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ALUTOR GRAMMAR

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CHAPTER 1. Phonology

In the present phonological sketch we will describe the following two main aspects of Alutor phonology: the static aspect, that is inventories of units (segments and suprasegmentals), and the dynamic aspect, that is phonological processes. The static part deals with the sounds of Alutor – phones and phonemes (1.1), as well as the syllable and rhythmic patterns (1.2). The dynamic part deals with the phonological processes of Alutor, which are presented in the form of rewriting rules (1.3).

The approach we use here is similar to that of generative phonology (see also [Kodzasov, Krivnova 1981]). Two levels of representing Alutor words are distinguished: the underlying level, that is the level of phonemes (it corresponds to the morphophonemic level in the Russian traditional phonology) and the surface level, that is the level of phones, or systematic phonetic level (we omit some minor details of Alutor pronunciation, irrelevant for the phonetic system). Rewriting rules apply to the underlying representation of a word, which is a sequence of underlying representations of the corresponding morphemes. Underlying representations of Alutor morphemes are given in the Dictionary – see Part III. The application of rewriting rules results in the surface representation, or the phonetic transcription.

In the present section the underlying representation of Alutor words and morphemes is given in braces. Phonetic and practical transcriptions of words are usually not parenthesized, but in some special cases the phonetic transcription is given in square brackets. The application of rewriting rules is shown in round brackets. The inventories of the surface and the underlying representations are identical, that means we use one and the same chart of symbols for writing phones and phonemes.

1.1. Segments

1.1.1. Vowels

1.1.1.1. Inventory

The vocalic system of Alutor consists of 11 vowels. They are: [i], [ī], [u], [ū], [e], [ē], [o], [ō], [ə], [a], [ā]. The phonological status of each vowel is discussed further.

The Alutor vowels represent a typical triangle system. They are distinguished in terms of quality and quantity. The aspects of quality are: tongue height (high vs. mid vs. low), frontness/backness (front vs. central vs. back) and lip rounding (rounded vs. unrounded).

The classification of vowels is given below in Table 1. The vowel [ə], or schwa, differs from all the other vowels both in length and in function. It is a supershort vowel, while all the other vowels are of normal length (short or long – see below).

The phonological status of this segment and its functions are discussed in 1.1.1.2.

Besides quality, we also distinguish vowels in terms of quantity: the non-schwa vowels can be either short or long¹. The vowel length is often conditioned by the position of a vowel in a word, but in some cases there is a phonological opposition between short and long vowels. The vowel length in Alutor deserves further discussion: the length contrast of *e* and *o* is discussed in 1.1.1.3, the length contrast of *i*, *u*, *a* is discussed in 1.1.1.4.

TABLE 1. Classification of vowels

Frontness/backness Lip rounding	front unrounded	central unrounded	back rounded
Tongue height high	i, ī		u, ū
mid	e, ē	ə	o, ō
low		a, ā	

COMMENTS on Table 1

The front and the back vowels are rather close to the central ones. The back vowels are rounded: *u* is strongly rounded, while *o* is moderately rounded. The mid vowels stand at approximately equal distance from the high and low vowels: they are neither open nor close. The vowel *ə* is a central mid vowel, but its main variant is a little bit lower than *e* and *o*. The long vowels do not differ considerably in quality from their short counterparts.

1.1.1.2. Phonological Status of Schwa

The phonological status of schwa is one of the most interesting problems of the Chukchi-Kamchatkan phonology. Some authors (see, for instance, [Zhukova 1968]) regard this vowel as a purely auxiliary segment and do not include it in the inventory of phonemes. Actually, the fact that the schwa is predictable in many contexts is rather obvious. In such cases the surface representation of a word containing *ə* can be derived from the underlying representation without *ə* (= the “non-vocalized” representation) by means of simple insertion rules (see 1.3.3.2). For example, if a word sounds like *tʃjátəʃk* ‘I came’, it can be derived from **tʃjatk*. Here the schwas break up the word-initial and the word-final consonant clusters. Thus, in this word, as well as in many other words, *ə* is just an epenthetic. This means that the schwa is

¹ Previously, long vowels were found neither in Alutor nor in any other Chukchi-Kamchatkan language (cf. [Moll 1955; Zhukova 1968] and others).

often used as the syllable nucleus to create well-formed syllables and to eliminate illicit consonant clusters.

However, in some other cases the schwa is unpredictable, because it is difficult or even impossible to formulate more or less standard phonological rules defining schwa epenthesis in the non-vocalized representation. In such situations the fact that a schwa is pronounced in a given word can be explained only by the individual property of a given morpheme. In other words, we think that in such cases ə should be considered an inherent constituent of the corresponding morpheme. Many roots and affixes therefore contain the schwa in the underlying representation, cf. the root {əpa} ‘soup’ appearing in the following words: *ʔəpāŋa* (< {əpa-ŋa}) ‘soup’, *tənəpatən* (< {t-n-əpa-at-n}) ‘I cooked it’². We also treat some root-medial ə that always appear in one the same place in a morpheme as part of the corresponding underlying representation, cf. *təm̄kətəm̄*³ ‘hummock’, *yatəm̄kəlin* ‘covered with hummocks’ (the root {təm̄k}); *təʔlək* ‘be ill’, *yaʔəllin* ‘(s)he fell ill’ (the root {tʔəl}), *mət-ján-mək* (< {mət-jat-mək}) ‘we (two) came’ (the prefix {mət} and the suffix {mək}). In other words, we always include the schwa in the underlying representation in case is not inserted by means of the standard rules listed below. On these grounds we consider the schwa an independent phoneme of Alutor.

Thus, schwas in Alutor words can be of two different origins: some ə are part of the underlying representation (“original” ə), some appear only in the surface representation, they are epenthesized by means of standard rules (“epenthetic” ə). In the phonetic transcription we write the vowel ə in all positions, as all linguists

² We treat the glottal stop in *ʔəpāŋa* as a segment epenthesized before a word-initial vowel (a situation similar to German, Arabic etc.). We can certainly choose another variant for the underlying representation – without ə, but with the initial ʔ, that is {*ʔpa}, but in this case the second word would appear as **tənāpavən* (< *tə-nə-ʔpa-və-n < *{t-n-ʔpa-v-n}), because in syllable-final position əʔ changes into *ā* (this alternation is typical for the conjunctive – see 1.3.6). Since it is not the word we have in reality, we choose {əpa} as the underlying representation.

³ The non-epenthetic vowels ə coming from the underlying representation are underlined here.

studying this language group do⁴.

1.1.1.3. Long and Short *e* and *o*

Vowels *e* and *o* always appear as long segments in open stressed or open pre-stressed syllables (that is in the first or the second syllable of an Alutor word – see 1.2), cf. *ʔéγəv* [ē] ‘yesterday’, *jəpəlɨən* [ē] ‘hoof’, *tórak* [ō] ‘sink’, *lɨotótəkən* [ō] ‘top’.

Short *e* and *o* are found in several roots in closed stressed and closed pre-stressed syllables before or after *q* and *ʕ*, cf. *léqtək* [e] (along with *líqtək* ‘come back’, *ʕoptótʕu* [o] ‘all’, *qónpəŋ* [o] (along with *qínpəŋ*) ‘always’. In post-stressed syllables, both open and closed, the vowels *e* and *o* are usually short, cf. *ʔássə* [e] ‘aunt’, *tətátoratəkən* [o] ‘I’ll sink’. The latter situation can be treated as standard vowel shortening in post-stressed position – see 1.3.7⁵. Short *e* and *o* are also found in non-accentuated auxiliary words (see 1.2.2), cf. *-γemat* [e] ‘maybe’, *-ʕoro* [o] ‘then’ (non-accentuated words are marked with “-”).

Long *ē* and *ō* are also found in both open and closed syllables in so-called “expressive” words, cf. *tōk* ‘(interjection) let us’ (for more details see 1.3.8.1). Expressive lengthening of this kind can be found in many languages, but such long vowels are not considered separate phonemes.

Thus, in Alutor long and short *e* and *o* occur in positions that complement each other. That is why we find it possible to treat a long phone and its short counterpart as

⁴ It is worth mentioning that native speakers of Alutor are not aware of the schwa as a segment of their pronunciation, whether predictable or not. They think some Alutor words have only consonants; at the same time, they can easily divide such words into syllables. For instance, a word which sounds like *pəŋəllo* ‘news’ is treated as having three syllables – [p|ŋ|l|l] (the symbol “|” indicates syllable boundaries), *wətəwət* ‘flower’ – as [wt|wt], *ʕəvətəwət* ‘boat’ – as [ʕt|v|ʕt]. The same is true for the Koryak language. E.A.Kreynovich [Kreynovich 1958] proposed for Koryak words the non-vocalised representation (that is without ə), but with marked syllable boundaries, like [wt|wt]. Since the schwa is not part of such representation, the author does not consider it a phoneme. In our opinion, such approach is neither adequate nor typologically justified, because there arises a problem of dividing words into syllables – some words have unpredictable syllable division. Nevertheless, E.A.Kreynovich was the first to pay attention to the crucial importance of the notion of syllable for Chukchi-Kamchatkan languages. As we will see further, this notion is absolutely necessary to create well-formed Alutor words.

⁵ From an historical point of view, the Alutor long *ē* and *ō* originated mostly from *aj* and *aw*, or from *əj* and *əw*, and original *e* and *o* changed into *i* and *u* in most positions (they are preserved only in closed syllables before or after *q* and *ʕ* – see above), cf. the following related words from Alutor and Koryak: Alutor *jəpəlɨən* [ē] – Koryak *jəppəlɨən* ‘hoof’, Alutor *lɨotótəkən* [ō] – Koryak *lɨawtótəkən* ‘the top of smth.’, Alutor *ʔimɨúlək* – Koryak *ʔemɨolək* ‘to miss (smb.)’, but Alutor *léqtək* – Koryak *leqtək* ‘to come back’, Alutor *qónpəŋ* – Koryak *qonpəŋ* ‘always’ (these correspondences are discussed in detail in [Muravyova 1986a]).

allophones of one and the same phoneme – \bar{e} or \bar{o} . For practical reasons we do not mark the length on e and o in practical transcriptions of Alutor words (except in expressive words) – see 1.3.12.

1.1.1.4. Long and Short *i, u, a*

There is a phonological opposition of long and short vowels i/\bar{i} , u/\bar{u} , a/\bar{a} in Alutor. The opposition is considerably restricted by the rules of rhythmic and syllable structure (see also 1.2). The constraints are:

1) a long vowel may appear only in an open syllable (except in expressive words);

2) in a stressed open syllable (that is the first or the second syllable of a word) a non-schwa vowel is always long;

3) in a post-stressed syllable (of a stressed word – see 1.2.2) a non-schwa vowel is always short.

Long vowels are therefore to be found only in the first or second open syllable, but since in the open stressed syllable the contrast between originally long and originally short vowels is neutralized, long and short vowels may only contrast in the first pre-stressed syllable. That is exactly what we found in Alutor, cf. *ʔitəkən* ‘(s)he/it is’ vs. *jilʔitkuk* ‘gossip’, *ʔupətəkən* ‘(s)he is repelling’ vs. *lūvətəkən* ‘(s)he is sucking’, *jatətəkən* ‘(s)he is coming’ vs. *ʔāsətəŋ* ‘two debts’. The functional significance of this contrast is not great, because pre-stressed \bar{i} , \bar{u} , \bar{a} occur rather seldom, and in many words originally long vowels occur in a stressed syllable, where the opposition is neutralized, cf. *ʔitək* [i] ‘be’ and *jiləjil* ‘tongue’, *ʔupək* [ū] ‘repel’ and *lūvək* ‘suck’, *jatək* [ā] ‘go’ and *ʔāsətəŋ* ‘debt’ (as one can see, in the practical transcription we mark the length in stressed syllables only on originally long vowels). At the same time, it is obvious that the length of these vowels is relevant and should be marked in the underlying representation of corresponding morphemes. Another piece of evidence for the vowel length is that after an open syllable with a long vowel there is always a syllable of the [Cə] type, cf. *nəpītəqin* ‘old’, *ʔālʂal* ‘axe’⁶. In the underlying representation of such morphemes we write both a long vowel and a [Cə]

⁶ Here the schwa does not break up an illicit cluster, because the corresponding cluster may appear in another word (see 1.2.1). Such examples have reference to another phonological constraint: a syllable with a long vowel cannot be a closed one. Thus we have *nəpītəqin* (while **nəpītqin* is wrong), *ʔālʂal* (while **ʔālʂal* is wrong).

syllable, for instance, {pītə} ‘old’, {ʕālə} ‘axe’⁷. As for the practical transcription, we mark the vowel length on such vowels in all positions except in closed syllables.

The vowel *ā* also occurs in the conjunctive, where it comes from *ɔʔ* under certain phonological conditions (see 1.3.3.2 and 1.3.6), cf. *nājātən* (< nə-ʔ-jatə-n < {n-ʔ-jat-n}) ‘if (s)he came’. It should be also noted that in Alutor the glottal stop never occurs syllable-finally⁸.

1.1.1.5. Examples

In the examples given below the Alutor vowels are shown in the following positions: 1) word-initially (after a glottal stop), both in an open and closed syllable; 2) post-consonantly, both in an open and closed syllable; 3) word-finally – either stressed or not (a stressed vowel is marked with “ ’ ”, an unaccentuated word is marked with “ – ” – see 1.2);

[i]: *ʔivək* ‘say’, *ʔimək* ‘swallow (smth.)’, *mətinuk* ‘eat berries’, *mivva* ‘who’, *ʔitəkən* ‘(s)he/it is’, *ʔimjúlək* ‘miss (smb.)’, *títəkən* ‘I am’, *timjúləkən* ‘I miss him/her/it’, *nónni* ‘name’;

[ī]: *ʔivətəkən* ‘it is getting cold’, *qivətəkən* ‘(s)he/it is getting frozen’, *ʔivəka* ‘it is cold’, *nəqivəqin* ‘frozen’;

[u]: *ʔivik* ‘body’, *ʔivtəʔut* ‘tree’, *ʕasivʕas* ‘pink salmon’, *tənivpə* ‘hill’, *ʔumakatək* ‘gather’, *ʔujivətək* ‘play’, *rurivə* ‘bed’, *tumakavək* ‘gather (smth., smb.)’, *ʔonnu* ‘(s)he/it’;

[ū]: *livətəkən* ‘(s)he is sucking’, *livək* ‘suck’;

[e]: *–vemat* ‘maybe’, *levətək* ‘come back’, *levətəkən* ‘(s)he is coming back’, *rarátenək* ‘near a house’, *ʔaxse* ‘aunt’;

[ē]: *ʔevon* ‘yesterday’, *ʔekulatək* ‘make the bed’, *jevəl* ‘orphan’, *jevásatək* ‘feel pity (for smb.)’;

[o]: *ʕopta* ‘entirely’, *ʕoptəlʔu* ‘all’, *tətátoratəkən* ‘I’ll sink’, *–ʕoro* ‘then’;

[ō]: *ʔójik* ‘eat’, *tojítəkən* ‘I am eating’, *tórak* ‘sink’, *tóratəkən* ‘(s)he/it is sinking’;

[ə]: *ʔəlla* ‘mother’, *ʔəpəvə* ‘soup’, *ʔəlləvi* ‘younger brother’, *nəpvəqin* ‘steep’, *ʔəpátək* ‘cook soup’, *təpvəkávək* ‘I was unable (to do smth.)’, *ηállə* ‘herd’;

[a]: *ʔáəkək* ‘son’, *ʔánvət* ‘festival’, *ʔujátik* ‘sledge’, *mátka* ‘whether’;

⁷ There are some examples in which *ī* originated from *ij*, for instance, Alutor *sivətəkən* (historically from *sivpətəkən*) ‘it is withering’, cf. Koryak *seivək*. But in most cases Alutor long *ī*, *ū*, *ā* correspond not to combinations with *j* or *w*, but to single vowels, for instance, Alutor *viləvil* – Koryak *veləvel* ‘thimble’.

⁸ It is possible that in some other cases the long vowel *ā* also originated from a syllable-final *ɔʔ* or *aʔ*. A similar historical change is also possible for the long *ī* (from *iʔ*) and *ū* (from *uʔ*).

ʔanúʔan ‘spring’, *ʔalpónhən* ‘patch’, *kəjúnaŋ* ‘fishhook’, *kaltíkal* ‘beetle’, *vítʔa* ‘at once’;

[ā]: *ʕālótkuk* ‘hew’, *ʕālóʔal* ‘axe’.

1.1.2. Consonants

1.1.2.1. Inventory

The Alutor inventory of consonants is not large, it includes only 18 segments. The consonants are distinguished in terms of place of articulation (labials vs. dentalveolars vs. palatals vs. velars vs. uvulars vs. glottal laryngeals vs. epiglottal laryngeals), manner of articulation (obstruents vs. sonorants; plosives vs. fricatives vs. vibrants vs. glides; central vs. lateral), nasality (oral vs. nasal) and secondary articulation (non-palatalized vs. palatalized). The classification of consonants is given below in Table 2.

TABLE 2. Classification of consonants

Place of articulation and other categories		lab.	dentalveolars		pal.	vel.	uvul.	glottal laryng.	epiglottal laryng.
			non-pal.	palat.					
obstruents	plosives	p	t	ts _j (s _j)		k	q	ʔ	ʕ
	fricatives	v				ɣ			
sonorants	nasals	m	n	n _j		ŋ			
	laterals		l	l _j					
	vibrants		r						
	glides	w			j				

The status of each consonant will be discussed further. Alutor consonants are divided into two subsystems – obstruents and sonorants. They differ greatly, so we would like to consider them separately.

1.1.2.2. Obstruents

The obstruents are subdivided into two classes: plosives and fricatives. In Alutor all the plosives are voiceless, and all the fricatives are voiced. The Alutor fricatives have a rather broad passageway, so they are similar to sonorants. Fricatives are represented by only two segments – *v* and *ɣ*. It is remarkable that while Alutor fricative obstruents

are not numerous, there is great variety to the sonorants.⁹

Alutor obstruents occur at all the places of articulation, except for the absence of palatals.

Labials are represented by the two consonants – *p* and *v*.

Dentalveolars (both obstruents and sonorants) are represented by the dentals *t*, *n*, *l* and the alveolar *r*. The dentals contrast in secondary articulation – palatalization; they may be either non-palatalized or palatalized. The non-palatalized dental *t* does not have a voiced fricative correlate¹⁰. The exact palatalized correlate of *t* would be *tʃ*, but this is not the sound we usually find in Alutor (actually, the sound *tʃ* does occur, but only in some Alutor words, cf. *matka* ~ *matʃka* ‘interrogative particle’). The sound we consider the palatalized correlate of *t* is represented mainly by two variants, both close to the palatalized *tʃ*, but not identical with it: the affricate *tsʃ* and the fricative *ʃ*, the latter similar to a palatal fricative. The affricate occurs mainly in the speech of the old generation, while the fricative is more widely used, it occurs in the speech of young and middle-aged people. In papers on Alutor the fricative sound is usually registered as ʃ; in the present paper we also use ʃ to write this sound in the practical transcription. It is remarkable that the morphological alternation *t*/*tsʃ* occurs approximately in the same contexts as the alternations *l*/*lʃ*, *n*/*nʃ* (see 1.3.10). On these grounds we refer to *tsʃ* as the palatalized correlate of *t*. The phoneme *tsʃ* has no voiced counterpart¹¹.

Velars are represented by the plosive *k* and the fricative *ɣ*. The fricative is rather close to the sonorants, it often sounds very much like the labial velar *w*¹². It is remarkable that *ɣ* changes into *w* syllable-finally (see 1.3.5).

Uvulars are represented by the plosive *q*, which is slightly pharyngealized. In

⁹ It is possible that the Alutor system is changing from a system with two classes of obstruents – plosives and fricatives, to a system with one class of plosives. That is just how the Koryak consonants are often described (see [Trubetskoy 1958, Zhukova 1972]): all non-plosives are treated as sonorants. But there are some typological facts that should be taken into consideration: first, two labial non-nasal sounds are not common in the class of sonorants; second, if *ɣ* were a sonorant, we would have its vocalic correlate – a high back non-rounded vowel, but there is no such vowel in the Alutor system. That is why we prefer to describe the Alutor system as contrasting between plosives and fricatives. Cf. also the reconstruction proposed in [Mudrak 2000].

¹⁰ The corresponding phoneme is reconstructed for the Chukchi-Koryak protolanguage [Muravyova 1986a]: in Alutor it coincided with *t*, in Koryak – with *j/č*, in Chukchi – with *r*; cf. Alutor *ʃiŋak* – Koryak *ʃiŋek* – Chukchi *riŋek* ‘fly’.

¹¹ Even if there had been such a sound in the proto-Alutor language, it is likely to have coincided with the palatal *j*.

¹² Such a sound exists, for example, in the Polish language.

most cases it is a plosive, but sometimes it sounds like an affricate¹³.

Laryngeals deserve special consideration. The glottal stop ʔ is sometimes used as an auxiliary segment, for instance, it is found before any word-initial vowel. In such contexts the glottal stop is predictable: it is inserted in accordance with the standard rules (see 1.3.3.1). But in other contexts this segment is unpredictable, so it must be treated as part of the underlying representation, cf. *nəʔálək* (< {nʔal-k}) ‘become’ (the root {nʔal}), *ʔəlláʔa* (< {əllaʔ-a}) ‘by a mother’ (the root {əllaʔ}), *nəmálʔa* (< {n-mal-ʔa}) ‘well’ (the circumfix {n-...-ʔa}). In syllable-final position the glottal stop behaves similar to the glides *w* and *j* (see 1.3.6). The sound ʕ is an epiglottal plosive laryngeal, that is a glottal stop accompanied by epiglottis lowering¹⁴. Due to such configuration the larynx becomes closed and the pharynx is narrowed in its lower part. Like the uvular *q*, the Alutor ʕ is also slightly pharyngealized. That is why both *q* and ʕ make the adjacent vowels more wide. There is an obvious contrast between the sounds ʔ and ʕ, cf. *júʔək* ‘reach’ – *vrək* ‘die’, but the fact was not mentioned in previous papers on Alutor¹⁵.

1.1.2.3. Sonorants

Among the sonorants the most numerous group is the nasals; here we find the labial *m*, two dentals – the non-palatalized *n* and the palatalized *n_j*, and the velar *ŋ*.

Laterals are represented by the non-palatalized *l* and the palatalized *l_j*.

The palatalized dentals *n_j* and *l_j* belong to the same place of articulation as their non-palatalized correlates *l* and *n*. The non-palatalized dentals *t*, *n* and *l*, like all other non-palatalized sounds, are not velarized¹⁶, that is why they do not velarise the following front vowels. It should be also noted that the opposition *n/n_j*, *l/l_j* is not neutralized before the front vowels, so both variants – a palatalized and a non-palatalized one – occur there (cf. *kálik* ‘write’ vs. *kaljísitək* ‘write (repeatedly)’).

The remainder of the sonorants do not require special comment. The consonants

¹³ That is why in Russian borrowings the Russian fricative *x* changes into the Alutor *q*, cf. *qəlǰǰpə* ‘bread’ (from the Russian *xl’eb*), *ʔúrvaq* ‘shirt, dress’ (from the Russian *rubáxa*), – *kolqos* ‘collective farm’ (from the Russian *kolxóz*).

¹⁴ In the Koryak language [Zhukova 1972] the corresponding phoneme is realised as the fricative pharyngeal and is written in the transcription as *h*.

¹⁵ The initial Alutor ʔ corresponds to the Koryak laryngeal ʔ, while the non-initial Alutor ʔ and ʕ (the latter – both initially and non-initially) correspond to the Koryak pharyngeal fricative ʕ, cf. the corresponding Koryak words *júʔək* ‘reach’, *vrək* ‘die’.

¹⁶ Actually, sometimes there occurs a velarized variant of *l* (we often transcribed this sound as *w*, not as *l*), but this may be due to the influence of the Russian language, where *l* is strongly velarized.

w and *j* are glides, which may coalesce with the preceding vowel syllable-finally (see 1.3.6). As we have mentioned above, the consonant *ʔ* also acts like a glide in the same context.

1.1.2.4. Examples

In the examples given below the Alutor consonants are shown in the following positions: 1) word-initially, 2) intervocalically, 3) post-consonantly, 4) pre-consonantly, *5) word-finally.

[p]: *púnta* ‘liver’, *púpu* ‘float’, *nónpəqin* ‘old’, *ʕópt̪a* ‘entirely’, *ʔipiʔip* ‘smoke’;

[v]: *yítu* ‘just now’, *ʔavíljuki* ‘disobedient’, *ʕóŋɔʕ* ‘boat’, *nóvqin* ‘black’, *ʔivíŋiv* ‘year’;

[t]: *tátul* ‘fox’, *ʔítak* ‘look’, *ʔáktəka* ‘impossible’, *tətka* ‘walrus’, *ʔúkit* ‘herring’;

[s]: *sáwat* ‘lasso’, *ʕurásik* ‘young man’, *ʔúmsan* ‘firewood’, *vásqin* ‘another’, *jávas* ‘later’;

[k]: *kukána* ‘pot’, *jákak* ‘bend down’, *ʔətkálŋən* ‘leg’, *nəktəqin* ‘hard’ *wámak* ‘harpoon’;

[ɣ]: *ʔit̪na* ‘ladder’, *vaxálək* ‘sit down’, *ʔásɣi* ‘now’, *ʔíŋəjɣ* ‘mould’;

[q]: *qamána* ‘plate’, *taqátaq* ‘side, facet’, *ʔúmqa* ‘polar bear’, *qúqluk* ‘make a hole’, *jáqjaq* ‘seagull’;

[ʔ]: *ʔánaŋ* ‘god, idol’, *ʔajáʔutkuk* ‘fish with a rod’, *ʔiwʔisik* ‘drink’;

[ʕ]: *ʕinúʕit* ‘goose’, *víʕək* ‘die’, *tánʕaI* ‘dried fish’;

[m]: *mámína* ‘fish drying shed’, *númal* ‘again’, *mírmir* ‘tear’, *kúmŋəkum* ‘voice’, *ʔárəm* ‘chief’;

[n]: *nəkínək* ‘night’, *junátək* ‘live’, *ʔórnik* ‘animal’, *tínɣa* ‘what’, *sómna* ‘draught male reindeer’;

[nʝ]: *njúmqin* ‘warm’, *ʔŋat* ‘trap’, *ʔəmŋ:án:njus* ‘I alone’, *qun:ʔətka* ‘a leg (of two)’;

[ŋ]: *ŋítaq* ‘two’, *paŋátək* ‘get tired’, *ŋújŋən* ‘tail’, *jáŋta* ‘separately’, *ʔásəŋ* ‘debt’;

[l]: *lómɣələm* ‘hood’, *tálak* ‘pound’, *ləqləŋ* ‘winter’, *nálɣən* ‘fur skin’, *míməl* ‘water’;

[lj]: *lájni* ‘maiden’, *ʕúlja* ‘man’, *ʔapljákk̪a* ‘barefoot’, *kawáljiniq* ‘swallow’, *lǝmŋəl̪j* ‘fairy tale’;

[w]: *wət̪wət̪* ‘flower’, *wirúwir* ‘kind of pink salmon’, *kət̪wir* ‘hair’, *piwtak* ‘be strewn’, *ʔewáʔiɰ* ‘brain’;

[r]: *rarána* ‘house’, *qurána* ‘reindeer’, *takrátək* ‘go down’, *qáryan* ‘marine’

animal's young', *qápar* 'glutton';

[j]: *júŋjuŋ* 'whale', *mája* 'where', *ʔáŋjak* 'praise', *púŋŋən* 'spear', *ʔúŋpəʔuj* 'prize'.

1.2. Syllable and Rhythmic structure

1.2.1. Syllable Structure

Alutor imposes strict conditions on syllable structure, and the notion of syllable is essential for the phonological pattern of the Alutor language.

If we consider the main classes of sounds – consonants and vowels – the canonical syllable patterns will be |CV| and |CVC| (the symbol “|” indicates a syllable boundary). These patterns have only one constraint: if the nucleus of a syllable is a long vowel, the syllable has no coda. Thus, in reality we find the following syllable patterns: |Cə|, |CV_{short}|, |CV_{long}|, |CəC|, |CV_{short}C| (here V is a non-schwa vowel), cf. |vi|tá|tək| 'work', |tí|mə|tí| 'eagle', |ʔít|ʔən| 'fur coat', |ʔa|lá|ʔa| 'summer', |jǐ|lə|jil| 'tongue', |wi|rú|wir| '(kind of) salmon', |ja|tát|kən| '(s)he is coming'.

The set of syllable patterns given above is valid only if we consider a careful, distinct pronunciation, which we will call the standard pronunciation. In fluent speech native speakers may often elide the schwa in a two or three consonant cluster (one of the consonants is usually a sonorant), so there may appear some consonant clusters, illicit in the standard pronunciation. Thus, we often find optional words pronounced of other syllable types, such as |CCV| and |CCVC|, cf. *qəlávul* ~ *qlávul* 'husband', *ʔənkəjap* ~ *ʔənkjap* 'long ago'¹⁷. In the present paper we prefer to deal only with the standard pronunciation.

Word boundaries in Alutor always coincide with syllable boundaries, for instance, *ʔéŋə|ʔarŋínati* (not **ʔéŋə|v#arŋínati*) 'It rained yesterday'.

In reduplications the boundary between the two root morphs also coincides with the syllable boundary, cf. *ʔinmə|ʔin* (< {inm=in}) (not **ʔin|min*) 'gulp'. The same is true with incorporations and productive compounds, but only if the second stem begins with a vowel, cf. *misʔá=ʔitʔəlʔən* (< {misʔa=it-lʔ-n}) 'the one in a beautiful fur coat', *sasʔ=ʔilŋatŋərŋən* (< {sasi=ilŋ-at-ŋərŋ-n}) 'watchstrap'. In some compounds there is no glottal stop before an initial vowel of the second stem, and the syllable begins with a preceding consonant, cf. *tíŋ-ílŋən* (< {tíŋ-ilŋ-ŋ}) 'ski strap'.

¹⁷ The same situation is found in related languages. Some Koryak dictionaries (for instance, [Korsakov 1939a]) register the standard pronunciation, while others (for instance, [Zhukova 1967]) record the fluent speech, cf. *məjen* ~ *mjen* 'mosquito'. As P.Ja.Skorik writes [Skorik 1961:63], in Chukchi the process of omitting schwas “is more widely spread in the western dialect than in the eastern one”.

No connection is found between syllable boundaries and morpheme boundaries. At the same time, there is an obvious correlation between morpheme boundaries and the position of epenthetic schwas: the schwa often plays the role of an “intermorpheme segment”, cf. *nǎ-mkǎ-qin* = *n-ǎ-mk-ǎ-qin* (< {n-mk-qin}) ‘numerous’ (see 1.3.3.2).

The morphology of Alutor combines morphemes in such a way that an underlying representation may be ill-formed. It may have illicit sound strings, such as initial syllables without onsets, illicit consonant clusters, hiatus etc. Illicit strings usually appear word-initially and word-finally, and also at morpheme boundaries¹⁸. In order to obtain well-formed words, we must modify the underlying representation by means of certain phonological rules, among them initial consonant deletion, glottal stop epenthesis, schwa epenthesis, and hiatus vowel deletion (see 1.3.2 and 1.3.3).

1.2.2. Rhythmic Structure

According to their rhythmic structure, all Alutor words can be divided into two main classes:

- 1) words having a phonetically prominent syllable – such words are called *accentuated* words;
- 2) words with no phonetically prominent syllables – such words are called *unaccentuated* words.

The class of accentuated words is the most numerous. Here we find the majority of words belonging to the main parts of speech, and also a lot of auxiliary words.

The prominence of the stressed syllable is characterised by the increase of pronouncing energy applied mainly to the rhyme of a syllable. This is manifested in a number of ways. If a syllable is open and the nucleus is a short vowel (but not a supershort ə), the stress is expressed by the vowel lengthening, cf. *qǎlǎvul* [ǎ] ‘husband’. If a syllable is closed, the stress is expressed by the code strengthening, that is the syllable-final consonant. The strengthening of a final consonant is clearly perceptible in case of the |CǎC| syllable type (native speakers say that in such syllables the stress falls on the consonant, not on the vowel), cf. *wǎtǎwǎt* [wǎt^twǎt] ‘flower’¹⁹. It is worthy of remark that syllables of the |Cǎ| type cannot bear stress, because the vowel ə cannot be lengthened.

¹⁸ The underlying representation is represented in such a way that most of illicit strings do not appear inside a morpheme (see, for instance, 1.1.1.2).

¹⁹ The length of these segments (the vowel of an open syllable and the final consonant of a closed syllable) has been proven through experimental research (for details see [Kodzasov, Muravyova 1980]).

In unaccentuated words the vowel length contrast is hardly detectable. It should be noted that unaccentuated words can be clearly distinguished only if the syllable supposed to bear stress is an open one, cf. *jánut* [ā] ‘today’ vs. *janut* [a] ‘earlier’ (the symbol “-” indicates the absence of stress in a word), *ʔiniri* [ī] ‘blanket’ vs. *ʔsiriri* [i] ‘sandpiper’. If such syllable is a closed one, it is more difficult to reveal the absence of stress.

