one, geographically and politically, being in fact one of the main causes of the famous Modoc War, linguistically it seems to amount to very little. The term "Modoc" is derived from Lutuami *muatwak*, meaning "southerner", from *muat* "south" + *wak* "to live", and was applied by both Modoc and Klamath to designate the Achumawi (or Pit River Indians). The term "Klamath" is probably derived from the Lutuami *maqlaks*, meaning "campers", from *maqlak* "to camp, to live", and by which they refer to themselves as a people (including both ethnic divisions).

As for the linguistic dialectal division, only contradictory and confusing evidence was obtained from Mac Williams. His father and his mother were Klamath. His wife is Modoc. Sometimes he said that what he was speaking was Klamath, other times that it was Modoc, other times he averred that there was no difference between the two, and again he would say that there was, but that he had spoken both of them so long that he now had them all mixed-up. His mother and his mother-in-law (the famous Old Dixie, a renowned shaman), were living with him, as well as his wife, and likewise a nephew who was unable to decide whether he was Modoc or Klamath. All these people seemed to converse together without any difficulty at all in what appeared to be a single tongue. The truth of the matter is probably that there is not much more difference between the two "dialects" than there is between the English of New-England and that of Virginia. Furthermore, the bringing together of the two groups to live in the same Reservation, for the last fifty years, must have contributed to the levelling.

The fact that Mac Williams knows a good deal of Achumawi, a language also known to a certain extent to the present authors, was of great help in the positive elimination of many grammatical complexities present in Achumawi, but lacking in Lutuami.

GENERAL IMPRESSION.

This language is rather simple and free from grammatical complexities. It certainly is not of the polysynthetic type that builds up intricate long words difficult to analyze. The syntax is clear and not involved. The affixes are not very numerous. Yet, the very first impression is perhaps one of unclearness and jumble. But this is soon seen to be due to two causes: one is the high degree of phonetic looseness which results from overplaying with internal consonantal modification; the other the tendency to overload the sentence with repetitions of meaningless words.

As an illustration of the latter we may give the following example :
 " I hit him " *at nu a hunks a ktoka* (lit. yet I do him do hit).

As an illustration of the former, the word " come " *kepka* may appear as *kepka, kepkat, ketpa, ketka*. The word " bite " *qoqa* as *qoqtka, qopka qoywa*. The word " hit " *ktoka* as *ktoika, ktopka, ktoywa, ktoktka, ktoywatka*. All these forms have of course slightly different meanings, but in practice they are about equivalent. Or rather it would be more correct to say that for each word in the language there are two forms which differ from one another in that one is obtained from the other by some sort of autonomic process, especially by syllabic manipulation¹. But there are of course many possible ways of performing syllabic manipulation. It is an almost endless game of ringing the changes on the phonetic constituents of a syllable. Every Klamath-Modoc Indian carries all these possible tunes in his consciousness and makes free use of them. For him there is no difficulty in keeping those autonomically changed variants like the ones given above (*ktok-*, *ktokt-*, *ktoktk-*, *ktopk-*, etc.), from several suffixes similar in sound which may be attached to any one of them (suffixes like *-ok* future, *-ak* only, *-tka* instrumental, *-kis* locative and *-is* agentive, etc.). He thus understands immediately the difference between *ktoktk-a* " he causes to hit " and *ktok-tka* " by the act of hitting ". The newcomer, not so well acquainted with the form patterns of the language, finds it more difficult.

Therein then lies the only real difficulty of the language, and also its only real interesting feature from the point of view of the morphologist. It may be said that Lutuami has gone mad on the one grammatical process of syllabic manipulation. It uses it for almost every conceivable purpose. Through it, or rather through its many variations, it expresses plurality, severalty, distributiveness, diminutiveness, the causative, the reflexive, the reciprocal, the frequentative, the iterative, and probably a few others. Had we been able to glean this from Gatschet's work before we made our visit to the Klamath Reservation, we would have taken good care to direct the main stream of our inquiry in this direction. There are undoubtedly many subtle phonetic laws to be worked out there. We hope this will stimulate other field-work linguists to take it up.

From the point of view of conceptual linguistics Lutuami is interesting as another example of the languages that keep separate the concrete and

1. By *autonomic* we mean those grammatical processes like inner modification, reduplication, metathesis, accent, etc., which one may oppose to the *incremental* processes such as affixation, compounding ; etc. *Syllabic manipulation* is the word we use to include the two related grammatical processes of metathesis and reduplication. See our article in " Language ", V, 2, 1929.

the relational (in opposition to the languages that make use of concrete-relational concepts) ¹.

PHONOLOGY.

The conditions under which the present study was made precluded a careful consideration of the fine points of phonetics, all the more so that the language is so easy to record phonetically. The extraordinary development of the autonomic processes is however an indicator that there is probably a good deal of phonetic subtlety. This subtlety is one of the points to which we would like to call the attention of further students of Lutuami. For the present we have preferred, for the sake of clear exposition, to swing the other way, and reduce as much as possible all the phonetic variations recorded in our material to a common simplified pattern. In the semantic list however, we have left the orthography exactly as recorded, without attempting any uniformizing.

The following is therefore only the "ideal" sound-system of Lutuami, with all variations ironed out.

[N. B. The system used here is that of the American Anthropological Association, as set forth in "Phonetic Transcription of Indian Languages", Smithsonian Miscellaneous Collections, Vol. 66, No 6, (Publication 2445, obtainable from the Smithsonian Institution, Washington, D. C.)]

I. CONSONANTS.

	LARYNGEAL	GUTTURAL	PALATAL	FRONTAL	LABIAL
Plosive <i>Intermediates</i>		q ^ʰ K G		T D	P B
Fricatives	b	ɣ x		s or c	
Nasals				n	m
Liquids				l	

[N. B. This table represents not all the consonants heard and recorded, but merely what seems to constitute the ideal pattern or skeleton.]

1. See Sapir's *Language*, especially Chapter V.

Laryngeal. — The series of laryngeal sounds so well developed in Achumawi (*h*, “*aïn*”, very strong glottal catch, etc.) is noticeably lacking in Lutuami. The glottal catch is encountered, but not frequently enough to make it a part of the ideal phonetic pattern of the language. The ordinary *h* sound is very feeble, and it is “dropped” half the time. Glottalized consonants are exceptional and probably the result of overcareful enunciation for the purpose of dictation.

Guttural. — In the guttural articulation, the velar *q* occurs. It is however strongly aspirated: *q^h*. The result of this is that it tends to degenerate into the fricatives of the same articulation, either the surd *x* or the sonant *ɣ*. This would indicate that the velar *q* is probably an intermediate: *Q̇*. There does not seem to be a functional opposition between *q* and *k*. There does seem on the other hand to be a tendency for the *k* to be pronounced as *q* (which then becomes, as is natural in that position, aspirated).

The *k* and the *g* are so interchangeable, (as are also *t* and *d*, *p* and *b*,) that we are forced to the conclusion that differences between surd and sonant are not important functionally in Lutuami. In other terms the ideal plosives are intermediates. They may sound (to an ear trained in a language like English, Spanish, French, which carefully distinguishes between surd and sonant) either on the side of surdness as *K*, or of sonancy as *G*. [In the discussions of examples in the morphological part we have reduced all such capitals to the ordinary lower case letters, in order not to introduce an extraneous element of distraction for the attention of the reader].

The fricatives *x* and *ɣ* appear to be only degenerations of *Qh*.

The velar *ɣ* is evidently not more than the natural consequence of juxtaposition of *n* and a guttural (similarly *n* becomes *m* before a labial).

Frontal. — The plosive is almost always frankly surd *t*, rarely the sonant *d*. This *t* is “blade-alveolar”. It is weakly aspirated.

The fricative is either the sibilant *s* or the “chuintant” *c*. This seems to be a matter of personal idiosyncrasis (perhaps of tribal idiosyncrasis, as between Modoc and Klamath). The corresponding sonants are very seldom heard. The interdentalals do not occur.

Surd *l* is encountered occasionally.

Labial. — The plosive is more frequently a surd *p* (with a slight aspiration), than a sonant *b*.

II. SEMI-CONSONANTS.

w and *y* are, unlike the neighbouring languages Achumawi and Paiute, more consonantal than vocalic.

III. VOWELS.

The true vocalic system seems to be that of the "open" vowels, *ɔ*, *o*, *α*, *ε*, *ι*, rather than the "close" ones (*u*, *o*, *a*, *e*, *i*). There is probably here a good deal to be worked out by further students. In the present study, in the morphological part, the vocalic system has been reduced to *u*, *o*, *a*, *e*, *i*.

Abnormal vowels (*ü*, *ĩ*, etc.) are entirely absent.

Accent. — There is no "pitch accent" in Lutuami, apart from the high pitch associated with dynamic stress. (See the remarks on accent under Grammatical Processes, Prosody, p. 14.)

It is noticeable that when the dynamic stress is well marked for one reason or another, the consonant following it is apt to be doubled, thus bearing part of the lengthening that otherwise would go to the accented vowel. Thus, the word for "all" is pronounced indifferently either as *na'nuk* or *nan'nuk*. There is here a field opened to further investigation.

Contraction. — Contraction is very frequent, especially with the pronouns. Thus *hacpa nuṛks* "I fed him", for *hacpa nu huṛks* (lit. feed I him); *at huṛks an hacpa* for *at huṛks a nu hacpa* (yet him do I feed).

Phonetic euphony. — Consonantal clustering, far from being avoided in Lutuami, seems on the contrary to be relished, especially the clustering of *k*, *t*, and *p*. Such words as *klopka* (see p. 3) seem especially delightful to the Lutuamian ear. Furthermore, the Lutuamian tongue seems to love to play with all sorts of syllabic manipulation (metathesis and reduplication) for the mere fun of it, entirely apart from the real morphological value it has in this language. Thus *kantak* and *tanktak* mean absolutely the same thing: "then only" [from *tank* then + *ak* only]. Vocalic clustering is also indulged in, though not so frequently. Thus: *wiwasoak* for *wiwasoka* "breasts". These euphonic artifices are of course invoked whenever there is real difficulty of pronunciation, such as *susmak* "mouths", for *susmka*.

MORPHOLOGY.

NOTE ABOUT THE TERMINOLOGY.

Throughout the course of this study we employ the terminology used by Prof. E. Sapir in his book "Language". The reader is especially

referred to p. 106 for the Grammatical Concepts, p. 147 for the Types of Linguistic Structure, p. 64 for the Grammatical Processes, p. 29 for the Formal Types of Word.

We have introduced some additions (after consultation by correspondence with Dr. Sapir) in the terminology of the Grammatical Processes. The new terms can be seen at a glance in the following table, where they are indicated by *italics* :

Grammatical Processes :

“ <i>Incremental</i> ”	vs.	“ <i>Autonomic</i> ”
1. Word-order.		1. <i>Prosody</i> (a. stress, b. pitch, c. quantity)
2. Compounding.		2. <i>Sound-variation</i> (inner modification of radical, or of grammatical element, either consonantal or vocalic)
3. Affixation (a. prefixation b. infixation c. suffixation)		3. <i>Syllabic manipulation</i> (a. reduplication b. metathesis)

I. GRAMMATICAL CONCEPTS 1.

[The following table, quoted from Prof. Sapir's book, is inserted here for the convenience of readers who may not have the book at hand.]

I. BASIC CONCRETE CONCEPTS (such as objects, actions, qualities) : normally expressed by independent words or radical elements; involve no relation as such.

II. DERIVATIONAL CONCEPTS (less concrete, as a rule, than I, more so than III) : normally expressed by affixing non-radical elements to radical elements or by inner modification of these; differ from type I in defining ideas that are irrelevant to the proposition as a whole but that give a radical element a particular increment of significance and that are thus inherently related in a specific way to concepts of type I.

1. The reader may as well skip the whole of this section and return to it later.

III. CONCRETE RELATIONAL CONCEPTS (still more abstract, yet not entirely devoid of a measure of concreteness) : normally expressed by affixing non-radical elements to radical elements, but generally at a greater remove from these than is the case with elements of type II, or by inner modification of radical elements ; differ fundamentally from type II in indicating or implying relations that transcend the particular word to which they are immediately attached thus leading over to :

IV. PURE RELATIONAL CONCEPTS (purely abstract) : normally expressed by affixing non-radical elements to radical elements (in which case these concepts are frequently intertwined with those of type III) or by their inner modification, by independent words, or by position ; serve to relate the concrete elements of the proposition to each other, thus giving it definite syntactic form.

Basic Concrete Concepts I and *Pure Relational Concepts IV* are essential to all speech. They are of course found in Lutuami, but do not require any special treatment.

Derivational Concepts II. — These are found in Lutuami, where they are expressed by :

a) All the different types of sound-manipulation combined with sound-variation. These two grammatical processes serve to represent in this language such grammatical categories as : plurality, the causative, reflexivity, reciprocity, diminutiveness, frequency, the iterative, etc. In Lutuami these are indicated by a modification of the semantema which is not involved in any syntactical relations. They must be analyzed therefore as pure derivational, not as concrete relational, concepts.