The position of stress in Alutor can be described in terms of syllable weight, thus it is a quantity sensitive system. Two types of syllables are distinguished here: light (mono-moraic) syllables and heavy (bi-moraic) syllables. Syllables of the |Cə| type are light syllables, while the other types are all heavy.

The position of stress in accentuated words is determined by the following three phonological constraints:

- 1) only a heavy syllable can bear stress; light syllables are always unstressed;
- 2) only the first or the second syllable can bear stress (but the second syllable is preferable);
- 3) a word-final syllable cannot bear stress.

These constraints help us to describe all the possible rhythmic patterns. First of all, a monosyllabic cannot bear stress, for its only syllable is the final one (but there exist some unaccentuated monosyllabic auxiliary words – see below). In case of a disyllabic accentuated word, the first syllable is stressed (it always appears to be a heavy one), for instance, *ʔákək* ‘son’, *káttil* ‘forehead’, *wála* ‘knife’²⁰. Polysyllabics may have stress either on the first or the second syllable, cf. *tílpəqal* ‘shoulder’, *tárgətər* ‘meat’, *nírgəqin* ‘cool’, *vitátək* ‘work’, *ɣərálɣən* ‘knee’, *vaɣəlɣən* ‘nail, claw’. For details see the stress assignment rules (1.3.4.).

The class of unaccentuated words is represented by the following groups and subgroups:

- 1) auxiliary words of different types, such as conjunctions, particles, introductory words, and also some adverbs, cf. *ʔinaq* ‘in order to’, *ʔoro* ‘then’, *matka* ‘whether’, *kətvəl* ‘not (prohibition)’, *ɣemat* ‘maybe’, *ayɪ* ‘very’, *ləyan* ‘even’, *wasaq* ‘sometimes’, *jaqi* ‘later’;
- 2) some personal pronoun forms, such as:
 - a) the dative form with a light second syllable, cf. *ɣəməkəŋ* ‘to me’, *ɣənəkəŋ* ‘to you (sg)’, *ʔənəkəŋ* ‘to him’, *murəkəŋ* ‘to us’, *turəkəŋ* ‘to you (pl)’, *ʔətəkəŋ*

²⁰ Actually, when morphemes are combined into a word, at intermediate stages there may appear a monosyllabic word with the only stressed syllable or a disyllabic word with the second stressed syllable, but such intermediate representations are then extended by means of some special rules (see 1.3.4.3), cf. *ɣájjə* (< ɣáj < {ɣaj-∅}) ‘mountain’, *ɣəvú-jjə* (< ɣəvú-j < {ɣvu-}j) ‘(s)he/it began’, *ɣəvákki* (< ɣəvák < {ɣva-k}) ‘to stick’.

‘to them’; the situation is quite different with the nominative singular which is an accentuated form, cf. *γόμενα* ‘I’, *γότε* ‘you (sg)’, *ῥάννου* ‘(s)he/it’;

b) the nominative dual and the short form of the nominative plural – *–muri* ‘we two’ and *–muru* ‘we’ (along with the full form *murúwwi*), *–turi* ‘you two’ and *–turu* ‘you (pl)’ (along with the full form *turúwwi*), *–ῥῆτι* ‘they two’ and *–ῥῆττι* (along with the full form *ῥῆτίwwi*) ‘they’;

3) Russian borrowings with the place of stress which does not conform to the above-mentioned constraints, cf. *–ῥυγυροτ* ‘kitchen garden’ (from the Russian *ogoryd*), *–makasin* ‘shop’ (from the Russian *magasín*), *–kapitan* ‘captain’ (from the Russian *kapitán*); but other borrowings may be accentuated, cf. *tánja* ‘Tanya’ (a Russian proper name), *marína* ‘Marina’ (a Russian proper name), *qəljippə* ‘bread’ (from the Russian *xl’eb*);

4) words derived from some roots which represent the main parts of speech; this group is represented by two subgroups:

a) words with a light syllable in potentially stressed position (= the second syllable of a word), for instance *–nəkəkəqin* ‘hot’ (the root {əkəkə}), {γətɪŋ} (*–nəγətɪŋqin* ‘fast’), {jəl} (*–təjələn* ‘I gave it’), {jɾəŋat} (*–jɾəŋatək* ‘stick’), {ləla} (*–ῥəlḗləki* ‘the one having no eyes, blind’), *–unḗəῥu* ‘baby’; but some other words derived from the same roots may become accentuated if a heavy syllable appears in potentially stressed position, cf. *tətánəkəkəvɾəŋən* ‘I’ll make it hot’ (the root {əkəkə}), *lḗləpək* ‘look’ (the root {ləla});

b) words with a heavy (usually open) syllable in potentially stressed position (= the second syllable), for instance (each root is illustrated here by either the nominative or the infinitive): *–siriri* ‘sandpiper’, *–ῥəlḗlju* ‘kid’, *–ῥəmama* ‘Mummy’, *–ῥəpapa* ‘Daddy’, *–kaljilji* ‘navel’, *–lḗjəŋi* ‘girl’, *–miti* ‘Miti (a mythological proper name)’, *–ḗaljuljuk* ‘rock a baby to sleep’; a word derived from such root may become accentuated if its second syllable is heavy and does not belong to the root, cf. *tətḗḗaljuljuŋən* ‘I’ll rock him/her to sleep’.

Unaccentuated auxiliary words and unaccentuated roots (that is group 4b) are marked in the Dictionary.

Besides the above-enumerated classes, there is one more group of words with peculiar prosodic properties. These are expressive words (mostly interjections) and expressive variants of ordinary words, namely the “distant” vocative, the “distant” locative and others. In such words the last vowel is lengthened (for details see 1.3.8.1)²¹, for instance, *koljomē* (interjection of admiration), *qəvəttē* ‘I do not know!’ (interjection), *ῥawēn* ‘oh, crab!’ (cf. *ῥawínaŋ* ‘crab’), *ῥasō* ‘oh, salmon!’ (cf.

²¹ See also [Kodzasov 1975].

ʕasiβas ‘pink salmon’), *tumγətōm* ‘oh, friend!’ (cf. *túmγətum* ‘friend’), *ʔakōk* ‘oh, son!’ (cf. *ʔákək* ‘son’), *telōŋ* ‘there (farther)’ (cf. *téləŋ* ‘there’), *ʕβōk* ‘high in the sky’ (cf. *ʕβək* ‘in the sky’), *ʔamkəkō* ‘very many’ (cf. *ʔámkəka* ‘many’). Native speakers do not perceive such long vowels as stressed ones.

1.3. Phonological Processes

Alutor exhibits a great variety of phonological processes²². Here we find various segmental changes – alternations, as well as root copying – reduplications. Among alternations there are replacements (including assimilations of different types, lenitions and fortitions, coalescences, etc.), insertions and deletions, and also metatheses. The most important phonological process in Alutor is that of creating the right syllable and rhythmic structure: some phonological processes help to create the right structure, while others take place only after the right structure has been created. Most Alutor alternations are phonologically conditioned, but there are also many alternations that are morphologically conditioned (the latter will be described in this section too).

Alutor phonological processes are represented here in the form of rewriting rules. The rules apply to the underlying representation of a word, that is a sequence of underlying representations of morphemes constituting the word. Underlying representations of morphemes are given in the Dictionary – see Part III. The result of application is the surface representation, i.e. the phonetic transcription of a given word. The rules are listed here in the order they should apply to the underlying representation (the only exception is mentioned in 1.3.3.2).

The majority of rules given below describe various segment modifications; they are numbered with Arabic numerals. There are also the stress assignment rules – they are numbered with Roman numerals. Besides, there are some additional rules that do not change the structure of words, but mark syllable boundaries and types of syllables – they are numbered with capital letters.

Each rule is given in two variants: as an ordinary utterance and as a formal rule. The notation we use for formal rules is $X \Rightarrow Y / A_B$, which means that a segment (or a string of segments) X is replaced by a segment (or a string of segments) Y in the context defined by A_B . The bar “ $_$ ” marks the position of the segment undergoing the process. The context A and B may contain: symbols for consonants and vowels – C and V , their phonological properties (shown by the lowered script), a morpheme (M) the segment belongs to – a root (R) or an affix (this is marked with “ \in ”), some

²² Here we follow the logical classification of phonological processes given in [Mel’nik 1996].

special morpheme properties (also shown by the lowered script). Irrelevant segments that separate X from A or B are marked in the context with “ ... ”. The symbol \wedge represents the null segment. The following symbols are used to indicate different types of boundaries: “ # ” for a word boundary, “ = ” for a composite boundary, and “ - ” for an ordinary morpheme boundary. To describe the context, the logical conjunctions “and” and “or” are sometimes used (they are underlined). All the rules given below are illustrated by Alutor words. For each word we write its practical transcription (see 1.3.12) and show its “phonological derivation”, that is a sequence of several relevant intermediate stages coming from the underlying representation. The derivation of a word is shown in round brackets and is marked with “ < ” (which means “comes from”). The underlying representation is given in braces, the relevant intermediate steps – without any brackets (but within the round brackets). Other notations used in the rules are listed in Abbreviations and Symbols.

1.3.1. Reduplication

Reduplication in Alutor is used as a means of forming the nominative singular. The information whether a noun employs reduplication to form the nominative singular is shown in the Dictionary, the exact morphological structure of a word is defined by morphological rules, so in this section we only describe the way a root copy is formed. In Alutor a root copy always follows the corresponding root and consists of only one syllable.

The root copy of a given reduplication is formed according to the following rules (R_{red} marks a root to be reduplicated):

if a root to be reduplicated begins with a single consonant, the root copy consists of the first three segments of the root, if it begins with a two-consonant cluster or a vowel, the root copy consists of the first two segments of the root, i.e.

(1)²³ a. $C_1V_1C_2(\dots) \Rightarrow C_1V_1C_2(\dots)=C_1V_1C_2 / \# _ \underline{\text{and}} C_1V_1C_2 \in R_{\text{red}}$

b. $C_1C_2\dots \Rightarrow C_1C_2\dots=C_1C_2 / \# _ \underline{\text{and}} C_1C_2 \in R_{\text{red}}$

c. $V_1C_1\dots \Rightarrow V_1C_1\dots=V_1C_1 / \# _ \underline{\text{and}} V_1C_1 \in R_{\text{red}}$

Examples: *kaltíkal* (< {kalti_{red}}) ‘beetle’, *kúmŋəkum*²⁴ (< kumŋ=kum < {kumŋ_{red}}) ‘voice’, *ʕasúʕas* (< {ʕasu_{red}}) ‘pink salmon’, *wirúwir* (< {wiru_{red}}) ‘(kind of) salmon’, *ʕálʕal* (< ʕālə=ʕāl < {ʕālə_{red}}) ‘axe’, *nəkínək* (< nki=nk < {nki_{red}}) ‘night’, *ʔanúʔan* (< anu=an < {anu_{red}}) ‘spring’, *ʔújpəʔuj* (< ujp=uj < {ujp_{red}}) ‘prize’.

²³ Let us be reminded once again that the rules are given here in the order they should apply to the underlying representation.

²⁴ After the described operation, some other modifications take place (for instance, the segments ə and ʔ are epenthesized).

1.3.2. Deletions

The following types of deletions occur in Alutor:

- 1) initial consonant deletion;
- 2) final vowel deletion;
- 3) hiatus vowel deletion.

The first two processes are found only in particular restricted groups of roots and affixes, so they are partly morphologically defined (the corresponding roots and affixes are marked in the Dictionary). But since these types of deletion play an important role in creating the canonical syllable structure, we find it necessary to describe them together with phonologically defined processes.

1.3.2.1. Initial Consonant Deletion

Initial consonant deletion occurs most commonly in word-initial position and only in a verb root beginning with a two-consonant cluster. The segments undergoing the process are the dentalveolars *t, s, n, l*. They are usually deleted immediately before a labial, velar, uvular or laryngeal. The process is partly morphologically defined, since roots truncating their initial consonants form a restricted group of the lexicon. In the Dictionary the initial consonant of such roots is shown in round brackets, cf. $\{(t)va\}$ ‘stay’, $\{(t)\gammaivi\}$ ‘year’, $\{(t)kəpl\}$ ‘beat’, $\{(t)ʕəlwət(i)\}$ ‘day’. Some roots beginning with the same clusters do not truncate their initial consonant, cf. *təyétatək* (< $\{t\gammaetat-k\}$) ‘jump’. The deletion of a root-initial consonant is sometimes found in composites²⁵.

The rules regulating initial consonant deletion run as follows:

if a root beginning with a two-consonant cluster is marked for consonant deletion, its root-initial consonant is deleted in word-initial position; the deletion may also occur when the root appears as a non-initial part of a composite, i.e.

(2)a. $C_1 \Rightarrow \wedge / \# _ C_2$ and $C_1 \in R_{\text{consonant deletion}}$

b. $C_1 \Rightarrow \wedge / = _ C_2$ and $C_1 \in R_{\text{consonant deletion}}$ (not regularly)

Examples: *kəplək* (< $\{(t)kəpl-k\}$) ‘beat’, cf. *tə-~~t~~kəplə-n* (< $\{t-(t)kəpl-n\}$) ‘I beat him?’, *ʔasyinʕəlju* (< $\{asyi-in(a)=(t)ʕəlw\}$) ‘today’.

1.3.2.2. Final Vowel Deletion

Final vowel deletion is typical of noun roots and also for some nominal suffixes. This is usually found in the nominative singular or in the 3 person singular of adjectives

²⁵ The fact that a root-initial consonant can be deleted in composites shows that a non-initial root tends to be similar to the beginning of a word.

when there is no overt affix²⁶ following such morphemes. The vowel to be deleted is always a post-stressed one. In most cases it is the vowel *a* that undergoes the transformation, but some roots truncate their final *i* or *u*. The process is partly morphologically defined, because morphemes truncating their final vowels form a restricted group of the lexicon. In the Dictionary the final vowel of such roots (and suffixes – see below) is shown in round brackets, cf. *tátul* (the root {tatul(a)}) ‘fox’. Some roots ending in a vowel do not truncate their final vowel, cf. *púnta* (the root {punta}) ‘liver’, *?iníri* (the root {iniri}) ‘blanket’.

The deletion is also attested for some suffixes, for example, the possessive suffix {-in(a)} and other adjectival suffixes that historically originated from the former, such as {-kin(a)}, {-lin(a)}, {-qin(a)}. The deletion of a root-final vowel may also occur in a composite, so in this respect the vowel deletion is similar to the consonant deletion.

The rules regulating final vowel deletion run as follows:

if a morpheme is marked for vowel deletion, it loses its final vowel in word-final position; the deletion may also occur when the morpheme appears as a non-final part of a composite, i.e.

(3)a. $V_1 \Rightarrow \wedge / _ \# \text{ and } V_1 \in M_{\text{vowel deletion}}$

b. $V_1 \Rightarrow \wedge / _ = \text{ and } V_1 \in M_{\text{vowel deletion}}$ (not regularly)

Examples: *tátul* (< {tatul(a)}) ‘fox’, cf. *tatúla-wwi* ‘foxes’; *?ímət* (< imt < {imt(i)}) ‘burden’, cf. *?imí-ta* ‘by a burden’; *?əlláŋi* (< əllanɟ < {əllanɟ(u)}) ‘younger brother’, cf. *?əlláŋju-ta* ‘by a younger brother’; *?aŋqákin* (< {aŋqakin(a)}) ‘sea, marine (sg)’, cf. *?aŋqá-kina-wwi* ‘sea, marine (pl)’, *?asyínʕəɟu* (< asyin=ʕəɟu < {asyi-in(a)=(t)ʕəɟw}) ‘today’.

1.3.2.3. Hiatus Vowel Deletion

Two vowels may occur adjacently in the underlying representation only at a morpheme boundary. Since hiatus is impermissible in Alutor, the situation may be remedied in two different ways:

1) a glottal stop is epenthesized between the vowels (the epenthesis rules are given in 1.3.3.1) – this usually happens at a composite boundary, for instance, *ra?ítənvəlʔən* (< {ra=it-nv-lʔ-n}) ‘master of the house’;

2) one of two vowels is deleted – this usually happens at an ordinary morpheme

²⁶ In the section “Morphology” (see Chapter 2) the final vowel deletion is treated as a morphological means of forming the nominative singular, but in the section “Phonology” we prefer to describe the vowel deletion as a phonological process.

boundary²⁷, for instance, *γʼllin* (< {γα-it-lin}) ‘(s)he/it was’.

NOTE. At first sight, the distribution of these two processes seems to be rather simple: one is found at a composite boundary, the other – at an ordinary morpheme boundary. The problem is to define what particular type of boundary appears in a word with two or more roots, that is in a composite. Actually, we distinguish three types of composites: reduplications, incorporations and compounds.

Some words appear with an epenthesis glottal stop between the vowels. Such situation is typical of incorporations and reduplications, cf. *γəməkʔunʔunʔuŋ* (< {γəmək=unʔunʔu-ŋ}) ‘to my son’, *ʔaláʔal* (< ala=al < {ala_{red}}) ‘summer’. Other words demonstrate vowel deletion. The latter is typical of non-composites, cf. *γʼvlin* *(< {γα-iv-lin(a)}) ‘(s)he said’. We regard these two means of transforming hiatus as marking different degrees of coalescence between the parts of a word: it is less so in case of epenthesis, and is more so in case of vowel deletion.

As for compounds, some of them epenthesize a glottal stop, while others delete a vowel, cf. *sasi=ʔilʔatʔərʔən* ‘watchstrap’, but *ʔaqimluk* (< {ʔaqa-impl-u-k}) ‘drink vodka (=drink bad water)’. We think that the difference between the two types of compounds lies in the degree of coalescence, so compounds of the first group should be treated as productive compounds, while compounds of the second group should be treated as non-productive ones (at least from the point of phonology). We mark the difference in morphological representations of compounds by using two different boundaries: in compounds like *sasi=ʔilʔatʔərʔən* (as well as in incorporations and reduplications) we indicate a composite boundary, while in compounds like *ʔaq-impluk* we indicate an ordinary morpheme boundary. When phonological rules apply, the type of boundary is considered to have been already assigned to the underlying representation.

One of the possible ways of describing vowel deletion at a morpheme boundary is in terms of the “vowel strength”. Some vowels appear to be weaker than others and tend to be elided. The relation “to be weaker” is marked here with the symbol “<”. According to this relation, Alutor vowels display the following hierarchy:

$\partial < a, \bar{a} < e, o < i, \bar{i} < u, \bar{u}$.

The rules regulating vowel deletion run as follows:

if two vowels occur adjacently at an ordinary morpheme boundary, the weakest one is deleted, i.e.

(4)a. $V_1 \Rightarrow \wedge / _ -V_2$ and $V_1 < V_2$

b. $V_2 \Rightarrow \wedge / V_1 - _$ and ($V_2 < V_1$ or $V_2 = V_1$)²⁸

Examples: *tɪnánititavəŋ* (< {ta-ina-n-itit-av-ŋ}) ‘(s)he will cook’, *γʼjulin* (< {γα-aju-lin(a)}) ‘(s)he revived’, *γʼvlin* (< {γα-iv-lin(a)}) ‘(s)he said’, *ʔimka* (< {a-

²⁷ Actually, not any vowel may appear morpheme-initially or morpheme-finally, so the list of possible combinations of vowels is considerably restricted.

²⁸ When we use the sign “=” with blank spaces on both sides in the context of the rules, it means equality, not a composite boundary (the latter is used without any spaces).

um-ka}) ‘it is warm’, *ʔinémək* (< {ina-emə-k}) ‘scoop’, *γálləγα* (< {γα-əlləγ-a}) ‘with a father’, *ʔarmávək* (< {arma-av-k}) ‘become a leader’, *qúrīn* (< {qura-in}) ‘reindeer’s’, *təkīmávək* (< {t-kīmə-av-k}) ‘detain’, *kánsuk* (< {kansa-u-k}) ‘smoke’, *təsíγuvək* (< {t-síγu-av-k}) ‘burn (smth.)’, *-mitīnak* (< {miti-ənak}) ‘Miti (Esg)’, *ʔakmítək* (< {akmi-at-k}) ‘take’, *mətīnuk* (< {mtini-u-k}) ‘eat berries’, *ʔimtīnaŋ* (< {imti-inəŋ}) ‘burden’, *kaŋīnaŋ* (< {kaŋu-inəŋ}) ‘fishhook’, *tətkəpluvək* (< {t-(t)kəpl-u-av-k}) ‘kill (smb.) by striking on one’s head’, *ʔalɬətkunaŋ* (< {allə-tku-inəŋ}) ‘scraper’.

NOTE. The rule given above has some exceptions, however. First, causatives derived from the roots {iwʔisi} ‘drink’ and {aw(ə)ji} ‘eat’ appear as *tīwʔisətək* ‘give water to drink’ and *táwəjətək* ‘feed’ (instead of **tīwʔisjətək* and **tawəjjətək*). It is probable that the vowel *i* in these roots originated from *ə* under the influence of the palatals *s* and *j*. Second, some roots preserve the root-final *a*, for example, *nutáyitanaŋ* (< {nuta-γita-inəŋ}) ‘binoculars’. The exceptions can be found in the Dictionary.

1.3.3. Insertions

The following types of insertions occur in Alutor:

- 1) glottal stop insertion;
- 2) schwa insertion.

In order to formulate the schwa insertion rules we need two additional rules which describe marking irrelevant morpheme boundaries and metathesis of a schwa and a consonant.

1.3.3.1. Glottal Stop Insertion

The rules regulating glottal stop insertion run as follows:

a glottal stop is inserted word-initially immediately before a word-initial vowel, and also before the initial vowel of a non-initial stem in a composite, i.e.

- (5)a. $\wedge \Rightarrow ʔ / \# _ V$
- b. $\wedge \Rightarrow ʔ / = _ V$

Examples: *ʔákək* (< {akk(a)}) ‘son’, *ʔitʔən* (< {itʔ-n}) ‘fur coat’, *ʔəpáŋa* (< {əpa-ŋa}) ‘soup’, *ʔaláʔal* (< ala=al < {ala_{red}}) ‘summer’, *ʔinməʔin* (< ʔinm=ʔin < inm=in < {inm_{red}}) ‘gulp’, *γəməkʔunjunjuŋ* (< {γəmək=unjunju-ŋ}) ‘to my son’.

1.3.3.2. Schwa Insertion

In general, the schwa insertion rules seem to be rather simple and roughly run as follows (some comments are given further):

a schwa breaks up a word-initial or word-final two-consonant cluster (irrespective of whether there is a morpheme boundary between the two consonants

or not); a schwa breaks up a word-medial three-consonant cluster at a morpheme boundary of any type, i.e.

- (6)a. $\wedge \Rightarrow \text{ə} / \#C_1_(-)C_2$
 b. $\wedge \Rightarrow \text{ə} / C_1_(-)C_2\#$
 c. $\wedge \Rightarrow \text{ə} / C_1_C_2C_3$ or $C_1_C_2C_3$
 d. $\wedge \Rightarrow \text{ə} / C_1C_2_C_3$ or $C_1C_2_C_3$

Examples: *təpáŋa*²⁹ (< {tpa-ŋa}) ‘stone hammer’, *nəmálqin* (< {n-mal-qin(a)}) ‘good’, *máqəm* (< {maqm(i)}) ‘arrow’, *tátək* (< {tat-k}) ‘bring’, *jatəkən* (< {jat-tkən}) ‘(s)he is coming’, *jaγsvinín* (< {jaγ=svi-ni-n}) ‘(s)he cut his/her foot’, *nírɔqin* (< {n-irv-qin(a)}) ‘sharp’, *ʔinməʔin* (< ʔinm=ʔin < inm=in < {inm=in}) ‘gulp’, *nályəʔəvu* (< {nalγ=ʔətv-w}) ‘canoe’.

Now let us comment on these rules. In the case where there is a one-consonant morpheme in a three-consonant cluster, namely -C₂-, the schwa is inserted at only one of the boundaries, to the left or the right of this morpheme (therefore, the string C₁C₂C₃ does not change into C₁əC₂əC₃). The boundary that does not count here is referred to as “irrelevant” one. In the rules given above irrelevant boundaries are considered null boundaries, cf. *mətəntakravna* (< {mət-n[-]takr-av-na}) ‘we took them down’, where [-] is an irrelevant boundary.

The following one-consonant morphemes are found in Alutor which may appear word-medially: 1) ʔ- – the conjunctive prefix; 2) n- – the medial variant of the causative marker; 3) -ŋ – the suffixal part of some circumfixes – the potential marker, the desiderative marker and also the derivative marker meaning ‘create (smth.)’. When any of these morphemes appears as C₂ in the string C₁-C₂-C₃, the following rules apply to reveal which of the boundaries should be treated as irrelevant:

*if there is a non-final string of segments C₁-C₂-C₃, the left boundary of the medial consonant is considered irrelevant in case it is the prefix ʔ-, and the right boundary in case it is the prefix n-; in case the medial consonant is the suffix -ŋ, the left boundary is considered irrelevant, except when the suffix -ŋ is followed by the morph -ki (the marker of the infinitive, the locative or of a converb), in which case the right boundary is considered irrelevant*³⁰, i.e.

²⁹ In the surface representation we attach an inserted ə to the preceding morph, cf. *játə-k* *(< {jat-k}) ‘come’.

³⁰ This additional rule can be interpreted in the following way. As the glottal stop is avoided in syllable-final position (in this position əʔ=> ā, see 1.3.6), and the fact that the morphs ŋ and ki appear close to each other can be explained historically (here ki comes from kəj, as the Kerek data show [Skorik 1968]), the principle of irrelevancy can be formulated as follows: *the irrelevant boundary is a boundary between a root and a one-consonant affix, i.e. if possible they are not broken up by a schwa.*

- A.³¹ a. $C_1-C_2-C_3 \Rightarrow C_1[-]C_2-C_3 / V_1_V_2$ and $C_2 = \text{Pref } \text{?}$
 b. $C_1-C_2-C_3 \Rightarrow C_1-C_2[-]C_3 / V_1_V_2$ and $C_2 = \text{Pref } n$
 c. $C_1-C_2-C_3 \Rightarrow C_1[-]C_2-C_3 / V_1_V_2$ and $C_2 = \text{Suf } \eta$ and $C_3V_2 \neq \text{Suf } ki$
 d. $C_1-C_2-C_3 \Rightarrow C_1-C_2[-]C_3 / V_1_V_2$ and $C_2 = \text{Suf } \eta$ and $C_3V_2 = \text{Suf } ki$

Examples: *mənʔpɪlalatkən* (< {mən[-]ʔ-pɪla-la-tk-n}) ‘we would leave him/her/it’; *mətʔntakravna* (< {mət-n[-]takr-av-na}) ‘we would get him/her/it down’; *ʔatánʔalɥəka* (< {a-ta-nʔal[-]ɥ-ka}) ‘(s)he does not want to become’, cf. *tanʔálɥəki* (< {ta-nʔal-ɥ[-]ki}) ‘want to become’.

Evidently, the rules marking irrelevant boundaries precede the schwa insertion rules, namely rules (6c), (6d).

1.3.3.3. Schwa and Consonant Metathesis

According to rule (6c), in the string $C_1-C_2C_3$ the schwa is inserted at a morpheme boundary, that is between C_1 and C_2 , but in many words it actually appears between C_2 and C_3 , so that C_1 and C_2 occur adjacently. This usually happens when C_1 and C_2 are homorganic consonants (namely dentalveolars). We treat this transformation as metathesis of a schwa and a consonant.

The metathesis rules run as follows:

*if a three-consonant cluster of the underlying representation has been broken up by a schwa, the vowel may change places with the second consonant, provided the first and the second consonant are dentalveolars*³², i.e.

- (7)a. $\text{ə}-C_2 \Rightarrow -C_2\text{ə} / C_1_C_3$ and C_1, C_2 are dentalveolars (optionally)
 b. $\text{ə}=C_2 \Rightarrow =C_2\text{ə} / C_1_C_3$ and C_1, C_2 are dentalveolars (optionally)

Examples: *tʂʂɪlɥəʔən* (< tʂʂələ-lʔə-n < {tʂəl-lʔ-n}) ‘sick (person)’, cf. *nəmɪlʔən* (< {nəm-lʔ-n}) ‘settled person, villager’.

1.3.4. Stress Assignment Algorithm

In order to create the right rhythmic structure, we need three types of rules:

- 1) rules regulating syllabification – the syllabification rules proper and the syllable marking rules (1.3.4.1);
- 2) rules regulating accentuation – the stress assignment rules (1.3.4.2);

³¹ As this rule describes only the boundary marking, not a phonological process, it is numbered with a capital letter.

³² Metathesis of this type is attested not only for dentalveolars, but also for some other types of consonants. For example, the same change occurs when one of the consonants is the causative marker – the prefix *-n-*, while the other consonant is not a dentalveolar, cf. *mət-ə-n-ɥəjulavən* (< {mət-n-ɥ(ə)jul-av-n}) ‘we taught him/her’ (the root {ɥ(ə)jul}), cf. *nojulqin* (< nə-ɥjul-qin < {n-ɥ(ə)jul-qin(a)}) ‘educated’. We fail to describe such examples by means of standard rules.

3) rules “adjusting” impermissible rhythmic patterns – the syllable addition rules (1.3.4.3).

1.3.4.1. Syllabification and Syllable Marking

After we have eliminated all illicit strings of vowels and consonants, we can divide words into syllables.

The syllabification rules run as follows:

a syllable boundary is found before any CV and word-finally, i.e.:

- B³³. a. CV ⇒ |CV
 b. # ⇒ |#

Examples: |ʔá|kək| ‘son’, |ʔít|ʔən| ‘fur coat’, |ʔa|lá|ʔal| ‘summer’, |ʔín|mə|ʔín| ‘gulp’, |ʔəmók|ʔu|n̩|n̩|n̩| ‘to my son’, |má|qəm| ‘arrow’, |tá|tək| ‘bring’, |nír|və|qín| ‘sharp’, |l̩|ó|tə|p̩|l̩| ‘little head’.

As the stress assignment rules are formulated in terms of light and heavy syllables (see 1.3.4.2), we also need the syllable marking rules. They run as follows (the symbol “ ∪ ” represents a light syllable, the symbol “ – ” represents a heavy syllable):

a syllable of the |Cə| type is treated as light, a syllable of any other pattern is treated as heavy, i.e.

- C. a. |Cə| ⇒ ∪
 b. |CV| ⇒ – / V≠ə
 c. |CVC| ⇒ –

Examples: |ʔá|kək| (– –) ‘son’; |l̩|ó|tə|p̩|l̩| (– ∪ –) ‘small head’; |ʔəmók|ʔu|n̩|n̩|n̩| (∪ – – –) ‘to my son’.

1.3.4.2. Stress Assignment

The stress assignment rules apply only to the right syllable structure, and only after syllables have been marked as light and heavy. The rules do not apply to unaccentuated words.

The stress assignment rules run as follows³⁴:

in a monosyllabic word the stress is placed on the only heavy syllable (there are no monosyllabics with a single light syllable in Alutor), i.e.

- I. – ⇒ ´ / #_#

Examples: *ḡájjə* (< ḡáj < {ḡaj}) ‘mountain’, *ḡállə* (< ḡál < {ḡal}) ‘herd’.

³³ Since these rules describe only marking strings of segments, but do not changing them, they are indicated by means of capital letters.

³⁴ These rules form a separate group – suprasegmental rules – when compared to segment changing rules. That is why they are numbered with Roman numerals.

in a disyllabic word the stress is placed on the first syllable, provided it is heavy; if the first syllable is light, the stress shifts to the second (heavy) syllable³⁵, i.e.

- II. a. – – ⇒ ´ – / # _ #
 b. ʊ – ⇒ ʊ ´ / # _ #

Examples: *tátul* ‘fox’, *kóttil* ‘forehead’, *páŋkan* ‘cap’, *pə́únnə* (< pə́únn < {pʰun(a)}) ‘mushroom’, *ɣə́vákki* (< ɣə́vákk < {ɣva-k}) ‘stick’.

in a polysyllabic word the stress is placed on the second syllable, provided it is heavy; if the second syllable is light, the stress shifts to the first syllable, provided it is heavy³⁶, i.e.

- III. a. – – ⇒ – ´ / # _ ...
 b. ʊ – ⇒ ʊ ´ / # _ ...
 c. – ʊ ⇒ ´ ʊ / # _ ...

Examples: *quráŋa* ‘reindeer’, *nəmáŋqin* ‘good’, *nəsə́qqin* ‘cold’, *ʔənpə́qlavul* ‘old man’, *ʔaʔə́lka* ‘it is painful’; *ʔənpə́ŋav* ‘old woman’, *níŋə́qin* ‘white’, *njə́təqin* ‘thin’.

NOTE. The root {aw(ə)ji} ‘eat’ has two morphs in the underlying representation: {awəji} and {awji} (the latter appearing as {oji} – see 1.3.6). The morph {awəji} is used in the causative *táwə́jatək* ‘feed’, and the morph {oji} is used in the non-causative *ʔojik* ‘eat’. Words derived from the morph {oji} are stressed as if were derived from the morph {awəji}, cf. *tójiitkən* (< {t-oji-tkən}) ‘I am eating’, and not **tójiitkən*.