Example. In the sentence *hut a watsags qoqtka* " the dog bit them " | lit. : he did dog bite|, the last word *qoqtka* is derived (by " sound-variation " combined with " syllabic manipulation ") from the primary form *qoka*. Because you hear *qoqtka*, instead of *qoka*, you know that the action of biting was done plurally. But nothing in the word *qoqtka* indicates who performed this plural biting on whom. Therefore, the grammatical category of plurality here used is a pure derivational concept, not a concrete relational concept (as it is in our languages).

b) Affixation. This grammatical process serves to represent in Lutuami several grammatical categories such as Tense, the Agentive, the Qualitative, etc. These affixes are listed under Grammatical Processes, p. 10. There are about a score of them. Of these about half are used to express pure derivational concepts, while the other half express pure relational concepts.

Example. *nu hunk muatwas-am laqi tamnu-tkan sle-o'la sinka-ks* " I saw the chief of the Muatwas killed, when I was on a trip there " (lit. : I him Muatwas-of chief (I having...) travell-ed see-did kill-the-one). In this sentence there are four suffixes. The first one expresses a pure relational concept. The second, third and fourth express pure derivational concepts, since they are modifications of the primary ideas " travel ", " see ", and " kill "; but there is nothing in these suffixes to indicate who was travelling, who saw whom, and who was killed ; in other words, there is nothing to indicate the *relations* between the parts of the sentence ; there is nothing of the relational in these suffixes.

Concrete-Relational Concepts III. — This is a class made up of concepts which ought to be, if language were a thing of logic, either purely derivational or purely relational, but are instead a mixing up of the two. This is however the kind of grammatical concept which to most of us, reared as we have been in Latin grammar, is evident, nay, essential. As a matter of fact there are many languages to whom such a mixture is repugnant. Lutuami is one of them. Concrete-relational concepts are not found expressed in this language.

In the sentence given above, the relations between the parts of the sentence, " I ", " chief ", " Muatwas ", " travel ", etc., are expressed either by word-order, or (in one case, that of the genitive *-am*) by affixation. The relations are therefore expressed as pure relations. In Latin this sentence would be expressed somewhat thus : *Muatwas-orum duc-em nec-atum ibi visit-ans vid-i*¹. The relations are there expressed by means of the concordance of the affixes, which, by an intricate system of conjugations and declensions, also express derivational ideas like plurality, mode, and tense. The Latin affixes therefore express concepts which are at once derivational and relational : i. e. concrete-relational concepts. The Lutuami affixes express either purely relational, or purely derivational concepts.

CLASSIFICATION. — Since we find in Lutuami Concepts I, II, and IV, but not III, this language must be classed with the *Pure-relational* (in opposition to the *Mixed-relational*), and more particularly with the *Complex* type of *Pure-relational* languages, i. e. the *Pure-relational deriving* languages.

1. In the Latin of, perhaps, the second century, that is. Classical Latin would require a " dum " clause, somewhat as follows : *Dum Muatwasos visitabam ducem eorum vidi morte adfici.*

II. GRAMMATICAL PROCESSES.

“ <i>Incremental</i> ”	vs.	“ <i>Autonomic</i> ”
1. Word-order.		1. Prosody : a. { stress b. { pitch c. { quantity.
2. Compounding.		2. Sound-variation (i. e. inner modification either of the radical or of the grammatical element, whether consonantal or vocalic.
3. Affixation :		3. Syllabic manipulation :
a. { pre-fixation		a. { metathesis
b. { in-fixation		b. { reduplication.
c. { suf-fixation		

INCREMENTAL PROCESSES.

WORD ORDER. — It is enough to give one look at the sentence adduced as an example on p. 9 to realize that this process must necessarily be very important in this language. The rules that govern word order are how-ever of a kind that demand a great deal of study of many texts before they can be presented in a satisfactory manner. We are not prepared to do it in this study.

COMPOUNDING. — Not a single instance recorded.

AFFIXATION. — Present in Lutuami, but not very conspicuous. A hasty examination of our material reveals about a score of definite affixes, to which number must be added some ten more which are rather compounds of two affixes. In all, say thirty. This could easily be matched by any of our Indo-European languages.

Of these affixes, one and only one and a dubious one at that, is a prefix. This is an *s-* often prefixed to verbs, and the meaning of which is very hazy. It suggests transitivity. It is often confused with the suffix *-s* of nouns (n° 8), (n° 25).

Of infixation there is not a trace.

The suffixes are of two kinds : those which express derivational concepts, and those which express relational concepts.

Examples of these suffixes are given immediately after the table.]

A) Suffixes expressing derivational concepts :

a) *Verbal* :

I) denoting Tense :

1. *-a*. Indefinite time.
2. *-k* Future.
3. *-o'la* Past.

II) denoting something akin to Aspect :

4. *-n*. This may be described as combining the functions of Participle Present, Ablative Absolute, and Continuative (by agglutination with *-a* (n° 1) it becomes *-an* ; hence by agglutination with *-k* (n° 7) it becomes *-ank* ; hence by agglutination with *-t* (n° 7) it becomes *-tank* ; hence by metathesis *-ktan*, *-kan*.

5. *-akška* "nearly, almost" probably compounded of *-ak* (n° 10) + *-s* (n° 8) + *-k* (n° 7).

III) denoting Manner :

6. *-pli* "over, again", and corresponding very nearly to our re-...

b) *Verbo-nominal* :

7. *-utki* best translated by "he that is.... being a..." evidently compounded of the demonstrative *but* + the verb *gi* = "to be" ; hence by a series of phonetic attritions the following forms are produced : *-tki*, *-tk*, *-i*, *-k* : the last two are postelitics rather than true affixes, and do not do much more than emphasize the continuative aspect of a verbal root.

8. *-s* (or *-c*, according to individual idiosyncrasies of pronunciation). This is usually added to verbal roots, and fulfills the function of a true nominalizing affix, especially in the form of *-is* (or *-ic*). In the latter case it may even be looked upon as an Agentive¹.

9. *-st* expressing a sort of Participle Present or Continuative in syntactically subordinated positions probably a compound of one of the ultimate forms of n° 7 and of n° 8.

10. *-ak* "only" perhaps derived from n° 4 + n° 7.

11. *-kis* "place of, place where it happens" very probably derived from compounding of n° 7 and n° 8.

1. Many nouns are found to end in *s*. This *s* disappears in the plural (not always). It would be very difficult to decide whether it should be regarded as an essential part of the radical, or as a crystallized suffix, or as a special mark of the singular. Probably the second hypothesis represents the original status, with the second and first as tendencies arising from confusion.

c) *Nominal* :

12. *-ka* (also *-ga*, *-ak*, *-ag*, *-g*) to express plurality.

12 a. The relationship terms end in the singular in *-ip*, *-ap*, *-p*, in the plural in *-as*, *-s*, *-isap*, *-asip*. (See Semasiology n° 4200.)

13. *-le'mi* "time of, season of".

d) *Adjectival* :

14. *-li* terminates many radicals which are truly adjectival in that they express quality, attribute, etc.

B) Suffixes expressing relational concepts :

15. *-am* Genitive Case, (or *-lam*).

16. *-amutki* "for, proper of, typical of, belonging to" [evidently compounded of n° 14 and n° 7].

17. *-amski* "at the house of" [evidently compounded of n° 15 and n° 11].

18. *-at*, *-tat* Locative Case.

19. *-eni* Inessive Case.

20. *-dal* Directional Case.

21. *-ksaksina* Circular Locative Case.

22. *-tan* Cis- or Trans-jacent Locative Case.

23. *-tka* Instrumental Case.

24. *-tiutki* "in exchange for" [evidently derived from n° 7].

25. *-s* (doubtful). Accusative Case in the pronouns and demonstratives. Nominative Case in nouns (still more doubtful).

EXAMPLES OF AFFIXES (listed by numbers as above).

n° 1, 2, 3. — *nu sle-a* I see, *nu sle-ək* I shall see, *nu sle-o'la* I saw long ago.

n° 4. — See Text III, 12 ; Sent. 70 ; Text I, 4, 6 ; Text III, 2, 15. Sent. 77-81

n° 5. — Sent. 82, 83.

n° 6. — Sent. 84, 85. Text II, 4, 6, 7.

n° 7. — The complete form *-utki* appears rarely in connected texts and sentences. It occurs very frequently in speech however, especially when a noun alone is given in answer to a question. For instance to the question: "What is that animal?", the answer instead of being merely *watsag* "dog" is much more likely to be *watsag-utki*. Or again: "How do you say *basket*?" Answer: *maksa-utki*. See also Sent. 81. In Sent. 78, 79, 80, the form *-tki* takes the value of a Participle Past because of the construction of the sentence beginning by *at* = already. See also Text I, 6 ; III, 2, 7. It is easy to see that the line of demarcation between the ideas of

Participle Present and Participle Past is not clearly defined in Lutuami. Sent. 77 shows a form (*-tko*) which appears to give the radical it modifies an adjectival value. The ultimate reductions in *-k* and *-t* are difficult to demonstrate except in the analysis of many adverbs or adverbial forms, such as : *tank* then, *at* yet, *bunkt* thus, *patsit* to-day, *mbusant* morning, *tatamanksat* as long as, etc.

n° 8. — Sent. 76, 86, 87, 99 (last) ; Text III, 3. Sent. 88, 89. Text III, 7 ; Sent. 6, 7, 9, 11

n° 9. — Sent. 90, 91, 92, 93 ; Text I, 5.

n° 10. — Text II, 2, 3.

n° 11. — Sent. 94, 95, 96, 97, 98.

n° 12. — For examples of this suffix see all the words in the Semantic List, but especially the following, in which the affix *-ka* is not obscured by phonetic causes, or mixed up (as a sign of plurality) with reduplication and metathesis : 1230 lake, 2000, 2500 wood-rat, 5120 tooth, 5430 gut, 5450 penis.

n° 12 a. — For examples of the plural of relationship terms, see 4200.

n° 13. — Sent. 99,

n° 14. — V. Semasiological List 1220, colours ;

n° 15. — Text I, 2, 8, 13 ; III, 1,

n° 16. — Sent. 100.

n° 17. — Sent. 101.

n° 18. — Numerous examples throughout the Texts.

n° 19. — Sent. 102.

n° 20. — Sent. 103.

n° 21. — Sent. 104.

n° 22. — Sent. 105.

n° 23. — Sent. 106.

n° 24. — Sent. 107.

AUTONOMIC PROCESSES.

The words of Lutuami are shot through with internal changes. To glance over the forms that a single stem can assume gives an effect that is truly kaleidoscopic. The processes of reduplication, metathesis, variations of vowels, consonants, even clusters of sounds, and changes of stress, play over one another in such a complicated way — even involving affixes — that analysis is extremely difficult. On the verb stems, changes can be rung almost indefinitely, it seems. For the nouns, usually only two forms were obtained, a simple and an elaborated form.

Moreover, these processes are more transparent in the nouns than in the verbs, so that among the following examples the majority have been taken from the former.

All these changes are so important a feature of Lutuami that they deserve special tables. This has been done to a certain extent for the verbs. For the nouns however it would have required so much space that it seemed better to include in the semantic list the second form for each noun (as the plural of it, usually with the suffix *-ka*), although this has properly nothing to do with semantics.

In the following table we give a few examples to indicate the general scheme of "autonomic" changes in the Lutuami verb. In reality the majority of them are much more complex and phonetically irregular than these. Here lies a field full of promise for further investigation. There are indications that other grammatical categories are expressed by similar autonomic changes.

	PRIMARY	DISTRIBUTIVE	CAUSATIV	REFLEXIVE	RECIPROCAL
to see	<i>sle-</i>	<i>slep̄k-</i>	<i>sesl-</i>	<i>besl-</i>	<i>beslebap̄k-</i>
to suck	<i>ets-</i>	<i>eets-</i>	<i>sests-</i>	<i>bests-</i>	<i>seedz-</i>
to hit	<i>ktok-</i>	<i>ktop̄k-</i>	<i>ktoktk-</i>	<i>soktk-</i>	<i>soktapt̄k-</i>
to scratch	<i>tslik-</i>	<i>tslip̄k-</i>	<i>sistlak-</i>	<i>histlak-</i>	<i>sistlap̄k-</i>
to cut	<i>slakt-</i>	<i>sloldz-</i>	<i>saslakt-</i>	<i>baslakt-</i>	<i>slulu'dza</i>

PROSODY. — There is present in Lutuami an *accent* which combines (as in English, Spanish, etc.) increased stress, raised pitch, and lengthened quantity. This accent probably has a certain morphological value, but it clearly has much less value than in English or Spanish. Semasiologically, it probably has no value at all; I have omitted it in the Semasiological List in all those words where I had conflicting evidence, or where my ear was unable to catch it. In ordinary fluent speech, it certainly stands out, but is probably connected with sentence-prosody. At any rate, the investigation of this process would be subordinated to that of the other two autonomic processes.