Words that do not acquire stress according to these rules are considered unaccentuated, cf. *–nə́jələn* ‘they gave him/her/it’, *–tə́jələn* ‘I gave him/her/it’ (the accented root {jəl}), *–tə́aljuljun* ‘I rocked him/her to sleep’ (the unaccentuated root {ʔaljulju}) (some exceptions were mentioned in 1.2.2, group 4b).

1.3.4.3. Syllable Addition

It appears that the rhythmic structure of the language does not permit stress to fall on the last syllable of a word, but strings with the last stressed syllable may appear at intermediate stages of derivation (see rules I and II). In order to improve the rhythmic structure a supplementary syllable is added.

The syllable addition rules run as follows:

if the stress falls on the last (closed) syllable of a word, a supplementary syllable of the |CV| type is added by means of geminating the last consonant and

³⁵ In Alutor there are neither stressed disyllabics with the second light syllable nor stressed disyllabics with the first light and the second open syllable.

³⁶ Otherwise, i.e. if the first syllable is light, the word does not acquire any stress.

adding a vowel (the vowel *i* – in case the last consonant is the suffix *-k* or *-t*³⁷, the schwa – in all other cases), i.e.

(8)a. $\wedge \Rightarrow C_2\text{ə} / V_{\text{stressed}}(-)C_1\text{ \# and } C_2 = C_1 \text{ and } C_1 \neq \text{Suf } k, t$

b. $\wedge \Rightarrow C_2i / V_{\text{stressed}}-C_1\text{ \# and } C_2 = C_1 \text{ and } C_1 = \text{Suf } k, t$

Examples: *ḡájjə* (< ḡáj < {ḡaj}) ‘mountain’, *ḡállə* (< ḡál < {ḡal}) ‘herd’, *pəʕúnnə* (< pəʕún < {pʕun}) ‘mushroom’, *pəlátə* (< pəlát < {plat}) ‘headscarf’, *tənúnnə* (< tə-nú-n < {t-nu-n}) ‘I ate it’, *qətəjjə* (< qətə-j < {(l)qət-j}) ‘(s)he went away’; *ḡəvákki* (< ḡəvák < {ḡva-k}) ‘stick’, *ləlátij* (< ləlá-t < {l(ə)la-t}) ‘two eyes’.

NOTE. The supplementary open syllable may optionally become a closed one by means of adding a sonorant *ŋ*, cf. *ḡəmmə* ~ *ḡəmməŋ* (< ḡəm < {ḡəm}) ‘I’.

1.3.5. Velar Fricative Sonorization

In certain contexts the velar fricative *ɣ* changes into the corresponding sonorant – the glide *w*. Since the passageway between the articulators becomes broader, we treat this change as lenition. The process does not take place before *ɣ*.

The sonorization rules run as follows:

an obstruent velar fricative ɣ changes into the corresponding sonorant w in syllable-final position (not immediately before ɣ); in word-final position or in a composite the change is optional, i.e.

(9)a. $\gamma \Rightarrow w / _ | C_1 \text{ and } C_1 \neq \gamma$

b. $\gamma \Rightarrow w / _ | \# \text{ or } _ | =$ (optionally)

Examples: *ʔaktíwka* (< {a-ktiγ-ka}) ‘it is windy’, cf. *kətíyatətəkən* ‘the wind is blowing’, *ʔakóki* (< a-kaw-ki < {a-kay-ki}) ‘without palms’, cf. *kayəlḡən* ‘palm’, *mániγ* ~ *mániw* ‘sack’, *líwliw* ~ *líyliγ* ‘egg’; but there is no change in *míγγa* ‘who’.

1.3.6. Vowel and Glide Coalescence

In Alutor some diphthong-like combinations of the “vowel + glide *j*, *w*, *ʔ*” type do not occur syllable-finally. They usually blend together to produce the corresponding vowel (mostly a long one). The vowel *a* and the schwa are most common in such combinations.

The coalescence of the vowel *a* and a glide follows the rules:

³⁷ The plural marker {w/wwi} seems to have originally had the same distribution of morphs as the markers *k* and *t* the morph *wwi* is likely to appear after a stressed syllable, while *w* appears in other positions, cf. *pantá-wwi* ‘pieces of fur from reindeer’s legs’, but *pəlák-u* (< pəlák-ə-w < {plak-w}) ‘fur boots’; but at present the morph *-wwi* is used not only after a stressed syllable, but also after any stem ending in a vowel, cf. *tatúla-wwi* ‘foxes’; a stem ending in a consonant may have both *-u* and *-uwwi*, cf. *məŋγ-úwwi* ~ *məŋγ-u* ‘hands’.

in syllable-final position vowel-and-glide combinations *aj* (not immediately before *j*), *aw* (not immediately before *w*, *v*), *aʔ* produce long vowels *ē*, *ō*, *ā* respectively³⁸, i.e.

- (10) a. $aj \Rightarrow \bar{e} / (_ \# \text{ or } _ | C_1) \text{ and } C_1 \neq j$
 b. $aw \Rightarrow \bar{o} / (_ \# \text{ or } _ | C_1) \text{ and } C_1 \neq w, v$
 c. $aʔ \Rightarrow \bar{a} / _ \# \text{ or } _ | C_1$

Examples: *nəmréqin* (< {n-mraj-qin}) ‘right’, cf. *nəmrájiγəm* ‘right (1sg)’; *ʔinévəkli* (< ʔinajvəkli < {ina-jvəkl-j}) ‘(s)he hit me’, cf. *jəvəklənin* ‘(s)he hit him/her’; *rarépəŋ* (< {rara-jpəŋ}) ‘along a house’, cf. *rurújpəŋ* ‘along a bed place’; *rarákineγəm* (< rarakinēγəm < {rara-kina-jγəm}) ‘the one from the house (1sg)’, cf. *nəməlruijγəm* ‘quick (1sg)’; *ʔináγalē* (< ʔinaγalē < {ina-γala-j}) ‘(s)he passed me by’, cf. *piŋku-j* ‘(s)he jumped’; *lótək* (< {lawt-k}) ‘in a head’, cf. *lávət* ‘head’; *ʔəjilatka* (< {a-wjil-at-ka}) ‘do not cast a shadow (=do not stand in my light)!’; cf. *wəjilatək* ‘cast a shadow’, *ʔinójiivatək* (< ʔinawjiivatək < {ina-γjiv-at-k}) ‘show’, cf. *γəjivatək* ‘show (smth.)’; *ʔəllā* (< əllā < {əllaʔ-Ø}) ‘mother’, cf. *ʔəlláʔ-a* ‘with a mother’, *kála* (< kalā < {kalaʔ-Ø}) ‘idol’, cf. *kaláʔ-a* ‘by an idol’.

No coalescence takes place in case of geminates *jj*, *ww* (the glottal stop does not occur syllable-finally before ʔ), cf. *təlájjə* ‘(s)he came’, *ʔawwáka* ‘do not be caught!’.

The coalescence of the schwa and a glide follows the rules:

in syllable-final position schwa-and-glide combinations *əj* (not immediately before *j*), *əw* (not immediately before *w*), *əʔ* produce vowels *ē/i*, *ō/u*, *ā* respectively: vowels *ē*, *ō* appear in root-initial position (and also in the suffixes *-jpəŋ*, *-jt* which are treated as roots in this respect³⁹), vowels *i*, *u* – in root-final position and in (other) suffixes (including the suffix *-jpəŋ* – optionally)⁴⁰, i.e.

- (11) a. $əj \Rightarrow \bar{e} / _ | C_1 \text{ and } j = \text{root-initial and } C_1 \neq j$
 b. $əj \Rightarrow \bar{i} / (_ \# \text{ or } _ | C_1) \text{ and } (j = \text{root-final or } j = \text{suffix-initial}) \text{ and } C_1 \neq j$
 c. $əw \Rightarrow \bar{o} / _ | C_1 \text{ and } w = \text{root-initial and } C_1 \neq w$
 d. $əw \Rightarrow \bar{u} / (_ \# \text{ or } _ | C_1) \text{ and } (w = \text{root-final or } w = \text{suffix-initial}) \text{ and } C_1 \neq w$
 e. $əʔ \Rightarrow \bar{a} / _ | C_1 \text{ and } C_1 \neq ʔ$

Examples: *tévəklən* (< {t-jvəkl-n}) ‘I hit him/her’, cf. *jəvəklənin* ‘(s)he hit him/her’; *winvépəŋ* ~ *winvípəŋ* (< {winv-jpəŋ}) ‘along a road’, cf. *rurú-jpəŋ* ‘along a

³⁸ But in post-stressed position these vowels appear as short ones (see 1.3.7).

³⁹ These suffixes obviously originated from the roots {jp} and {jt}.

⁴⁰ This process seems to be related to the rhythmic structure: the vowels *i*, *u*, *a* appear as short correlates of the long vowels *ē*, *ō*, *ā* in non-stressed position, cf. the unique reduplication *ewá=ʔiw* (< {ewa_{red}}) ‘brain’.

bed'; *ʔəlláŋji* (< ʔəllanəj < {əllanji(u)}) 'younger brother', cf. *ʔəlláŋju-ta* 'by a younger brother'; *mími* (< məjməj < {mj=mj}) 'ashberry', cf. *nə-mjə-qin* 'bitter'; *nəmitiŋəm* (< {n-mit-jŋəm}) 'skilled (1sg)', cf. *nə-məlrū-jŋəm* 'quick (1sg)'; *jəlqáti* (< {jəlq-at-j}) '(s)he slept', cf. *píŋku-j* '(s)he jumped'; *tónan* (< {t-wna-n}) 'I took it away', cf. *wənákki* 'take away', *tojúlatən* (< təwjulatən < {t-ŋjul-at-n}) 'I learnt it', cf. *ŋjúlátək* 'learn'; *-ʕəljū* (< ʕəljəw < {(t)ʕəlw}) 'in the daytime', cf. *-ʕəlwətisʔatək* 'spend all day long'; *púpu* (< pəwpəw < pəwpəŋ < {pŋ=pŋ}) 'float', cf. *pəŋátək* 'float'; *mətánu* (< mətanə-w < {mtan-w}) 'mosquitoes', cf. *mətíni-wwi* 'berries'; *tājələn* (< təʔjələn < {t-ʔ-jəl-n}) 'I would give him/her/it', cf. *təʔítək* (< {t-ʔ-it-k}) 'I would be', *təʔəlqətək* (< {t-ʔ-lqət-k}) 'I would go'.

No coalescence takes place in case of geminates *jj*, *ww* (the glottal stop does not occur syllable-finally before *ʔ*), cf. *qətəjja* '(s)he went away', *təwwak* 'I stuck'.

In some rare cases the combination "the vowel *i* + the glide *j*"⁴¹ also coalesces. The change follows the rule:

in syllable-final position a combination ij (not immediately before j) produces the corresponding long vowel ī, i.e.

(12) $ij \Rightarrow \bar{i} / _ | C_1 \text{ and } C_1 \neq j$

Examples: *ʔimtiŋpətəkən* (< {imti-jp-tkə-n}) '(s)he is carrying it on (his/her) back'.

1.3.7. Vowel Reduction

Alutor demonstrates quantitative and qualitative vowel reduction in pre-stressed and post-stressed positions.

In pre-stressed position only the vowel *a* is reduced; the alternation *a/ə* takes place in some monosyllabic prefixes ending in *a*, and more rarely – in some roots⁴².

The qualitative reduction follows the rule:

in an open pre-stressed syllable a vowel a is reduced immediately before ʕ and appears as ə (provided it is not the prefix a), i.e.

(13) $a \Rightarrow \text{ə} / _ | \text{ʕ}_{\text{stressed}} \text{ and } a \neq \text{Pref } a$

Examples: *ŋəʕánqavlin* (< {ŋa-ʕanqa-v-lin}) '(s)he stopped', cf. *ʔa-ʕánqav-ka* '(s)he did not stop'; *təʕərsan* (< {taʕər-san}) 'how many times', cf. *təʕər* 'how many', *jəʕílyən* (< {jaʕily-n}) 'moon', cf. *nəjəʕisŋəqin* 'moonlit'.

Quantitative reduction is typical of long vowels and occurs in post-stressed

⁴¹ It would be natural to expect the coalescence *uw* => *ū*, but it is unattested in Alutor (the combination *uw* occurs only before *w*).

⁴² This rule may have some reference to the irregular distribution of alternates *á* and *ə* found in the root {*laʔu* / *ləʔu* / *sʔu*} 'to see', cf. *tə-láʔu-tkən* 'I see him/it', but *ləʔú-kki* 'to see', *ʔinjá-sʔu-k* 'to seek'.

position. It often takes place in reduplications derived from roots with long vowels.

Quantitative reduction follows the rule:

a long vowel is shortened in post-stressed position, i.e.

(14) $V_{\text{long}} \Rightarrow V_{\text{short}} / V_{\text{stressed}} \dots _$

Examples: *ʕáɫʕal* (< ʕáɫə=ʕáɫ < {ʕáɫə_{red}}) ‘axe’, *rarátenək* (< {rara-tēnə-k}) ‘near a house’, *rarákinɛɣəm* (< rara-kin-ēɣəm < {rara-kina-jɣəm}) ‘the one from a house (1sg)’, *ʔáɪɪa* (< əllā < {əllaʔ-∅}) ‘mother’.

1.3.8. Fortitions

Fortitions are represented in Alutor by the following two phonological processes:

- 1) expressive vowel lengthening;
- 2) consonant gemination.

1.3.8.1. Expressive Vowel Lengthening

Expressive vowel lengthening takes place in certain “expressive” words – the “distant” vocative, the “distant” locative and others. Although expressive vowel lengthening is not a regular process, we think it possible to give here approximate rules:

in expressive words short vowels ə, a, i, u change into mid long vowels ǝ̄, ā, ē, ō respectively, i.e.

- (15) a. ə ⇒ ǝ̄ / in expressive words
b. a ⇒ ā / in expressive words
c. i ⇒ ē / in expressive words
d. u ⇒ ō / in expressive words

Examples: *ɲǝ̄nək* (< {ɲan-k} ‘there far away (the distant locative)’, cf. *ɲánək* ‘there’; *ʔámkəkǝ̄* (< {a-mk-ka} ‘very many’, cf. *ʔámkəka* ‘many’; *-mitē* (< {miti-∅}) ‘oh, Miti (the distant vocative)’, cf. *-miti* ‘oh, Miti (a mythological proper name)’, *-ʔawēn* (< {awin}, the contracted form of {awinaŋ-∅}) ‘oh, crab (the distant vocative)’ along with *ʔawínaŋ* ‘oh, crab’.

1.3.8.2. Consonant Gemination

In some rare cases the root-final obstruent *t* is geminated, so that the preceding syllable becomes closed. The process is partly morphologically defined, since roots geminating their final consonants form a restricted group of the lexicon (the corresponding words are given in the Dictionary). Some roots ending in *t* do not demonstrate this alternation, cf. *arát-i* ‘(s)he fell’.

The rule regulating consonant gemination runs as follows:

if a root is marked for gemination, its root-final obstruent t is geminated

immediately before a word-final vowel, provided the preceding vowel is a stressed one, i.e.

(16) $t \Rightarrow tt / \#CV_{\text{stressed}} _ -V_2\# \text{ and } t \in R_{\text{gemination}}$

Examples: *játti* (< *ját-i* < {*jat-j*}) ‘(s)he came’; cf. *təjátətəkən* (< {*t-jat-tkən*}) ‘I am coming’.

Consonant gemination is obviously related to syllable addition when the consonant is geminated too – see 1.3.8.2.

1.3.9. Regular Contact Consonant Assimilations

Contact assimilation of consonants is a wide spread phenomenon not only in Alutor, but also in its related languages – Chukchi and Koryak. Most Alutor assimilations are regressive, but some are progressive. In Alutor assimilations take place only intervocalically (that is at a syllable boundary). In some cases an intervocalic position appears after an epenthetic schwa has been inserted, for instance, *γámməlin* (< {*γα-tm-lin*}) ‘(s)he killed him/her’. Most changes given below occur irrespective of a morpheme boundary between the changing segment X and the context (but assimilations are optional at a composite boundary). In order to simplify the formal rules we omit here syllable and morpheme boundary markers. It should also be noted that the dental *t* of a person-number verbal prefix is not assimilated at a morpheme boundary before a root consonant (this information is also omitted in the rules), cf. *mət-láʔutkən* (= {*mət-laʔu-tkə-n*}) ‘we see him/her/it’.

The following types of assimilation occur in Alutor:

1) partial assimilation of the dental *t* before nasals, namely:

at a syllable boundary an obstruent dental t changes into the corresponding nasal (of the same place of articulation) immediately before a nasal m, n, nj, or ŋ (see also rule (19)), i.e.

- (17) a. $t \Rightarrow n / _ m$
 b. $t \Rightarrow n / _ n \text{ or } _ nj$
 c. $t \Rightarrow n / _ ŋ$

Examples: *γámməlin* (< {*γα-tm-lin(a)*}) ‘(s)he is killed’, *ʔakminnin* (< {*akmi-t-ni-n*}) ‘(s)he took him/her/it’, *varánjjaqu* (< *varan-jjaqu* < {*varat-njaqu-Ø*}) ‘a lot of people’, *γannəlin* (< {*γα-tŋa-lin(a)*}) ‘it grew’.

2) complete assimilation of the dental *t* before sonorant dentalveolars, namely:

at a syllable boundary an obstruent dental t changes into the corresponding sonorant immediately before a sonorant dentalveolar l, lj, or r (see also rules (17) and (19)), i.e.

- (18) a. $t \Rightarrow l / _ l \text{ or } _ lj$
 b. $t \Rightarrow r / _ r$

Examples: *vitállat* (< {vit-at-la-t}) ‘they worked’, *tórran* (< {t-tra-n}) ‘I tore it’.

3) contact dentalveolar palatalization, namely:

at a syllable boundary a non-palatalized dentalveolar t, n, or l changes into its palatalized correlate immediately before the corresponding palatalized dentalveolar s, nj, or lj respectively, i.e.

- (19) a. $t \Rightarrow s / _s$
b. $n \Rightarrow nj / _nj$
c. $l \Rightarrow lj / _lj$

Examples: *ʔarássitək* (< {arat-sit-k}) ‘pour’, *mətánj;aju* (< {mtan-n;aju}) ‘big mosquito’, *ʔəstul;əqək* (< əstul-l;əqə-k < {əstul-l;q-k}) ‘on a table’.

4) palatalization of the sonorant dentals *n, l* before the palatal *j* (here both segments change), namely:

at a syllable boundary a non-palatalized dental n or l together with the following palatal j change into the corresponding geminated palatalized dental nj; or lj; respectively, i.e.

- (20) a. $nj \Rightarrow nj;_j$
b. $lj \Rightarrow lj;_j$

Examples: *tənj;un* (< tə-nju-n < {t-nju-n}) ‘I guarded him/her/it’, *til;íta* (< {til-jíta}) ‘by a wing’.

5) complete assimilation of the nasal *n* before sonorant dentoalveolars, namely:

at a syllable boundary a sonorant nasal n changes into the corresponding sonorant dentalveolar immediately before a sonorant dentalveolar l or r, i.e.

- (21) a. $n \Rightarrow l / _l$
b. $n \Rightarrow r / _r$

Examples (this assimilation is attested only for the medial variant of the causative marker *-n-*): *təllévən* (< {t-n-levə-n}) ‘I took him/her/it (with me)’, *tərritəlavən* (< {t-n-rītəla-av-n}) ‘I saw him/her/it in (my) dream’.

6) complete assimilation of the uvular *q*, namely:

at a syllable boundary an obstruent uvular q changes into k when it is immediately preceded by a velar k, i.e.

- (22) $q \Rightarrow k / _k$

Examples: *tákkin* (< {taq-kin(a)}) ‘why’.

7) complete progressive assimilation of the labial *v*, namely:

at a syllable boundary an obstruent labial v changes into w immediately after a labial w, i.e.

- (23) $v \Rightarrow w / w_$

Examples: *təwwak* (< tə-wva-k < {t-γva-k}) ‘I stuck’.

1.3.10. Irregular Distant Dental Palatalisations

Alutor alternations which we call distant palatalizations are rather peculiar from a typological point of view. The alternation itself looks like this: in some morphemes (mostly roots) a dental non-palatalized consonant changes into its palatalized correlate in the context defined by another morpheme of the same word (mostly an affix), cf. *viljúpilj* (< {vilu-pilj}) ‘little ear’. Since some such morphemes (but not all of them) contain a palatalized consonant and the changing segment becomes a palatalized one, we treat this process as distant palatalization, and refer to the corresponding morphemes as “palatalizing” ones⁴³.

The process takes place in roughly the following environment:

if there is a palatalizing morpheme in a word, a non-palatalized dental t, n, or l changes into its palatalized counterpart s (seldom tj), nj, or lj (in some cases s) respectively, i.e.

- (24) a. $t \Rightarrow s$ (seldom t_j) / $\exists M_{\text{palatalizing}}$
 b. $n \Rightarrow n_j$ / $\exists M_{\text{palatalizing}}$
 c. $l \Rightarrow l_j$ (in some cases s) / $\exists M_{\text{palatalizing}}$.

Examples: *γasvásʔatəlqivlin* (< {γα-(t)va-sʔat-lqiv-lin(a)}) ‘(s)he was sitting’, *anúsʔatək* (< {anu-sʔat-k}) ‘spend spring’, *alásʔatək* (< {ala-sʔat-k}) ‘spend summer’, *njəvísəkuk*⁴⁴ (< {nvil-tku-k}) ‘stop (repeatedly)’, *ljevətukuk* (< {levə-tku-k}) ‘walk’, *məsátukuk* (< {mla-tku-k}) ‘break’.

But in reality the distribution of the alternants and the context they appear in turn out to be more complicated than it is shown in the above-mentioned rule. First, palatalizing morphemes may not contain a palatalized consonant⁴⁵, cf. *ʕíninəkven* (< {ʕinn-kv-n}) ‘scarf’ ({kv} is a palatalizing suffix). Second, palatalizing affixes may cause palatalization in one root and not affect another root, cf. *ljevətukuk* (< {levə-tku-k}) ‘walk’, but *ʔányətəkuk* (< {anγət-tku-k}) ‘celebrate’ ({tku} is a palatalizing suffix). Third, it is difficult to find a strict distribution between the palatalized consonants l_j and s (actually, we think that the alternation l/s is more ancient, while l/l_j is an innovation). Fourth, there exist not only palatalizing affixes, but also palatalizing roots, for palatalization appears in some affixes, cf. *númgin* (< {n-um-qin(a)}) ‘warm’ ({um} should be treated as palatalizing root), but *nurágin* ‘distant’. And finally, there are duplicate affixes with the alternation l/s , which slightly differ

⁴³ A.N.Zhukova [Zhukova 1972] refers to similar alternations in the Koryak language as “consonant harmony”.

⁴⁴ When the dental of a root is palatalized, the dental of an affix is usually palatalized too.

⁴⁵ At the same time, if an affix has a palatalized consonant, it is not necessarily a palatalizing one.

in meaning and therefore are treated on the synchronic level as different affixes, cf. {-lʔat} ‘iterative action’ – {-sʔat} ‘constant action’ (see the list of affixes in the Dictionary). All these facts show that the distant palatalization in Alutor cannot be described in terms of formal rules, so the exact distribution of the alternants is lexically defined (see the Dictionary).

1.3.11. Summary of Rules

1. Reduplications

- (1)a. $C_1V_1C_2(\dots) \Rightarrow C_1V_1C_2(\dots)=C_1V_1C_2 / \#_ \underline{\text{and}} C_1V_1C_2 \in R_{\text{red}}$
 b. $C_1C_2\dots \Rightarrow C_1C_2\dots=C_1C_2 / \#_ \underline{\text{and}} C_1C_2 \in R_{\text{red}}$
 c. $V_1C_1\dots \Rightarrow V_1C_1\dots=V_1C_1 / \#_ \underline{\text{and}} V_1C_1 \in R_{\text{red}}$

2. Deletions:

1) initial consonant deletion

- (2)a. $C_1 \Rightarrow \wedge / \#_C_2 \underline{\text{and}} C_1 \in R_{\text{consonant deletion}}$
 b. $C_1 \Rightarrow \wedge / \#_C_2 \underline{\text{and}} C_1 \in R_{\text{consonant deletion}}$ (not regularly)

2) final vowel deletion

- (3)a. $V_1 \Rightarrow \wedge / \#_ \underline{\text{and}} V_1 \in M_{\text{vowel deletion}}$
 b. $V_1 \Rightarrow \wedge / \#_ \underline{\text{and}} V_1 \in M_{\text{vowel deletion}}$ (not regularly)

3) hiatus vowel deletion

- (4)a. $V_1 \Rightarrow \wedge / \#_V_2 \underline{\text{and}} V_1 < V_2$
 b. $V_2 \Rightarrow \wedge / V_1\#_ \underline{\text{and}} (V_2 < V_1 \text{ or } V_2 = V_1)$

3. Insertions:

1) glottal stop insertion

- (5)a. $\wedge \Rightarrow \text{ʔ} / \#_V$
 b. $\wedge \Rightarrow \text{ʔ} / \#_V$

2) irrelevant boundary marking

- A. a. $C_1-C_2-C_3 \Rightarrow C_1[-]C_2-C_3 / V_1_V_2 \underline{\text{and}} C_2 = \text{Pref } \text{ʔ}$
 b. $C_1-C_2-C_3 \Rightarrow C_1-C_2[-]C_3 / V_1_V_2 \underline{\text{and}} C_2 = \text{Pref } n$
 c. $C_1-C_2-C_3 \Rightarrow C_1[-]C_2-C_3 / V_1_V_2 \underline{\text{and}} C_2 = \text{Suf } \eta \underline{\text{and}} C_3V_2 \neq \text{Suf } ki$
 d. $C_1-C_2-C_3 \Rightarrow C_1-C_2[-]C_3 / V_1_V_2 \underline{\text{and}} C_2 = \text{Suf } \eta \underline{\text{and}} C_3V_2 = \text{Suf } ki$

3) schwa insertion

- (6)a. $\wedge \Rightarrow \text{ə} / \#C_1(-)C_2$
 b. $\wedge \Rightarrow \text{ə} / C_1(-)C_2\#$
 c. $\wedge \Rightarrow \text{ə} / C_1_C_2C_3 \text{ or } C_1_ = C_2C_3$
 d. $\wedge \Rightarrow \text{ə} / C_1C_2_C_3 \text{ or } C_1C_2_ = C_3$

4) schwa and consonant metathesis

- (7)a. $\text{ə-C}_2 \Rightarrow \text{-C}_2\text{ə} / \text{C}_1\text{-C}_3$ and $\text{C}_1, \text{C}_2 = \text{dentalveolar}$ (optionally)
 b. $\text{ə=C}_2 \Rightarrow \text{=C}_2\text{ə} / \text{C}_1\text{-C}_3$ and $\text{C}_1, \text{C}_2 = \text{dentalveolar}$ (optionally)

4. Stress assignment algorithm:

1) syllabification and syllable marking

- B. a. $\text{CV} \Rightarrow |\text{CV}|$
 b. $\# \Rightarrow |\#|$
 C. a. $|\text{Cə}| \Rightarrow \cup$
 b. $|\text{CV}| \Rightarrow - / \text{V} \neq \text{ə}$
 c. $|\text{CVC}| \Rightarrow -$

2) stress assignment

- I. $- \Rightarrow \acute{\quad} / \# _ \#$
 II. a. $- - \Rightarrow \acute{\quad} - / \# _ \#$
 b. $\cup - \Rightarrow \cup \acute{\quad} / \# _ \#$
 III. a. $- - \Rightarrow - \acute{\quad} / \# _ \dots$
 b. $\cup - \Rightarrow \cup \acute{\quad} / \# _ \dots$
 c. $- \cup \Rightarrow \acute{\quad} \cup / \# _ \dots$

3) syllable addition

- (8)a. $\wedge \Rightarrow \text{C}_2\text{ə} / \text{V}_{\text{stressed}}(-)\text{C}_1\text{-}\#$ and $\text{C}_2 = \text{C}_1$ and $\text{C}_1 \neq \text{Suf k, t}$
 b. $\wedge \Rightarrow \text{C}_2\text{i} / \text{V}_{\text{stressed}}\text{-C}_1\text{-}\#$ and $\text{C}_2 = \text{C}_1$ and $\text{C}_1 = \text{Suf k, t}$

5. Velar fricative sonorisation

- (9)a. $\gamma \Rightarrow \text{w} / _ | \text{C}_1$ and $\text{C}_1 \neq \gamma$
 b. $\gamma \Rightarrow \text{w} / _ | \#$ or $_ | =$ (optionally)

6. Vowel and glide coalescence

- (10) a. $\text{aj} \Rightarrow \bar{\text{e}} / (_ | \# \text{ or } _ | \text{C}_1)$ and $\text{C}_1 \neq \text{j}$
 b. $\text{aw} \Rightarrow \bar{\text{o}} / (_ | \# \text{ or } _ | \text{C}_1)$ and $\text{C}_1 \neq \text{w, v}$
 c. $\text{a}^? \Rightarrow \bar{\text{a}} / _ | \# \text{ or } _ | \text{C}_1$
 (11) a. $\text{əj} \Rightarrow \bar{\text{e}} / _ | \text{C}_1$ and $\text{j} = \text{root-initial}$ and $\text{C}_1 \neq \text{j}$
 b. $\text{əj} \Rightarrow \text{i} / (_ | \# \text{ or } _ | \text{C}_1)$ and ($\text{j} = \text{root-final}$ or $\text{j} = \text{suffix-initial}$) and $\text{C}_1 \neq \text{j}$
 c. $\text{əw} \Rightarrow \bar{\text{o}} / _ | \text{C}_1$ and $\text{w} = \text{root-initial}$ and $\text{C}_1 \neq \text{w}$
 d. $\text{əw} \Rightarrow \text{u} / (_ | \# \text{ or } _ | \text{C}_1)$ and ($\text{w} = \text{root-final}$ or $\text{w} = \text{suffix-initial}$) and $\text{C}_1 \neq \text{w}$
 e. $\text{ə}^? \Rightarrow \bar{\text{a}} / _ | \text{C}_1$ and $\text{C}_1 \neq \text{?}$
 (12) $\text{ij} \Rightarrow \bar{\text{i}} / _ | \text{C}_1$ and $\text{C}_1 \neq \text{j}$

7. Vowel reduction

- (13) $a \Rightarrow \text{ə} / _ \text{CV}_{\text{stressed}} \text{ and } a \neq \text{Pref } a$
(14) $V_{\text{long}} \Rightarrow V_{\text{short}} / V_{\text{stressed}} \dots _$

8. Fortitions

1) expressive vowel lengthening

- (15) a. $\text{ə} \Rightarrow \bar{\text{o}} / \text{in expressive words}$
b. $a \Rightarrow \bar{\text{o}} / \text{in expressive words}$
c. $i \Rightarrow \bar{\text{e}} / \text{in expressive words}$
d. $u \Rightarrow \bar{\text{o}} / \text{in expressive words}$

2) consonant gemination

- (16) $t \Rightarrow tt / \#CV_{\text{stressed}} _ -V_2\# \text{ and } t \in R_{\text{gemination}}$

9. Regular contact consonant assimilation

1) partial assimilation of dental / before nasals

- (17) a. $t \Rightarrow n / _ m$
b. $t \Rightarrow n / _ n \text{ or } _ n_j$
c. $t \Rightarrow n / _ \eta$

2) complete assimilation of dental / before sonorant dentalveolars

- (18) a. $t \Rightarrow l / _ l \text{ or } _ l_j$
b. $t \Rightarrow r / _ r$

3) contact dentalveolar palatalization

- (19) a. $t \Rightarrow s / _ s$
b. $n \Rightarrow n_j / _ n_j$
c. $l \Rightarrow l_j / _ l_j$

4) sonorant dental palatalization with /j

- (20) a. $n_j \Rightarrow n_j n_j$
b. $l_j \Rightarrow l_j l_j$

5) complete assimilation of nasal / before sonorant dentalveolars

- (21) a. $n \Rightarrow l / _ l$
b. $n \Rightarrow r / _ r$

- (22) $q \Rightarrow k / _ k$

7) complete progressive assimilation of labial /

- (23) $v \Rightarrow w / w _$

10. Irregular distant dental palatalization

- (24) a. $t \Rightarrow s \text{ (seldom } t_j) / \exists M_{\text{palatalizing}}$
b. $n \Rightarrow n_j / \exists M_{\text{palatalizing}}$

c. $l \Rightarrow lj$ (in some cases s) / $\exists M_{\text{palatalizing}}$

1.3.12. Practical Transcription of Alutor Words

In order to write Alutor words we use a simplified variant of the phonetic transcription, which we refer to as the practical transcription. The simplifications we use are the following:

1) we omit the glottal stop in word-initial position before a vowel, cf. *alpónhən* [ʔalpónhən] ‘patch’;

2) in most words we do not mark vowel length on *e* and *o* (see 1.1.1.3), cf. *jepólhən* [jēpólhən] ‘hoof’, *rarátenək* [rarátənək] ‘near a house’, but we do mark the length of *e* and *o* in expressive words (see 1.1.1.3), cf. *qolomē* [qolomē] ‘that’s great!’;

3) we do not mark vowel length on stressed vowels *i*, *u*, *a* occurring in open syllables, cf. *títək* [títək] ‘I was’;

4) we always mark vowel length on originally long vowels *ī*, *ū*, *ā*, except in closed syllables, cf. *jíləjil* [jíləjil] ‘tongue’, *jilótukuk* [jilótukuk] ‘gossip’;

5) we usually transcribe the palatalized correlate of *t* as *s* (except some rare examples in texts when it is pronounced like *tj*), cf. *nəsásaqin* ‘tasty’.

And finally, since the stress assignment rules in Alutor are rather simple, we do not mark stress in Alutor words except in this section.

1.3.12. How Phonological Rules Apply

Here are some examples of how the above-listed phonological rules apply to underlying representations. They illustrate situations where one rule creates a context for applying another rule.

Example 1. {*inm_{red}*} ‘rock (*Nsg*)’ (rule 1c) \Rightarrow *inm=in* (rule 5a) \Rightarrow *ʔinm=in* (rule 5b) \Rightarrow *ʔinm=ʔin* (rule 6d) \Rightarrow *ʔinmə=ʔin* (rules Ba, Bb) \Rightarrow [ʔin|mə|ʔin] (rules Ca, Cc) \Rightarrow $-\cup-$ (rule IIIc) \Rightarrow [ʔinmə=ʔin]; the practical transcription is *ínməʔin* ‘rock’.

Example 2. {(l)qət-j} ‘go away (*3sg pf*)’ (rule 2a) \Rightarrow qət-j (rule 6b) \Rightarrow qətə-j (rules Ba, Bb) \Rightarrow [qə|tə-j] (rules Ca, Cc) \Rightarrow $\cup-$ (rule IIb) \Rightarrow qətá-j (rule 8a) \Rightarrow [qətá-jjə]; the practical transcription is *qətájjə* ‘(s)he went away’.

Example 3. {*mət-n-takr-av-n*} ‘get (smth./smb.) down (*1pl-3sg pf*)’ (rule Ab) \Rightarrow *mət-n[-]takr-av-n* (rule 6b) \Rightarrow *mət-n[-]takr-avə-n* \Rightarrow (rule 6c) \Rightarrow *mətə-n[-]takr-avə-n* (rules Ba, Bb) \Rightarrow [mə|tə-n[-]|tak|r-a|və-n] (rules Ca, Cb, Cc) \Rightarrow $\cup-$... (rules IIIb) \Rightarrow [mətə-n[-]takr-avə-n]; the practical transcription is *mətəntakravən* ‘we got him/her down’.

Example 4. {*raγ_{red}*} ‘ptarmigan (*Nsg*)’ (rule 1a) \Rightarrow *raγ=raγ* (rule 9b) \Rightarrow

$\text{raw}=\text{raw}$ (rules Ba, Bb) \Rightarrow $|\text{raw}|=|\text{raw}|$ (rule Cc) \Rightarrow -- (rule IIa) \Rightarrow $\acute{\text{r}}\text{aw}=\text{raw}$ (rule 10b) \Rightarrow $\acute{\text{r}}\bar{\text{O}}=\text{r}\bar{\text{O}}$ (rule 14) \Rightarrow $[\acute{\text{r}}\bar{\text{O}}=\text{r}\bar{\text{O}}]$; the practical transcription is *róro* ‘ptarmigan’.

Example 5. { γ a-it-lin(a)} ‘be (3sg res)’ (rule 3a) \Rightarrow γ a-it-lin (rule 4a) \Rightarrow γ -it-lin (rules Ba, Bb) \Rightarrow | γ -it-|lin| (rule Cc) \Rightarrow – – (rule IIa) \Rightarrow γ -it-lin (rule 18a) \Rightarrow [γ -it-lin]; the practical transcription is *γillin* ‘(s)he was’.

CHAPTER 2. Morphology

In this chapter we consider the main word classes, rich in inflectional morphology, namely, the verb, adjective, noun, and pronoun.

2.1. Verbs

The verbs can be divided into two classes, *finite* (inflected) and *non-finite*. Finite forms are defined as compatible with the head predicate position of an independent clause. Non-finite forms can occupy the head predicate position of a subordinate clause as well as be part of the analytical verb form.

Finite forms have several conjugations depending on the number of agreement slots. First of all there are *polypersonal* and *monopersonal* conjugations. In *polypersonal* conjugation the verb has two agreement slots: a prefix and a suffix slot. Transitive verbs agree with the agentive and patientive arguments (referred to below as *A-* and *P-arguments*). Intransitive verbs agree with the sole core argument⁴⁶ (referred to below as *S-argument*). It is important that the *S/A-argument*, i.e. the argument bearing the Principal hyperrole (see argumentation below) is the main controller of agreement. In *monopersonal* conjugation the verb has only one agreement slot – the suffix slot controlled by the *S/P-argument*, i.e. the argument bearing the Absolutive hyperrole. Furthermore there is a number of *impersonal* forms that do not distinguish person values of core arguments.

First, we will consider three conjugation types of finite and non-finite verb forms.

2.1.1. Polypersonal conjugation of finite verb

Polypersonal conjugation is notable for a specific set of grammatical categories as well as agreement encoding.

2.1.1.1. Grammatical categories of polypersonal conjugation

Polypersonal conjugation is specified by the following categories: aspect, mood, and person-number agreement with the core arguments of intransitive and transitive verbs. There are two values for *aspect*: perfective (PF) and imperfective (IPF). *Perfective* has an unmarked value, it coincides with the verb's stem, *imperfective* has a suffix marker *-tkə /-tkən /-tkəni* (its ending depends on the type of the following morphemes⁴⁷).

⁴⁶ In this case both agreement slots are used, see below.

⁴⁷ The distribution of the imperfective's allomorphs (*-tkə /-tkən /-tkəni*) is not quite clear.

Comment: V etom fajle snjaty vse ispravlenija, on prakticheski gotov r formatirovaniju.

U menja takie pros'by:
1. Sledit', chtoby tablicy ne razryvalis', vključaja ix nazvanija, i byli na odnoj stranice. Imejte v vidu, čto ja nemnogo pereformatiroval tablicy, chtoby oni luchše chitalis'. V častnosti razdvinul stroki.
2. V Table 3 sleduet raspolozhit' affixy odnogo tipa drug pod drugim, naskol'ko eto pozvol' aet shirina tablicy. Dlja etogo luchše pol'zovat' sja tabuljaciej, a ne probelami.
3. Proverit' v primerax, chtoby glossa byla raspolozhena pod slovom. Eto ne vseгда bylo tak.

Comment:

The category *m o o d* is also obligatory. It has four values:

- *i n d i c a t i v e* (IND), does not have its own specific markers;
- *o p t a t i v e* (OPT), does not have its own specific markers⁴⁸;
- *p o t e n t i a l* (POT), circumfix marker *t a-...(-ŋ)*⁴⁹, framing the verb stem;
- *c o n j u n c t i v e* (CONJ), prefix marker *ʔ-/ā-*⁵⁰.

Besides these, in Alutor there is also an impersonal form of the *i m p e r a t i v e* (see 2.1.3).

Finally, the finite verb agrees⁵¹ in person and number with its core arguments, distinguishing three persons (1st/2nd/3rd person) and three numbers — *s i n g u l a r* (sg), *d u a l* (du) and *p l u r a l* (pl)⁵². Intransitive verbs agree with their sole core argument (S-*a r g u m e n t*) marked with the nominative, and have, aspect and mood being fixed, 9 person-number forms. The transitive verb agrees simultaneously with the agentive argument (A-*a r g u m e n t*) marked with the ergative as well as with the patientive argument (P-*a r g u m e n t*)⁵³ marked with the nominative, and has, aspect

⁴⁸ The mood value is coded cumulatively, together with person-number values, see below.

⁴⁹ The suffix component of the circumfix can be covert, for example, in imperfective potential. The potential marker coincides with desiderative marker (see 2.1.3 below).

⁵⁰ The marker *ā-* is a phonetic variant of the marker *ʔ-* in specific positions (see 1.3.6).

⁵¹ In Alutor the person-number markers are combined with the unmarked usage of personal pronouns in the core argument positions, so it is possible to interpret them as agreement markers.

⁵² As the paradigms show, semantically this tripartite personal opposition has its own internal structure. The opposition ‘singular — non-singular’ (sg — nsg) consists of six deictic items. Elementary single entities are defined in terms of speech act participants (1sg = ‘speaker’, 2sg = ‘hearer’) and non-participants of the speech act (3sg = ‘somebody’). Non-singular entities are totalities of elementary entities: 1nsg = ‘speaker and hearer/somebody’, 2nsg = ‘hearer and somebody’, 3nsg = ‘somebody and somebody’ (i.e. the countable number opposition of homogenous entities is present only in the 3rd person). Exactly these entities are ordered in the Deictic Hierarchy (see Figure 1 below). The arrangement of non-singular entities with respect to singular entities is semantically motivated. Thus, ‘1nsg’ includes, besides the speaker, the hearer and/or the 3rd person. Such an entity is lower on the Hierarchy than ‘1sg’. Simultaneously this entity is higher than ‘2sg’, because it includes the speaker, and this factor is most important for the Hierarchy. The motivation for ‘2nsg’ is similar.

Within the scope of the non-singular there is a proper number opposition of dual and plural (du and pl), because the number of homogenous elementary entities increases, and this opposition uses iconically specific coding devices (see 2.1.1.2.4). Dual does not have a surface expression (it is possible to postulate the zero marker), and plural is expressed by a specific morpheme — pluralizer *-la*.

In that way the prototypical number opposition is represented in the subsystem of 1/2nd person nsg, and partially in 3rd person sg/nsg.

⁵³ See 3.1.6 on agreement with the addressee argument.

and mood being fixed, 63 person-number forms.

The conjugation of the intransitive verb ‘jump’ and the transitive verb ‘beat’ are presented in Appendix. The linear structure of the finite verb form is presented in Table 1. The nucleus of the form is its verb stem. It has the zero rank. Morpheme slots that precede the stem (prefixes) have negative rank numbers increasing from right to left. The slots following the stem (suffixes) have positive rank numbers increasing from left to right.

TABLE 1. The linear structure of the finite verb form

-4	-3	-2	-1	0	+1	+2	+3	+4
S/A agree- ment	mood	inversion	incorpo- ration	stem	plura- lizer	aspect/ mood	A+P agree- ment	S/P agree- ment

COMMENTS on Table 1

1. The leftmost slot (rank -4) is occupied by the agreement markers of S/A-arguments, see 2.1.1.2 as well as Table 5. The rightmost slot (rank +4) is occupied by agreement markers of the S/P-arguments, see Table 6. Additionally, these agreement slots can be occupied by non-transparent agreement markers⁵⁴.

2. Prefixal mood markers (the conjunctive marker *ʔ-* and the potential marker *ta-*) occupy rank -3. The suffix component of the potential mood marker (*-ŋ*), as well as the imperfective aspect marker (*-tkən*) have the rank +2.

3. The pluralizer *-la* occupies rank +1, immediately following the stem.

4. The slot following the prefixal mood marker (rank -2) is occupied by the specific inversion marker *ina-* (see below, Comment 1 on Table 8). Rank +3 is intended for portmanteau agreement markers (*-ni*, *-ŋə*, see 2.1.1.2.4 below).

5. Finally, the stem of an incorporated word can be placed in immediate preposition to the stem, rank -1 (on incorporation see 3.1.4).

6. Any affix slot can be empty. However there is no verb form coinciding with the bare stem, i.e. at least one of the eight slots should be filled.

2.1.1.2. Person-number agreement

From the point of view of a formal as well as explanatory description the person-number conjugation of Alutor verbs is a very complicated matter. In question is not just the abundance of agreement forms (the full paradigm of the finite verb has 496

⁵⁴ The non-transparent marker *na-/nan-/ən-* ‘LOW.A’ occupies the prefix slot with rank -4, see 2.1.1.2.4, and the marker *-tki* ‘2nsg.A+3.P’ occupies the suffix slot with rank +4, see 2.1.1.2.3.

agreement forms), but rather the less than trivial rules of agreement marker selection. Namely, only a portion of the inventory of agreement markers is transparent in the sense that they directly correspond to the person-number value of the corresponding argument. In many slots of the verb paradigm there are deviations from this ideal semiotic pattern (the so called non-transparent markers). This phenomenon should be given particular consideration.

2.1.1.2.1. Agreement in perfective potential

A fragment of the paradigm of the perfective potential aspect-mood forms can be used in order to gain some preliminary familiarity with the person-number agreement system. In Tables 2 and 3 schematic paradigms of intransitive and transitive verbs are presented, showing, for the purposes of clarity, only agreement markers⁵⁵.

TABLE 2. Schematic person-number paradigm of an intransitive verb (POT, PF)

Number	1 person	2 person	3 person
sg	t-	∅-	-∅
du	mət-	-tək	-t
pl	mət- -la	-la -tək	-la -t

⁵⁵ A hyphen follows the prefix markers and precedes the suffix markers. The absence of the material or zero marker in an expected agreement slot means that this slot is absent in this box of the paradigm.

TABLE 3. Schematic person-number paradigm of transitive verb (POT, PF)

P	A					
	1sg	1du	1pl	2sg	2du	2pl
1sg				ina-	ina- -tək	ina- -la -tək
1du				na- -mək	na- -mək	na- -mək
1pl				na- -la -mək	na- -la -mək	na- -la -mək
2sg	t- -γət	mət- γət	- mət- -la-γət			
2du	t- -tək	mət- -Ø - tək	mət- -Ø -tək			
2pl	t- -la-tək	mət- -la- tək	mət- -la-tək			
3sg	t- -n	mət- -n	mət- -la-n	Ø- -n	-tki	-la -tki
3du	t- -na-t	mət- -na- t	mət- -na-t	Ø- -na-t	-tki	-tki
3pl	t- -na-w	mət- -na- w	mət- -na-w	Ø- -na-w	-la -tki	-la -tki

P	A		
	3sg	3du	3pl
1sg	ina- -Ø	na- -γəm	na- -γəm
1du	na- -mək	na- -mək	na- -mək
1pl	na- -la -mək	na- -la -mək	na- -la -mək
2sg	na- -γət	na- -γət	na- -γət
2du	na- -tək	na- -tək	na- -tək
2pl	na- -la -tək	na- -la -tək	na- -la -tək
3sg	-ni- n	na- -n	na- -n
3du	-ni- na-t	na- -na-t	na- -na-t
3pl	-ni- na-w	na- -na-w	na- -na-w

In the prefix and suffix agreement slots with ranks -4 and +4 two number values for 1st/2nd person arguments — singular (sg) and non-singular (nsg), are distinguished, and the opposition of dual and plural is expressed by a specific morpheme, the pluralizer *-la*, occupying the nearest suffix slot after the stem.

In Table 3, the regular font indicates transparent person-number agreement markers that have single person-number values for particular A/P-arguments, while the boldface indicates non-transparent agreement markers that do not have a direct correlation with the person-number values of their respective arguments.

In Table 4 the transparent person-number agreement markers in perfective potential are presented (naturally, without the pluralizer *-la*).

TABLE 4. Transparent person-number agreement markers on perfective potential

The type of agreement	1sg	1nsg	2sg	2nsg	3sg	3du	3pl
S/A-prefixes	t-	mət-	∅-	-	-	-	-
S-suffixes	-	-	-	-tək	-∅	-t	-t
P-suffixes	[-ɣəm]	-mək	-ɣət	-tək	-n	-na-t	-na-w

COMMENTS on Table 4

1. As the Table shows, prefixal S- and A-agreement markers are the same (they are presented in the first line of the Table). This slot can be occupied by material markers of the 1st person, as well as the zero marker⁵⁶ of the 2nd person sg. Other persons do not have prefixal agreement markers⁵⁷.

2. The suffix slot is occupied by person-number S- and P-markers (the second and third lines of the Table respectively). Suffixal person-number S-markers correspond to 2nd person non-sg and 3rd person, i.e. person-number S-markers are in complementary distribution among the prefix and suffix slots: S-arguments ‘I’, ‘we’, ‘you (sg)’ have prefixal agreement markers, while ‘you (non-sg)’, ‘(s)he/it’, ‘they’ have suffix markers. In contrast to S-arguments, all persons of P-arguments have corresponding person-number P-markers⁵⁸, material forms of S- and P-markers being different (the single exception is the marker *-tək* ‘2nsg.S/P’).

3. 3rd person P-markers consist of the *-n(a)* person marker and a number marker. In the

⁵⁶ This description differs from zero marker and forms that lack any agreement marker. Practically for particular boxes of the paradigm the descriptive choice depends on systematic considerations.

⁵⁷ Here and below lack of an agreement marker is indicated by the dash.

⁵⁸ The ‘1sg.P’ marker *-ɣəm* has a restricted usage; see below.

singular, the final vowel of the person marker undergoes syncope⁵⁹, in the dual the marker *-t* is added, in the plural the markers *-w* or *-wwi* are added.

Thus, A- and P-markers of transitive verbs are in complementary distribution between prefix/suffix slots. The S-markers of intransitive verbs are represented in both slots, the choice depending on the person value. The S-arguments ‘I’, ‘we’, ‘you (sg)’ are similar (from the point of view of the slot type and the material form) to the respective A-arguments of transitive verbs, while ‘you (pl)’, ‘(s)he/it’, ‘they’ are likened (from the point of view of the slot type) to the respective P-arguments of transitive verbs⁶⁰. It seems that this person differentiation is not random. It demonstrates the opposition between speech-act participants (locutors) and participants that are external to the speech act (non-locutors). The boundary between locutors and non-locutors is inside the 2nd person rather than between 2nd and 3rd person, as is usually assumed. In Alutor the hearer (‘you (sg)’) is a speech-act participant, while 2nd person nsg (‘you (pl)’) includes, beside the hearer, other persons, and this is the reason to interpret this totality as a non-locutor. As shown below, the agreement paradigm testifies, based on cross-linguistically relevant (see [Kibrik 1997b]) opposition between locutors and non-locutors, to the existence of the multi-member Deictic Hierarchy in Alutor, see Figure 1.

Comment: Ssylka na russkiju stat’ju, sm. Bibliography, gde est’ Kibrik 1997a: “Beyond...”. V Bibl. nado postavit’ indeksy “a” i “b”]

FIGURE 1. The Deictic Hierarchy

1sg > 1nsg > 2sg > 2nsg > 3sg > 3nsg
locutors > non-locutors

2.1.1.2.2. Pure and combined transparent agreement markers

Until now we have been discussing the autonomous (pure) agreement markers. In fact, however, the marker can often depend on the mood and/or the aspect of the verb form expressing simultaneously person-number and aspect/mood values. Such markers will be called combined markers. Pure and combined transparent markers are presented in a generalized form in Tables 5-7. These Tables take into account the agreement markers of all finite verb forms, including mood and aspect. It turns out that in general, pure markers belong to the set of suffixal P-markers, see Table 7 (they show little variation in the context of the aspect/mood values of the verb form). As for prefixal S/A-markers, they are all combined with mood values, see Table 5, and

⁵⁹ This means of coding the singular is used also for the nominative singular of some nouns, see 2.3.1.1, as well as for number inflection of adjectives (*-gin(a)*, *-kin(a)* and others), see 2.2.

⁶⁰ These similarities have independent manifestation in the effects of markedness reversal, see below in 2.1.1.2.3.

suffixal S-markers are combined with values of mood as well as aspect. The only pure agreement marker is the suffix marker *-tək* ‘2nsg’⁶¹.

Tables 5-6 show a formal correspondence between combined markers and their grammatical values. However, from the point of view of an explanatory description such a formal correspondence is absolutely insufficient. It is natural to suppose that the means of merging the values of person, mood, and aspect into single markers are not random, they are motivated in many cases by the nature of these values themselves. Some assumptions of this kind are presented in the Comments on the tables, though a full explanatory description is the goal of further investigations.

TABLE 5. Transparent prefixal S/A-markers

Mood	1sg	1nsg	2sg	2nsg	3sg	3nsg
IND/POT	t-	mət-	∅-	-	-	-
CONJ	t-	mən-	n-	n-	n-	n-
OPT	m-	mən-	q-	q-	n-	n-

COMMENTS on Table 5

1. S/A-markers consistently merge the indicative and the potential as “objective” moods. The use of these moods presupposes the existence of corresponding events. The indicative mood characterizes the event as existing in a real world, and the potential mood, as existing in a virtual world. The conjunctive and the optative are unified by the idea of “desirable” modality: they indicate the events of the world of a speaker's desires (see the semantics of mood in 2.1.7.1 — 2.1.7.4).

2. In unmarked “objective” moods (IND and POT) only locutors have the prefixal agreement markers, and these markers can be considered pure. In “desirable” moods the mood and deictic values are combined⁶², therefore non-locutors also have prefix markers.

3. 2nd and 3rd person conjunctives (CONJ) have the single marker *n-*, indicating a S/A-participant, whom the speaker does not control. The choice of the same marker for 3rd person optative (OPT) is not random.

4. 2nd person optative has a specific marker *q-*, which is differentiated from the 3rd person.

⁶¹ It is remarkable that only this agreement marker unifies S- and P-markers, cf. Tables 6-7.

⁶² The single deviation is conjunctive for 1sg.S/A (*t-*), coinciding with the markers of “objective” moods (see Comment 5 to Table 5).

The 2nd person optative semantically coincides with the imperative⁶³, because exactly in this speech situation the speaker perlocutively affects the addressee with the speech act.

5. The 1sg value does not differentiate between the conjunctive and the optative: these moods have the single *mən-* agreement marker⁶⁴, in contrast to 1sg. In the context of the conjunctive 1sg uses the *t-* marker, identical to the one used in the unmarked moods, and such a merger takes place only for this person. Probably the maximal degree of control on the part of the speaker over the desirable event is important: inasmuch as the speaker has an S/A-role in the event, the probability of its accomplishment is estimated by the speaker to be very close to real event.

6. A unique 1sg marker is present in the optative (*m-*). In this mood the speaker is simultaneously the sender as well as the recipient of the prescription. It should be taken into account that this mood does not have its own marker and differs from the indicative only by means of agreement markers, i.e. the speech acts with different S/A-arguments are cognitively different. The following types of desires are distinguished: a desire addressed to the speaker himself (*m-*), addressed to the speaker and other persons (*mən-*), addressed to the hearer and, optionally, to other persons (*n-*) (in the latter case the addressee of desire being virtual rather than actual).

TABLE 6. Transparent suffixal S-markers

⁶³ Usually in Chukotko-Kamchatkan languages the mood under consideration is called imperative, see [Zhukova 1968] (Alutor), [Zhukova 1972] (Koryak), [Volodin 1992] (Kerek), [Skorik 1977] (Chukchi). However the semantics of 1st and 3rd persons' S/A-arguments does not have a perlocutive component of inducement to the action (see the separate analysis of the meanings of these forms in [Muravyova 1990a]). It should be mentioned that Alutor **rarely uses the imperative proper**, see 2.1.3.

⁶⁴ At that the forms of conjunctive and optative in general are distinct.

Aspect, mood	1sg	1nsg: du/pl	2sg	2nsg	3sg	3du	3pl
PF+POT	- <u> </u> ~ -i	- <u> </u>	- <u> </u> ~ -i	-tək	-∅ ~ -i	-t	-t
PF+IND	-k	-mək	-j	-tək	-j	-γəʔət	-t
PF+CONJ	-k	-mək	-n	-tək	-n	-na-t	-na-w
PF+OPT	-k	-mək	-γi	-tək	-n	-na-t	-na-w
IPF+POT	- <u> </u>	- <u> </u> /-t	- <u> </u>	-tək	-∅	-t	-t
IPF+IND	- <u> </u>	- <u> </u> /-t	- <u> </u>	-tək	-∅	-t	-t
IPF+CONJ	- <u> </u>	- <u> </u> /-t	-	-tək	-n	-na-t	-na-w
IPF+OPT	- <u> </u>	- <u> </u> /-t	-	-tək	-n	-na-t	-na-w

COMMENTS on Table 6

1. As mentioned above, the ‘2nsg.S’ marker, *-tək*, is largely independent from aspect/mood values, and also identical to the ‘2nsg.P’ marker (see Table 7).

2. In contrast to the imperfective⁶⁵, the perfective tends to be combined with specific locutor suffixal markers (absent only in the perfective potential⁶⁶). 1st person agreement markers are identical for the indicative, conjunctive, and optative. In these moods the singular is *-k* ‘1sg.S+PF’ marker, non-singular is *-mək* ‘1nsg.S+PF’ (identical to the marker ‘1nsg.P’). As with the 2nd person singular, its markers are also combined with mood values: *-j* ‘2sg+PF+IND’, *-n* ‘2sg+PF+CONJ’, *-γi* ‘2sg+PF+OPT’.

3. Usually in the context of perfective potential (with the final component *-ŋ*) and the singular S-arguments the suffixal agreement markers are absent (see Appendix), however sporadically the marker *-i* (the same for all persons⁶⁷) appears, thus it can be given a value of ‘sg.S+PF+POT’.

4. It should be mentioned that an interpretation of the empty suffix slot for ‘2sg.S+PF.POT’ is complicated. The proposed interpretation (the lack of markers) is motivated by the locutor status of ‘2sg’, merging with the 1st person. However another interpretation is also possible, that is, the existence of a zero marker. The following generalizations favor this interpretation: if it is true, then (a) the tendency for the 2nd and 3rd persons to merge into singular markers becomes stronger, (b) 2nd person singular in the perfective always has a suffix marker.

5. The 3rd person has its own subsystem, for clarity presented in Table 6a. First, 3rd person

⁶⁵ In this aspect locutors do not have overt suffix markers, see Comment 7 below about marker *-t* ‘1pl.S’ in imperfective aspect.

⁶⁶ See, however, Comment 3 below.

⁶⁷ See, for example, [20:13]: *γəmmə tə-ta-r.ətə-ŋ-i* ‘I will return home’, [9:25]: *t-ina-n.u-ŋ-i*, *t-ina-toli-ŋ-i* ‘(you) are going to roast me and eat me’, [6:23]: *ta-vusqə.svi-ŋ-i* ‘when it gets dark’.

differentiates all three number's values⁶⁸, second, it contrasts □bjective□ and □esirable□ moods. In □esirable□ moods the values of person (*-n/-na* marker) and number ([syncope of the final *-a*] ‘sg’, *-t* ‘du’, *-w* ‘pl’) are split, see Table 7 and Comment 3 on Table 4. In the □bjective□ moods, excluding the perfective indicative, the singular (*-∅*) and non-singular (*-t* marker) are differentiated.

6. The perfective indicative, i.e. the most unmarked aspect-mood form, occurs, on the contrary, in the most peculiar way, in the context of 3rd person S-argument. 3rd person singular has the marker *-j* ‘3sg+PF+IND’, identical to the ‘2sg+PF+IND’ marker. However, it is most remarkable that 3rd person dual (‘they two’) has a unique marker *-γəʔət* ‘3du+PF+IND’. 3rd person plural is not combined by aspect values; the marker *-t* is combined with mood only and is identical in the indicative and potential irrespective of aspect.

7. The existence of the single locutor suffix *-t* ‘1pl.S’ marker in imperfective, identical to the ‘3nsg.S’ marker for POT and IND, suggests an idea that ‘we many’ includes third persons in the set of participants (‘we many’ = ‘I+they’), i.e. plurality iconically marks 3rd person rather than 1st person. This interpretation being accepted the suffixal locutor S-markers are present only in the perfective aspect with the exception of the potential mood.

8. After stems with a single final consonant the 3nsg S-marker *-na-* sometimes has the allomorph *-əna*.

TABLE 6a. 3rd person suffixal transparent S-markers

Aspect, mood	3sg	3du	3pl
PF+IND	-j	-γəʔət	-t
PF+POT, IPF+IND/POT	- ∅	-t	-t
CONJ,OPT	-n	-na-t	-na-w

TABLE 7. Suffixal transparent P-markers

Context	1sg	1nsg	2sg	2nsg	3sg	3du	3pl
free	[-γəm]	-mək	-γət	-tək	-n	-na-t	-na-w
1nsg.A+OPT/CONJ			-tək				

COMMENTS on Table 7

1. In general P-markers are context-free. The only exception is the usage of *-tək* as ‘2.P’ in the context of OPT/CONJ and 1nsg A-argument. It should be mentioned that in this case (‘we

⁶⁸ Motivation of this property of the 3rd person is discussed in the footnote 95.

<A> — you <P>') 'we' has an exclusive value. Nevertheless the motivation of this P-argument number neutralization in this context needs additional explanation.

2. Non-locutor P-markers are identical to S-markers in OPT/CONJ (see Table 6a).

3. The agreement marker -γəm '1sg.P', presented in square brackets has restricted usage. It is used only in the context of the 3nsg A-argument (see below).

4. It should be mentioned that -γəm '1sg.P' and -γət '2sg.P' are closely connected with the agreement markers of the adjective conjugation (see 2.2). They are enclitic forms of respective personal pronouns 'I' and 'you (sg)'.

Thus, we have examined pure and combined agreement markers. Their distribution testifies to the fact that generally according to the cognitive logic of Alutor the values of person are not independent from the values of mood and aspect. On the contrary, they constitute a united semantic space where coordinates of various person values are at different distances from each other and from various values of mood and aspect. These spacial relationships of mutual proximity/remoteness have their iconical (though not yet completely understood) expression in the overt form of agreement markers.

2.1.1.2.3. Pure non-transparent agreement markers

Now let us consider pure non-transparent markers, presented in boldface in Table 3. These markers are specific in the sense that it is difficult to ascribe to them a single person-number value of an A/P-argument. It is easy to see that these markers usually simultaneously take account of person-number values of both the A- and P-arguments of transitive verbs. To be more precise, these markers are present with the following combinations of person-number values of A- and P-arguments:

A	P	Agreement markers
2nsg	3	-tki
3sg	3	-ni
3nsg	1/2/3	na-
3sg	2	na-
3sg/2	1nsg	na-
3sg/2	1sg	ina-

What is a motivation of this united expression of A/P-person-number values? In our description the interpretation of these markers is based on the Deictic Hierarchy mentioned above (see Figure 1). In this Hierarchy the arguments' person-number values are ordered in accordance with the principle of markedness reversal with respect to A/P-positions. Namely, the leftmost member of the Hierarchy

generally harmonizes with the A-role, and the rightmost member with the P-role. Therefore the A-role is mostly unmarked for the ‘I’-argument, and the P-role for the ‘they’-argument, and vice versa, the A-role is generally marked for the ‘they’-argument, and P-role for the ‘I’-argument. With respect to the intermediate positions of the Deictic Hierarchy, markedness of the A-role increases in the Hierarchy from left to right, whereas markedness of the P-role increases from right to left. The critical point of this Hierarchy is the boundary between locutors and non-locutors. It is normal for locutors to play the A-role⁶⁹, whereas it is normal for non-locutors to play the P-role. The following person-number combinations of A- and P-roles are congruent with this tendency⁷⁰:

A		P
I	—	you sg/you nsg/him/them
we	—	you sg/you nsg/him/them
you sg	—	him/them

It is easy to see that these combinations of deictic categories trigger the regular (pure and combined) agreement markers. Deviations from the regular coding are found in the context of the following person-number A- & P-combinations:

A		P
you sg	—	me/us
you nsg	—	me/us /him/them
he	—	me/us /you sg/you nsg/him/them
they	—	me/us /you sg/you nsg/him/them

It is exactly these combinations that trigger non-transparent agreement markers (see boldfaced markers in Table 3). However, the various combinations of deictic values trigger different types of non-transparent markers, thus a more precise formulation is needed. In general the choice of non-transparent coding depends on the values of both arguments of the transitive verb, nevertheless the starting point for the choice is the deictic properties of one of them. In the following cases it is the A-argument:

(a) *the most deictically unnatural, i.e. the most marked A-argument (= ‘they’) needs the non-transparent marker (na-);*

⁶⁹ Moreover, locutor can play the P-role in case when the A-role is also occupied by locutor outranking the former in the Deictic Hierarchy.

⁷⁰ English pronominal constructions are used for the sake of clarity.

(b) if the A-argument is outranked by the P-argument on the Deictic Hierarchy, the non-transparent marker is needed (it is important that it is the same *na-* marker).

(c) If the non-locutor A-argument is deictically not lower than the P-argument⁷¹, the special portmanteau non-transparent markers are used, whose choice depends on the deictic properties of the A-argument (*-tki* 'you nsg — him/them'; *-ni* 'he — him/them').

The P-marker also can be the starting point. It takes place in the following case:

(d) the most deictically unnatural, i.e. the most marked P-argument (= 'I') needs the non-transparent marker (*ina-*).

Some rules are not mutually exclusive, and can be in conflict. Conflict resolution is based on the following principles:

1. The deictic properties of terminal members of the Hierarchy are stronger than the properties of intermediate members.

2. If the terminal members of the Hierarchy are in conflict, the A-argument has a priority. For example, rule (c) is in conflict with rule (a) in the situation 'A-they — P-them'. In this case rule (a) is stronger. Rule (d) can also be in conflict with rule (a) in the situation 'A-they — P-me'. In this case the properties of the A-argument are stronger again, therefore rule (a) has a priority. In such situations as 'A-you sg/-you nsg/-he — P-me' there is a conflict between (d) and (b). In this case, according to principle 1, rule (d) is stronger.