SOUND-VARIATION. — This is a very prominent grammatical process in Lutuami, second only to reduplication in importance. Both consonants and vowels are affected by it. And not only may a simple sound change to another simple sound, but diphthongs and consonant clusters may be involved as well. In most cases, though not always, the sound changes are accompanied by reduplication or by metathesis, or by both, sometimes to such a degree that it is almost impossible to refer an elabora-

ted form to its base without finding or reconstructing intermediate forms.

This is especially true of the verbs, where causatives, reflexives, reciprocals, and the plurals of these, are all formed from the original radical by a sort of cumulative elaboration. To illustrate, let us take some of the forms of the verb *sl-*, « to see ». The form in brackets is reconstructed. We find :

sl- : by metathesis : *sel-* : by reduplication : *sesl-* : by consonant variation : *hesl-* : by reduplication plus vowel variation, *hebasl-*.

Much of the sound variation in Lutuami appears to be entirely at random --- part of the abundant phonetic play that goes into the creating of the elaborated forms of the words. There are however a number of changes that have a certain regularity, recurring again and again to express the same concept. Such are :

1. Change of the vowel of the radical to *-a-*. This change seems always to be accompanied by a reduplicative change. It is used in creating the elaborated forms that express plurality, both for nouns and verbs.

eye	<i>lulp</i>	<i>lulalp-ak</i>
log	<i>bimbak-s</i>	<i>bibambak-a</i>
breast	<i>wisu</i>	<i>witeaso-ak</i>
dead wood	<i>mulu</i>	<i>mumalo-ak</i>
camas	<i>poq</i>	<i>popaq</i>
earthworm	<i>mulx</i>	<i>mumalx-aka</i>
horsefly	<i>sqoplenk-s</i>	<i>sqosqaplenk-aka</i>
dragonfly	<i>qoqtink-s</i>	<i>qoqaqtink-aka</i>
fawn	<i>wi'luq</i>	<i>wi'walaq</i>
day	<i>psc</i>	<i>fsepse</i>
hay	<i>ksu-u</i>	<i>ksuksa-ka</i>
night	<i>psin</i>	<i>psipsan</i>
swan	<i>qus</i>	<i>ququas-ka</i>
to burn	<i>nut</i>	<i>numat</i>
to fill	<i>qitqog</i>	<i>qiqatqog</i>
to be hot	<i>qelp</i>	<i>qepalp</i>
to sing	<i>swin</i>	<i>swiswan</i>
to kneel	<i>lutsul;a</i>	<i>lulatsul;a</i>
to drink	<i>punui</i>	<i>pupanui</i>
to walk	<i>qisu</i>	<i>qiqasu</i>
to scratch	<i>tslipk</i>	<i>sitslapk</i>

2. Nasalization of a consonant of the radical in forming plurals of nouns. This change is not always accompanied by reduplication.

flint *busak-s* *bumbska* (for *bubsak*)

hawk	<i>dogi-s</i>	<i>dondgi-k</i>	(for <i>dodgi k</i>)
turtle	<i>gak</i>	<i>gangk-a</i>	for <i>gagk-a</i>)
arm	<i>wəq</i>	<i>wəŋq-ak</i>	
grass	<i>wəʔak-s</i>	<i>wəwəʔan̄k</i>	
hand	<i>nep</i>	<i>nemb ak</i>	

3. The change to the ending *-pk-* to form the plurals of verbs. [See chart of verb forms.]

4. The change to the ending *-yɔw-* to form the intensive plural of verbs. [See chart of verb forms.]

5. The change to an initial *-s-*, or *-sn-* in the causative. [See chart.]

6. The change to an initial *-b-*, in the reflexive. [See chart.]

Other changes than these are too irregular to be formularized.

These are some random examples :

pine	<i>qus</i>	<i>qoqus</i>	
breech elout	<i>sinta'sqis</i>	<i>sesinta'sqis</i>	
rabbit	<i>tsuakna</i>	<i>tsatsuakna-aka</i>	
lizard	<i>xi'a</i>	<i>xex'ia-ak</i>	
lynx	<i>slo'a</i>	<i>sluislo'a-k</i>	
grizzly bear	<i>loq</i>	<i>lulq-ak</i>	
blackbird	<i>tsoq</i>	<i>tsutsq-a</i>	
woman's kilt	<i>sanapts</i>	<i>esnapts-ka</i>	
crane	<i>kle'idi-s</i>	<i>kli'kldi-ka</i>	
fish	<i>me'be-s</i>	<i>memi'h-ka</i>	
wild onion	<i>le'ha-s</i>	<i>leli'h-ka</i>	
young woman	<i>siwak</i>	<i>siusuwak</i>	
thigh	<i>tsuk-s</i>	<i>tsutso-k-a</i>	
testicles	<i>slulk-s</i>	<i>sluislo-k-a</i>	
to saw	<i>solts</i>	<i>sluislalts</i>	
wind	<i>slewi</i>	<i>slesluyi</i>	
to miss	<i>qahya</i>	<i>qaqihya</i>	
to turn over	<i>kteubl-</i>	<i>ktektobl</i>	
gopher	<i>stoi-s</i>	<i>stoisti-ak</i>	

Consonant variation in nouns usually amounts to no more than the simplifying of a consonant cluster that is reduplicated.

coals	<i>stoilaks</i>	<i>stoitelaks</i>	
tule mat	<i>steulas</i>	<i>stetolas-ka</i>	
hawk	<i>tsiktu</i>	<i>tsisakto-ak</i>	
bat	<i>ktisok</i>	<i>ktitsatso-ak</i>	[for <i>ktiktaso-ak</i>]
sweathouse	<i>spuklis</i>	<i>spukpaklis</i>	[for <i>spuspaklis</i>]
tail	<i>xpel</i>	<i>xpelpla-k</i>	[for <i>xpexpla-k</i>]

star	<i>ktcol</i>	<i>ktoktcol</i>
half	<i>tqalam</i>	<i>tatpalam</i>
ash	<i>tsapsxi-s</i>	<i>tetsapsxi-ka</i>
bark	<i>kneutse</i>	<i>kekneutsa-k</i>

SYLLABIC MANIPULATION. — 1) *Metathesis*. In Lutuami, metathesis is everywhere present. The sounds seem always ready to slip out of their original order and fall into some new design. Even the affixes are subject to this rearranging. Some of them seem scarcely to have a constant form. Thus we find equally *-kis* or *-kvi* or *-ski*, for the locative, *-ak* or *-ka* for the plural, *-tank* or *-ktan* or *-kan* for the present participle, *-asip* or *-isap* in relationship terms. And the choice as to which shall be used cannot be accounted for by any observable rule, either phonetic or morphological¹.

Much of the metathesis seems to be a functionless accompaniment of the putting of words together into sentences. It is probably connected with sentence stress. Often, too, it occurs in suffixing, the two final sounds in the stem reversing their order before the suffix, as *tapaq*, *tatapqa-*. And this not for euphonic reasons apparently, but simply for the fun of playing with the sounds. Often, however, metathesis forms a true part of the complex of autonomic changes that serve to elaborate the simple forms of stems into the derived forms.

Examples of metathesis preceding the suffix of plurality :

egg	<i>napal</i>	<i>nanapla-k</i>
camas	<i>woka-s</i>	<i>wowak-a</i>
bird	<i>tsika-s</i>	<i>tsitsak-a</i>
leaf	<i>tapap</i>	<i>tatapqa-k</i>
tobacco	<i>qatskal</i>	<i>qaqatskla-aka</i>
ear	<i>momoats</i>	<i>momotsa-k</i>
tongue	<i>pa'wats</i>	<i>papa'wtsa-k</i>
intestines	<i>ga'ye</i>	<i>ga'gey-ak</i>
eagle	<i>yaukal</i>	<i>yayokla-k</i>
bow string	<i>naleh</i>	<i>nanalhy-aka</i>
fish	<i>mehe-s</i>	<i>memih-ka</i>
wild onion	<i>leha-s</i>	<i>lelih-ka</i>

Examples of more complete rearrangement of sounds by metathesis :

hip	<i>pusaklas</i>	<i>pusaslka</i>
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1. It is quite possible that there is some subtle system in these changes. This is one of the points to which further students of the language should turn their attention.

young woman	<i>snevēts</i>	<i>wewēns</i>
basket cap	<i>qmaleq-s</i>	<i>qaqlmeq-a</i>
ground squirrel	<i>musas</i>	<i>musams-ka</i> [for <i>mumsaska</i>]
poplar	<i>wulal</i>	<i>wulawl-aka</i> [for <i>wuwlal-aka</i>]
rattle snake	<i>xis</i>	<i>xisxa-ka</i> [for <i>xixas-ka</i>]
moon	<i>u-ʔaukwa</i>	<i>kau-ʔwa</i>

SYLLABIC MANIPULATION. — 2) *Reduplication*. Reduplication is almost always a grammatical process in Lutuami. There are a few words in the vocabulary that occur primarily in a reduplicated form, but very few. These are mainly adjectives, words of color and form, and consist of a stem completely reduplicated + the adjective suffix *-li*. We may call this « false reduplication ».

Examples :

red	<i>taqtaqli</i>
white	<i>balbali</i>
green or blue	<i>metsmetsli</i>
black	<i>puspusli</i>
brown	<i>limlimli</i>
yellow	<i>qegeqli</i>
round	<i>qolqoli</i>
flat	<i>leplepli</i>
sharp	<i>tsaqtsaqli</i>
blunt	<i>qomqomli</i>
mottled	<i>qasqas</i>
magpie	<i>weweweq-s</i>

As a grammatical process however, reduplication is the most conspicuous feature of Lutuami, the mechanism upon which the whole system of derivational changes is very largely based. The use of other processes in conjunction with this gives an effect of limitless possibilities of variation. Closer study reveals, however, that while there are occasional irregular forms, the vast majority of cases belong, as far as the reduplication is concerned, to one or the other of two characteristic types that are constantly recurring throughout the material.

Complete reduplication used as a process is so rare that it cannot be considered a type. Only three cases were found, and since in these the primary form is a monosyllable even they may be equally well interpreted as being of Type I, below. They are :

willow	<i>ya-s</i>	<i>ya-ya-ka</i>
bow	<i>nte-is</i>	<i>ntente-ka</i>
to live	<i>wa</i>	<i>wawa</i>

In general, we may say that it is the syllable or element found at the beginning of the simple form that is reduplicated in the elaborated form.

Type I. Reduplicating syllable :

to shout	<i>ʔena-</i>	<i>ʔeʔena-</i>
to freeze	<i>qat-</i>	<i>qaqat-</i>
to gamble	<i>sakl-</i>	<i>sasakl.</i>
to travel	<i>tammu-</i>	<i>tatammu-</i>
to skin a hide	<i>naski-</i>	<i>nanaski-</i>
to ask	<i>wul-</i>	<i>wuwul</i>
to roast	<i>lusk-</i>	<i>lulusk</i>
rain	<i>xto'dʒa</i>	<i>xtoxto'dʒa</i>
shell beads	<i>lakt-as</i>	<i>lalakt-ka</i>
basket	<i>maksa</i>	<i>mamaksa-aka</i>
sweathouse	<i>qe'law'as</i>	<i>qeqe'lawas</i>
snare	<i>ktsin</i>	<i>ktsiktsin-ak</i>
quiver	<i>tokank-s</i>	<i>totokank-a</i>
arrow	<i>talʒe</i>	<i>tatalʒe-aka</i>
cedar	<i>buluans</i>	<i>bubuluans-aka</i>
juniper	<i>qe'lo</i>	<i>qeqe'lo-aka</i>
pine nuts	<i>qte'lo</i>	<i>qteqte'lo-ak</i>
seed	<i>loq</i>	<i>lolox-aka</i>
hemlock	<i>wako</i>	<i>wawako-ak</i>
sage brush	<i>tsaklo</i>	<i>tsatsaklo-ak</i>
wild rye	<i>kle pi</i>	<i>klekle'py-ak</i>
yellow sage	<i>wa'mi</i>	<i>wawam'y-ak</i>
twig	<i>tspa'mi</i>	<i>tspatspa'my-ak</i>
leaf	<i>tapaq</i>	<i>tatapqa-k</i>
berry	<i>qawey-as</i>	<i>qaqawi-ka</i>
tobacco	<i>qatskal</i>	<i>qaqatskla-aka</i>
horse	<i>watc</i>	<i>wawatc</i>
coon	<i>watskina</i>	<i>wawatskina</i>
cow	<i>musmus</i>	<i>mumusmus</i>
circle	<i>tawlka</i>	<i>tatawlka</i>
hog	<i>kusu</i>	<i>kukusu-k</i>
marten	<i>kle'pa</i>	<i>klekle'pa-k</i>
bear	<i>witem</i>	<i>wiwitem-ak</i>
fox	<i>pe'p</i>	<i>pepe'p-ak</i>
civet cat	<i>taslats</i>	<i>tataslats-ka</i>
deer	<i>paqols</i>	<i>papaqol-ka</i>
skunk	<i>tsasi-s</i>	<i>tsatsusi-k</i>
goose	<i>lu-s</i>	<i>lu'lu-ka</i>

heron	<i>tsoaqa-s</i>	<i>tsoatsoaqa</i>
egg	<i>nāpal</i>	<i>nanapla-k</i>
porcupine	<i>tce·li-s</i>	<i>tcetce·li-k</i>
tree squirrel	<i>wasla</i>	<i>wawasla-ak</i>
raven	<i>qaq</i>	<i>qaqaq-ak</i>
swallow	<i>titagea</i>	<i>tititagea-ak</i>
bull snake	<i>wamnik-s</i>	<i>wawamnik</i>
salmon	<i>tsial-s</i>	<i>tsitsial-ka</i>
fly	<i>maŋk</i>	<i>mamaŋk-ak</i>
duck	<i>we·k-s</i>	<i>wewe·x-ka</i>
person	<i>maqlak-a</i>	<i>mamaqlak-a</i>
chief	<i>laqi</i>	<i>lalaqi</i>
forehead	<i>laki</i>	<i>lalaki</i>
tongue	<i>pa·wats</i>	<i>papa·watsa-k</i>
nates	<i>tsaslak-s</i>	<i>tsatsaslak-a</i>
mocassin	<i>waksna</i>	<i>wawaksna-ak</i>
feather	<i>nil</i>	<i>ninil-ak</i>
house	<i>ladz-as</i>	<i>laladz-ka</i>
weasel	<i>tsaska</i>	<i>tsatsaska-ya</i>
lip	<i>xetsu</i>	<i>xexetso-a</i>
bow string	<i>naleb</i>	<i>nanālbhy-aka</i>
ground	<i>qela</i>	<i>qeqelo-ak</i>
to smoke (of a fire)		<i>slayka</i> <i>slaslayka'a</i>
smoke	<i>slayaks</i>	<i>slaslayaks</i>
fire post	<i>sneylaks</i>	<i>snesneylaks</i>
heart	<i>stayn-as</i>	<i>stastayn-ka</i>