These generalizations are summarized in Table 8.

TABLE 8. Non-transparent markers

Rule	Marker	A-argument	P-argument
(a); it is stronger than (c, d)	<i>na-</i>	they	me/us/you sg/you nsg/him/them
(b)	<i>na-</i>	he	us/you sg/you nsg
(b)	<i>na-</i>	you nsg/sg	us
(c)	<i>-tki</i>	you nsg	him/them
(c)	<i>-ni</i>	he	him/them
(d); it is stronger than (b)	<i>ina-</i>	he/you sg/you nsg	me

COMMENTS on Table 8

1. It is necessary to emphasize the essential distinction between *na-* and *ina-* markers. *na-*

⁷¹ In this case the P-argument is also non-locutor.

occupies the regular prefix slot for A-markers (rank -4). *ina-* has a specific prestem slot (rank -1), it is controlled by the P-argument and is identical to the antipassive marker, i.e. it is an *inversion* marker. It is also essential that in the context of this agreement marker the A-argument is marked by suffixal agreement markers identical to S-markers⁷². For examples see the perfective forms of the verb ‘beat’ below:

Mood	A-argument	P-argument	Verb form
Indicative:	2sg.A	1sg.P	ina-tkəpl-i
	2du.A	1sg.P	ina-tkəplə-tək
	2pl.A	1sg.P	ina-tkəplə-la-tək
	3sg.A	1sg.P	ina-tkəpl-i
Potential:	3sg.A	1sg.P	t-ina-tkəplə-ŋ-Ø
Optative:	2sg.A	1sg.P	q-ina-tkəplə-γi
	2du.A	1sg.P	q-ina-tkəplə-tək
	2pl.A	1sg.P	q-ina-tkəplə-la-tək
	3sg.A	1sg.P	n-ina-tkəplə-n
Conjunctive:	2sg.A	1sg.P	nə-ʔ-ina-tkəplə-n
	2du.A	1sg.P	nə-ʔ-ina-tkəplə-tək
	2pl.A	1sg.P	nə-ʔ-ina-tkəplə-la-tək
	3sg.A	1sg.P	nə-ʔ-ina-tkəplə-n

In the suffixal agreement slot there are S-markers *-i* ‘2/3sg.S + IND + PF’, *-γi* ‘2sg.S + OPT + PF’, *-n* ‘3sg.S + OPT + PF’, *-Ø* ‘3sg.S + POT + PF’, *-tək* ‘2du/pl.S’.

2. It is necessary to mention an essential difference between portmanteau *-ni* and *-tki* markers. *-ni* co-occurs with P-markers (see *-ni-n*, *-ni-na-t*, *-ni-na-w*), whereas *-tki* blocks the appearance of P-markers. It testifies to the fact that they occupy different slots in the verb form. *-ni* occupies the rank +3, the next slot being free, whereas *-tki* occupies the slot with rank +4⁷³ (see Table 1).

2.1.1.2.4. Combined non-transparent markers

Above pure non-transparent agreement markers of “objective” moods (indicative and potential) were considered. The majority of these markers have no modal values, however, *na-* has this form in the “objective” moods only. In the conjunctive it is realized as *ən-*, and in the optative as *nan-* (see the paradigm for transitive verbs in Appendix).

The occurrence of the portmanteau *-γə* non-transparent marker is more specific (see the optative paradigm in Appendix and in Table 9). This marker is licensed in the context of arguments with the deictic properties: ‘2.A + 3.P’. Moreover, it is combined with the optative and is sensitive to aspect values.

⁷² B.Comrie calls these forms pseudo-intransitive [Comrie 1980].

⁷³ This is also supported by the co-occurrence of this marker with the non-transparent marker *-γə*, see below.

TABLE 9. Schematic paradigm with the non-transparent marker *-γə* in the optative

A- argument	P-argument					
	3sg		3du		3pl	
IPF+2sg	q-	-tkə -n	q-	-tkə -na-t	q-	-tkə -na-w
IPF+2du	q-	-tkəni -γə-tki	q-	-tkəni -γə-tki	q-	-la-tkəni -γə-tki
IPF+2pl	q-	-la-tkəni -γə-tki	q-	-tkəni -γə-tki	q-	-la-tkəni -γə-tki
PF+2sg	q-	-γə-n	q-	-γə-na-t	q-	-γə-na-w
PF+2du	q-	-γə-tki	q-	-γə-tki	q-	-la -γə-tki
PF+2pl	q-	-la -γə-tki	q-	-γə-tki	q-	-la -γə-tki

As Table 9 shows, in imperfective⁷⁴ this marker occurs only in the context of 2nsg A-argument, i.e. it shares the distribution with the marker *-tki* and follows the above-mentioned rule (d).

However in perfective this marker co-occurs also with 2sg A-arguments. In the context of the perfective the rule for this marker looks as follows:

(e) *If in the perfective optative the A-argument is a hearer that is deictically higher than the P-argument (i.e. in situations such as ‘you sg/nsg — him/them’), then the non-transparent marker -γə is necessary.*

2.1.1.2.5. Pluralizer insertion

It was said above that 1st/2nd person S/A-markers are distinguished in only the singular and non-singular⁷⁵, whereas suffixal 3rd person S- and P-markers are distinguished in the singular, dual, and plural (see Tables 6-7). The main means used by agreement to contrast dual vs. plural is a specific marker, a so-called pluralizer (*-la*) that has a special linear slot (rank +1, see Table 1)⁷⁶. The scope of pluralization is:

⁷⁴ It should be taken into consideration that these forms are very rare in the speech. In texts (Part I) only one occurrence of this marker in the optative imperfective was found. There are also some divergences between the paradigm presented in this volume and the paradigm in [Zhukova 1968: 304-05]: in the latter paradigm there are forms *q-.....-tkəni-γə-na-t* ‘2sg.A+OPT-.....-IPF-2.A+3-3.P-du’, *q-.....-tkəni-γə-na-w* ‘2sg.A+OPT-.....-IPF-2.A+3-3.P-pl’.

⁷⁵ See Comment 7 on Table 6 about “exceptional” marker *-t* ‘1pl.S+IPF’.

⁷⁶ See also [Mel’čuk 1986].

- 1st/2nd person S/A/P-arguments;
- 3rd person S-arguments in “objective” moods — indicative and potential⁷⁷;
- 3rd person P-arguments in the context of the non-transparent marker *-tki*⁷⁸.

As one can see, there are accessible arguments that are in the scope of pluralization, and non-accessible arguments that are out of the scope of pluralization. First, the dual vs. plural distinction of the 3rd person A-arguments does not have any overt expression, including the pluralizer. Second, in the context of suffixal markers *-t* ‘3du’ and *-w* ‘3pl’, the 3rd person S- and P-arguments are non-accessible.

Intransitive verbs have the following rule of pluralizer insertion: accessible S-argument controls pluralizer insertion.

Pluralization of transitive verbs is more complicated: the verb has only one pluralizer slot and two potential plural agreement controllers, — A- and P-arguments, if accessible. Plural values are possible in the following combinations:

A-argument	P-argument	Pluralizer
sg	pl	-la-
du	pl	-la-
pl	sg	-la-
pl	du	<i>NO</i>
pl	pl	-la-

As one can see, an accessible plural P-argument always needs the pluralizer, whereas an accessible plural A-argument needs the pluralizer only in the context of a singular P-argument. It is clear that the lack of the pluralizer in case of a plural A-argument codes the dual value of the P-argument, i.e. the lack of the pluralizer in this case is marked. This is an argument for the postulation of the marker \emptyset - ‘du.P’. Assuming this to be the case, the pluralizer slot is free, and it becomes potentially accessible for the pluralizer controlled by respective A-argument only in case of the singular P-argument. Thus, accessible arguments can be the real controllers of pluralization in the following pluralization conditions:

Pluralization condition	Pluralization controller
one argument = ‘nsg.S/A/P’	S/A/P
two arguments = ‘sg/nsg.A’+‘nsg.P’	P
= ‘nsg.A’+‘sg.P’	A

⁷⁷ When du/pl number is not coded by markers *-t/-w*, see Table 6.

⁷⁸ When du/pl number is not coded by 3rd person markers *-t/-w*, see Comment 2 to Table 8.

2.1.2. Monopersonal conjugation of finite verbs

Two finite forms belong to this type, one of them has the 3sg marker γa^{79} -...-*lin*, the other has the marker n^{80} -...-*qin*. These forms have only one (suffixal) agreement slot, so they can be called forms with monopersonal agreement.

n -...-*qin* forms are identical to the adjective conjugation (therefore they are called deverbial adjectives and glossed as ADJ') and γa -...-*lin* forms are analogous to the conjugation of derived adjectives⁸¹ (these forms are called resultative and glossed as RES).

The argument controlling agreement of these verb forms varies depending on a verb's transitivity/intransitivity: intransitive verbs agree with the S-argument (marked with the nominative), transitive verbs agree with the P-argument (also marked with the nominative).

Person-number agreement markers of these forms coincide with those of the adjectives, namely: agreement is controlled by person (1, 2, 3) and number (sg, du, pl) of the appropriate argument. Instead of the expected resultative marker *-*lina(w(wi))*, the 3pl marker has the marker *-laŋ* with variants *-laŋin* || *laŋina* || *-laŋina(w(wi))*. The deverbial adjective, along with the *-qina(w(wi))* marker, often uses the resultative markers.

TABLE 10. Resultative person-number markers

Number \ Person	sg	du	pl
1	γa -...- <i>jɣəm</i>	γa -...- <i>muri</i>	γa -...- <i>muru</i>
2	γa -...- <i>jɣət</i>	γa -...- <i>turi</i>	γa -...- <i>turu</i>
3	γa -...- <i>lin</i>	γa -...- <i>lina-t</i>	γa -...- <i>laŋ</i> ~ <i>-laŋin</i> ~ <i>-laŋina(w(wi))</i>

TABLE 11. Person-number markers of deverbial adjective

⁷⁹ Before the vowel-initial stem it has the variant γ -.

⁸⁰ Before the consonant-initial stem it has the variant n ɔ-.

⁸¹ These markers are used for the formation of the denominal habitive adjectives; see 2.2.2.

Number Person	sg	du	pl
1	n-...-jγəm	n-...-muri	n-...-muru
2	n-...-jγət	n-...-turi	n-...-turu
3	n-...-qin	n-...-qina-t	n-...-qina(w(wi)) ~ -laŋ ~ -laŋin ~ -laŋina(w(wi))

COMMENTS on Tables 10-11

1. Markers *-jγəm* and *-jγət* are presented in their initial form after stems with final *-u*, e.g.: *γ-etu-jγəm* ‘RES-give.birth-1sg.P’. After stems with a final consonant the *-jγəm* and *-jγət* markers are presented as *-iγəm*, *-iγət*, e.g.: *n-it-iγəm* ‘A-be-ADJ+1sg’ (from: *n-it* + *-jγəm*); the string *-a* + *-jγəm* / *-jγət* is realized as *-eγəm* / *-eγət*⁸².

2. The stem's final consonant *-t* is assimilated before *-lin/-laŋ* as in *l-lin* / *l-laŋ*, e.g.: *γa-jal-lina-t* ‘RES-come-RES-3du.S’ (from: *γa-jat-lina-t*). In our collection of texts (see Part I) the suffix component of the resultative marker (*-lin*) can be omitted, the stem's final consonant preserving assimilation that marks the 3rd person, e.g.: *γa-n.awəj.al* ‘RES-feed’ [12:18] (from: *γa-n.awəj.at-lin*).

γa-...-lin finite forms are very frequent in narrative texts. They belong to the domain of real modality and describe a situation as a fact rather than as an event (on opposition between fact/event see [Arutyunova 1988]). With that, these forms signify, as a rule, the result of the action; therefore they are interpreted as resultative. They often have the additional meaning of indirect evidentiality.

- (1) a. *γəmmə γa-vitat-iγəm*.
I worked (a long time ago).
b. *titkəpil; γ-itγəlʔal-lin*.
The sun shone (I did not see that).

The *n-...-qin* finite forms signify a habitual action that usually takes place or potentially can take place.

- (2) a. *γəmmə qonpəŋ nə-vitat-iγəm*.
I (usually) work.
b. *γəmmə nə-kaljisit-iγəm*.
I (usually) write.

⁸² For the lack of an example of deverbal adjective cf. a similar predicative form *a-npə-k-eγəm* ‘A-old-PRED-1sg’.

- c. ənnu nə-waŋi-*qin*.
She (usually) does needlework.
- d. sullə nə-jəl-*qin*?
Is there salt on sale?
- e. pəʃʉnnə nə-nu-*qin*.
The mushroom is edible.

2.1.3. Impersonal conjugation

Impersonal conjugation is used by the deverbal predicative and imperative forms (the latter form is very rare in our collection of texts⁸³).

The **deverbal predicative** is derived from a verbal stem with the help of the circumfix *a*⁸⁴-...-*ka*, identical to the predicative marker which is derived from the adjective stem (see 2.2.1). The deverbal predicative, unlike the predicative proper, does not agree in person. The only overt agreement marker is the pluralizer *-la* (controlled by 1-2nd person, analogous to conjugated verb forms):

- (3) ...niŋvit=təllə-k t-epəŋal-la-tək, *a-sasiku-la-ka*.
 devil=door-LOC POT-get.stuck-PLUR-2nsg.S *A-go.sledging-PLUR-PRED*
 ...you will get stuck in the evil entrance. *Don't go for a ride*. [14:2]

The deverbal predicative occurs in the predicate position of an independent clause, conceptualizing the situation as a state, usually a background one:

- (4) a. murə-kki wut.ku ləqlaŋ-ki *a-qajav-ka*, aŋiŋatka
 we-LOC here winter-LOC *A-freeze-PRED* very
 wəjal.atə-tkən, kətiŋ.atə-tkən.
 be(of.snowstorm)-IPF wind.blow-IPF
 Here *it's cold* in winter. There are strong snowstorms and wind. [38:1]
- b. *a-pʃa-ka*, q-iŋ;a-ŋj.iwʔis.al-la-tək.
A-feel.thirsty-PRED 2.A+OPT-1sg.P-give.water.to.drink-PLUR-2nsg.S
(I) feel thirsty, give me water to drink. [3:2]
- c. taraŋ-i titkəmsəsʔə-n,
 put.up.a.yurt-3sg.S+PF Titkəmsesen -NOM+SG

⁸³ The imperative function is carried out by 2nd person optative, see 2.1.7.3.

⁸⁴ In front of vowel initial stems the prefix component of the marker is missing.

aktəka uŋjuŋju nə-pila-ni-n,
 impossible child+NOM+SG 3.A+OPT-leave-3sg.A+3P-3sg.P
 nuta-ŋ aktəka nə-lqətə-n, a-tirŋə-ka.
 tundra-DAT impossible 3.S+OPT-go-3sg.S A-cry-PRED`

Titkemesen put up the yurt. (He) could not leave the child and go to the tundra, (because he) {i.e. the child} *was crying*. [7:48]

The deverbal predicative often co-occurs with the derivational desiderative circumfix (*ta...-ŋ*), homonymous with the potential marker⁸⁵.

(5) a. əmama, **a-t iwʔisi-ŋ-ka.**
 mummy+NOM+SG A-DESID-drink.water-DESID-PRED`
 Mummy, (I) *want to drink*. [7:27]

b. ə-nannə allə **a-ta-n. leqt. av-ŋə-ka...**
 (s)he-ERG not A-DESID-return-DESID-PRED`
 He didn't *want to send* (me) back... [37:7]

This form is very often optionally accompanied by the particle *allə* which has a negative meaning (see details in 2.1.5):

(6) a. *allə* *aŋəljy.at-ka,* *allə* *a-tirŋ.at-ka.*
 not moan-PRED` not A-cry-PRED`
 (I) *don't moan.* (I) *don't cry.* [15:10]

⁸⁵ The desiderative marker occupies a position inside the verb stem, therefore it can co-occur with the potential marker (cf. (iv) with (ii-iii)):

- (i) ralqivə-tkən 'He enters'
 enter-IPF
- (ii) ta-ralqivə-ŋə-tkən 'He wants to enter'
 DESID-enter-DESID-IPF
- (iii) ta-ralqivə-tkən 'He will be entering'; ta-ralqivə-ŋ 'He will enter'
 POT-enter-IPF POT-enter-POT
- (iv) ta-ta-ralqivə-ŋə-tkən 'He will try to enter'
 POT-DESID-enter-DESID-IPF

- b. *a-ʔəm=laʔu-ka* mur.ɣina sākīt-u?
A-bone=see-PRED' our+NOM+PL sister-NOM+PL
Haven't you found the bones of our sisters? [8:77]

It is also used for the formation of the analytical negative (see 2.1.4).

The **imperative** is formed by means of the circumfix *ɣa...-a/-ta*⁸⁶. Imperative forms do not have the aspectual values, and lack regular personal markers⁸⁷. Nevertheless the imperative has restricted inflectional devices. First, it has number agreement with a 1-2nd person argument identical to that of the polypersonal conjugation (the marker *-la*, see 2.1.1.2.5). Second, it has 1sg P-argument agreement by means of the inversion marker *-ina*, see 2.1.1.2.3. For example:

- (7) a. ...*ɣ-awwaw-a* rara-ŋ ...
 IMPR-leave-IMPR house-DAT
 ... *go home...* [23:21]
- b. ...*asyi·wut* ɣəmmə *ɣ-ina-qura=nmə-lqiv-la-ta*.
 now I+NOM IMPR-1sg.P-reindeer=kill-LQIV-PLUR-IMPR
 ... *from now on kill reindeer for me.* [20:97]

As (7b) shows, the imperative is compatible with incorporation.

There are also analytical imperative forms containing the lexical verb with the predicative marker *a...-ka* and the auxiliary marked as imperative:

- (8) *am-oji-ka* *ɣ-itə-lqiv-a*.
A-lip-CARIT IMPR-be-LQIV-IMPR
Shut up [=be silent]. [20:68]

2.1.4. Analytical verb forms

Besides the synthetic verb forms described above analytical forms are also possible. They include a lexical verb and an auxiliary as the bearer of verbal inflectional categories. There are the auxiliary verbs *it-* 'be' and *t/n.t-* 'do, have'. The choice of

⁸⁶ Variant *-ta* occurs after final full vowel stems, and variant *-a* — after final consonant or final *ə* stem.

⁸⁷ It is natural to suppose that the prefix and suffix parts of the imperative marker occupy the personal S/A/P-slots of verb form (ranks -4 and +4). It is also possible to regard the imperative as derived from unmarked perfective stem.

auxiliary depends on the (in)transitivity of the lexical verb: intransitive verbs are combined with the auxiliary ‘be’ and transitive verbs with the auxiliary ‘do, have’.

The analytical forms have positive as well as negative polarity. The lexical verb inside positive analytical forms has the suffix marker *-a/-ta* (identical to the ergative marker). There is also the suffix marker *-ŋ*, see (9b), identical to the dative marker. These forms are almost impossible outside of analytical verb forms; therefore their converbal (see below) interpretation is not desirable⁸⁸. We will refer to them as the analytical form of the lexical verb⁸⁹ (glossed as ANLT).

The following are examples with intransitive verb:

- (9) a. **turə-pkir-a** *γ-il-laŋina*,
 just-arrive-ANLT RES-be-RES+3pl.S
 γa-pəŋl.u-laŋ... ʕurasik-u...
 RES-ask-RES+3pl.P worker-NOM+PL
As soon as they arrived, they asked ... the workers. [20:62]
- b. **wiwn-ipəŋ** **qunj=awwawə-ŋ** *γ-il-laŋina*
 Wiwen-PROLAT one=leave-ANLT RES-be-RES+3pl.S
 ŋəru.qqə tanjŋə.sit=irra-wwi ...
 three make.war=troop-NOM+PL

⁸⁸ There are two textual examples contradicting this interpretation that deserve a special mention:

- (i) **kəryə=ŋju-ta** **mimlə-k** **na-ntu-tkə-nawwi**.
 dry=eat-ANLT⁸⁸ water-LOC LOW.A-wash.down-IPF-3pl.P
 After eating (them) dry, they wash them down (with water). [26:2]
- (ii) **ətti** **jəʕa.ŋju-ta** **mətə-ntu-lqivə-tkə-nawwi...**
 or eat.directly-ANLT 1nsg.A-wash.down-LQIV-IPF-3pl.P
 {LC: We make soup,} or after eating them directly (we) begin to wash them down...
 [33:31]

-a/-ta form, according translation, is used here as a converb, however in both cases the subordinate as well as main verbs are the same: ‘eat’ and ‘wash down’. There is an assumption that in this case the *-a/-ta* form is not a free one, but it is a part of idiomatic expression signifying ‘to eat and drink simultaneously’.

⁸⁹ The analytical representation permits negative polarity, *nuy-* prefix marker being added; see 2.1.5.

{LC: The Iir and Alut people left at first for Wiwen from here, and at once from there,}
from Wiwen, *at the same time* three military troops *left*... [19:26]

The following are examples with transitive verbs:

- (10) a. **tur-juʔ-a** *ya-ntə-lin* ilʔukamak,
just-reach-ANLT RES-do-RES+3sg.P Ilukamak+NOM+SG
vitya *ya-qatvə-lin* *sasevəŋ-ənak*.
at.once RES-cut-RES+3sg.P Saseveng-ERG+SG
As soon as (Saseveng) caught up with Ilukamak, Saseveng immediately killed him.
[22:45]
- b. *javas* **kəplj.u-tku-ta** *ənə-ntə-la-mək*.
later knock.out-DISTR-ANLT LOW.A+OPT-do-PLUR-1nsg.P
(And) towards the evening *you can knock us out.* [17:5]
- c. *to* *ŋan.in* *t-ā-juʔə-lqivə-n*, **ʔaqa=nm-a**
and that+NOM+SG 1sg.A-CONJ-reach-LQIV-3sg.P badly=kill-ANLT
ənnu *tə-ʔə-ntə-n*.
(s)he+NOM 1sg.A-CONJ-do-3sg.P
{LC: there is our former sister.} I wish I could attack her and *subject her to an excruciating [=bad] death.* [20:54]
- d. *to* *num* *ajevaq* **am-ta-lqenav-ŋ-a**
and again but only-DESID-shoot-DESID-ANLT
na-ntə-tkə-n *piŋinaŋ*...
LOW.A-do-IPF-3sg.P Pinginang+NOM+SG
But as soon as they wanted to shoot at Pinginang, {RC: Pinginang jumped into the fortress.} [21:101]

Auxiliary verbs are compatible with different mood values: (10a) exemplifies the indicative, (10b) the optative, (10c) the conjunctive, and (10d) the potential.

See 2.1.5 below for a discussion of the negative analytical forms.

Besides the regular auxiliaries, the verb *nʔal-* ‘become’⁹⁰ may also function as

⁹⁰ A single example has also been documented with the auxiliary verb *awwaw-* ‘leave’ in the context of the lexical motion verb:

an auxiliary, indicating the starting point of the event expressed by the negative form of the lexical verb:

- (11) a. ...pałjja əlləγə-n **it-ka** nəʔa-l-i.
 □because father-NOM+SG be-PRED' become-3sg.S+PF
 {LC: We are making you husband and wife} because (your) father has died [= has ceased to exist]. [31:10]
- b. ...maŋ.ina nə-ŋuj-laŋin to ŋan.ina
 which+NOM+PL ADJ-weak-ADJ+3pl and that+NOM+SG
 kətavān **nunə-lqut-a** nə-nʔalə-naw.
 necessarily NEG-get.up-ANLT 3.S+OPT-become-3pl.S
 {LC: Anyway we are going to fight, until} (those), who are weaker, surely *can't get up*.
 [22:32]

2.1.5. Negative forms

Besides the positive verb forms described above, there are negative forms. Verbal negation can be expressed by the following means:

- (1) combination of the negative particle with the regular finite form of the verb;
- (2) combination of the negative particle with the deverbal predicative (*a-...ka*);
- (3) combination of the negative particle with the analytical form derived from the deverbal predicative;
- (4) the analytical form, derived from the negative analytical representation (*nunə-...-a/-ta*);
- (5) circumfixes *təmŋi-... -a/-ta* and *a-...-kəʔin* (the latter is identical to the caritive adjective (see 2.2.2) marker. It is compatible with the negative particle).

Now we will consider the negative forms in detail.

Type (1) is found only for the desirable moods — optative and conjunctive. In this case the negative (more precisely, the prohibitive) particle *qətəmmə*⁹¹ is used.

-
- (i) to vitya γ-awwāv-laŋ vələ-ŋŋə...
 and at.once RES-leave-RES+3pl.S go.out.on.the.shore-ANLT

And at once they went out on the shore... [22:28]

⁹¹ It is interesting to note that the negative particle *qətəmmə* is also compatible with nouns, cf. *γəmmə wiwnəŋ tə-t-awwāvə-ŋ, qətəmmə korfa-ŋ* 'I will arrive at Vyvenka rather than in Korf'. However in general nouns are more often combined with the negative noun *alvalʔin* 'not that, another' rather than with *qətəmmə*, cf. *γəmnān tə-γita-tkə-n qajunjunju, alvalʔin ŋavəsqaipilj* 'I look at the boy rather than at the girl.'

- (12) a. *qətəmmə* mə-vitatə-k!
not 1sg.S+OPT-work-1sg.S+PF
I will not work!
- b. *qətəmmə* qə-vitat-γi!
not 2sg.S+OPT-work-2sg.S+PF+OPT
Do not work!
- c. *γəmmə qətəmmə* tə-?-awwəvə-k.
I+NOM not 1sg.S+CONJ-CONJ-go-1sg.S
I would not go.

Type (2) has two realizations. In combination with the negative particle *allə*, it contrasts with the positive forms of the real moods. In combination with the particle *kərvə(l)*, it represents the prohibitive as a negative correlate of optative/imperative.

- (13) a. ...ʕatav γəm-nan *allə* a-laʔu-ka.
only I-ERG not A-see-PRED`
{LC: Before the Japanese people appeared here long ago.} Only I *didn't* see (them).
[32:3]
- b. ...*kərvəl* γəttə a-wintat-ka tən;ŋə=svi.sitə-k...
must.not you+NOM A-help-PRED` horn=saw-INF
... *Don't* you *dare help* saw the tusks. [16:13]

In type (2) reduction of the negative marker is possible (the negative particle is absent):

- (14) a. ...ŋavaq a-jəl-ka tərup=təryə-tər,
if A-give-PRED` Teruppe=meat-NOM+SG
na-ta-meŋə=rwit-γət.
LOW.A-POT-big=beat.up-2sg.P
... if (you) *won't hand over* Teruppe's meat, (they) will beat you up. [10:49]
- c. niŋvit=təllə-k t-epəŋal-la-tək, a-sasiku-*la*-ka.
devil=door-LOCPOT-get.stuck-PLUR-2nsg.S A-go.sledging-PLUR-PRED`
...you will get stuck in the evil entrance. *Don't go for a ride*. [14:2]

Type (3) is the analytical extension of type (2) for real moods. Both full and reduced realizations are possible.

- (15) a. *allə* *tinɣa* *a-jəl-ka* *na-ntə-ɣəm.*
 not what A-give-PRED' LOW.A-do-1sg.P
 They *didn't give me* anything. [10:32]
- b. ...*nura.q* *a-jəl-ka* *na-ntə-ɣəm.*
 long A-marry.off-PRED' LOW.A-do-1sg.P
 ...*I hadn't been married* for a long time. [32:13]

Type (4) uses a negative analytical representation of the lexical verb as a basic structural element in combination with the optative auxiliary verb. This type is a negative correlate of the optative. Optionally the presence of a negative particle is possible.

- (16) a. *kətʋəl* *nuŋə-nm-a* *mənə-ntə-nat.*
 must.not NEG-kill-ANLT 1nsg.A+OPT-do-3du.P
 We *don't have to kill* them. [20:35]
- b. *nuŋ-ta.ləʔu.ŋə-sqiv-a* *mənə-ntə-nawwi.*
 NEG-look.for-go-ANLT 1nsg.A+OPT-do-3pl.P
 Let's *not go to look for* them. [6:14]

Type (5) is formed by means of circumfixes. First we have *təmɣi-...-a/-ta*, deriving the negative correlate of the supine (verbal nominal) (see 2.1.6.2 below). The prefix part of the circumfix coincides with the root of the verb 'be lost' (i.e. not to exist in the real world), the suffix part coincides with the marker of verbal analytical representation (see the preceding type). This negative form refers to a situation whose non-existence is a goal of the action expressed by the main clause (see 2.1.6.2).

Second, *a-...-kəlʔin* circumfix is used for the derivation of the negative form, and then the negative particle *allə* is added. In contrast to other forms this type is a deverbal attributive. There are grounds to interpret this form as a negative correlate of the deverbal adjective (*n-...-qin*); see 2.1.2.

- (17) a. ...*wutt.in* *ɣərnɪk* *allə* *a-vʃə-kəlʔin* ...
 this+3sg animal+NOM+SG not A-die-NEG+3sg
 ...this animal *isn't dead* {RC: he is sleeping.} [16:13]

- b. numal unjuju allə a-jajarə=ttil-kəlʔin.
 again child+NOM+SG not A-drum=put-NEG+3sg
 (My) child *doesn't put the drum down* again. [8:35]

2.1.6. Infinite forms

The following are the infinite forms: infinitive, supine, converbs, and participles.

2.1.6.1. The infinitive is derived from the verb stem by means of the *-k/-ki* marker (identical to the locative marker), the allomorph *-ki* usually being used after stems with final *-ŋ*, cf. *alu-k* ‘pick berries’, *tannuŋ-ki* ‘fish’. In accordance with phonetic rules (see 1.3.4.3), the allomorph *-k* can be realized as *-kki* after the stressed syllable, cf. *γəvə-kki* ‘get stuck’. Most frequently the infinitive is used in the context of phasal verbs, however other contexts are also possible (see details below in 2.1.7.5).

2.1.6.2. The supine is derived from the verb stem by means of the marker *-nvəŋ*. It is used in the context of motion verbs as well as of other verbs where the expression of goal is necessary (see (18a-c)). If the goal of the main action is prevention rather than accomplishment of an action, the negative correlate of the supine is used (*təmŋi-...-a/-ta*) (see 18d).

- (18) a. to ʕoro γ-awwəvə-lqiv-lina-t *γiletə-nvəŋ*.
 and then RES-go-LQIV-RES-3du.S hunt-SUP
 And then they went *hunting*.
- b. akka.lj.ʔe *juŋju=təγə=ŋta-nvəŋ* γa-lqəl-laŋ.
 man+NOM+PL whale=meat=go.with.purpose-SUP RES-go-RES+3pl.S
 The men went *to get whale meat*.
- c. ʕoptə.ljʔ.u varat γa-ʕəŋav-laŋ *anγətə.tku-nvəŋ*.
 all people+NOM+SG RES-call-RES+3pl.S celebrate-SUP
 (He) called all the people *to celebrate*.
- d. nə-mjə-ʔa mət-tekə-tkə-nawwi, **təmŋi-wisat-a**.
 ADV-salty-ADV Insg.A-make-IPF-3pl.P NEG-turn.sour-SUP
 We salt them {i.e. fish} *so that they might not go sour*. [33:27]

2.1.6.3. Converbs are also derived from the verb stem. They are often marked by affixes similar to the spatial cases. Converbs do not have any inflectional categories.

They are usually used in subordinate clause and express temporal relations between the main and subordinate clauses.