Words beginning with vowels are very rare in Lutuami. The following, all beginning in *a-*, seem to belong with the preceding list. A few in *u-* will be found further on with the irregular forms.

water	<i>ampu</i>	<i>aampo-ak</i>
tree	<i>aŋko</i>	<i>aaŋko-ak</i>
digging stick	<i>amda</i>	<i>aamda-aka</i>
mountain mahogany	<i>amlala-m</i>	<i>aamdala-ka</i>

Type II. Reduplicating element. In this type there is no additional syllable in the elaborated form as result of the reduplication

bluebird	<i>tikaka</i>	<i>titkaka-ak</i>
nose	<i>psi-s</i>	<i>psips-ka</i>
liver	<i>tusoq</i>	<i>tutsox-ka</i>
kidney	<i>bin·e</i>	<i>bibne-ak</i>

knee	<i>qolens</i>	<i>qoqlens-ak</i>
wing	<i>la-s</i>	<i>lal-ka</i>
ground hog	<i>mui</i>	<i>mummy-ak</i>
butterfly	<i>yapulpule</i>	<i>yaypulpule-k</i>
young man	<i>tsimanjka</i>	<i>tsitsmanjka-aka</i>
baby	<i>mukak</i>	<i>mumkak</i>
old person	<i>tsika</i>	<i>tsitska-aka</i>
younger sister	<i>tupaka</i>	<i>tutpaka</i>
mouth	<i>sum</i>	<i>susm-ak</i>
tule mocassins	<i>mit</i>	<i>mimteyay-ak</i>
swan	<i>qus</i>	<i>quqs-a</i>
day	<i>wai'ta-s</i>	<i>wawi'ta</i>
toad	<i>ko'e</i>	<i>ko'kwe-aka</i>
spoon	<i>mitco</i>	<i>mimtco</i>
puma	<i>qoqarwas</i>	<i>qoqerwaswas- (Ga)</i>
guts	<i>ga'ye</i>	<i>gag'e'y-ak</i>
cunus	<i>stem-s</i>	<i>stesm-ak</i>
arrow head	<i>da'wal-s</i>	<i>saswal</i>
basket cap	<i>qmaleq-s</i>	<i>qaqlme'q-a</i>
belt	<i>qaeli-s</i>	<i>qaqeli-ak</i>
shirt	<i>tsuli-s</i>	<i>tsutsli-ka</i>
wild onion	<i>tawix-s</i>	<i>tatwix-ka</i>
camas	<i>woka-s</i>	<i>wowak-a</i>
service bush	<i>tcak</i>	<i>tcask-aka</i>
root of tree	<i>we'uk</i>	<i>wewo'k-ak</i>
antelope	<i>tce'uk</i>	<i>tcetco-ak</i>
valley	<i>sa'yka</i>	<i>sasi'ka-ak</i>
PitRiver Indian	<i>moatwas</i>	<i>mumatwaka</i>
bird	<i>tsika-s</i>	<i>tsitsak-a</i>
vulture	<i>tswa'i-s</i>	<i>tswatswi'-ka</i>
wolf	<i>qe'utsi-s</i>	<i>qequtsi-k</i>
stone	<i>kta'i</i>	<i>kta'kti-ak</i>
heel	<i>taqak</i>	<i>tatqak-a</i>
ice	<i>we-s</i>	<i>wen-ka</i>
coyote	<i>wa-s</i>	<i>wau-ka</i>
water snake	<i>wi'siŋ</i>	<i>wi'usiŋa</i>
ladder	<i>wa'qis</i>	<i>wa'uqis</i>
dog	<i>watsag</i>	<i>wau'tsak</i>
to snow	<i>kena</i>	<i>kekna</i>
to kang	<i>ksakae</i>	<i>ksakskae</i>
to shoot	<i>tewi</i>	<i>tetwi</i>

to give	<i>se'wan</i>	<i>se'swan</i>
to dance	<i>ksi'ulꞑ</i>	<i>ksi'ksolꞑ</i>
to be friends	<i>sawaline</i>	<i>saswaline</i>

As against these long lists of words that reduplicate according to regular patterns, we find only a small number that have what appear to be reduplicated forms, but of an entirely irregular character.

wolf	<i>qeutsis</i>	<i>qeutsisis</i>	(also <i>qeutsi-k</i>)
breast	<i>wisu</i>	<i>wisus-ka</i>	
house	<i>ukeplaks</i>	<i>keukeplaks</i>	
clapstick	<i>upaꞑpaks</i>	<i>wauꞑpaꞑpaks</i>	
mouse	<i>qala'yowa</i>	<i>qalaꞑle'yowa-k</i>	
trousers	<i>qalalaps</i>	<i>qaqalaps-ka</i>	
egg	<i>nalpal-ak</i>	(as well as the regular form <i>nanaplak</i>).	

III. GRAMMATICAL CATEGORIES.

GENDER. — Not expressed in Lutuami by any grammatical process, with the following exception : the demonstrative *hunk* is more frequently used for animate beings (in the sense of he, she), and *hun* (it) for inanimate objects. This is however not a strict rule.

Sex is indicated in the case of men by the different appropriate words, such as “ boy ”, “ girl ”, “ old man ”; “ old woman ”, in the case of animals, either by appending a word such as “ old man ”, “ girl ”, etc., or by the name of “ bear ” for males, and of “ doe ” for females.

NUMBER. — Number is strongly expressed grammatically in Lutuami. But it is not at all the equivalent of our number, either in extent of concept or in manner of grammatical expression.

In our languages, number is pretty well confined to the plural. In Lutuami, as will be shown presently, it expresses not only plurality, but distributiveness, piecemealness, smallness, endearment, and even frequency and iterativity in so far as these may be regarded as a “ number of similar acts ”.

In our languages, especially in those closer to Latin, the plural is used as an important tool of syntactical relations between the several parts of the sentence. In Lutuami number is purely a derivational concept. It is not used at all as a relational concept. Hence it may be expressed by either subject, verb, or object, or by an independent word.

In our languages the plural is expressed mostly by the one process of suffixation. In Lutuami it is expressed mostly by the process of syllabic manipulation.

NUMBER. Examples :

I° 1° “ I will give it to him ” :

nu bunk sewanok
I him give-shall

2° “ I will give it to them ” :

nu hungen sewanok (hungen plural of *bunk*)
or :
nu bunk seswanok (*seswan-* distributive plural of *sewan-*)
or :
nu hungen seswanok

II° 1° “ the dog bit him ” :

watsag bunk qoka
dog him bite

2° “ the dogs bit him ” :

wautsag bunk qoka (*wautsag* distributive of *watsag*)
or :
wautsag-ka bunk qoka (*wautsag-ka* distributive form of *watsag* + *-ka*
simple plural suffix)

3° “ the dog bit him in many places ”

watsag bunk qopka (*qopka* distributive of *qoka*)
or :
watsag bunk qotka (*qotka* not much more than a phonetic variant
of *qopka*, but perhaps with a subtle difference)
or :
watsag bunk qoywa (*qoywa* definitely more plural or more distributive than *qopka*)

The above three expressions might also mean : the dog bit him several times.

They might also mean : the dog gave him a small bite.

They might also mean : the dog gave him several small bites.

They might also mean : the dog gave him several small bites several times.

4° “ A small dog bit him ” :

wautsag bunk qoka (just like II, 2)

5° “ the dog nibbled at him playfully ” :

watsag bunk qopka (just like II, 3)

6° “ the puppies are nibbling at them ”

wautsag-ka hungen qoywa
etc., etc., etc.

The above examples ought to show three things in regard to the idea of Number in Lutuami :

a) The concepts of plurality, distributiveness, frequency, smallness, and endearment, are closely connected. For instance, example II, 3, such as it stands, could be interpreted, according to the context, in several ways : the dog nibbled at him, the dogs bit him, the puppy bit him, etc. In other words the " number " of either subject or object may be expressed in the verb alone, provided the context makes the sense clear enough. It is not, as with us, an opposition between one and many, so much as a conception of " piecemeal-ness ". Lutuami speech is less concerned with the representation of units than with that of frequency, whether in the action itself or in its actors : it is the sum total of action, actors, and the manner of it, which is viewed as " number " in Lutuami. In the action related there may have been several horses, or several people riding, or a little boy riding, or a grown man riding a pony, or one man riding often, etc. ; it is all the same.

b) Number is expressed in Lutuami, primarily by the two grammatical processes of sound-variation and syllabic manipulation, secondarily by affixation. As a matter of fact, the suffix *-ka* seems to correspond more closely to plurality in the Indo-European sense, than to distributiveness in the Lutuamian sense.

c) Number is expressed in Lutuami as a purely derivational concept not as a derivational concept mixed with the relational. In Latin, an example par excellence of the use of concrete-relational concepts, we would have *illi mordent canem, ille mordet canem, ille mordet canes, illi mordent canes, illum mordet canis, illos mordent canes, illos mordet canis, illos mordent canes*, etc., where the concept of number expressed by the variations *ill-e, -i, -um, -os, mord-et, mord-ent, cau-is, -es, -em*, is all mixed up with objectivity and subjectivity (to say nothing of gender). In Lutuami, on the contrary, the idea of number is expressed without any relation to the actors of the action. This does not mean that it is the action, (vs. the actors), which bears the burden of the expression of number. It is neither action nor actors, but rather both at once. Provided the concept of number is represented somewhere, all is well.

PERSON. -- Only moderately well developed. See the section on pronouns (Grammatical Parts). There is no dual. There is no exclusive vs. inclusive plural. There are no reciprocal pronominal forms (I see you, you-me, you-him, he-you, etc.). Person is always indicated by means of independent words (pronouns), never by affixes (so-called incorporated pronouns). In other words, the grammatical category of Person is expres-

sed in Lutuami in the form of "basic concrete concepts", not as "concrete relational concepts": it is not elaborated into grammatical architecture.

TIME: TENSE AND ASPECT. (See also **VERB** under Grammatical Parts). — Time does not seem to be of much importance in Lutuami. There is a definite form for the Remote Past (suffix *-o'la*). There is also a definite form for the Eventual Future (suffix *-ok*). So much for Tense. These two are not often used anyway. Most often the verb is to be found in an Indefinite Tense (suffix *-a*).

Aspect is even less well represented. We have seen that the Frequentative aspect is bound up with Number, and so is also the Iterative. The Continuative and Habitative are but very feebly represented by some of the affixes. There is no Inceptive whatever. There is no Imperfective.

MODE. — Of Mode there is likewise little evidence in Lutuami. The Imperative is hardly more than a fusion of the radical with the independent pronoun [*ktoki* hit : from *tok*+*i* = thou]. The Subjunctive, Optative, Purposive, Resultative are not represented. The Interrogative is expressed by means of an independent word, *tam*, placed like a question mark at the beginning of a sentence. What we have called an Indefinite Tense (normal ending of any verb in *-a*) might perhaps be construed as an Infinitive. The concept of Participle is much more on the side of the noun and adjective than of the verb (See the "verbo-nominal affixes").

VOICE. — Passivity is not expressed grammatically: "he was eaten by the bear" would be rendered "the bear ate him". On the other hand, the Causative, the Reflexive, and the Reciprocal, are all represented as grammatical categories, and expressed by the grammatical processes of sound-variation and syllabic manipulation, or a combination of both. For instance, from the primary form *sle-* "to see", we form *sesl-* "to cause to see", by metathesis (from *sle* to *sel*) and reduplication (from *sel* to *sesl*). By sound variation (inner consonantal modification of radical) we pass from *sesl-* to *hesl-* "to see oneself". The Reciprocal is necessarily associated with plurality. Hence, in Lutuami, it is necessary to start with a radical already modified to express Number, for instance *slepk-* "to see plurally". From this we obtain *heslebapk-* "to see one another". Other examples will be found in the Table at the beginning of the section on sound-variation and syllabic manipulation treated as grammatical processes, p. 14.

Transitivity of the verb does not seem to find a grammatical expression in Lutuami. There is however an element *s* which is so frequently encount-

ered as an initial phonetic constituent of verbs that it may perhaps be regarded as an *s*- prefix to designate something like transitivity. On the other hand, there is a similar *-s* suffix for pronouns and demonstratives which, although not very clear, seems to have to do with the expression of objectivity. Add to these difficulties the fact that many nouns end naturally in *s*, and it will be seen that it is very difficult to decide whether the *s* in question is a prefix to the verb or a suffix to the preceding word.

CASE. — This is a grammatical category which is essentially relational. We are apt to consider it a concrete-relational concept because we have been brought up in Latin grammar. In Lutuami however, it is expressed only as a pure-relational concept, either by independent words, by word-order, or by suffixes (q. v. p. 12).

IV. GRAMMATICAL PARTS.

THE NOUN. — The noun appears usually as a radical.

Whenever it appears in another garb, it is because something has been added to the radical (whether by affixation or as an autonomic process), not to the *abstracted* radical. Therefore the formula for the noun in Lutuami must be represented by $A + (b)$. [In the Verb, on the contrary, the radical is always found accompanied by a grammatical element; it is therefore an abstracted radical, and will be so represented in the formula (See the Verb).]

Number is expressed in the noun mostly by autonomic processes, and is treated as a derivational concept; it is never mixed with relational concepts.

Gender is not expressed grammatically.

Subjectivity and Objectivity are expressed by word-order only, not by affixation. Most of the other relational categories are expressed by case-suffixes (see p. 12).

It is a peculiarity of many nouns that they end in *s*. Now *-s* is in Lutuami a regular nominalizing affix (*tsi-* to tive, *tsis* a dwelling). On the other hand *-s* is also a mark of the objective case in the pronouns and demonstratives. Furthermore *s-* appears in so many transitive verbs that one is inclined to see in a prefixed *s-* a mark of transitivity. Finally many nouns which end in *-s* lose that *s* when their plural is in *-ka*. The meaning or function of that final *s* in nouns is therefore rather obscure.

THE VERB. — The Lutuami verb is simple, structurally.

Its formal type may be represented by the formula $(A) + (b)$.

In the very great majority of cases the grammatical element (b) is *-a*, which marks no special time, may be used when the context indicates the past or the future, but disappears to make place for any of the other verbal suffixes (v. g. from *tamnuu* "to travel, I travel, he travels, etc.", one forms not *tamuatkan* but *tamnukan* "having travelled"). This *-a* suffix may therefore be regarded as the mark of an Indefinite Tense or an Infinitive Mode. It may perhaps be traceable to the ubiquitous enclitic *a*, which fulfills no visible function, means nothing at all, but is sprinkled around profusely. The *-a* suffix may perhaps have come from this enclitic *a*.

The enclitic *a* might perhaps be best translated, if one really wants to translate it rather than simply to disregard it as a mere redundancy of speech, by "do" or "did". Thus in *nu a slea* "I see", one may translate it by "I do see". The enclitic *a* is not necessary, Yet one finds very few sentences where it does not come in as a sort of prefixed accompaniment to the verb. Its place is usually after the subject pronoun and before the object pronoun. This latter seems to have become almost as necessary an accompaniment of the verb as the enclitic *a*, and nearly as meaningless in a great many cases. For instance, it is quite natural that one should feel the desire for expressing "it" in the sentence "I see": I see it. In Lutuami the "it" comes before the verb: *nu a bun slea*. But this desire for the expression of an object as if the verb were incomplete without it, is carried to an extreme with verbs like to live, to sit, to walk, etc. *nu a bun tsia* "I sit" (lit. I do it sit). Even with the verb *gi* "to be", one says: *nu a bun gi* "I am".

Not all verbs end in *-a*, as explained in the first paragraph. Some end in *-e*, and a few in *-i*. The verb *pa* or *pan* "to eat" carries the ending in *n* in nearly all the forms except the second person which is almost invariably *pa*.

The Future is indicated by the suffix *-ok*. The Past is indicated by the suffix *-ola*. These suffixes displace the *-a* of the Indefinite tense.

The verb in Lutuami does not carry the burden of syntactical relations. Thus plurality may be expressed (as explained in the section on Number as a Grammatical Category p. 22); but it bears no necessary relation to plurality of the subject. Neither do any of the other grammatical categories which may be expressed in the verb, such as Time, Mode, etc. (q. v.), involve any relations with subject or object. In other words the verb in Lutuami undergoes only Derivational changes. Notably, it does not express Person.

We have already mentioned the fact that the Imperative is poorly developed. The second person singular is indicated either by the radical

alone, or by a pseudo-suffixation of the pronoun "toi", *i*. Thus, "hit!" *ktok* or *ktoki*. The second plural is expressed by the use of the pronoun: *ktok at nannuk* "hit ye all!". Somewhat similarly, the first person plural is expressed by a pseudo-suffixing of the personal pronoun *nat* (sometimes abbreviated to *na*) "let's camp: '*nat maklak-na*'; "let's drink" *punu-na*, or *punu-na nat*, [or *pupanu-na nat* (using the reduplicated plural)].

PRONOUNS AND DEMONSTRATIVES. — There are no affixed pronominal forms (so-called "incorporated pronouns").

The independent pronouns show a great deal of loose variation.

First Person: The primary element is the phonema *n*.

	Subjective	Objective
Singular	<i>nu, ni</i>	<i>an</i>
Plural	<i>nat</i>	<i>nal, nals, anal</i>

(The objective form *an* appears very often in cases where the subjective would be expected. It is there to be interpreted as a fusion of the verbal enclitic *a* ["do"] + *nu*. Thus "I see him" may be expressed either by *nu a bun slea*, or by *buns an slea* [for *bun a nu slea*]).

Second Person: The primary element is the phonema *m*.

	Subjective	Objective
Singular	<i>i, its</i>	<i>mis, am</i>
Plural	<i>at</i>	<i>amal, amals</i>

Third Person: The primary element is the phonema *hu*.

	Subjective	Objective	
Singular	<i>hut, ut</i>	Animate	<i>bunk, hunks</i>
		Inanimate	<i>bun, un</i>
Plural	<i>hutsa</i>	Animate	<i>hungen, unges</i>
		Inanimate	<i>buta</i>

*Demonstratives :**kan* " this, one, who "*tua* " which " (probably from *tu* = there)*tum, tum'i* " many ", (objective *tuments*)*nan'uk* " all " " *nanukens*)*Possessive forms :* (to be analyzed in connection with suffixes *-utki* and *-am* q. v.)

	First Person	Second Person	Third Person
Singular	<i>keau, keaot,</i> <i>keau otgi</i>	<i>miabut</i> <i>miaut</i>	<i>bunk-lam otki</i>
Plural	<i>na'-lam otgi</i>	<i>ma'-lam otgi</i>	<i>hungalam utki</i>

ADJECTIVES AND ADVERBS. — Adjectives in Lutuami are present mostly in the form of simple radicals. Adjectives of colour present a reduplicated radical and a suffix *in-li* (*taxtaxli* red, etc.).

Adverbs are likewise represented by independent words for the most part.

It is well to note however that there are several affixes (classed and described in this study as *verbo - nominal*, q. v. p. 11), which give the radical which they affect, whether nominal or verbal, a certain feeling of adjectiveness or of adverbiality. For instance *bunk-st* " thus ", from *bunk* " this "; *psek-st* " to-day ", from *psen* " day "; *kakang-is* a hunter, from *kakang-* " to hunt ", etc., etc.

There is, as in most languages, a tendency to run together several short words in a colloquial form to express an adverbial idea. The texts at the end of this study are full of these colloquial expressions, with their probable analysis.

Mention must be made of the word *at*. It seems to have no very definite meaning, and to fulfill no special function other than just filling in the sentence, or weighting the verb. Its primitive meaning is probably that of " yet, already ". It may also be a mere fusion of the enclitic *a* and the demonstrative *ut* " it ". As examples of its meaninglessness we may give the following :

" I am giving it to him " *at a nu bunk sewana*

" I will give it to him " *at nu bunk sewanok*

" I eat " *nu bun pan*

or :

at a nu bun pan (lit. yet do I it eat)
 or :
nu bun pan-at

SEMASIOLOGY.

Lutuami has not yet been classified with any linguistic family. It certainly has little in common with either its Hokan neighbour to the south or its Uto-Aztecan neighbour to the east. The present writers have therefore no contribution to make at present in the elucidation of the semantic affinity of Lutuami.

In order to enable comparative linguists to find semantemas easily, these have been listed according to a decimal system, under the following categories : 1. Nature. 2. Animals. 3. Plants. 4. Man. 5. Body Parts. 6. Culture.

All the verbs are listed with the object with which they have the most evident and natural connection, as "to see" with eye, "to walk" with "foot", etc.

Only the radical elements are given, with the following two exceptions : 1° in the case of both nouns and verbs, the "reduplicated" form is given, besides the primary (these reduplicated forms indicate plurality, see morphology); 2° in the case of the nouns, the plural suffix *-ka* has been left; it is not always possible to dissect it out from the radical proper, for the reasons already explained in the morphological part.

Affixes are listed as if they were true semantemas. For, every morphema may be regarded either as a degenerated independent word, or as the potential anlage of such. In other words, from the point of view of pure semantics, every morphema is also a semantema since its phonetic elements carry per se a "sign-value" (*sema*). In the semantic list these affixes are located in connection with the nouns or ideas with which they have the most natural and evident connection (as suffixes of plurality with Number, of Tense with Time, etc.). Their nature as affixes is always indicated by a preceding or a following hyphen¹.

1110 sun *tsa'Bas*, moon *uqa'u-kva*; star *ktcol*, *ktcoktcol*

1120 spring *sqʷ-a*; summer *phaDa*; autumn *tsalam*; winter *lul'Dam*; day *wai'ta*, *wawi'ta*; dawn *be-ke*; sunrise *Dine-c*; ten o'clock *Dintsipka*; noon *psεkst* (from *psε*, *psεpsa*, "day"); 3 or 4 o'clock *tingo'ila*; sundown *tino'le*; dusk *i'unik* or *i'units*; night *psin*, *psipsan*