The **-*k*-*ki* converb** shares the same marker as the locative. This converb refers to a situation that immediately precedes the main action:

- (19) a. *retə-k* uŋjuŋu-ta miti na-panena.tvə-n.
 go.home-CONV child-ERG Miti+NOM+SG LOW.A-tell-3sg.P
Returning home, the sons told Miti (everything). [2:28]
- b. ...muljɨjɨtkəŋ tɨŋ.atə-tkən sākɨtə-ŋ *jewas.atə-k*.
 Mullitkang+NOM+SG cry-IPF sister-DAT pity-CONV
 □ullitkang was crying, *feeling sorry* for (his) sister. [22:64]
- c. ʕoro ŋuj.av-i *vitətə-k* ŋalvə.lʔə-k.
 after.that grow.weak-3sg.S+PF work-CONV herd-LOC
 Soon he lost his strength, *working* in the herd. [32:26]

This marker can also be added to the resultative (*ya-...-laŋ*) deriving a ***ya-...-laŋ-ki*** converb with approximately the same meaning, cf.:

- (20) qutkəŋŋjaqu nura.q *ɣil-laŋ-ki*
 Qutkinnaqu+NOM+SG for.a.long.time RES-be-RES+3pl.S-CONV
 iv-i...
 say-3sg.S+PF
After a while, Qutkinnaqu said... [2:36]

The **-*kəŋ* converb** derived from the potential shares the same marker as the lative. This converb refers to a situation as following the main action:

- (21) ...*ta-vɨʕə-ŋ-kəŋ* əmqa-nak mənɣət.kin
 POT-die-POT-CONV Emqa-ERG+SG ten
 tanŋ-uwwi ɣa-nmə-laŋ.
 enemy-NOM+PL RES-kill-RES+3pl.P
 ...*before he died*, Emqa killed (another) ten enemies. [21:21]

The **-*inaŋu* converb** refers to a partial temporal overlapping of two actions:

- (22) *ənj.in naqam turə=pkir-inagu awən*
 this+NOM+SG well just-arrive-CONV already
aŋaŋta.ɫʔatə-tkə, ɫʔəl-ləʔə-ŋ ra.lqiv-i.
 sing-IPF be.sick-ATR-DAT enter-3sg.S+PF
 And this (shaman), *having just arrived*, already was singing. (He) dropped in on the sick person. [29:19]

The *ya...-a/-ta* and *yeqa...-a/-ta* **converbs** share the same markers with the comitative and associative, respectively, and refer to an action that is parallel to the main one:

- (23) a. *ʕoro qutkin;ŋaqu ɣ-awwaw-lin*
 after.that Qutkinnaqu+NOM+SG RES-leave-RES+3sg.S
yeqa-taval;ŋəɫ-sir-a.
 CONV-turn.round-ITER-CONV
 Then Qutkinnaqu left, *turning round* all the time. [10:14]
- b. *qutkin;ŋaqu qə-meŋə=rwil-la-ɣə-tki*
 Qutkinnaqu+NOM+SG 2.A+OPT-big=beat.up-PLUR-2.A+3.P-2nsg.A+3.P
awən-miti-ma yeqa-n.qujma.viri.v-a.
 COMIT-Miti-COMIT CONV-lower.trousers-CONV
 ...beat up Qutkinnaqu together with Miti badly, *lowering (their) trousers*. [10:68]

The *-jpəŋ* **converb** shares the same marker with the prolativ. This **converb** refers to an action that is parallel to the main one and is intimately bound with it:

- (24) *amə-lla-ta ɣit-epəŋ mət-n.ullə-tkə-na...*
 only-eye-ERG look-CONV 1nsg.A-cut-IPF-3pl.P
 We cut (them) out by eye [=only with eyes *looking*] {RC: according to the size of the legs.} [27:5]

The *-kaga* **converb** refers to a background action:

- (25) *miɣa tirŋ.atə-tkən uptə-kaga?*
 who+NOM+SG cry-IPF cut.wood-CONV
 Who is (this) crying *when* (I) cut wood? [9:19]

2.1.6.4. The participle is derived by means of the attributivizer *-lʔ*⁹² added to the verb stem. The head noun phrase of a relative clause, as well as a (relativized) coreferential argument of a subordinate clause headed by the participle, should have nominative marking (see 3.4.1). In this position the participle also has nominative marking and agrees in person and number with the dependent S/P-arguments by means of suffix markers:

	sg	du	pl
1st person	-jγəm	-muri	-muru
2nd person	-jγət	-turi	-turu
3rd person	-n	-t	-u(wwi)

For example: *jəlq.ata-lʔ-iyəm* ‘sleeping (1sg)’, *awwavə-lʔə-t* ‘leaving (3du)’, *alvatə-lʔə-muru* ‘skinning (1pl)’.

Participles as well as other attributes can be nominalized without the addition of any markers. Nominalized participles are inflected for case.

(26) a. ...*γα-ηyu-lina-t* *inja-jisi-k* *rəlti-l-əʔə-k...*
 RES-begin-RES-3du.S ANTI-gather-INF lie-ATR-LOC
 began to pick up *what was lying* (there) ... [23:49]

b. *ηəru.qqə* *ʕujamtawilʔ-u* *ina-rwitə-lʔ-u*
 three person-NOM+PL ANTI-flog-ATR-EQUAT
n-itə-nawwi...
 3.S+OPT-be-3pl.S
 Let three men become *those who flog them* [=floggers]... [30:21]

In (26a) the nominalized participle is marked for the locative, in (26b) it is marked for the equative.

The participle usage in relative clause formation is discussed in 3.4.1.

⁹² This marker derives attributive forms from nouns, adjectives, and adverbs, for example: *rənnə-lʔə-n* ‘horned’ (cp. *rənnə-lyən* ‘horn’), *tinməla-lʔə-n* ‘that who deceives’ (cf. *tinməla* ‘false’), *a-jilə-kə-lʔə-n* ‘that who without mouth’ (cp. *a-jilə-ka* ‘without mouth’).

Besides there is also the attributivizer *-sʔə-* that means ‘holding the property in great degree’, for example: *aŋaŋə-lʔə-n* ‘that who is godlike, shaman’ (cf. *aŋaŋə* ‘godlike’) — *aŋaŋə-sʔə-n* ‘the strongest between shamans’.

2.1.7. The values of some verbal categories

2.1.7.1. Indicative

The indicative refers to the events belonging to the real world, i.e. events that took or are taking place. Temporal deixis of respective forms is secondary. The perfective usually describes events that took place before the speech act, see (27a). The imperfective is neutral to the temporal axis. It can be used for events proceeding during the speech act as well as prolonged incompleting events before the speech act, see (27b):

- (27) a. wutt.in *itt-i* ənkəjap, n̄jə.mqə.saŋ.ki.
 this+3sg be-3sg.S+PF long ago in.one's.childhood

This *occurred* long ago in (my) childhood. [37:1]

- b. naqam.ʔat *təʔlə-tkən* pəttuŋə-lʔə-n.

only be.sick-IPF rich-MAGN-NOM+SG

nə-mkə-qin ŋallə *tətə-lqivə-tkə-ni-n*

ADJ-numerous-ADJ+3sg herd+NOM have-LQIV-IPF-3sg.A+3P-3sg.P

nəmə.lʔə-n. ənnanu *təʔlə-tkən*.

Nemelen-NOM+SG always be.sick-IPF

{LC: And Qisgayat could not recover.} (This) rich man *was sick* all the time. (And well this) Nemelen *had* numerous herds. (And) he *was sick* all the time. {RC: After that it already began to snow} [29:8-10]

The imperfective also describes prolonged events that continuously take place or are repeated. Thus, texts 25-28, describing traditional customs, abound in indicative imperfective forms, for example:

- (28) jaqi *mətə-ʔita-lqivə-tkən*, varəŋj-ŋjaq
 later 1nsg.S-hold.a.race-LQIV-IPF people-AUGM+NOM+SG
iŋu-tkən ʔita-lʔə-ŋ.
 gather-IPF hold.a.race-ATR-DAT

Well, we *hold a race*. People *gather* at the place of the race. [25:1]

Repeated action can refer to the past:

- (29) ႣႣႣႣႣႣ.ႣႣႣ ႣႣႣႣႣႣ ႣႣ-walqivə-lqivə-k to numal
 several.times I+NOM1sg. S-run.away-LQIV-1sg.S+PF and again
 na-lla-tkəni-ႣႣႣ səkola-Ⴃ.
 LOW.A-carry-IPF-1sg.P school-DAT
 I had run away many times (before), but every time [=again] I *was returned* to school.
 [37:5]

In (29) both actions are repeated, however the first verb ('run away') has perfective marking, and the second one ('carry') — imperfective marking. This is because the first action is punctual and the second is prolonged.

In analytical negative forms relating to the temporal domain of the definite future the auxiliary verb can have imperfective marking:

- (30) ...allə a-pily.at-ka *il-la-tkəni-tək.*
 not A-get.hungry-PRED' be-PLUR-IPF-2nsg.S
 {LC: Wait! A little later, don't hurry. Later you will eat well, you will be full and} *will not be (left) hungry.* [11:10]

2.1.7.2. Potential

Potential means that the event P does not belong to the world of real events, nevertheless P can potentially be in this world. This event does not have any epistemic restrictions. It is quite natural that this type of event is closely related to events that, in languages with the grammatical category of tense, pertain to future. Therefore in most cases potential verb forms are translated as future forms:

- (31) vitya ləႣႣႣႣႣ-n ႣႣ-kumn.al-lin:
 at.once Legerngen-NOM+SG RES-shout-RES+3sg.S
 “*mət-t-ona-la-ႣႣႣ-n* wutt.in tətka”.
 1nsg.A-POT-take.away-PLUR-POT-3sg.P this+3sg walrus+NOM+SG
 Legerngen there and then exclaimed, □e *will take away* this walrus (from you)□.
 [22:20]

2.1.7.3. Optative

The optative, like the conjunctive, pertains to moods that refer to the mental state of the speaker. The prototypical properties of the optative are the following:

- the speaker is thinking about a virtual event P;

- the speaker wants event P to be performed;
- the speaker highly estimates the reality of the approach of the event P;
- the speaker is talking about this.

The speaker's capability to control the approach of event P depends on the person of the active participant (actor) of this event.

In the context of the 1sg actor (identical to the speaker) the optative, along with the speaker/actor's wish for the performance of event P, refers to his intention or wish to accomplish it:

- (32) *maja? mən.sisʔatə-n.*
 where 1sg.A+OPT-look-3sg.P
 {LC: Miti says that she gave birth to his child. Qutkinnaqu:} *Where? I will take a look.*
 [7:14]
- (33) *anaʔqi qətəmməʔvan ʕoptə.ljʔ.u mə-jət-la-tək*
 perhaps not all 1sg.A+OPT-give-PLUR-2nsg.P
təryə-tʔul.
 meat-piece+NOM+SG
 Perhaps, I *will not give* you all the meat. [10:46]
- (34) *qə-ŋa.lqiv-γi, nəmaqav,*
 2.S+OPT-sit.down-LQIV-2sg.S+PF+OPT enough
m-imt.ṭpə-γət.
 1sg.A+OPT-shoulder-2sg.P
 Sit down, (that's) enough, *I will carry you on (my) back.* [4:9]

The usage of the 1pl optative is analogous: the optative refers to the speaker's intention to perform an action and his address to the listener to do this together with him:

- (35) a. ... *mən-meŋə=tkəplə-la-n, mən-ʕalap-la-n.*
 1nsg.A+OPT-hard=beat-PLUR-3sg.P 1nsg.A+OPT-catch.up.with-PLUR-3sg.P
 {LC: Ah, that's just him.} *Let's beat him hard, let's catch him.* [8:53]
- b. *qutkin;ŋaqu, γemat-qi mən-ra.mk.isi-mək*
 Qutkinnaqu+NOM+SG maybe 1nsg.S+OPT-pay.a.visit-1nsg.S+PF
rara-ŋ.
 house-DAT

Qutkinnaqu, *maybe we will go (and) visit (my) home.* [7:24]

- c. nuŋ-alu-sqiv-a mən-itə-tkən.
 NEG-pick.berries-go-ANLT Insg.S+OPT-be-IPF
We won't have to go picking berries. [7:18]

It the context of a 3rd person S/A-argument, the optative refers to the speaker's wish that the event in question happens to that 3rd person:

- (36) qəyi taqə=trup=kiwəl nə-ʔ-itə-n,
 look! what=Teruppe=blood+NOM+SG 3.S+OPT-be-3sg.S
 ənŋ.in ɣəm.nin ʕiŋ.val=kiwəl.
 this+3sg my+3sg nostril=blood+NOM+SG
 {LC: □hy is this blood bad?□, said Miti.} *You see, it would be good if this were Teruppe's blood, but this is blood from my nose.* [10:29]

This example convincingly testifies to the failure of an imperative interpretation of these forms in the 3rd person. In the context of the 3rd person, the subject of the wish does not have to coincide with the speaker.

- (37) a-ŋeqə-ka wutʔku tiy-uwwi nə-tkiv-na(-wwi).
 A-bad-PRED here ski-NOM+PL 3.S+OPT-spend.the.night-3pl.S
It's bad if the skis spend the night here. [12:6]

In the dialogue the speaker (the man) presupposes that the hearer (the bear) wishes the skis had stayed home at night.

It is not by chance, from the point of view of this mood, that the optative is obligatory in the context of a predicate of impossibility to perform the action, because the actor's wish to perform it is presupposed:

- (38) a. aktəka mə-jəl-γət java-lʔ-uwwi,
 impossible 1sg.A+OPT-give-2sg.P use-ATR-NOM+PL
 jaqi qəlavul ta-jatə-ŋ, ujatiki-k mə-jəl-γət.
 later husband+NOM+SG POT-come-POT sledge-LOC 1sg.A+OPT-give-2sg.P
I can't give you my clothes [=those I'm using]. Later (my) husband will come, (and) I will give you (the clothes) on the sledge. [7:34]

- b. aktəka uŋjuŋju nə-pila-ni-n,
 impossible child+NOM+SG 3.A+OPT-leave-3sg.A+3P-3sg.P
 nuta-ŋ aktəka nə-lqətə-n, a-tirŋə-ka.
 tundra-DAT impossible 3.S+OPT-go-3sg.S ā-cry-PRED`
 {LC: Titkemesen put up the yurt. He} could not *leave* the child and *go* to the tundra,
 (because he) {i.e. the child} was crying. [7:48]

In (38b) the intention to leave the child and go into the tundra is ascribed to the actor of these actions (to Titkemesen) rather to the speaker. The semantics of the following optative is similar:

- (39) ʕopt=allə tinɣa ənnan ʕujamtawilʔə-n
 completely=not what one person-NOM+SG
 nə-levə.tku-n.
 3.S+OPT-walk-3sg.S
 {LC: Kirumsen approached the village,} (but) *not even one* person (there) *was walking*
 around. [19:52]

From the point of view of Kirumsen's arrival, the village being deserted is interpreted by him to be as a result of some cause preventing the natural intention of the inhabitants to be outdoors.

In the context of the 2nd person S/A-argument, i.e. in the context of appeal to the addressee in connection with his actions, the semantics of the optative naturally acquires a perlocutive connotation of speech influence over the addressee's actions:

- (40) naqam q-iv-ɣi. “qə-ɣalmə-ɣi”.
 only 2.S+OPT-say-2sg.S+PF+OPT 2.S+OPT-bend-2sg.S+PF+OPT
 You only *say*, ‘*Bend down*’. [14:21]

In the following example, three different person-number values of the optative forms are presented that clearly illustrate the relationship between the optative and the category of person:

- (41) rəttətiniʔaŋawət, mən-injinɣivi.sit kimitʔa-ta,
 Rettetianiangawet+NOM+SG 1nsg.S+OPT-change clothes-ERG
 ɣəm-nan mə-jəl-ɣət ɣəm.nin kimitʔa-w.
 I-ERG 1sg.A+OPT-give-2sg.P my+3sg clothes-NOM+PL

γə-nannə γə.ninnə q-ina-jəl-yi.
 you-ERG your+3sg A+OPT-1sg.P-give-2sg.S+PF+OPT

Rettetiniangawet, *let's exchange* clothes. I *will give* you my clothes, (and) you *give* me yours. [7:32]

In sum, from the point of view of the proposed analysis of the optative, 1st and 3rd person forms are most closely related to its prototypical meaning, while 2nd person forms are the natural extension of this meaning towards semantics of the imperative⁹³.

2.1.7.4. Conjunctive

The conjunctive's semantics is related to an event P that is desirable for the speaker, but is not realized in the actual world. In contrast to the optative, also related to the domain of desirability, the conjunctive represents the desirability of event P as a given, without the speaker's aim to participate actively in the event. The degree of reality of an event can vary, from highly probable, especially if the speaker is the actor of the event, to unreal— in conditional clauses. Conjunctive verb forms are translated in different ways.

Forms in the 1sg actor conjunctive are translated as “should not I do P”, where P is denoted by the conjunctive verb form:

- (42) a. ...ləyut ana tə-ʔə-ŋvu-na mimlə-ŋ
 better (part.) 1sg.A-CONJ-begin-3pl.P water-DAT
 s.iŋsə.tku-k...
 throw.away-DISTR-INF
 ... *Isn't it better for me to begin* to throw them into the water... [19:78]

- b. anaʔyemat malj.kətvalj tə-ʔə-ŋvu-k
 perhaps enough 1sg.S-CONJ-begin-1sg.S+PF
 sussəməvə-k... ŋan.in t-ā-juʔə-lqivə-n,
 prepare-INF that+NOM+SG 1sg.A-CONJ-reach-LQIV-3sg.P
 ʕaqa=nm-a ənnu tə-ʔə-ntə-n.
 badly=kill-ANLT s(he)+NOM 1sg.A-CONJ-do-3sg.P

⁹³ Traditional analysis presupposing the 2nd person imperative to be the prototypical meaning for these forms fails on the grounds of the usage of this mood with the 1st and especially with the 3rd person.

Probably it is enough. *I will begin* to prepare, {because there is our former sister.} *I wish I could attack* her and *subject her* to an excruciating death. [20:54]

In these contexts conjunctive has the following components of the meaning:

- the speaker wishes event P to be performed,
- the speaker has resources to accomplish event P,
- the speaker does not have a strong intention to use his resources for the accomplishment of event P.

Forms in the 1pl actor conjunctive are translated as “If we could do P”:

(43) a. $\text{an}\eta\text{m}\text{ə}\text{ʔak}$ $\text{m}\text{ən}-\text{ʔ}\text{ə}-\text{tur}=\text{ʔoji}-\text{la}-\text{tk}\text{ə}-\text{t}...$
 at.least 1nsg.S+CONJ-CONJ-fresh=feed-PLUR-IPF-3nsg.S+IPF
If only we could eat fresh meat,... [8:6]

b. $\dots\text{qun}\text{ə}\text{ʔa}$ $\text{m}\text{ən}-\text{ʔ}\text{ə}-\text{ju}\text{ʔ}\text{ə}-\text{n}$ $\text{mur}-\text{i}$
 at.first 1nsg.A+CONJ-CONJ-reach-3sg.P we-NOM+DU
 $\text{wiwn}\text{ə}-\text{kin}$ $\text{ar}\text{əm}$ $\text{iwsew}\text{ə}-\text{n}$,
 Wiwen-REL+3sg leader+NOM+SG Iwsewen-NOM+SG
 $\text{m}\text{ən}-\text{ʔ}\text{ə}-\text{ŋvu}-\text{n}$ $\text{mur}-\text{i}$ $\text{umaka.}\eta$
 1nsg.A+CONJ-CONJ-begin-3sg.P we-NOM+DU together
 $\text{t}\text{ə}.v\text{ity}\text{ə}.l\text{ʔav}\text{ə}-\text{k}$ $\text{ən}\eta.in$ $\text{jun.at.}\gamma\text{ər}\eta\text{ə}-\text{kjita}?$
 discuss-INF this+3sg life-CAUS

□irst shall we *approach* the leader of Wiwen, Iwsewen, (and) *shall we begin* to discuss this matter [=this life] together (with him)? [19:11]

In this case the wish component of the meaning is foregrounded. Sometimes the conjunctive means the availability of potential resources to accomplish event P:

(44) $\text{t}\text{ōk}$, $\text{a}\gamma\text{i}$ $\text{m}\text{ət}-\text{tejan}-\text{m}\text{ək}$ $\text{jaqq}\text{ə}.s\text{ʔam}$
 well very 1nsg.S-lay.up.dried.fish-1nsg.S+PF there.and.then
 aqan $\text{ʕopt}\text{ə}.l\text{ʔ}.\text{u}$ $\text{mik}-\text{u}$ $\text{qas}\gamma\text{əva}.s\text{ʔ}-\text{u}$
 although all who-NOM+PL poor.man-NOM+PL
 $\text{m}\text{ən}-\text{ʔ}\text{ə}-\text{naw}\text{ə}(\text{ja}.n-\text{naw}).$
 1nsg.A+CONJ-CONJ-feed(-3pl.P)

Well, we have prepared a lot of dried fish for winter. This time we *can feed* everyone, even the poor people. [9:3]

- (45) əjatuk, miti, nə-ʔ-etu-n
 if.only Miti+NOM+SG 2sg.A+CONJ-CONJ-give.birth-3sg.P
 ηav.akka.pilj.
 daughter+NOM+SG
If only you, Miti, were to give birth to a daughter. [5: 3]

Examples of the 3rd person conjunctive are rare in our collection of texts. In the following sentence an unreal event looking like a real one is talked about:

- (46) tu ənηa ηanə.k asyi.kina.k qonpə.η aηanta-n
 and so there so.far always song-NOM+SG
 na-n.aηanta.və-tkə-n, keηə-n
 LOW.A-sing.about.something-IPF-3sg.P bear-NOM+SG
 nə-ʔ-ivə-lqiv ...
 3.S+CONJ-CONJ-say-LQIV
And until now there they always sing a song about this, as if the bear were talking...
 [9:42]

The meaning of the conjunctive in a dialogue is naturally combined with a request for advice (in the form of a question) about forthcoming actions:

- (47) a. maη.kət ənta tə-ʔ-ntə-nawwi,
 how this 1sg.A-CONJ-do-3pl.P
 sissəη=quli=java-lʔ-u!
 mockingly=melody=use-ATR-NOM+PL
What shall I do (with the girls) who are using melody in this mocking way? [8:43]
- b. ...taq.kina.η jaq tə-ʔ-nmə.lqivə-na...
 why (part.) 1sg.A-CONJ-kill-LQIV-3pl.P
...Why should I kill them?... [20:8]
- c. ...taq.in γə-nannə q-in-iv-γi, matka
 about.what you-ERG 2.A+OPT-1sg.P-say-2sg.S+PF+OPT whether
 tə-ʔ-nmə-nat ʔopta ətt-i ηita.ryara.
 1sg.A-CONJ-kill-3du.P all they-NOM+DU two.together
 {LC: Bad matter. My wife lives wrong.} *What will you tell me? Maybe, shall I kill*

both of them? [30:5]

- d. ...taq-a jaq mən-ʔ-awwaw-ləʔ
 what-ERG (part.) 1nsg.S+CONJ-CONJ-leave-PLUR

By what *shall we go*? [19:22]

- e. tōk-əja, maŋ.kətə.ŋ mən-ʔ-ŋvu-nat
 well how 1nsg.A+CONJ-CONJ-begin-3du.P
 təmə-kki ɣə.nina-t qəlik.tumɣə-t?
 kill-INF your-3du brother-NOM+DU

Well, (then) how should we kill your brothers? [20:11]

The conjunctive is also used in irrealis conditional clauses:

- (48) jaqqəm qun, ɣavaq n-ā-jun.atə-tkə-na, awən
 well well if 3.S+CONJ-CONJ-live-IPF-3pl.S already
 ənnan maŋ.in nə-ʔ-ivə-n...
 one which+NOM+SG 3.S+CONJ-CONJ-say-3sg.S

{LC: Maybe then something happened to them.} Well if they *were alive*, someone *should have said*, {RC: “Now then, I will visit□. } [19:50]

The conjunctive as well as the optative is used in **purpose** clauses with the conjunction *qinaq* ‘in order that/to’:

- (49) a. əllaʔə-ŋ ɣa-jəl-laŋ wapaqa-wwi ina.ra.lʔ-a,
 mother-DAT RES-give-RES+3pl.P fly.agaric-NOM+PL neighbour-ERG
 ɣa-n.ɣəjul.av-laŋ **qinaq** nə-ʔ-mlavə-lqi
 RES-teach-RES+3pl.P in.order.to 3.S+CONJ-CONJ-dance-LQIV+PF
 nə-ʔ-aŋaŋta-lqi ətək=ra-tenə-k.
 3.S+CONJ-CONJ-sing-LQIV+PF their=house-APUD-LOC

The neighbors gave my mother fly-agarics (and) told [=taught] them {i.e. the fly-agarics} **to make** her *dance* (and) *sing* by their house. [39:1]

- b. wutt.in kuka-jərʔə-n piŋpiŋ-in
 this+3sg pot-contents-NOM+SG gunpowder-POSS+3sg

tə-ʔə-ttilə-n semə.k milyə-k, to tita
 1sg.A-CONJ-put-3sg.P close.to fire-LOC and when
n-ā-pətkatə-n wutt.in piŋpiŋ-in
 3sg.S+CONJ-CONJ-shoot-3sg.S this+3sg gunpowder-POSS+3sg
 kuka-jərʔə-n, to **qinaq** rara-ŋa
 pot-contents-NOM+SG and in.order.to house-NOM+SG
nan-ʔə-nqu-n.
 LOW.A+CONJ-CONJ-carry.away-3sg.P
 I *shall put* this pot with gunpowder near the fire so that it *will explode* and *blow up* the house. [22:87]

2.1.7.5. Infinitive

The infinitive forms sentential complements of phasal verbs (with typical meanings ‘begin’⁹⁴, ‘continue’, ‘finish’). Phasal verbs inherit the transitivity / intransitivity properties of subordinate verbs marked as the infinitive. In the context of an intransitive embedded verb the main verb has an intransitive agreement pattern and agrees with a noun marked with the nominative:

- (50) a. ... *mətə-lyi=tyilivə-lqiv-la(-mək)* *tanjŋə.sitə-k!*
 1nsg.S-real=continue-LQIV-PLUR(-1nsg.S+PF) make.war-INF
 ... *We properly continue to make war!* [17:19]
- b. ... *qutkin;ŋjaqu-nti* *ŋa-r.etə-lina-t* to
 Qutkinnaqu-NOM+DU RES-return.home-RES-3du.S and
 ya-ŋvu-lina-t *jun.atə-k.*
 RES-begin-RES-3du.S live-INF
 ...the Qutkinnaqus returned home and *began to live* {there again}. [6:45]
- c. ... *injas* ***q-il-la-tək*** *valatkəla-k...*
 enough 2.S+OPT-be-PLUR-2nsg.S run.after-INF
 ...Well, that's enough. *Stop running* (after me)... [8:59]

However, in the context of a transitive embedded verb the main verb gets a transitive agreement pattern:

⁹⁴ Statistically the overwhelming number of infinitive textual occurrences are governed by the verb ‘begin’.

...they **couldn't** stand up... [30:52]

The infinitive construction can also be governed by other verbs ('impossible', 'enough', 'want', 'hurry', 'help', 'teach', etc.):

- (54) a. ...*ta-vitan-ŋə-k* **aktəka**...
 DESID-work-DESID-INF impossible
 {LC: Well, now, I was taken ill.} I **cannot** work... [34:1]
- b. *akin·um* **injas** *tur-i* **t-in-ŋə-tək**
 if enough you-NOM+DU POT-be-POT-2nsg.S
ʕaqa=jun.atə-k...
 badly=live-INF
It is enough for you *to live badly* {RC: as well as for me ...} [23:58]
- c. ...**ɣemə-lqivə-tkən** *awaməlkaki* *qura.tʔul-a* *oji-k*...
 want-LQIV-IPF Awamelkaki+NOM+SG reindeer.meat-ERG eat-
 INF
 {LC: When} Awamelkaki *wants to eat* reindeer, {RC: then at once he goes to the nomad camp} [20:99]
- d. **a-rəks.av-ka** *oji-k*.
A-hurry-PRED' eat-INF
Don't hurry to eat. [11:19]
- e. ...*kətvəl* *ɣəttə* **a-wintat-ka** *tənɲjə=svi.sitə-k* ...
 must.not you+NOM A-help-PRED' horn=saw-INF
 ...Don't you dare **help** *saw* the tusks. [16:13]
- f. ...**ta.ɲj.ɣəjus.av.ŋə-tkə-ni-n** *rətku-k*.
 teach-IPF-3sg.A+3P-3sg.P shoot-INF
 {LC: The son became an adult. Titkemesen made a bow and} taught him (how) to shoot. [7:49]

Adjectives can also occasionally govern the infinitive construction that specify an adjective's truth domain:

- (55) a. ...*ləqlaŋ-ki* ʕopta *tavʕal-u* **a-mal-ka-wwi**
 winter-LOC all dried.fish-NOM+PL A-good-PRED-3pl

t.u-kki.

eat-INF

...In winter various dry fish is delicious [=good for eating]. [33:33]

- b. ...**nə-tajəŋ-qin** *kəŋav.sitə-k* ...
ADJ-sinful-ADJ+3sg fight-INF
...it's *sinful* to fight, {RC: well we have the same blood...} [22:31]
- c. asyiʕvan turyə-nan maŋ.kət **nə-mit-turu** jun.atə-k to
now you-ERG how ADJ-skilful-2pl live-INF and
ən.kətə.ŋ ɣa-jun.atə-lqiv-la-ta.
so IMPR-live-LQIV-PLUR-IMPR
Now live just as you *can*. [20:97]

Moreover, the infinitive is documented in interrogative clauses:

- (56) a. mətə-pljə-jəl-ləqiv-la-tək — tinya
1nsg.A-completely-marry.off-LQIV-PLUR-2nsg.P— what+NOM+SG
atʔu liyi ləŋ-ki?
still.more know know-INF
We've decided to marry you off — What more {do you want} to know? [31:8]
- b. meʔa, əlləɣ-iyət, uŋŋa itt-i vali=qavi-k?
(interjec.) father-2sg not be-3sg.S+PF fat=present-INF
Well, Father, wasn't (there) any *donation* of (pieces of) *fat*? [23:24]

In the context of the phasal verb 'begin', the infinitive is often combined with the desiderative marker specifying the modal description of the event: the infinitive designates that the agent of the event attempts to accomplish the action:

- (57) a. imjaq əjava.k ənpə=qura-ŋa kətawət
already far.away old=reindeer-NOM+SG suddenly
ŋəvu-jjə **ta-liqtə-ŋ-ki.**
begin-3sg.S+PF DESID-turn-DESID-INF
Already far away an old reindeer suddenly *began* to try to turn back. [37:13]
- b. ŋan.ina-t qe.takalŋə.jərʔə-t ɣa-meŋə-lina-t,
that-3du brother-NOM+DU RES-grow.up-RES-3du.S

ya-gvu-lina-t *ta-katyu.tvi-g-ki.*
 RES-begin-RES-3du.S DESID-become.strong-DESID-INF

The two brothers grew up (and) began to practise in order *to become strong*. {RC: Later they became strong enough to stop shooting with arrows with wooden tips...} [20:2]

c. ...*ya-gvu-lin* *ta-jol-gə-k* လၢၤၤၤ-ၤၤၤၤ.
 RES-begin-RES+3sg.P DESID-give-DESID-INF Legerngen-DAT+SG

{LC: And at once on arrival Saseveng took off his fur coat, and there and then pulled out the knife and} *began to offer* (it) to Legerngen. [22:36]

2.2. Adjectives

Alutor shows a clear morphological opposition between two classes of adjectives: *qualitative* adjectives and *relative* adjectives. These classes of adjectives have different markers and belong to different derivation types. Qualitative adjectives appear as an original lexical group, while relative adjectives are derived from other parts of speech (mostly nouns).

From a syntactic point of view adjectives are used either *autonomously* (i.e. as separate words, usually attributes or predicates), or in *incorporation*. An adjective can be used attributively only when its head noun is marked for the nominative (see 2.2.4). In this case an attribute agrees in *person* and *number* with its head noun. If an adjective is used predicatively, it also agrees in *person* and *number* with its S-actant, so the forms used in both situations are identical. In the case its head noun is not a nominative case form, an adjective is usually incorporated (for details see 2.2.4).

We will first consider qualitative and relative adjectives used autonomously, and then discuss adjective incorporation.

2.2.1. Qualitative adjectives

Qualitative adjectives belong to the class of original predicates denoting various kinds of qualities and properties. They have at least one actant, that is an S-actant (the subject of a quality or property).

Qualitative adjectives are marked with the circumfix *n-...-qin(a)* (further shortened to *n-...-qin*), the same as that used with verbal adjectives (see 2.1.2). The prefixal part *n-* appears in all qualitative adjectives, so it marks the part of speech, while the suffixal part *-qin(a)* is used only with the 3rd person S-actant, so it expresses both the part of speech and the person(-number) agreement. With the 1st or 2nd person the standard monopersonal markers are used (see Table 11 above). A sample of person-number adjective forms is given in Table 12.

TABLE 12. Person-number forms
of the qualitative adjective *mraj-* ‘lucky’

Number \ Person	sg	du	pl
1	nə-mraj-iyəm	nə-mre-muri ⁹⁶	nə-mre-muru
2	nə-mraj-iyət	nə-mre-turi	nə-mre-turu
3	nə-mre-qin	nə-mre-qina-t	nə-mre-qina(-w) ~ nə-mre-laŋ ~ nə-mre-laŋin ~ nə-mre-laŋina(w(wi))

Adjectives marked with *n-...-qin* can be used both attributively and predicatively (see 3.3), but the first use is more frequent.

Like other attributes without a head noun, adjectives may be substantivized. In such situations a person-number form is used as a nominative case form.

- (58) ... naqam ɣa-n.pasus.av-laŋ uŋjuŋju-pilj-ŋjaqu,
 only RES-leave baby-DIMIN-NOM+PL
 to ŋita.q nə-ɣərtap-qina-t ...
 and two ADJ-elder-ADJ-3du
 ... Only the little children are left and *two elders* ... [19:68]

Substantivized adjectives used in oblique cases (that is those different from the nominative) are not found in Alutor.

Another adjective form is derived from a qualitative stem by means of *a-...-ka*. It is called the *predicative* form. Its only function is to indicate a predicate⁹⁷:

- (59) a. *a-məlrū-ka* əmqa-nin uŋjuŋju
 A-skilled-PRED Emqa-POSS.SG+3sg child+NOM+SG

⁹⁶ Here the diphthong-like combination *aj* changes into *e* according to the coalescence rules, see 1.3.6.

⁹⁷ Thus, there are two adjective forms used predicatively: the form marked with *n-...-qin* and the form marked with *a-...-ka*. Their distribution is not clear, but it is possible that they express the difference between the permanent and temporary state respectively (so they are similar to Russian full and short adjectives).

piŋinaŋ.

Piŋinaŋ+NOM+SG

Emqa's son, Piŋinaŋ (was) *quick* [=skilled]. [21:84]

- b. am-pensija-wwi tin a-mqə-ka-wwi ...
only-pension-NOM+PL well A-small-PRED-3pl

Only the pension is *not quite enough* [=small] ... [34:4]

- c. ... ɣəmmə ajevaq a-npə-k-eyəm.
I+NOM already A-old-PRED-1sg

... Really I'm already *old*. [19:76]

The examples given above show that the form marked with only *a...-ka* indicates the 3rd person singular. The corresponding plural form has a pluralizer -*w(wi)*, the 1st and the 2nd person markers are the same as for other adjectives (see Table 11), among them *-jɣəm*, *-jɣət* (these two undergo certain phonological changes, see 1.3.6).

The adverbial modifier is also derived from a qualitative stem. It is marked with the adverbializer *n...-ʔa*, for instance: *nə-katɣu-ʔa ɣa-rwil-lin* '(he) strongly tugged it' [20:66] (cf. *nə-katɣu-qin* 'strong'), *ɲavaq nɲə-mqə-ʔa mət-suljatə-tkə-nawwi* 'if we salt them only a little' [33:29] (cf. *nɲə-mqə-qin* 'little, small'). The suffixal part of the adverbializer occupies the position of agreement marker.

Qualitative adjectives have several forms that can be referred to as degrees of comparison.

The prefix *mal-*, added to an adjective, expresses a greater degree of the quality:

- (60) ... *malj-n-issə-laŋ* kəm^o-uwwi ...
COMP-ADJ-heavy-ADJ+3pl stone-NOM+PL

{LC: Isn't it better for me ... to throw the bundles into the sea, attaching (to them)}
stones *as heavy as possible*... [19:78]

Another derivative marker, namely the suffix *-lʔ*, is identical to the verbal attributivizer⁹⁸. It is used to build forms expressing a high degree of quality:

- (61) qisɣajat pəttuŋə-lʔə-n tə^oəl-ləqi.
Qisɣayat+NOM+SG rich-MAGN-NOM+SG be.sick-LQIV

⁹⁸ The attributivizer is usually added to a verbal stem and changes its form, while qualitative adjectives are originally of an attributive nature.

(Once) *a rich man* Qisgayat became sick. [29:4]

In example (61) the form *pəttuŋə-lʔə-n* ‘the rich’ is derived from the adjective *nə-pəttuŋ-qin* ‘rich’. Such forms can be used both attributively (as appositions) and non-attributively (as nouns). Being used attributively, they agree in case and number with the head noun.

The highest degree of quality can also be expressed by means of the suffix *-sʔ*, identical with the verbal attributivizer expressing intense actions. The suffix is often accompanied by the prefix *am-*, cf.:

- (62) a. ə-nannə ŋita.q mata-ni-nat
 (s)he-ERG two marry-3sg.A+3P-3du.P
 ŋav.ʔan-ti ***am-tur-sʔə-pilj.ŋaq-ti.***
 wife-NOM+DU SUPERL-young-SUPERL-DIMIN-NOM+DU
 He married two wives, *the youngest ones*. [8:70]

- b. ***am-misʔa-sʔə-n*** itʔə-n
 SUPERL-beautiful-SUPERL-NOM+SG fur.coat-NOM+SG
 γ-epə-lin ...
 RES-put.on-RES+3sg.P

They were dressed *in the most beautiful fur coats*⁹⁹ {RC: and were going around the house.} [6:9]

Another way to express a high degree of quality is to add the prefix *ənan-* (*ən-ənnu-win ənan-ʔassajji* ‘Here is the youngest (daughter), this one’ [32:12]), often accompanied by the suffix *-sʔ* (cf. *ənan-meŋə-sʔə-n qəlik=tətkə* ‘the biggest male walrus’ [22:14]).

In a comparative construction the object of comparison appears in the dative case, while the adjective is in its usual form, but with the incorporated quantifier *ʕoptə-* ‘most’:

- (63) ... γəmmə turəkə-ŋ nə-ʕoptə=kətyu-jγəm ...
 I+NOM you-DAT ADJ-most=strong-1sg
 ... I am the strongest **of you all** ... [22:23]

⁹⁹ It is remarkable that the Alutor word is in the singular, which means that there is only one object for each possible subject of the action.

2.2.2. Relative adjectives

Relative adjectives (= the adjectival form of a noun), express a *general modifying* meaning. They are usually derived from nouns, and sometimes from adverbs and verbs. They are marked with the adjectivizer *-kin(a)* (further shortened to *kin*). Being used attributively, a relative adjective agrees in person and number with its S-actant. Thus, in the 3rd person it is marked with *kin/-kina-t/-kina(-w(wwi))* ‘3sg/du/pl’, and in the 1st or 2nd person the standard person-number markers are used, following the adjectivizer *-kin(a)*, for instance, *-kin-eyəm*¹⁰⁰ ‘1sg’, see Table 13.

TABLE 13. Person-number markers of relative adjectives marked with *-kin*

Number Person	sg	du	pl
1	-kin-eyəm	-kina-muri	-kina-muru
2	-kin-eyət	-kina-turi	-kina-turu
3	-kin	-kina-t	-kina(-w(wi))

Examples:

- (64) a. *pilyə=wajam-kin* pəɲu.tkən
throat=river-REL+3sg source+NOM+SG
The source of the (River) Pilgywajam. [16:2]
- b. *tita-kin-eyəm* ɣəmmə(ɲ) ɣə.nin-eyəm ɲav.akk-eyəm.
when-REL-1sg I+NOM your-1sg daughter-1sg
Once I was your daughter. [6:33]
- c. *kukjulɣə-n* ... *vətɣər.at-kin*
hole-NOM+SG be.rescued-REL+3sg
a rescue hole [22:86]

In (64a) the relative adjective is derived from a noun, in (64b) from an adverb, and in (64c) from a verb.

Being used co-predicatively, a relative adjective may express an *ablative* meaning¹⁰¹:

¹⁰⁰ The endings *-eyəm/-eyət* are phonological variants of the agreement markers *-jɣəm/-jɣət*, which are added to the suffix ending in *a-*, namely *-kina*.

¹⁰¹ Thus, the allative and ablative functions have no special markers in Alutor.

- (65) a. numal tə-wa.lqivə-k səkola-kin-eγəm.
 again 1sg.S-run.away-sg.S+PF school-REL-1sg
 Again I ran away from school. [37:4]
- b. ... t-aratə-k ujatik-kin-eγəm ...
 1sg.S-fall-1sg.S+PF sledge-REL-1sg
 ... I fell from the sledge ... [37:9]

The circumfix *γα-...-lin(a)* (further shortened to *γα-...-lin*) is used to derive *habitue* adjectives meaning ‘having an object X’, where X is the base noun. Habitue adjectives have the same person-number markers as the resultative forms (cf. 2.1.2), as shown in Table 14.

TABLE 14. Person-number markers of habitue adjectives marked with *γα-...-lin*

Number \ Person	sg	du	pl
1	γα-...-jγəm	γα-...-muri	γα-...-muru
2	γα-...-jγət	γα-...-turi	γα-...-turu
3	γα-...-lin	γα-...-lina-t	γα-...-laŋ ~ γα-...-laŋin ~ γα-...-laŋina(-w(wi))

Examples:

- (66) a. ... ilγə=Iʰu=səmŋa-njaq ... təttal γ-asʔə-**lin** ...
 white=face=draught.reindeer-AUGM+NOM+SG very HABIT-fat-3sg
 {LC: And in front} a white-faced castrated male reindeer {RC: was running}. He (was) very fat. [29:45]
- b. ʰoptə.ljʔ.u γ-unjunju-**laŋ**.
 all HABIT-child-3pl
 They (were) all with children. [8:64]

The negative correlate is a *caritive* adjective meaning ‘without an object X’. It is marked with the compound circumfix *a-...-kə.lʔin(a)* (further shortened to *a-...-kəlʔin*), consisting of the adverbializer *a-...-ka* (cf. the predicative marker), the attributivizer *-lʔ* and then the possessive adjective marker *-in(a)* (the latter is used only with the 3rd person). A caritive adjective agrees with its head noun the same

way as a possessive adjective (see 2.2.3). Adverbialization is shown in (67a), and the caritive adjective form in (67b):

- (67) a. amɲut mətə-tyivi(-mək) *allə* unjunju-**k(a)**.
 many.times 1nsg.S-live.for.years(-1nsg.S) not child-CARIT
 Thus, for some years we lived *without children*.. [32:19]
- b. *allə* mur-u **a-kujjə-kəlʔə-muru**.
 not we-NOM+PL A-mug-CARIT-1pl
 We *don't have a mug*. [4:21]

The caritive adjective agreement markers are shown in Table 15.

TABLE 15. Person-number forms of caritive adjectives marked with *a-...-kəlʔin*

Number Person	sg	du	pl
1	a-...-kəlʔ-iyəm ¹⁰²	a-...-kəlʔə-muri	a-...-kəlʔə-muru
2	a-...-kəlʔ-iyət	a-...-kəlʔə-turi	a-...-kəlʔə-turu
3	a-...-kəlʔin	a-...-kəlʔina-t	a-...-kəlʔina(-w(wi))

2.2.3. Possessive adjectives

Possessive adjectives are usually derived from nominal stems by means of the suffix *-in(a)* (further shortened to *-in*), which in the 3rd person appears as *-in/-ina-t/-ina(-w(wi))* ‘3sg/du/pl’.

With 1st declension nouns (see 2.3.1.1) the suffix is placed immediately after a nominal stem, for instance, *qəliktumɣ-in* ‘POSS+3sg’, *qəliktumɣ-ina-t* ‘POSS+3du’, *qəliktumɣ-ina* ‘POSS+3pl’ – the possessive forms of the noun *qəliktumɣə-n* ‘brother (for a sister), NOM+SG’. The person-number agreement markers are placed immediately after the possessive suffix; see the forms in Table 16.

TABLE 16. Person-number markers

¹⁰² The vowel *i* of the morph *-iyəm* appears as a result of the coalescence of an epenthetic *ə* and *j* (see 1.3.6).

of possessive adjectives derived from 1st declension nouns

Number \ Person	sg	du	Pl
1	-in-eγəm	-ina-muri	-ina-muru
2	-in-eγət	-ina-turi	-ina-turu
3	-in	-ina-t	-ina(-w(wi))

Since 2nd declension nouns distinguish both singular and non-singular (see Table 18), they also distinguish number of the base noun (the possessor) in the possessive forms. When the possessor is singular, the possessive suffix *-in(a)* is placed after the oblique stem marker *-ən(a)*, but *-in(a)* is often omitted, so the following optional markers appear: *-ən-in* ~ *-ən* ‘3sg’, *-ən-ina-t* ~ *-əna-t* ‘3du’, *-ən-ina-w* ~ *-əna-w* ‘3pl’, for instance: *qutkən;ŋ;aju-nin* (~ *-n*) ‘3sg’, *qutkən;ŋ;aju-ninat* (~ *nat*) ‘3du’, *qutkən;ŋ;aju-ninaw* (~ *-naw*) ‘3pl’ – the possessive forms of the singular noun *qutkən;ŋ;aju* ‘Qutkinnaqu, NOM+SG’, with the ergative *qutkən;ŋ;aju-nak* ‘Qutkinnaqu, ERG+SG’. When the possessor is non-singular (= dual or plural), the possessives are marked with *-tγ* (obviously related to the oblique stem marker *-tək*): *-tγ-in* ‘3sg’, *-tγ-ina-t* ‘3du’, *-tγ-ina-w* ‘3pl’, for instance, *utkin;ŋ;aju-tγin un;un;u* ‘Qutkinnaqus’ son’ – the possessive form derived from the plural noun *qutkən;ŋ;aju-tək* ‘Qutkinnaqu, NOM+PL’, with the ergative *qutkən;ŋ;aju-tək* ‘Qutkinnaqu, ERG+PL’. The possessive person-number markers are shown in Table 17.

TABLE 17. Person-number markers
of possessive adjectives derived from 2nd declension nouns

Singular possessor			
Number \ Person	sg	du	pl
1	-ənin-eγəm ~ -ən-eγəm	-ənina-muri ~ -əna-muri	-ənina-muru ~ -əna-muru
2	-ənin-eγət ~ -ən-eγət	-ənina-turi ~ -əna-turi	-ənina-turu ~ -əna-turu
3	-ənin ~ -ən	-ənina-t ~ -əna-t	-ənina(-w(wi)) ~ -əna(-w(wi))

Non-singular (dual or plural) possessor			
Number \ Person	sg	du	pl
1	-ətyin-eyəm	-ətyina-muri	-ətyina-muru
2	-ətyin-eyət	-ətyina-turi	-ətyina-turu
3	-ətyin	-ətyina-t	-ətyina(-w(wi))

The main function of the possessive adjective is to express a possessive relation, the possessor appearing in the possessive form. For instance, *uvik qisyajat-in* ‘the (whole) body of *Qisgayat*’ [29:31], *qəlik.tumy-ina-t ər-ti* ‘the two bows of (her) brothers’ [20:25], *qilivgawət-ina-w unjun;u-wwi* ‘*Qilivngawet*’s children’, [20:81]; *qilivgawət-ənin qəlavul* ‘*Qilivngawet*’s husband’ [20:80], *sasevəgə-tyin ra.jər?ə-n* ‘(to) the *Sasevengs*’ house’ [22:80].

Possessive adjectives may also express various types of modifiers, for instance: ‘made of X’: *kulta-wwi kali.l?ə=kult-ina* ‘(We sew) the soles on with eared-seal skins’ [27:7]; ‘containing X’: *səmkə.jər?-uwwi qajun;un;u-na-w* ‘the bundles with children’ [19:80], *ŋav.kir-jər?ə-n pipiqə;ŋ-in* ‘the trousers, full of the mice’ [14:8], ‘consisting of X’: *imət tav^oal-in* ‘a load of dried fish’ [21:73]. A possessive adjective may also indicate an S-actant of a deverbal noun: *kalak=?ağəl?-in iv.γərŋən* ‘the speech of the magical spirit’ [7:12].

2.2.4. Adjective incorporation

An Alutor adjective modifying a noun can be incorporated by its head noun, so that a nominal composite appears. Qualitative adjectives are incorporated without their category marker *n-...-qin*, while relative adjectives marked with *-kin* and possessive adjectives marked with *-in* preserve their derivational markers. With other types of relative adjectives incorporation is not attested.

Adjective incorporation may be either semantic or syntactic (for details see [Muravyova 1990b]).

If the head noun is a nominative case form, for semantic reasons we may choose either the autonomous or the incorporated form of an adjective. Incorporation is usually used to indicate that the corresponding quality or property refers to background information. Since in such situations incorporation is semantically defined, we call it “semantic” incorporation, cf. *meŋə=kuka-ŋa* ‘big pot, NOM+SG’ vs. *nə-meŋə-qin kuka-ŋa* ‘big pot, NOM+SG’.

However, if the head noun is not a nominative case form, that is an oblique case form, an adjective is obligatory incorporated (let us be reminded that adjectives have no case forms). Since in such situations incorporation is syntactically defined, we call

it “syntactic” incorporation, cf. *ilyə=qura-ta* ‘by a white reindeer, ERG’ vs. *n-ilyə-qin qura-ŋa* ‘white reindeer, NOM+SG’, *meŋə=rara-k* ‘in a big house, LOC’ vs. *nə-meŋə-qin rara-ŋa* ‘big house, NOM+SG’, *əlləy-ina=rara-k* ‘in the father's house, LOC’ vs. *əlləy-in rara-ŋa* ‘the father's house, NOM+SG’.

2.3. Nouns

The semantic and syntactic functions of a noun are expressed mostly by the items of nominal grammatical categories (case-number marking and person-number marking – see 2.3.1.1, 2.3.1.2 and 2.3.2), in some cases by derivative markers of location (2.3.1.3) and adjectivization (2.3.3); some local functions are expressed outside a locative noun by means of adpositions (2.3.1.3). Nouns are used either autonomously or in incorporation. Being used autonomously, a noun is marked for a set of grammatical categories. Incorporated nouns are just bare stems, without any category markers.

The set of grammatical categories a noun is inflected for depends on its syntactic position in a sentence. Three types of noun forms are distinguished on the morphological level: nominal, predicative and adjectival. The nominal form is used in the position of an actant, the predicative form – in the position of a predicate, the adjectival form – in the position of an attribute.

2.3.1. Nominal forms

2.3.1.1. Noun declension

The nominal form of a noun is inflected for case and number.

The category of case is formed of the following 11 cases: nominative (NOM), ergative (ERG), locative (LOC), dative (DAT), lative (LAT), prolativ (PROLAT), contactive (CONT), causal (CAUS), equative (EQUAT), comitative (COMIT), associative (ASSOC).

The category of number has three values: singular (SG), dual (DU) and plural (PL). The dual and plural forms of proper names express associative duality and plurality, i.e. ‘X and somebody else’:

- (68) *pəkir-ləqiv-la-t* *qutkin;ŋjaqu-tək.*
 approach-LQIV-PLUR-3pl.S+PF Qutkinnaqu-DAT+NSG
 They came back to the *Qutkinnaqus* {i.e. to the family of Qutkinnaqu}. [7:70]

Case and number, in the forms where number is distinguished, are expressed by

fused items. Most of the items are suffixes, but the comitative and associative markers are circumfixes. Besides these, some nouns form the nominative singular by means of an operation – the final vowel truncation or the root reduplication.

Alutor nouns are divided into three groups with two sets of person-number markers called *d e c l e n s i o n s*: the 1st declension and the 2nd declension.

The *first group* includes common nouns denoting non-humans. These nouns are inflected using 1st declension items. 1st declension forms distinguish number (singular, dual and plural) only in the nominative. In other cases (= oblique cases) number is not distinguished, but is sometimes marked using verbal agreement or defined by the context.

The *second group* includes proper names (human and those of domestic animals) and kinship terms denoting elder relations. 2nd declension forms distinguish number not only in the nominative, but also in some oblique cases; in the nominative they distinguish singular, dual and plural, while in oblique cases they distinguish only singular (SG) and non-singular (NSG)

The *third group* includes all other common nouns denoting humans. These nouns are inflected using either 1st or 2nd declension forms (though the distribution of these forms is not fully clear). For instance, the noun *alləɣ-* ‘father’ has the ergative *alləɣ-a* (1st declension), which expresses either singular or plural, depending on the context, and also the ergative *alləɣ-nak* (2nd declension, singular) and *alləɣ-tək* (2nd declension, plural). The case-number forms are given in Table 18.

TABLE 18. Case-number inflections (nominal forms)

Paradigmatic type		1st declension			2nd declension		
Number		sg	du	pl	sg	du	pl
Case							
1	nominative	<i>see the Dictionary</i>	-t / -ti	-w/-wwi	<i>see the Dictionary</i>	-nti	-w/-wwi
2	ergative		-a/-ta		-ənak	-ətək	
3	locative		-k/-ki		-ənak	-ətək	
4	dative		-ŋ		-ənaŋ	-ətək	
5	lative		-kəŋ		—		
6	prolative		-jɤəŋ / -ɤəpəŋ (short variants -e ~ -i ¹⁰³)				
7	contactive		-jit ~ -jita				
8	causal		-kjit ~ -kjita				
9	equative		-u/-nu		-u/-ənu		
10	comitative		ɣa-...-a/-ta		awən-...-ma		
11	associative		ɣeqə-...-a/-ta		—		

COMMENTS on Table 18.

1. Items separated by a slash are in complementary phonological distribution. Items separated by a tilde are optional variations.

2. The nominative singular displays a variety of markers that are discussed further on; these markers are shown in the Dictionary.

The *nominative* singular deserves special comment. The following ways of marking the nominative are found in Alutor: the zero marker \emptyset , the suffixes *-n*, *-lɤəŋ*, *-qa*, *-ŋa*, and also two operations – the final vowel truncation and the root reduplication (the latter is marked with R_{red}). The nominative singular type is morphological information given for every noun in the Dictionary.

The most productive means of marking the nominative are by final vowel truncation and *-n* suffixation; these markers are usually used with Russian loanwords, cf. *kuruv* ‘cow’ (cf. *kuruva-wwi* NOM+PL – from the Russian *koróva*), *səkola-n* ‘school’ (from the Russian *škóla*). The zero ending can be added to stems ending in a consonant or in a vowel, cf. *anyət-∅* (root {*anyət*}) ‘festival’, *punta-∅* (root {*punta*}) ‘liver’.

¹⁰³ The short variants result from the phonetic allomorphs *-epəŋ/-ipəŋ* (see below).

The final vowel truncation is accompanied by standard phonological processes, cf. *tatul* (root {*tatula*}) ‘fox’, but *akək* (root {*akka*}) ‘son’, *imət* (root {*imti*}) ‘burden’ (since consonant clusters do not occur word-finally, a schwa is inserted here – see 1.3.3).

The inflectional ending *-n* is added to stems ending in either a vowel or a consonant¹⁰⁴, cf. *γətγα-n* (< {γətγα-n}) ‘late autumn’, *nalγə-n* (< {nalγ-n}) ‘fur skin’.

The inflectional ending *-lɥən* is usually used with nouns denoting body parts (both human and animal's), names of animals, and also with nouns denoting one object of a pair, cf. *vilu-lɥən* ‘ear’, *masvi-lɥən* ‘animal's chest’, *ʕiγə-lɥən* (< {ʕiγ-lɥən}) ‘wolf’, *lili-lɥən* ‘mitten’. After stems ending in a homorganic consonant the inflectional ending *-lɥən* appears as *-ləɥən* (see 1.3.3.3), cf. *aɥar-ləɥən* ‘star’.

The inflectional ending *-qal* is used only with nouns denoting one object of a pair, cf. *pəlak-qal* (along with *pəlakə-lɥən*) ‘fur boot’, *lili-qal* (along with *lili-lɥən*) ‘mitten’.

The inflectional ending *-ɥa* is used with a few nouns that probably belong to the original Alutor lexicon: *əpa-ɥa* ‘soup’, *kuka-ɥa* ‘pot’, *mami-ɥa* ‘fish drying shed’, *qura-ɥa* ‘reindeer’, *rara-ɥa* ‘yurt, house’, *ruru-ɥa* ‘bed, sleeping place’, *titi-ɥa* ‘needle’, *təpa-ɥa* ‘stone hammer’.

Many original and some loan-words form the nominative singular by copying (= reduplicating) the root morph. Such words belong to different semantic groups, cf. *anu-ʔan* (< {anu_{red}}) ‘spring’, *wiru-wir* (< {wiru_{red}}) ‘(kind of) salmon’ (for reduplication rules see 1.3.1).

The *ergative* markers *-a/-ta* are distributed according to the final segment of a stem: the variant *-a* is used with stems ending in a consonant or a schwa, while the variant *-ta* is used with stems ending in a non-schwa vowel, cf. *təry-a* ‘meat, ERG’, *jil-a* (< {jilə-a}) ‘tongue, ERG’, , but *γətka-ta* ‘leg, ERG’.

In the *locative* the inflectional ending *-ki* is characteristic of stems ending in *ɥ* (and sometimes in *w*), in other cases the ending *-k* or its phonological variant *-kki* are used (the latter – after a stressed vowel), cf. *ləqlaɥ-ki* ‘winter, LOC’, *rara-k* ‘house, ERG’, *mimlə-k* ‘water, LOC’, but *lələ-kki* ‘eye, LOC’.

The *dative*, as well as the *lative* (the latter can be treated historically as a double case composed of the locative and dative items), has no variants.

In the *prolative* the morph *-γəpəɥ* is used with the stems ending in a single consonant, while in other cases the morph *-jɥəɥ* is used. If a stem ends in the vowel -

¹⁰⁴ If a stem ends in a consonant, an epenthetic ə is inserted to break up an illicit consonant cluster (see 1.3.3.2).

a, the morph *-jpaŋ* appears as *-epaŋ*; the same variant is used if a stem ends in a two consonant cluster, because in such cases the epenthetic *ə* is inserted, and the combination *əj* in most cases changes into *e*, though in some rare cases – into *i* (see 1.3.6), so the marker *-ipaŋ*¹⁰⁵ may appear, cf. *qatŋav-ŋəpaŋ* ‘ravine, PROLAT’, *nut-epaŋ* (< {nuta-jpaŋ}) ‘land, PROLAT’, *winv-epaŋ* ~ *winv-ipaŋ* (< winvə¹⁰⁶-jpaŋ < {winv-jpaŋ}) ‘road, PROLAT’. The morphs *-e* and *-i* are short variants of the morphs *-epaŋ* and *-ipaŋ* respectively.

The *equative* markers *-u/-nu* have the same distribution as the ergative markers *-a/-ta*: the variant *-u* is used with stems ending in a consonant or a schwa, while the variant *-nu* is used with stems ending in a non-schwa vowel, cf. *tavʹal-u* ‘dried fish, EQUAT’, *keŋ-u* (< {keŋə-u}) ‘bear, EQUAT’, but *əpa-nu* ‘soup, EQUAT’.

The variants *-a/-ta* in the *comitative* and *associative* are identical with those of the ergative and have the same distribution, cf. *ŋa-qlavul-a* ‘husband, COMIT’, *ŋa-masla-ta* ‘butter, COMIT’, *ŋeqə-masla-ta* ‘butter, ASSOC’.

2.3.1.2. Case functions

Below we enumerate the main functions of the Alutor cases.

The *nominative* is used mostly to express the syntactic function of an S/P-actant, that is the Absolutive hyperrole, according to the ergative actant marking strategy (see 3.0). The nominative (not a bare stem) is also used to express named objects. Besides this, the nominative is used in the vocative position, with final vowel lengthening (we treat this process as expressive vowel lengthening – see 1.3.8.1), for instance, in the vocative we may use *miti* along with *mitē*¹⁰⁷ ‘Oh, Miti!’ (Miti is a mythological woman’s name).

The *ergative* is used to express the following functions: a) the A-actant of a verb, that is the actant with an Agentive hyperrole, b) the instrument of an action, c) the lowered actant of a verb in the antipassive construction (see 3.1.3.1). Beside the Agent, the Agentive hyperrole in Alutor also includes the Experiencer. Thus, the Agentive hyperrole is typical for verbs such as ‘take’, ‘cut’ (the Agent) / ‘see’, ‘wish’ (the Experiencer):

- (69) a. *qutkinŋaŋaqu-nak* *ŋ-akmi.l-lin* uttə-ʔut ...
 Qutkinnaqu-ERG+SG RES-take-RES+3sg.P stick-NOM+SG

¹⁰⁵ These variants appear because the inflection *-jpaŋ* historically comes from the root {jp}, and undergoes changes given in rule (11) (see 1.3.6) either as a root or a suffix.

¹⁰⁶ Here and in some other cases the vowel *ə* is epenthetic.

¹⁰⁷ We call this form the “expressive” vocative.

Qutkinnaqu took a stick ... [6:10]

- b. *qutkinṅaṅaqu-nak ... ḡa-laʔu-lin ənnə-ʔən.*
 Qutkinnaqu-**ERG**+SG RES-see-RES+3sg.P fish+NOM+SG
Qutkinnaqu ... found a fish. [1:2]

The instrumental and ergative functions can be expressed by the ergative within the same clause:

- (70) *əmqa ḡa-qatvə-lin sisḡinṅ-ki puḡḡ-a*
 Emqa+NOM+SG RES-cut-RES+3sg.S armpit-LOC spear-**ERG**
tanṅ-a.
 enemy-**ERG**
 ... a warrior injured Emqa with a spear in the armpit. [21:20]

The locative is used to express: a) essive (see (71a)) and lative (see (71b)) local functions, b) peripherally governed actants (see (71c)):

- (71) a. *ekatə.sqə-k va.ḡal-i.*
 precipice-**LOC** sit-3sg.S+PF
 She sat down on the cliff. [13:5]
- b. ... *uṅjuṅu-wwi maniw-ki*
 child-NOM+PL bag-**LOC**
qə-ju-ḡə-tki ...
 2.A+OPT-put.inside-2.A+3.P-2nsg.A+3.P
 ... put the children in the bags ... [8:59]
- c. *ənnu ḡilḡatə-tkən uḡatiki-k.*
 (s)he+NOM+SG tie-IPF sledge-**LOC**
 He is tying up the sledge.

The dative is used to indicate: a) the Addressee of an action – see (72a), b) the Benefactive of an action – see (72b), c) the object of destination (corresponding to the allative function) – see (72c), d) the actant moved from the position of the Absolutive, often denoting the Stimulus of a verb with the Experiencer (see 3.1.3.1).

- (72) a. *qutkinṅaṅaqu ənnə-ṅ iv-i ...*
 Qutkinnaqu+NOM+SG fish-**DAT** say-3sg.S+PF

Qutkinnaqu said *to the fish* ... [1:11]

- b. ləwət jaqqi mə-jisi-na ḡav.jilʔa.lḡə.tumγə-ḡ.
better later 1sg.A+OPT-gather-3pl.P female.cousin-DAT

Should I pick them {i.e. berries} later *for the cousin*. [14:55]

- c. təla-jjə ulγəvə-ḡ ...
come-3sg.S+PF grave-DAT

He went *to the grave* ... [5:8]

The **l a t i v e** denotes reaching the point of destination:

- (73) a. piḡinaḡ γa-ra.lqiv-lin təγar-γiḡ-kəḡ ...
Pinginang+NOM+SG RES-come.inside-RES+3sg.S store.hole-IN-LAT

Pinginang went *inside the store-hole* ... [21:73]

- b. to ʕoro γa-la-laḡ γəviḡ-kəḡ.
and after.that RES-come-RES+3pl.S Geving-LAT

After that they went *to Geving* {a place near Wiwen}. [22:12]

The **prolative** expresses a lative function ‘motion past’, and also an elative function ‘motion from’:

- (74) a. ... γa-ḡvu-laḡ jalγətə-k γəγə-lq-epəḡ ...
RES-begin-RES+3pl.S migrate-INF lake-SUPER-PROLAT

... they began to migrate *along the surface of the lake*... [16:7]

- b. wut.ke waj ḡəra=jəḡḡ.γəḡḡ-i t-ina-waq.atə-ḡ ...
here here knee=joint-PROLAT POT-1sg.P-step-POT

{(If) you step over me here *along the knees*, {RC: you (will become) successful [=good] in hunting.} [24:11]

- c. γəmmə tə-jatə-tkən rar-epəḡ səkola-ḡ.
I+NOM 1sg.S-go-INF house-PROLAT school-DAT

I am going to school *from (my) house*.

The **equative** is used to express functions ‘such as X’, ‘as X’, with verbs like ‘become (smth., smb.)’, ‘turn (into smb.)’, ‘work as (smb.)’ etc.:

- (75) a. liḡ=lot-u nəʔal-i.
great.bilberry=leaf-EQUAT become-3sg.S+PF

He became *a bilberry leaf*. [8:45]

- b. ... *inu-nu* *ya-jəl-lin* *keŋ-a...*
 food.for.a.trip-**EQUAT** RES-give-RES+3sg.P bear-ERG
 The bear gave (his own rib) *for food* . [12:16]

The **contactive** indicates contact with an object, for instance:

- (76) *ənki* *qamav-ənak* *akmi.n-ni-n* *jattiyə-n*
 later Qamav-ERG+SG seize-3sg.A+3P-3sg.P Yattigen-NOM+SG
tilpə-jit ...
 shoulder-**CONT**
 Later Qamav seized Yattigen *by the shoulder* ... [41:8]

The **causal** expresses the cause or motive of an action:

- (77) a. *kətvəl;* *tətkə-kjita* *a-tkəŋav.sil-la-ka ...*
 must.not walrus-**CAUS** *4*-fight-PLUR-PRED'
 Don't fight *because of the walrus*... [22:26]
- b. ... *jəŋa-kjita* *ya-pkav-lin* *milγə.ʕər-a*
 fog-**CAUS** RES-be.unable.to-RES+3sg.S gun-ERG
ta-nmə-ŋ-ki.
 DESID-kill-DESID-INF
 ... *because of the fog* he couldn't shoot it [=kill it with a gun]. [36:10]

The **comitative** expresses the external participant of an action, with the same role as the main performer of the action; the 1st and the 2nd declension have different comitative markers:

- (78) a. *ʕoro* *jalγət-γəʔət* *qajəl;ʕinnə-ŋ* *ʕaqaniŋvitə-nti*
 after.that migrate-3du.S+PF Qayelinne-DAT Aqaningvit-NOM+DU
ya-ŋav. ʔan-a.
COMIT-wife-**COMIT**
 And after that Aqaningvit *and his wife* moved to Qayelinnen {the village Khayilino}.
 [30:60]
- b. *ʕat* *qutkin;ŋaqu*
 without.fail Qutkinnaqu+NOM+SG
qə-menə=rwil-la-γə-tki *awən-miti-ma ...*
 2.A+OPT-big=beat.up-PLUR-2.A+3.P-2nsg.A+3.P **COMIT**-Miti-**COMIT**
 Without fail, beat up Qutkinnaqu *together with Miti* badly, lowering (their) trousers ...