1. See our article "A practical scheme for a semantic classification". *Anthropos*, 1930, p. 137.

- 1210 fire *lɔ'lək-s*, *lulɔ'x-Ga*: coals *stɔ'ilaski*, *stoite'aksɔ'*; camp-fire *stɔ'ilax-kis*; ash *tɔa'psxi-s*, *tɔsa'psxi-Ga*; smoke *sla'i-a*, *slasla'i-a'a*; to burn (tr. and intr.) *nul-*, *nuna't-*, *nunt-*; to be hot *qɛl'pk-*, *qeqal'qk-*; hot, warm, *lus'lus*; cold *qa'taks*; to blow the fire *pne'uke*; to fan the fire *bule' == plale*; to freeze *qatk-*, *qaqatk-*.
- 1220 ground, earth, soil, the world: *qɛ'la*, *qɛqɛ'lo-aK*; mountain *ya'ina*, (pl. the same); stone *kta'e*, *xta'ktya-G*; flint *Bu'sak-s*, *Bu'mBsKa*; valley *sa'yga*, *sasi'ga-aG*; red *taqtaq-li*; black *pɔspɔ-li*; white *Bɔl'Bɔl-li*; blue, green *mɛts'mɛts-li*; brown *lin'lim-li*; yellow *qeqeq-li*; buff *ɣuna' gapsi*; grey *spɔ'gatkɔ*; mottled *qaspas*.
- 1230 water *zm'Bɔ*, *a'am'Bo-aG*; raid *xto'Dɔa*, *xtoxtɔDɔa*; river *qɔ'qe*, *qoq'Ge*; lake *ɛus*, *ɛw-aK*; spring *wɛ'loas*, *wɛwɛ'lokak*; to snow *ke'n-*, *kekn-* (and hence snow: *kes*, *keknis*); to freeze *wɛn*, *wɛwan* (and hence ice: *wes*, *wɛwas* [or *wɛu-Ga*]); wet *mukz'lta*; dry *Baba'*.
- 1240 wind *slɛ'wi*, *slɛ'sluyi*.
- 1310 to-day *patsit*; then *tswi*; some time *tuskis*; ago, long ago *tɔnk*, *mɔtc*, *kaak*, *tɔnkak*; yesterday *ɣuna'*; already *at*, *n'a*, *tot*; off and on *GinG*; later *tɛ*; always *tsweisat*; again *Pɛn*; while *mantcak* *manksat*; whereat *tata'*; Suffixes: Present Indefinite *-a*; Future *-ɔk*; Past *-ɔla*; nearly, *-ska*, *aska*, *-laska*; time of, season of, *-ɛmi*, *-le-mi*; Present Participle *-ank*; Accidental Agentive *-st*; Past Participle *-tkɔ*; Past Participle Passive *-tki*.
- 1420 There *GiDa*, *Gɛn*: there *Tu*: on, upon, *hit*, *bi*, *i*: on this side *gen*, *king*; on the other side *kuni*; far *ati*; behind, last *tapɔ*; across *tuktsa*; inside *wasi*; outside *ɣani*; (see also the list of suffixes on p. 12); north *ya'm-at*; south *mu'-at*; east *lupe'*; west *txa'-lam*.
- 1510 one *nɔs*, two *lx'bi*; three *Dɔn*, four *wɛ'unip*; (*nɔp* = finger); five *tu'nɛp*; six *nɔks'tɛɛp* (5 + 1); seven *lxpkstsɛptk* (5 + 2); eight *dan* = *ksɔptk* (5 + 3); nine *naks'ɛks* (one "off"); ten *tɛ'unip* ("both hands" ? cf. five); eleven *nɔs likl*; twelve, thirteen, fourteen, etc... *lap pɛula*, *dan pɛula*, *wuni pɛula*; ... twenty *lap niteunip*; twenty one *lap niteunip pɛn nɔs*; twenty two *lap nite'unip bɛn lxɔ*; ... thirty *dan nite'unip*; one hundred *tina*.
- 1520 much, many *tun*; all, whole *nau'uk*; few *kinkan*; half (crosswise) *naiksta*; half (lengthwise) *tqalam* or *tatqlam*; very much *qaan*; only *pil*, *-ak*; to add *nɛt-*; no, negation, negative *qai* (cf. *qo* "bad"), *le* or *wɛ* (especially in compounds like "not else"); *ta* (nothing but); interrogative *Dam*.
- 2000 no generic word for animal ", except *i'uwas*, *iuwɔs'Ga* whichrae lly means "wilder, inhabitant of the wilds" (from *iwa* = out-doors, far away from camp, far out in the hills); female *kulu*

- (applied to deer, bear, elk, etc.); tail *xpəl*, *xpəlplak*; pelt *nil*, hide *kalas'*.
- 2100 bison *yoho'*; elk *wun*; horse *wats*, *wawats* (cf. dog *watsag*, suggesting a transposition of the original semantema from dog to horse, and a secondary distinction through the diminutive in *-aG*); cow, bull, steer *musmus*, *munusmus*; deer *Baqəls*, *pabəa:olGa*, also *lil-bunks* (especially as a plural or distributive), doe *kulu* (see above under 2000), fawn *wi'Laq*, *wi' waLaq*, antelope *tcə'uk*, *tsetsoak*; [the words for sheep and mountain sheep are english corruptions: *sisipok*, and *yainatigut* (*yaina* = mountain, *gut* from *goa*)t.]
- 2200 puma *qoy'arwas*, *qoqe'qarwas*; lynx *slə'a*, *shuisloak*; civet cat (bassarisk) *tsəts. tsətsətska*.
- 2300 wolf *qe'utsis*, *qe' qutsik* (or *qeutsisis*); coyote *was*, *wa'nuka* (also *wasas*); dog *watsəG*, *wa'utsəG*; fox *pəp*, *pəpəbək*.
- 2410 bear: grizzly *lq*, *ləl'ak*, brown bear, *witəm*, *wiwitəmək*.
- 2430 pig *ku'su*, *kuku'suk* (probably from Spanish *coche*, or through Chinook jargon from French).
- 2440 marten *kle'ba*, *kekləbək*.
- 2450 skunk *tsa'sis*, *tsasa'sik*; racoon *watskina*, *wawatskina*; weasel *tsas'ka*, *tsatsas'kaya*; porcupine *tcə'lic*, *tcetce'lik*.
- 2500 tree squirrel *wəsla*, *wawas'sluak*; ground squirrel *mosas'*, *musams'ka*; ground-hog *mu'i*, *mu'miak*; gopher *sto'ic*, *stoy'stiak*; wood-rat *qutsa*, *quqtsak*; mouse *qala'yowa*, *qalaklə'əwak*; hare *ɾɾəl*, *ɾɾə'lak*; rabbit *tsuakua*, *tsatsuaknaaG^a*.
- 2600 bird *tsi'kas*, *tsi'tsaka*.
- 2620 eagle *ya'u'a*, *yayo'klak*; hawk *tsi'ktu*, *tsisa'ktoak*; do'gis, *dondgig*; vulture *tsoa'is*, *tswatswi'ga*; owl *yuki*, *yukiak*.
- 2630 heron *tsoa'gas*, *tsoatsoa'ga*; crane *kle'idis*, *kli'klidi'ga*; duck *'wəks*, *'wəwəks'ka*; goose *lus*, *lu'lu'Ga*; swan *qus*, *quqaska* (or *quqsa*).
- 2630 raven *qaq*, *qaqa'ak*; magpie *wəqwəqs*, *wiwaq'wəqa*; blackbird *tsoqse* *tsu'ts'a* (or *tsotsa'ga*); crow *hama*.
- 2660 bluebird *tika'ga*, *titka'gaak*; *qtsi'tso*, *qtsi'tsadzoaG*; swallow *tita'qea* *titita'qeaG*.
- 2670 bat *kli'sək*, *ktitzadzoak*.
- 2680 feather *nil*, *nini'lak*; bill (like mouth); wing *Ləs*, *Lalga*; egg *napa*, *nalpalak* (or *nana'plaG*).
- 2690 to fly *sn-*.
- 2710 water-snake *wisiŋ*, *wiu'siŋ^a*; bullsnake *wa'mniks*, *wawa'mniG*; rattlesnake *xis*, *xixxaG^a*.
- 2720 turtle *gak*, *gangka*; lizzard *xi'a*, *xexi'aaG*.
- 2730 frog, toad *ko'ε*, *ko'kwəaGa*.

- 2800 fish *me'hɛs*, *mɛmib'ka*.
 2820 salmon *tsi'als*, *tsisialGa*.
 2890 to swim *peɛw-*; roe *'lo'qas*.
 2920 fly *mank*, *mamarɣgak*; horse-fly *sqoplenks*, *sqosqaplengaak*; dragon-fly
qoqlinks, *qoqatinGaGa*; butterfly *ya'bulbule*, *yay'bulbulek*.
 2930 earthworm *mulx*, *mumal'ɣaG^a*.
 3111 tree, wood, *qɣkɔ*, *qɣɣgoak*; dead wood *mulu*, *muma'loaG*.
 3112 branch *wɛq*, *wɛwɛqak*; twig *tspa'mi*, *tspatspa'myak* bark *kne'udze*, *kekne-
 udzak*.
 3113 log *bim'baks*, *bibam'baka*.
 3115 pine *qus*, *qoqus*; cedar *buluans*, *hubualuan'zaga*; hemlock *oako*, *wawa ==
 kwaG*; juniper *qe'lo*, *qe' qe'loaGa*; poplar *ɣwula'l*, *ɣwul'aula'Ga*;
 willow *yas*, *yayaGa*.
 3120 sagebrush *tsa'klo*, *tsatsakloak*; d^o with a yellow bloom *wa'mi*, *wawa'
 myak*; mountain mahogany *amdalam*, *a'amdalaGa*; service-bush
wak, *tsaskaG*.
 3140 leaf *tapaq*, *tatapqak*; grass (green) *wɛ'ɣaks* *wɛwɛ'ɣank*; grass (dry,
 applied nowadays to hay) *ksun*, *ksuksaGa*.
 3141 "wild rye" *kle'pi*, *kleklepyak*; tobacco *xats'kal*, *qaqatsklaaga*.
 3200 root (of tree) *wɛ'uk*, *wɛwɛ'kak*; camas *pɔqs*, *pɔpaq*, also *wɔkas*, *wɔwaka*;
 "wild parsnip" *qe's*, *qe'qe's*; "wild onion" *le'bas*, *lelika*; also
tawiqs, *tawiyxa*.
 3412 "wild plum" *tomo'lo*, *tetomaloak*.
 3420 berry *qawɛ'yas*, *qaqawika*; juniper berries *biutse'usam*, *biutse'wis* (or
biutse'wisGa).
 3440 seed *loq*, *lolo'ɣaGa*.)
 3450 pine nuts *qte'lo*, *qteqte'loaG*.
 4000 person, people *mɔq'lzks*, *mamaq'lak'a*
 4100 man *his'waks*, *hi'aswaks*; woman *snɔwɔts*, (plural *wɔwɔns* [or *wɛwɔnwi*],
 old man *kumuts*, *waleɛx*; old woman *wɛlɛqs*; young man *tsimarɣga*,
titsmarɣga; young woman *siwak'*, *siu'suwak*; child *ta'dɔks* (Mod.),
tsekon (Klam.); infant *kitskɔɣ*, *kinkɔɣ*; also *mukak'*, *mum'kak*; old
 folks *tsika*, *tsitskaaG^a*.
 4200 father *pte'sap*, *pte'sisap*; mother *ke'sap*, *ke'sisap*; elder brother *txe' ==
 unap*, *txe'unisap*; younger brother *tap'vap*, *tal'pisap*; elder sister
tɔbzksi, *tɔbzksiB*; younger sister *tubzk'a*, *tutbzka*; paternal
 uncle *psɛɛp*, *psɛizap*; maternal uncle *loqodzip*, *loquodzip*; pater-
 nal aunt *pxodzip'*, *pxodzip'sap*; maternal aunt *psaxɛp*, *paxesap*;
 nephew: sisters's son *pzkɩg*, *pzk'lisap*, brother's son *pztsqa'lep*,
patsqa'lisap; niece: sister's daughter *maqo'ɣap*, *maqo'isap*; brother's
 daughter *qodzitska*, *qodzisap*; paternal grandfather *plok'sip*, *polok'si-*

sap, maternal grandfather *ka'zip*, *kazisap*; paternal grandmother *pte'wip*, *pte'wisap*, maternal grandmother *p'olip'*, *p'olisap*; great-grandparent *tsiltsil*; grandson (son's son) *lulaks*, *lulaksap*, (daughter's son) *kzkzs*, *kakasip*; granddaughter (son's daughter) *kzmisk*, *kzmisap*; (daughter's daughter) *qoliska*, *qolisap*; son *unak*, *unawrgak*; daughter *bε'ip*, *beisap*; husband ("man") wife ("woman"); father-in-law *pxεsip*, *pxεpxεzip*; mother-in-law *guspaks*; brother-in-law *ptsukxp*, *ptsuksxp*; sister-in-law *mulgxp*, *mulgesap*; widow *wεn'wit*, *wεwan'wit*.

4300 I *nε*, *ni*; me *an*; me *nat*; us *anal*; thou *i*; thee *am*, *mi*; ye *at*; you *amal*; he, she, it *hot*, *ot*, *hon*, *hurk*; they, them, *hutsa*, *buta*, *hurges*, *wrgεs*; this, who, he *kan*; many *tum*, *tum'i*, (objective *tu'mens*); all *nanεk* (object. *na'nukens*); my [with relationship terms] *ke'au*, (for the other persons the Genitive suffix *-am*, or *-lam* is used, added to the pronoun).

4400 chief *laqi*, *lala'γi*; shaman *ki'uk*.

4500 to be strong *qil'-*.

4600 No special name for the Modoc or Klamath tribes other than the word "people", or *euksni* (from *eus*, lake [cf. name bestowed on them by Pit River tribes: *lutuami*, from *lutuam*, "Tule Lake"]); sometimes they use also the words *modokni*, evidently coined after American usage; Pit River tribe *moatwas*. *mumatwaga* (from *muat* = south); white man *boston*, *babastinag* (from Boston).

5100 head *nεs*, *nunGa*; forehead *lεke*, *lala'GyaG* (cf. "chief" 4400); nape *nis*; skull *nγzk*, *nγakγa*; Adam's apple *nauks*; hair of head *laq*; hair of face *smoq*.

5110 eye *lεp*, *lulal'BaG*; to see *sle'-*, *splek-*; to look-, *slesl-*, *slepkok-*; to look *te'lutsn-*; to search, to go after *qai'qarεk-*.

5120 mouth *sum*, *susm-*, tongue *Ba'waTs*, *PaPauDzε-*; lip *xε'Tsu*, *xεxεDzεo-*; tooth *DuT*, *Tut'a'-*.

5121 to eat *Pz*, *Pzn*, *PzPK*, *PzuK*; to smoke tobacco *Pzq* (probably derived from to eat); to bite *qo'K-*, *qo'qtK-*, *qo'PK-*, *qo'γw-*; to drink *Pu'n'ui*, *BuPzn'ui*; to suck *εTs-*. *eεTs-*, to taste *ma's-*.

5122 to speak *hemKqrK-*, to tell *saBe-*, *sasP-*, to sing *swin-*, *swiwa'n-*, to shout *stu-*; to order *stuli'*; to ask *wul-*, *wu'wul-*; to cry *γεnq*.

5130 Nose *Pzεis*, *Pzi'Ps-*; to smell (tr.) *stiK-*; to smell (intr.) *Pilui*, *nεnPilui*.

5140 ear *momo'aTs*, *momo'Dza-*; to hear *Do'min-*; to listen *maTsa'D-*; deaf *Tjo'qaT*.

5200 hand (from points of fingers to elbow) *nεP*, *nεmB-*; arm (from, elbow up, including the shoulder) *wεq*, *wεuq-*; thumb *Tqo'Po*, index *sPε'lwis*; middle finger *TaTqla'm* ("half, middle"); ring finger *TaTqlam yaktstani*; little finger *KaPtsi*.

- 5210 to touch *TasT-*; thick *mu*; thin *KeTsa*; rough "bad feel"; smooth, soft "good feel"; heavy *muanen* ("thick"); light *KeTsanen* ("thin").
- 5220 to grab *snoq-*, *snoqpap-*; to give *se'wan-*, *seswan-*, also *ney-*, *nepK-*; to scratch *TslipK-*, *sistlapK-* (or *sistlapK*); to scratch oneself *sadaqts-*; Suffix expressing "in exchange for" *-ti*, Suffix expressing "for use in connection with" *-*, *-amutki* (probably from *am* "of" + *otki* "being" < *but* it + *Gi* to be).
- 5230 to make *cut-*: Instrumental case suffix *-ka*, *-atka*.
- 5240 to hit *ktoG-*, *ktopk-*, *ktoyw-* (also for to strike, slap, etc.), to turn a thing over *ktenBl-*, *ktektoBl-*.
- 5250 to fill *qitqoG-*, *qiqatqoG-*.
- 5300 foot (from ends of toes to knee excluded; no special name for either toes, or ankle, or foot, separately from *shinj pɛts*, *pɛtsap*; heel *taqak tatqa-*; knee *qolens*, *qoqlenz-*; thigh *ts'uks*, *tsutso'ka*; hip *pu'saklas*, *puksaslGa*.
- 5310 to go *gen-*, *genat*; to come *gepk-*, *gepkat*; to arrive *Gatk-*, *Gatp-*; also *Batp-*; to return *gepkap'le*; to walk *qis-*, *qiqais-*; also *qisn-*, *qɛqasn-*; to walk slowly *gɛaunigen-*; to run *huts-*, *toits-*; to jump *ɾgats*, *ɾgatsnat*; to travel *tannu*, *tatannu*; to meet *wist-*; fast *qse*, *qseqse*; slow *ke'au*.
- 5340 to stand *tku'tk-*, *lu'aluatk-*; to lie *sqolɾ-*, *lulalɾat*; to sit, to be, *tsia*, *tsiat*, *tsitsia*; to sit still *tseɬ*, *tseɬat*; to kneel *lutslɾ-*, *lulatsulɾ-*; to hang (tr. and intr.) *ksakae*, *ksaksakae*; (also *ika'ya*); to shake *swetyen*.
- 5350 to kick (same as to hit, v. 5240).
- 5400 breast *wi'su*, *wiwa'so-aG*; belly *kas*.
- 5410 bone *qaqo*; meat, flesh, *tsuleks*.
- 5420 blood *tsekeli*, fat *pilu'*, milk *etsas* (cf. to suck 5121).
- 5430 heart *stayn-as*, *stastayn-ga*; liver *tuso'q^h*, *tutsox-ga*; kidney *Bin'e*, *Bibne-ak*; gut *qa'ye*, *qaqeya-ak*.
- 5450 penis *qeq*, *peq-ɾa*; testis *slul-ks*, *sluislal-ga*; cunnus *stem-s*, *stesm-ak*; vagina *gɛno*, *gɛngano-ak*; pubic hair *smak*; podex *ts'ei*; anus *qiu'*; menses *stopwe*; to defecate *sxe'n*; to urinate *swits-*; to copulate *s'in-*; to masturbate *lɛɛwan*; to fart *ski-*; womb, *tsala-ks tsatsasla* = *ga*.
- 5500 to live, to be, to sit *tsi-*, *tsitsi-*; to live in camp, to be encamped *maqlɾ-* (cf. *maqlaks* man, person, people, Indian); to grow *tei-* (probably the same as *tsi-* to live); to be tired *qetsig-*; to think *busk-ank*; to know *saywa-k*; to help *satway-*; to wish *sanal-*; to be friends *sawaline-*, *saswaline*; to be able, can, must, *ak-*; to fear *wuc-*; sick *silla'*; good *tits*; bad *qoi* (cf. *gay* = not); true *qatak-ni*.

- 6100 to cut *xtakt-*, *xtol̄z-*, to saw *slolts-*, *slulu'dz-* or *sluisla'lts-*; to chop *udεεk-*; sharp *tsaqtsaq-li*; blunt *qom'qom-li*; on, with, by, Instrumental suffix *-tka*.
- 6210 bow *nTε-is*, *nTεnTε-G^a*; bowstring *naleb'*, *nanal'by-aG*; arrow *Talze*, *TaTal'z̄yaK*; arrowhead *sa'walz̄*, *saswal'-ga*; quiver *to'kq̄rks*, *toto'kq̄r-Ga* (cf. to hunt); to shoot *Tewi*, *TeT̄wi*; *sli-n-*; to miss *qaby-*, *qa'qiby-*; to kill *si'uk-*, *lu'el-*; to hunt *kq̄rk-*, *kq̄rk̄r̄G-*, *ka'k̄r̄kaṛG-*; to fish *'swεw-*, *swa'sow-*; *bwa'eṛe*; war *sε'loaly*; snare *ktsin*, *ksiktsin-ak*.
- 6220 to dig *yeb-*, *yeyb-*; digging-stick *qmDa*, *aqmDa-aG*
- 6230 hat (basket cap) *qmalεq-s*, *qaqlmεq-Ga*; necklace *nawaq-s*, *snasnoax-ka* (cf. Adam's apple 3100); shell beads *lakt-as*, *lalakt-Ga*; shirt *tculi-s*, *tcutsli-Ga*; belt *qaili-s*, *qaqeli-ak*; breechclout *sinta'qis*, *sesintasqis*; skirt, woman's kilt, *sanapts*, *sesnapts-ka*; trousers, leggings, *qala'laps*, *qaqalaps-ka*; shoes, mocassins, *wa'ksna*, *wawaksn-aG*; tule mocassins, *mit*, *mimte-aG*.
- 6241 house *la'Dz̄-as*, *lala'Dz̄-ga*; *uke'plaks*, *ke'ukeplaks* (from *kepl-* hot); *tsis* (from *tsia* to live); *was* (from *wa* to live); *qe'lawas*, *qeq'lawas* (large « sweat-house »); *spuk'lis*, *spukpa'klis* (small « sweat house »); doorway *steqic*; center post *to'pka* (pl. *to'pkas* or *tuta'pka*); center-post ladder *wa'qis*, *wa'uqis*; smoke-hole *sla'yaks*, *slasla'yaks*; fire-pit *sne'ylaks*, *snesne'ylaks*;
- 6242 to roast *nu'k-*, *no'nuk-*; *lu'sk-*, *lulu'sk-*; to bake *puk-*, *pupk-*; spoon *mitco*, *mimtco*.
- 6251 basket *maksa*, *mamaksa-aGa* (probably from *ma'i* tule); *kala* (made of roots); *yaki* (made of willow wands, from *yās* willow); tule mat *stε'ulas*, *steto'las-Ga*.
- 6253 to skin a hide *naski*, *nanaski*; to tan a hide *toq'i*, *toq'tqi*.
- 6254 to write, paper, book, etc., *PiPa* (from « paper »); flute *stota*, *stoyto'ta*; clap-stick *upa'qpaks*, *wa'upaqpaks*.
- 6260 to trade *se'sakw-*.
- 6280 boat *wunc*, *wuwanc*.
- 6290 to dance *ksi'uly-*, *ksiksoly-*; to doctor (shamanism) *tsut-*; to gamble *sakl-*, *sasakl-*; to meet *wistanG-*; basket game *pabl-*; to sweat (medicinally) *spuklits-*; to run in the mountains for the acquisition of supernatural power *spotu-*, *spocplu-*, *spuspatu-*; to be crazy *lek-*.

TEXTS.

I. SPEECH OF WELCOME.

(The informant tells about having met the present recorder some years previously, his pleasure at seeing him again, how they are going to study together the Indian language, etc.)

1. *tank a mis nu tu slea Alturas djakfolsten-*
 long ago do thee I there see Alturas Jack Fulstone-
 It is a long time since I have seen you. That was in
am-ski bit bitank¹ kemp-gi
 of-place there that time camp-be
 Alturas, at Jack Fulstone's place. That is where you were then camped.

2. *tswi nat at tank batpa tot at djakfolsten-am*
 then we yet then arrive already yet Jack Fulstone
 When we arrived Jack Fulstone's wife

snewets silla' 3. *tank tot weleqs bunkst tsuta*
 -of woman sick then yet old woman her doctor
 was already sick. Then the old lady doctored her

lap-ni psin tsuta 4. *tswi nat tank at mis tapi =*
 two-be night doctor then we then yet thee last
 for two nights. That was the last time that we saw you.

zeni² slea 5. *tswi wuca mis ni toqa zuna gida*
 see then fear thee I when yesterday here
 I was surprised at you yesterday to see you back here again.

pen gatp-ist³ 6. *tswi nat gen pen tits ewa-anka*
 again arrive-ing then we here again good full-ing
 Now that we have met again we feel good.

wist-anka 7. *tswi nat gen gida sawalineá patsit*
 meet-ing then we here here make friends to day
 Here we are to-day, good friends.

1. *bitank*, <*bit*, there + *tank*, then. It may be well to note at the same time that the ending *ank* is also the regular suffix for the Continuative. In the present case this adverb has all the value of a correlative: "we saw you at the time *when* you were camped, etc. . . ."

2. *tapizeni*, <*tapi*, the last one + *-zeni*, out.

3. The ending *-ist* is the mark of the Accidental Agentive (see the Suffixes): "the arriver in the act of arriving", "timui te advenientem".

*genwaitas*¹ 8. *tswibuktatki*² *qela-tat* *sabe-otki* *tank* *nals*
to-day that's the way world-in tell-being long ago us

That is the way to act in this world, as they were always telling us,

nal-am *tsitskaak* *sabea* *nannuk* *toalas*³ *qoi-;ank (?)*⁴ *tsi-*
we-of (our) old people tell all whoever to be friends (?) live-
our old men, for every body and all to be friends at peace.

itki 9. *at* *humist*⁵ *pil* 10. *ken-tat* *waitas-tat* *titsewaks*⁶
being yet thus only here-on day-on feel good

That's the only way. To-day we feel good.

11. *qatak-ni* *tswitanabunkt*⁷ *wist-anka* *patsit* *tswinatkenat*⁸
true-be we are doing it now meet-ing to-day we do it now

That's the truth of it⁹. We are doing it now. We are meeting each other.

12. *bunkt* *meenak* *cuta* *gida* *gentat*¹⁰ *waitastat*¹¹ 13.
thus moment work here to-day to-day

That's what we are doing to-day. We have been working like this

tswinabunkt *biba*¹² *cuta* *maqlaks-am*¹³ *bemkanks*¹⁴ *nannuk*
we do it now write work Klamath-of speech all

for a little while. That's what we are doing, writing down all the Indian

14. *kanak*¹⁵ *nat* *huca* *genwaitas*¹⁶ 15. *tswi* *cuta* *bunk*
that's all we think right now then work this

words. That's all I can think of for the present. Now we have worked

1. From *gen* here + *waitas* day.

2. Idiomatic expression, from *tswi* then + *bukt* thus + *otki* being.

3. From *tu* there.

4. Correctness of record doubtful. No verification. Perhaps a negative expression from *qoi* not + a word signifying "quarrel, fight"?

5. From *hu* here + *ist* accidental agentive.

6. From *titsew-a* to feel good, (from *tits* good). The ending *ks* combines *k* (suffix with a generalized verbal feeling) and *s* (generalized nominal feeling). "To-day the feeling is good".

7. "That's the only way", "That's the truth of it", "We are doing it now", and similar expressions are stereotyped and meaningless locutions typical of Indian formal address.

8. From *tswi* then + *tana* we (metathesis from *nat*) *bunkt* thus.

9. Idiomatic expression, from *tswi* then, *nat* we, *ke* for *gi* to be.

10. From *gen* here + *-tat* at.

11. From *waitas* day + *-tat* at.

12. From «*paper*».

13. *-am* Genitive Case.

14. *bemkank* to speak. *-s* nominalizing suffix.

15. Probably from *gen* here + *-ak* only.

16. From *gen* here + *waitas* day.

*talaotki*¹ 16. *atkateak*² *hi*
ending that's all hi

to the end. Amen.

II. RELATION.

[The informant relates a morning's hunt after rabbits with the recorder.]

1. *patsit nat mbusant automobil-atka rabbits kankanka*
to-day we in the morning automobile-by rabbits hunt
To-day we went across the river in the car on a hunt for rabbits.

tuktsa qoqe kuniksta 2. *tswi its*³ *at wunip rabbits*
there across river there across then you yet four rabbits
You shot four rabbits but I only shot one.

*slin*⁴ *nutsik*⁵ *nazak*⁶ *rabbit slin* 3. *tswi nat at*
shot but I one only rabbit shot then we yet
That's all the hunting

*kankt-ak*⁷ 4. *kiyank kepkapli*⁸ 5. *tswi nat bit ambu*
hunt-only thereupon come home then we there wate
we did. And then we started back. Then we filled (our canteens) with

*qiqatqoka*⁹ 6. *tswi nat at kepkapli gida* 7. *tswi nat*
fill up full then we yet come home here then wer
water. Then we came back here. Then we

katpapli gida 8. *hi kadade*.
arrive home here hi that's all.
arrived home again. That's all, hi!

1. Probably from *at* already + *-utki* being.

2. Formula for ending stories or speeches. Probably from *at* already and *ak* only mixed up in a hodge-podge of metatheses and redundancies.

3. Emphatic form of the pronoun *i* thou.

4. Verbal forms consisting of the radical alone as in the present case are rather infrequent.

5. From *nutsi*, emphatic form of *nu* I + suffix *-ak* "only". *nutsik*: ...as forme, etc.

6. From *nas* "one" + *-ak* "only".

7. From *kank* "to hunt". Note above the more usual (reduplicated) form: *kankank--kankt* is the Participle Past, "having hunted".

8. From *gen-*, *gepk*, to come + *-pli* suffix for "homewards".

9. The reduplicate form here indicates a superlative. The primary form is *qiqok-*

III. HOMILY.

[The informant gives a discourse after the fashion of the old men giving advice to the young people.]

1. *tsitskaak*¹ *nal-am* *kaak* *nals* *neis* *sabea* 2. *spotu-*
 old men us-of long ago us to tell "spotu"-
 Our old men used to tell us : Go *spotu*-ing in the mountains if you
*ank*² *tcin-tki*³ *gen-tat* *qel-tat* 3. *humistseatkyank*⁴ *saywaks*⁵
 ing grow-ing here-on earth-on that's the only way knowing-er
 want to grow up on this earth.
- tna* *gok*⁶ 4. *but* *yayna* *biswaks* *gi* 5. *beeyun* *makwal-*
 someone will be that mountain man is there camp-
 That mountain is a person. Camp there.
 That's the only way you'll get to be somebody who knows anything.
- tat* 6. *tswi* *mis* *but* *satway-ok* *nannuk* *waitas* 7. *tata-*
 at then thee it help-will all day as
 Then he will help you, always.

1. Plural by reduplication of *tsika*. The word does not mean "old man" so much as "old timer". It may perhaps be derived from *tits* = good + *kaak* = long ago. The singular would then have been created by analogy.

2. "*Spotu*" is the word used to describe the whole complex of actions, semi-religious in intent, semi-healthy, which is also meant in local Indian jargon by "going to the mountains". It includes running uphill at sunset time, spending the night on mountain tops, visiting lonely springs, running around hungry and thirsty, throwing rocks about, and generally going crazy. Thus one acquires "power". Then comes the "sweating" of purification, and the final jumping into the river.

3. Compare the use of the two suffixes *-ank* and *-tki* in *spotuank* and *tcintki*. *-tki* comes from *-otki*, which in turn is derived from *but* it + *gi* to be. The suffix *-tki* expresses an inherent or essential quality, and in fact comes rather close to forming adjectives in many cases, in a manner very similar to *-li* (for instance *taqtaq-li* or *taqtaq-tki* "red", the second form having rather the sense of "being red"). The suffix *-ank*, on the contrary, refers more to an accidental quality, and is really a verbal affix. In the present instance the two words *spotuank* *tcintki* have a value somewhat like : by *spotuing* growing up happens, or : growing is the result of *spotuing*.

4. Idiomatic expression, like the ones noted in note 11 of the first text. From *humist* = thus + *at* = yet + *gi* = be + *-ank* = ing.

5. The ending in *ks* is very frequent, especially in words like man, woman, child, etc., and may be looked upon as *-k* = verbalizing suffix + *-s* = nominalizing suffix. One may say for instance, for young man, *tsimanks* or *tsimangatki* (*-otki* suffix); the word is probably derived from the verb *tsi*- "to be, to grow, to be alive". In the case of *saywa-ks* the ending *ks* is equivalent to an agentive : the one who knows.

6. Future of the verb *gi* = to be.

*manksat*¹ *i* *bunks* *kaltsui-ok* *mis* *qil-is*² *ewana-ki*³
 long as thou him meet-will thee strong full-ing

As long as you go to him he will make you strong, just like a

kiuk 8. *tswi* *bikts* *wewalokak-tat*⁴ *pee-w-at* 9. *bit* *yayna-*
 shaman then hence little springs-at swim-at there mountain-
 shaman From there go and swim in the little springs in the mountains.

dal *tamnu-k-ol-an*⁵ 10. *tswi* *at* *sputu-tkan*⁶ *at* *spuklitska*
 towards having travelled then yet having "sputu-ed" yet sweat

When you have finished sputuing, take a sweat.

11. *tswi* *mis* *but* *biswaks* *cut-ok* 12. *tswisak*⁷ *ke*
 then thee it man make-will always thus

Then it will make a man out of you.

Thus you will

saywaks *tatamanksat* *i* *biswaks* *tsitsa-n*⁸ *gen-tat* *qela-*
 a knowing man as long as thou man living here-upon earth
 be somebody as long as you live on this earth.

tat 13. *neist*⁹ *pil* *mis* *ni* *sabea* *at* *qay* *pen*
 upon first only thee I tell yet not again

This is the first time I have told you these things, and

stua *net* *weleda*¹⁰ 14. *tswi* *domin-ok* *keau* *stulis*¹¹
 order add nothing else then hear-will my advice
 I shall not add any other advice. Now you listen to my advice.

15. *saywaknank*¹² *mis* *ni* *nen* *sabea* 16. *tswi* *at*
 because I know thee I this tell then yet
 I tell you because I know.

1. From *tata* = whereat + *manksat* = while.

2. From *qil* = strong + *-is* = Agentive, "the one who is strong".

3. From *ewa* = to be full + *-ki* = ing. "... to ye [as] full of strength [as] a shaman".

4. The primary form of spring is *weloa* (or *weloa-s*). The reduplicated form here indicates both plurality and diminutiveness.

5. From *tamnu* = to travel + *-k* = verbalizing suffix + *-ola* = Past + *-n* = Participle Present in a subjective position. "having performed the action of having travelled to the mountains, now you must perform sputu, etc."

6. Contains both the Participle Past *-tka* and the Participle Present *-n* in combination.

7. From *tswi* = then + *ak* = only.

8. Reduplicated form of *tsia* = to live + *-n* = Participle Present as subject.

9. From *nas* = one + *st* = Accidental Agentive.

10. From *we* + *le* + *ta*, all of them negative particles seldom used alone.

11. From *stu-* = to shout, order + *-li-* = adjectival suffix + *-s* = nominalizing suffix.

12. From *saywa* = to know + *k* = verbalizer + *n* = Participle Present + *ank* = Habitative suffix.

katateak hi
 that's all hi!
 That's all now, hi!

1. I am fishing *mehes an sweewa* (*mehes fish*).
2. I fish a lot of little fishes *tum an memibka sweewa*.
3. I will fish *nu a hun sweewok mehes*.
4. I will fish a lot *nu a hun sweewak memibka*.
5. I fished two fishes *lab an mehes sweewa*.
6. He is a fisherman *hut a swasowis mehes*.
7. I am a fisherman *nu a swasowis*.
8. I hunt *nu a kankanga*.
9. I am a hunter *nu a kankangis* or *nu a luelis*.
10. I hunted *nu a kankangola* or *nu a luelola*.
11. I used to be a hunter when I was young
tank an tsimangat luelolis
 long ago I young man hunter (hunted-er)
13. I killed a man *biswaks an siuk an*.
14. I killed several men *biaswaks an stuk an* or *tum an biaswaks siuk an*.
15. I saw one wolf *nas an slea qeutsis*.
16. I saw many wolves *tummi an slea qeutsis* or *qeutsik an slea*.
17. Only one marten *hut a natsyak yayna*.
18. Many martens *hut a tummi yayna*.
19. Hit him! *ktoki hunks*.
20. I am hitting him *nu a hunks ktoka*.
21. I already hit him *nū a hunks ktokola*.
22. I will hit him *nu a hunks ktokok*.
23. I hit a few *ktopka*.
24. I hit many *ktoyowa*.
25. Hit! (one) *ktoki*.
26. Hit a few *ktopki*.
27. Hit many *ktoyowi*.
28. I grabbed you *nu am snoqa*.
29. You grabbed me *i an snoqa*.
30. I eat *nu a pan* or *at an pan*.
31. I dont eat *qay an pan*.
32. I eat a lot *tum a pauk*.
33. I eat all the time *tswisak an pan*.
34. I eat a little *kig an pan* or *kig an papk*.
35. I eat it all up *nannuk an pan*.
36. Two of us eat *nat labi pan*.

73. Here on the ground : *gen-tat qela-tat*.
74. I am on the ground *nu a hun-tat qela-tat*.
75. You are on the ground *i a hun-tat qela-tat*.
76. I saw a deer over there eating :
tu an slea baqols kink papk-s
 there I see deer off and on eat-ing
77. Grass *ksun* grassy *ksunol-tko*.
78. The horse is already caught : *at hun watsas snoqa-tki*
79. It's already dug : *at ot yeba-tki*
80. It's already cut : *at ot sludz̄a-tki*
81. It's done already *at otki*
82. I nearly killed him *nu hun siuk-akska*.
83. I nearly saw it *nu hun sleo'l-akska*.
84. This book is turned over *hit a pipa* (paper) *bu-pli*.
85. I turn this board over *hun an papqas kteu-pli*.
86. To live *tsi* a dwelling *tsis*.
87. To live *wa* a dwelling *was*.
88. To dance *kisul-ȳa*, *ksiksol-ȳa*, a dancer *ksiksol-ȳis*.
89. to snow *kena*, *kekna*; snow *kes*, snow-heap *kekn-is*.
90. I saw him digging *nu a bunk slea yab-ist*.
91. I saw him hitting *nu a bunk slea ktok-st* (or *ktopka-st* or *ktoyow-ist*).
92. I saw him being hit *bunk slea ktok-st bunk-st* (him see hitting him-ing)
93. I saw him eating *nu bunk slea pa-st*.
94. Ashes *stoylaks*; camp *stoylax-kis*.
95. To eat *pa*; restaurant *pa-kis*.
96. To drink *punu*; saloon *punu-kis*.
97. To camp *maqlak*; camping-place *maqlak-kis*.
98. To defecate *sxein*; toilet *sxei-kis*.
99. Summer-time *pada-le-mi*; autumn *tsalam-le-mi*; winter *luld̄am-le-mi*;
 noon-time *psekst-le-mi*; haying-time *ksun-le-mi*; it is eating-time *at a pas-le-mi* (*pa* to eat, *pas* the act of eating).
100. Harness *wats-amutki* ("horse-of-it is").
 this is for an automobile (referring to a jack) *automobil-amutki*.
101. At the chief's place *laqi-amski* (or *laqi-yamksaksi*),
 at the dog's place *watsag-alamski* (or . . . *mksi*),
 at my father's place *keau ptes-amksi*.
102. Towards the mountains *yayna-ȳeni*,
 towards there *tu ȳeni*,
 this way *kina-ȳeni*.
103. Towards the mountain *yayna-dal*,
 towards the house *ladzas-dal*,

- towards the barn *barn-dal*,
 north *yayna-dal* (toward the mountain),
 south *mua-dal*; east *lube-dal*; west *txalam-dal*.
104. Around the house *ladzas-ksaksina*,
 around the stable *stable-ksaksina*.
105. Over there *tu-tan*,
 on this side *gina-tan*; on the other side *kuni-tan*,
 on this side of the automobile *automobile gina-tan*,
 on the other side of the automobile *automobile-kuni-tan* (or *automobile-tu-tan*).
106. To go by automobile *automobile-tka gena*,
 to go by horse *wats-tka gena*.
107. I traded it for a basket (*maksa*)
maksa-tiutki nu a hun sesadwi,
 in exchange for an automobile
automobile-tiutki.
108. Did I tell you? *tamtam mis ni sabea*
 ? thee I tell.
 Did I cry? *tamtam ni ʔena*.
 Did you cry? *i tam ʔena* (or *tamtam i ʔena*).
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