[10:68]

The associative expresses the external participant of an action, with a role different from the role of the main performer of the action; associative forms are found only with 1st declension nouns, usually non-animate:

(79) a. $\gamma\text{əm.nin}$ $\text{əllə}\gamma\text{ə-n}$ $\text{qonpə}\eta$ $\text{ke}\eta\text{ə}=\gamma\text{ili-tkən}$
my+3sg father-NOM+SG always bear=hunt-IPF
geqy-meNy=wala-ta.

ASSOC-big=knife-ASSOC

My father always goes hunting a bear *with a big knife*.

b. qəljippə tətu-kki $\gamma\text{eqə-masla-ta}$ a-mal-ka .
bread-NOM+SG eat.with.something-INF ASSOC-butter-ASSOC A-good-

PRED

It is good to eat bread *with butter*.

2.3.1.3. Local semantic functions

A noun phrase can also express different types of location (location with respect to the object expressed by a base noun). These functions are expressed either by a derivative suffix (in the case there is a contact between the objects or at least it is implied) or by an adposition governing the locative noun phrase (in the case there is no obvious contact between the objects), for details see [Muravyova 1994].

In order to express functions of the first type, a nominal derivative with a locative suffix is used. In general, such derivatives have complete paradigms including the nominative, but the most frequent forms are cases with locative functions, such as the locative, the dative (with an allative function), the lative and the prolativ.

The following local functions are expressed by means of suffixes:

SUPER ‘surface of an object’, the marker *-lq* (with the variant *-lq*), for instance: *ηajə-lqə-η* ‘(climb) the mountain’ [8:38], *γəγə-lq-epəη* ‘(migrate) along the surface of the lake’ [16:7], *ujatiki-lqə-k* ‘(load smth.) on the sledge’ [22:66], *vəljusa-lqə-k* ‘(put smth.) on a dish’ [29:27];

IN ‘inner part of an object’, the marker *-γiη*, for instance: *uljəv-γiη-ki* ‘in the grave’ [5:10], *uljəv-γiη-γəpəη* ‘(shout) from the grave’ [7:59], *səγe-γiη-ki* ‘(hide) in the sands’ [18:18], *təγar-γiη-kəη* ‘(go) inside the store-hole’ [21:73];

INTER ‘place among objects’, the marker *-swən/-lwən*, for instance: *tuməkka-lwənə-k* ‘(to talk about smth.) in the presence of other people’ [22:68], *ra.mkə-swən-i* ‘(to visit) all the houses’ [28:2], *ηe-swənə-k* ‘(to live) among the mountains’ [32:4];

APUD ‘place near an object’, the marker *-tenə*, for instance: *ra-tenə-k* ‘(to dance) by the neighbouring house’ [39:4], *inmə-tenə-k* ‘(to build a village) near the cliff’ [23:3], *əməkkə-tenə-k* ‘(to put smth.) near himself’ [29:21].

If there is no obvious contact between the two objects, adpositions¹⁰⁸ expressing various local functions are used (they govern the locative case form), cf. *əmiŋqal tənupə-k* ‘behind a hill’, *ujatiki-k ɣətulŋəŋqal* ‘at the side of a sledge’, *rəmetəŋqal tənupə-k* ‘far behind a hill’, *inmə-k teləŋqal* ‘on the other side of a rock’, *tilirra-k semək* ‘near Tilirra {the village Tilichiki}’.

2.3.2. Predicative forms

The predicative form of a noun is marked for person and number of its S-actant. To express the 1st and the 2nd person the person-number suffixes identical with those of an adjective (original or deverbal) are added. The 3rd person is identical with the nominative singular, dual and plural respectively. The person-number forms are given in Table 19.

TABLE 19. Person-number inflections (predicative forms)

Number Person	sg	du	pl
1	-jɣəm	-muri	-muru
2	-jɣət	-turi	-turu
3	= NOM+SG	= NOM+DU	=NOM+PL

The predicative is used when a noun is a predicate (for present situations). When an S-actant is the 1st or 2nd person, the noun-predicate and the S-actant¹⁰⁹ are marked differently:

- (80) a. ɣəmmə əlvə.lʔ-ijəm qaj.unju-*jɣəm* ...
 I+NOM not-1sg little.boy-1sg
 I'm not a little baby ... [30:32]

¹⁰⁸ These auxiliary words can be used both prepositionally and postpositionally (though the latter is more common). We refer to them as adpositions and use this term in the Dictionary (adpositions are marked with the abbreviation *adp*). Some Alutor adpositions consist of two parts: the main part (the root) and the suffix with a local function, cf. *telə.ŋqal* ‘on that side of’, with the root {telə} ‘there, that’ and the suffix {-ŋqal} meaning ‘the side of’.

¹⁰⁹ For the 3rd person see 3.3.

- b. ... mur-uwwi jəljʔaljŋəjərʔə-muru.
we-NOM+PL male.cousin-1pl
{LC: This is sinful, we won't kill you, because} we are *cousins*. [22:38]
- c. ŋav=ʕəfʕə-turu, ʕəmulʔə-turu ...
female=dog-2pl weakling-2pl
You bitches, you weaklings, {RC: you, oh, you couldn't kill me!} [17:23]

Example (80c) shows that the S-actant itself may be absent, but it still controls the agreement of the predicate.

The predicative is also used as an apposition for another noun or pronoun (the pronoun itself may be absent).

- (81) əjōwət ina-n.təmŋi.v-la-tək ŋan-ənnul-eyəm ...
long.time.ago 1sg.P-lose-PLUR-2nsg.A there-the.same-1sg
Long, long ago you lost me. That's me ... [6:35]

The predicative is also used when addressing somebody:

- (82) meʔa, əlləy-iyət, ujnə itt-i vali=qavi-k?
(interjec.) father-2sg not be-3sg.S+PF fat=present-INF
Well, Father, wasn't (there) any donation of (pieces of) fat? [23:24]

2.3.3. Adjectival forms

The adjectival form of a noun is actually the result of a derivational process, when a noun becomes an adjective. We distinguish between relative (REL), possessive (POSS), habitive (HABIT) and caritive (CARIT) adjectives, see 2.2.2. From a syntactic point of view an adjectival is used in the role of the genitive, sometimes the ablative, which occur in other languages with case systems.

2.3.4. Noun incorporation

A noun in the nominal can be incorporated by a verb or other noun. Thus, we have verbal composites, with a verb as the head, and nominal composites, with a noun as the head, (for details see 3.1.4). An adjectival (= denominal adjective) can also be incorporated (see 2.2.4 above). Incorporated nouns have no category markers; incorporated denominal adjectives may preserve their adjectivizers *-kin* and *-in*, which are referred to as derivational affixes.

Nouns are easily incorporated when they have no modifiers in the underlying syntactic structure, and the speaker refers to the corresponding objects as background

information (for details see 3.1.4).

Nouns are incorporated by other nouns when they are used attributively in the underlying structure and denote non-specific objects, for instance: *tanŋə=ʔirra-n* ‘the enemy party’ [21:10], *ʕasu=nəm.jərʔə-n* ‘a village of pink salmon’ [3:21], *viʕe=rara-ŋa* ‘a grass house’ [6:16], *wir=imət* ‘the load of alder bark’ [7:8]. Not all linguists consider this type of compounding incorporation, but it is obviously a highly productive type of compounding.

2.4. Pronouns

2.4.1. Personal pronouns

Free personal pronouns for the 1st, 2nd and 3rd person, singular, dual and plural, occur in Alutor. The 3rd person singular does not distinguish between either human/non-human or animate/non-animate. Substantivized demonstratives are also used as 3rd person pronouns (see below).

Dual and plural pronouns are derived from one and the same stem and differ only in the nominative and sometimes in the ergative, in other oblique cases one and the same form is used for each case (in the ergative the difference between the dual and plural can be marked through verbal agreement). Thus, there are 9 pronouns, but only 6 pronominal stems: {γəm} ‘I’ (NOM *γəmmə*), {γət} ‘you (sg)’ (NOM *γəttə*), {ən-/ə-}¹¹⁰ ‘(s)he/it’ (NOM *ənnu*), {mur} ‘we’ (NOM *muri* ‘we two’, NOM *muru(wwi)* ‘we’), {tur} ‘you (nsg)’ (NOM *turi* ‘you two’, NOM *turu(wwi)* ‘you (pl)’), {ət} ‘they’ (NOM *ətti* ‘they two’, NOM *ətuwwi* ‘they’).

Personal pronouns have much in common with nominal forms of the noun: they are used in the same syntactic positions and are marked for case. But, unlike nouns, personal pronouns are not incorporated, they are used only as autonomous words. Adjectives derived from pronominal stems and similar to adjectival forms of the noun belong to another group of pronouns – possessive pronouns.

Alutor personal pronouns have approximately the same set of cases as nouns. 10 cases are distinguished: nominative, ergative, locative, dative, prolativ, contactiv, causal, equative, comitativ, associativ. As for the Lative, its pronominal form is likely to coincide with the dative form, so it is not represented in the list of cases.

There is some divergence from the case system of nouns as regards the realization of different cases.

The nominative singular is marked with a zero morph; in the 1st and 2nd person

¹¹⁰ The morph *ə-* is usually used before markers beginning with *n-*.

an additional syllable appears (see 1.3.4.3), in the 3rd person a suppletive stem is used. The nominative dual is marked with *-i*; the same form is optionally used as the ergative dual (this marker does not occur with nouns). The nominative plural is marked with *-u(wwi)*. All ergative forms (including dual – optionally) are marked with the special pronominal marker *-nan*.

In some case forms special suffixes occur; that have no meaning, their only function is to “extend” a pronominal stem. They are: *-ək*, *-kka*, *-ula*, *-ɣ*¹¹¹. In some plural case forms (equative, comitative and associative) possessive pronoun stems are used (see 2.4.2). The complete paradigms of personal pronouns are given in Table 20.

TABLE 20. Personal pronouns paradigms

Singular pronouns				
	Person Case	1	2	3
1	nominative	ɣəmmə	ɣəttə	ənnu
2	ergative	ɣəm-nan	ɣə-nannə	ə-nannə
3	locative	ɣəmə-kki	ɣənə-kki	ənə-kki
4	dative	ɣəm-əkə-ŋ	ɣən-əkə-ŋ	ən-əkə-ŋ
5	prolative	ɣəmə-kk-epəŋ	ɣənə-kk-epəŋ	ənə-kk-epəŋ
6	contactive	ɣəmə-kka-jit(a)	ɣənə-kka-jit(a)	ən-əkka-jit(a)
7	causal	ɣəmə-kka-kjit(a)	ɣənə-kka-kjit(a)	ən-əkka-kjit(a)
8	equative	ɣəmm-ula-nu	ɣətt-ula-nu	ənn-ula-nu
9	comitative	awən-ɣəmm-ula-ma	awən-ɣətt-ula-ma	awən-ʔənn-ula-ma
10	associative	ɣeqə-ɣəmm-ula-ta	ɣeqə-ɣətt-ula-ta	ɣeqə-ʔənn-ula-ta

¹¹¹ In the glossed texts these suffixes are treated as parts of pronominal stems (see Part I).

Non-singular (dual and plural) pronouns				
	Person Case	1	2	3
1	nominative	mur-i (du) mur-uwwi (pl)	tur-i (du) tur-uwwi (pl)	ətt-i (du) ət-uwwi (pl)
2	ergative	mur-i (du) ~ mur-γə-nan (du) / mur-γə-nan (pl)	tur-i (du) ~ tur-γə-nan (du) / tur-γə-nan (pl)	ətt-i (du) ~ ət-γə-nan (du) / ət-γə-nan (pl)
3	locative	murə-kki	turə-kki	ətə-kki
4	dative	mur-əkə-ŋ	tur-əkə-ŋ	ət-əkə-ŋ
5	prolative	murə-kk-epəŋ	turə-kk-epəŋ	ətə-kk-epəŋ
6	contactive	murə-kka-jit(a)	turə-kka-jit(a)	ətə-kka-jit(a)
7	causal	murə-kka-kjit(a)	turə-kka-kjit(a)	ətə-kka-kjit(a)
8	equative	mur-γina-nu	tur-γina-nu	ət-γina-nu
9	comitative	awən-mur-γina-ma	awən-tur-γina-ma	awən-ʔət-γina-ma
10	associative	γeqə-mur-γina-ta	γeqə-tur-γina-ta	γeqə-ʔət-γina-ta

2.4.2. Possessive pronouns

Possessive pronouns are similar to the adjectival form of a noun. They are derived from pronominal stems in approximately the same way as adjectival forms.

The possessive pronouns are divided into *possessive forms proper* and *relative possessive forms*, similar to possessive and relative adjectival forms. Cf.: the possessive form proper *γəmnin* ‘my (= belonging to me)’ vs. the relative possessive form *γəməkkakin* ‘my (= related to me)’.

Like adjectival forms, possessive pronouns can be used either autonomously or in incorporation. Possessive pronouns proper have special stems when incorporated. Table 21 shows possessive suffixes of both types: the suffix *-nin(a)*, marking the possessive forms proper with the possessor in the singular, is obviously related to the marker of the 2nd nominal declension; the suffix *-γin(a)*, marking the possessive forms proper with the possessor in the non-singular, is used only with pronouns. The relative possessive forms are marked with the suffix *-kin(a)* (like denominal relative adjectives). Being incorporated, possessive pronouns proper are extended with the suffix *-ək*, while relative possessive forms are always extended with the suffix *-kka* (regardless of whether or not they are incorporated). The possessive stems are listed below in Table 21.

TABLE 21. Possessive pronouns

Possessive forms proper				
Number \ Person	sg		nsg	
	autonomous	incorporated	autonomous	incorporated
1	γəm-nin(a)-	γəm-ək-	mur-γin(a)-	mur-ək-
2	γə-nin(a)-	γən-ək-	tur-γin(a)-	tur-ək-
3	ə-nin(a)-	ən-ək-	ət-γin(a)-	ət-ək-

Relative possessive forms				
Number \ Person	sg		nsg	
	autonomous	incorporated	autonomous	incorporated
1	γəmə-kka-kin(a)-	γəmə-kka-kin(a)-	murə-kka-kin(a)-	murə-kka-kin(a)-
2	γənə-kka-kin(a)-	γənə-kka-kin(a)-	turə-kka-kin(a)-	turə-kka-kin(a)-
3	ətə-kka-kin(a)-	ətə-kka-kin(a)-	ətə-kka-kin(a)-	ətə-kka-kin(a)-

Since possessive pronouns are similar to adjectives, being used autonomously, they agree in person and number with the nominative head noun and are marked with standard person-number suffixes; these suffixes are listed in Table 22.

TABLE 22. Person-number markers of possessive pronouns

Number \ Person	sg	du	pl
	1	-jγəm	-muri
2	-jγət	-turi	-turu
3	[the vowel -a truncation]	-t	-w(wi)

COMMENTS on Table 22

The 3rd person possessive pronouns may have an additional syllable after a stressed vowel (see 1.3.4.3), cf. *γəninna* ‘your (sg)’, *əninna* ‘his/her/its’, but *γəmnin* ‘my’, *murγin* ‘our’, *turγin*

‘your (nsg)’, *ətyin* ‘their’.

Similarly to adjectives, possessive pronouns may become substantivized. In such cases, they are inflected using 1st or 2nd declension forms, depending on their referent (non-human/ human respectively).

2.4.3. Demonstrative pronouns

Viewed from their morphological properties, demonstrative pronominal adjectives are similar to relative adjectives (see 2.2.2); they usually consist of the demonstrative root plus the suffix {-in(a)}¹¹². The main Alutor demonstrative adjectives are: {ənnj.in(a)} ‘this’, {wut.in(a)/wutt.in(a)/wutt.aq} ‘this’, {ŋan.in(a)/ŋan.ka} ‘that’, {iyənnj.in(a)} ‘such’.

The demonstratives are used both attributively and without a head noun. Being used attributively, demonstratives agree with their head noun in person and number, the markers being the same as for other adjectives with the suffix *-in(a)*.

Being used without a head noun, they function like the 3rd person pronouns. In this case demonstratives are inflected using 1st or the 2nd declension forms depending on their referent (non-human/ human respectively). The most frequent case-number forms are shown in the Dictionary¹¹³.

Compare the following examples:

- (83) a. *ənyin* rara-ŋa na-tekə-n ənnan_j=ŋə^oiləyə-ŋ.
this+3sg house-NOM+SG LOW.A-make-3sg.P one=month-ADV
This house was built during one month.
- b. tə-laʔu-n miljut=ŋujjə-n, *ŋanin*
 1sg.A-see-3sg.P+PF hair=tail+NOM+SG **that+NOM+SG**
 t-akmitə-n, t-ivə-n ...
 1sg.A-take-3sg.P+PF 1sg.A-say-3sg.P+PF
I saw a hare tail. I took it and said ... [35:9]
- c. *wutina-ta* ina-jəl-i ənnə-ʔən.
this-ERG 1sg.P-give-3sg.A+PF fish+NOM+SG
This (one) gave me a fish.

¹¹² Some demonstratives may be used as bare roots, without any suffixes. In such cases they are referred to as demonstrative particles, cf. *ŋan* ‘there’ (particle) – *ŋanin* ‘that’ (pronominal adjective).

¹¹³ In the Dictionary case-number forms of the 1st and 2nd declension are marked with “human” or “non-human” respectively.

Besides demonstrative adjectives, there are also demonstrative adverbs derived from the same roots: *wutku* ‘here’, *wutkepəŋ* ‘from here’, *ŋanək* ‘there’, *iŋənŋinək* ‘that is why’ and others. In order to express great distance from the speaker and the hearer the iconic vowel lengthening is used (see 1.3.8.1), for instance, instead of *ŋanək* ‘there’ the form *ŋōnək* ‘far over there’ is often used.

2.4.4. Interrogative pronouns

The following two interrogative nouns are used in Alutor: {taq} ‘what’ (*tinya* ‘what, NOM+SG’) and {mik} ‘who’ (*miŋŋa* ‘who, NOM+SG’). They are used very much like nouns. The pronoun ‘what’ is declined as a word of the 1st declension, and the pronoun ‘who’ – as a word of the 2nd declension. The pronoun ‘what’ is used not only in the singular, but also in the plural (cf. *taq-uwwi* ‘what, NOM+PL’ [17:13]).

Being used predicatively, these pronouns agree with their S-actant (which can be omitted) in person and number:

- (84) **mik-iyət?**
 who-2sg
 Who are you? [5:12]

When the pronoun {taq} ‘what’ is used attributively in the underlying structure, it is obligatorily incorporated; in this case it means ‘what; what kind of’¹¹⁴. Compare:

- (85) **taq=ŋav.ʔan-iyət?**
 what=wife-2sg
 (It's not important) whose wife you are. [13:10]

A pronoun similar to the adjectival form is found only for the pronoun ‘who’ – it is the possessive pronoun *mik.in(a)-* ‘whose’¹¹⁵. It is used like any other possessive adjective marked with *-in(a)* and it may be substantivized like any other pronominal adjective.

¹¹⁴ Cf. the English pronoun *what* used attributively in phrases like *what book?*.

¹¹⁵ Actually, there exists an interrogative pronoun derived from the root {taq} by means of the suffix *-in(a)*, that is the pronoun {taq.in(a)}. However, it is used only to denote the object of certain verbs of speech such as ‘say, speak (about smth.)’ in an interrogative sentence, cf. *taq.in ənŋ.ina iv-la-ʔ* ‘What did they say?’ [10:48]

CHAPTER 3. Syntax

Comment: V etom fajle okonchatel'nyj vid glavy. Vse ispravlenija ubrany. Dlja kontrolja est' fail KI_SYNT_w91, v kotorom ispravlenija pokazany. Esli vozniknet neobxodimost' chto-libo izmenit', pokazhite mne.

In this chapter we shall briefly, without any ambitions to completeness, consider some of the most important topics of clause structure.

3.0. Basic notions

In this study of Alutor syntax we do not use such traditional syntactic notions as subject and object since, in our opinion, their common usage is not congruent with the internal structure of Alutor and would merely lead to misunderstanding. In this case it is more advisable to use more neutral notions based on a framework of core arguments constituting the base of clause syntactic structure (for the grounds of the opposition “core vs. peripheral arguments” see [Kibrik 1998]).

There is a restricted number of core arguments in a clause. If there is only one core argument in a clause¹¹⁶, the clause (as well as its predicate) is *intransitive*. This argument is called the *S-argument* (Sole) irrespective of its semantic role. If there are two core arguments in a clause, the clause (as well as its predicate) is *transitive*. A transitive clause has an agent-like *A-argument* (Agentive) and a patient-like *P-argument* (Patientive).

In our case, this terminology is preferable because it does not ascribe a particular syntactic pattern to Alutor clause structure, keeping this fundamental question open for further investigation, as there is not yet enough data to resolve this problem.

3.1. Transitivity increase and decrease

Alutor has a strict distinction between transitive and intransitive verbs. *Transitive* verbs have two core arguments: an *A-argument* and a *P-argument*. The *A-argument* is

¹¹⁶ In Alutor there are many ambient verbs with a zero S-argument indicating ‘environment of the event’:

- (i) murə-kki wutku ləq.laŋ-ki a-qajav-ka, aŋiyatka
we-LOC here winter-LOC A-freeze-PRED' very

wəjal.atə-tkən, kətiy.atə-tkən.

be(of.snowstorm)-IPF wind.blow-IPF

Here it's cold in winter. *There are strong snowstorms and wind.* [38:1]

- (ii) imjaq ʕitu-ruʔ-i.
already goose-fly.in-3sg.S
Geese have already flown in.

marked with the ergative and controls the prefix agreement slot in polypersonal conjugation; the P-argument is marked with the nominative and controls the suffix agreement slot in polypersonal conjugation. In monopersonal conjugation agreement is controlled by the P-argument.

Intransitive verbs have one core S-argument marked with the nominative that controls the suffix agreement slot in monopersonal conjugation and both agreement slots in polypersonal conjugation.

From the point of view of case marking Alutor uses the ergative alignment¹¹⁷, unifying the S/P-arguments (with the Absolutive hyperrole) and opposing them to the A-argument. Monopersonal conjugation is analogous (the Absolutive is the agreement controller). An interpretation of polypersonal conjugation is more controversial. Namely, the S-, A- and P-arguments use different sets of controlled agreement slots: The S-arguments control the prefix as well as suffix slots, the A-arguments control the prefix slots and the P-arguments control the suffix slots. Therefore, from the point of view of polypersonal conjugation the tripartite alignment is realized. From the point of view of the marker's material form, the prefix markers bring the A- and S-arguments in line with the accusative alignment (with the Principal hyperrole), opposing them to the P-argument; see 2.1.1.2.

In the suffix slots the sets of S- and P-markers are different, therefore the suffix slot realizes the tripartite alignment opposing the S/A/P-arguments.

In Alutor there are different means of including a verb's arguments into the set of core arguments as well as excluding them from the set of core arguments. The first process is called *i n c r e a s e*, and the second one *d e c r e a s e* of their syntactic status. These processes often take place simultaneously as the status of some argument increases while the status of another one decreases.

From the point of view of the increase/decrease of the syntactic status, the nominative position is the most important. This position is always present in a clause (it can lack material form in the context of ambient verbs or in case of ellipsis). It is the target of all increasing processes. Therefore, the Absolutive hyperrole can correspond to different primary semantic roles. In contrast to the nominative position, the ergative position is stable from the point of view of its role identification: it merges the agent and experiencer in the Agentive hyperrole. Almost always, it is the initial position of the government pattern of the respective verb¹¹⁸. The only exception

¹¹⁷ For a more detailed discussion of the typology of syntactic constructions and the corresponding hyperroles see [Kibrik 1997a].

¹¹⁸ This position can be added in the case of causativization, however in this case it is a derivational process producing a new lexeme rather than a diathesis change.

is when an intransitive verb with an agent in the S-position becomes transitive (see below). In this case the syntactic status of the agent argument decreases. This position cannot be the target of an increasing process.

Devices that combine increase and decrease are the following: varying government pattern, antipassivization, incorporation, and causativization (with preservation of the number of arguments). Autonomous increase of syntactic status takes place in case of agreement controlled by a dative NP and in case of causativization of intransitive verbs: in the latter case the verb receives the second core Agentive position. Let us consider these devices in more detail.

3.1.1. Varying government pattern

Some two-place verbs allow two diatheses — intransitive and transitive. For example, the verb *syisiv.at-* ‘joke’ <smb.: *N*, on smb.: *D*>, <smb.: *E*, on smb.: *N*>:

- (1) a. $\gamma\text{əmm}\text{ə}$ $t\text{ə-syisivat}\text{ə-k}$ $\text{ən}\text{ək}\text{ə-}\eta$.
 I+NOM 1sg.S=joke-1sg.S+PF he-DAT
 I played a joke on him [a=b]
- b. $\gamma\text{əm-nan}$ $t\text{ə-syisivat}\text{ə-n}$ ənnu .
 I-ERG 1sg.A=joke-3sg.P he+NOM

In (1a) the only agentive argument, ‘I’, is the core one, while in (1b) both NPs are the core arguments. In the latter case the goal ‘he’ is included in the number of core arguments. The government pattern of the verb *yal-* ‘pass by’ is analogous. In intransitive usage it has a peripheral place argument:

- (2) a. ənnu $\gamma\text{ala-tk}\text{ən}$ $\gamma\text{əm}\text{əkka-ten-e}$.
 he+NOM pass.by-IPF+3sg.S I-APUD-PROLAT
 He is *passing by* me.
- b. $\text{ə-nann}\text{ə}$ $\gamma\text{əmm}\text{ə}$ $\text{ina-}\gamma\text{al-e}$.
 he-ERG I+NOM 1sg.P-pass.by-3sg.S
 He *has passed by* me.

The commonly used verb *iv-* ‘say’ has two government patterns: <smb.: *N*, to smb.: *D*, smth.: *Scompl*>; <smb.: *E*, to smb.: *N*, smth.: *Scompl*>:

- (3) a. qutkin;ŋaqu ənnə-ŋ iv-i...
 Qutkinnaqu+NOM+SG fish-DAT say-3sg.S+PF
 Qutkinnaqu said to the fish... [1:11]
- b. ...qə-ʕəŋa.v-γə-na akka.ljʔ.e, q-iv-γə-na ...
 2.A+OPT-call-2.A+3.P-3pl.P men+NOM+PL 2.A+OPT-say-2.A+3.P-3pl.P
 ...call the men, tell them. [17:7]

The case marking of arguments in (3b) can be simply worked out with the help of verbal agreement.

3.1.2. Lability

Labile verbs license one-place as well as two-place government patterns. The first realizes an intransitive and the latter a transitive usage without the addition of any markers to the verb. In Alutor both labile schemes are present, A-lability preserving the agentive argument in both patterns as well as P-lability preserving the patientive argument.

The A-lability results in increase / decrease¹¹⁹ of the status of the patientive argument. In the transitive government pattern the patient occupies the nominative position while in the intransitive pattern the patient is unspecified or is absent from the government pattern of the verb:

- (4) a. γəm-nan tə-tivla-tkə-n nalγə-n.
I-ERG 1sg.A-beat.with.stick-IPF-3sg.P fell-NOM
 I beat *a fur* skin *with a stick*.
- b. ...γəmmə tə-tivla-tkən.
I-NOM 1sg.S-beat.with.stick-IPF
 {LC: Before (I) come into the house,} I *beat (my clothing) with a stick*.

The following verbs are similar: *ajaʔu.lqiv-* ‘start fishing with a hook, with a rod’ <smb.: *N*>, <smb.: *E*, smth.: *N*>; *aljə.tku-* ‘remove a superficial layer (peel a potato, skin a fish, shave a tree, process a skin, scrape)’ <smb.: *N*>, <smb.: *E*, smth.: *N*>. Interesting in this respect is a certain Alutor verb derived from the interrogative pronoun *taq* ‘what’, *taq-* ‘what to do’ <smb.: *N*>, <smb.: *E*, to smb.: *N*>:

- (5) a. qə-taqə-tkən wasaq!
 2sg.S+OPT- what.to.do-IPF sometimes

¹¹⁹ Depending on which government pattern is accepted as the primary one.

Sometimes *do something!*

- b. ...mik-ənak ən-taqə-nd?
 who-ERG+SG LOW.A+OPT-what.to.do-3pl.P
 {LC: Skis are in their own place} . Who will do anything to them? [13:31]

In (5a) the verb has intransitive conjugation, while in (5b) it has transitive conjugation with an overt ergative A-argument.

P-lability licenses the presence/absence of an Agentive argument in a government pattern in which the nominative patient of the verb is preserved. For example the verb *tku-* is P-labile: ‘be finished’ <smth.: *N*>; ‘finish, wipe out’ <smb.: *E*, smb/smth.: *N*>’. Derivational relations of the verb *ujp-* are more complicated: ‘be cut, be pricked, thrust a splinter (into)’ <smb.: *N*; with smth.: *E*>; ‘stick, string’ <smb.: *E*, smth.: *N*; in(to) smth.: *L*>.

- (6) a. vitatγəŋə-n ku-tkən.
 work-NOM finish-IPF
 The work *has finished*.
- b. ḡənvə.q tanḡə=ʔirra-n na-tku-lqivə-tkə-n
 many enemy=troop-NOM+SG LOW.A-finish-LQIV-IPF-3sg.P
 əmqə-tək.
 Emqa-ERG+NSG
 The Emqas *wiped out* a great number of enemy parties. [21:4]

- (7) a. t̪i-ta t-ujpə-k.
 needle-ERG 1sg.S-stick-1sg.S
 I stuck (myself) with the needle.
- b. γəm-nan t-ujpə-n uttə-ʔut nutal.qə-k.
 I-ERG 1sg.A-stick-3sg.P stake-NOM+SG earth-LOC
 I stuck a stake into the ground [=in the ground].

Comment: [see dictionary *ujp2*]
 [It is necessary to check the identity of the translation in the dictionary]

3.1.3. Antipassive

3.1.3.1. Antipassive syntax

The increase of syntactic status is possible in the context of multi-place verbs because the single argument of a one-place verb initially occupies the highest position. The increase is marked with the antipassive marker *ima-*, identical to the ‘1sg.P’

agreement marker (see 2.1.1.2.3)¹²⁰. It most frequently increases the status of the A-argument of a transitive verb:

- (8) a. q-akmitə-γə-n *sullə*.
 2.A+OPT-take-2.A+3.P-3sg.P salt.NOM
 Take salt!
- b. γəm.nin mətqə-mət aviska,
 my+3sg fat-NOM+SG a.lot.of
- q-in-akmi.t-γi *mətq-a*.
 2.S+OPT-ANTI-take-2sg.S+PF+OPT fat-ERG
 I have much fat, take fat. [11:3]

The transitive agentive verb being antipassivized, the decreased patient is marked with the ergative¹²¹. Being antipassivized, the behavior of the experiential verb changes: the decreased stimulus is marked with the dative:

- (9) a. ə-nannə tənwəlpə-tkə-ni-n sākəγit.
 he-ERG recognize-IPF-3sg.A+3P-3sg.P sister+NOM+SG
 He recognizes the sister. [a=b]
- b. ənnu ina-nnəwəlp.atə-tkə-n¹²² sākītə-ŋ.
 he+NOM ANTI-recognize-IPF-3sg.S sister-DAT

The antipassive can also mark an increase in the status of a peripheral argument. Thus, the verb *t/n.sem.av-* ‘draw nearer’ <smb.: *E*, smth.: *N*, to smb./smth.: *D/Lat*>, besides the primary diathesis, has a derived one, with an increasing of the addressee:

- (10) a. ə-nannə tə.səm.avə-ni-n *ʕərvə-ʕət* arγiŋ-kəŋ.
 he-ERG draw.nearer-3sg.A+3P-3sg.P boat+NOM coast-LAT

¹²⁰ As claimed above, the general function of this morpheme is to mark an unusual filling of a specific syntactic position; with this function in mind this marker is called the inversion marker.

¹²¹ In Alutor the ergative case syncretically marks a core Agentive argument or a peripheral argument initially bearing the instrument semantic role or indicating a demoted patient.

¹²² This verb tends to have the suffix *-at* added in case of antipassivization.

He drove the boat to the coast.

- b. ə-nannə *aryiŋ* *inja-n;sem.avə-tkə-ni-n* ʕətəv-a.
 he-ERG coast+NOM ANTI- draw.nearer-IPF-3sg.A+3P-3sg.P boat-ERG
 He drives the boat to the coast.

In this way, the antipassive is not obligatorily followed by a decrease in transitivity; see (10b).

In Alutor there are verbs that are always accompanied by the *ina-* marker, for example, *in.emə-* ‘scoop, draw’ (etymologically bound with the intransitive verb *emə-* ‘go for water’). This verb has three arguments (agent, patient, and instrument), optionally complemented by benefactive. The interpretation is possible that in primary diathesis there is no argument that fills the highest position, therefore the location of any argument in this position is marked with the inversion marker:

- (11) a. *ənnu* *in.emə-tkə-n* *miml-a* *eminaŋ-a*
 he+NOM ANTI.draw.out-3sg.S water-ERG scoop-ERG
tumγə-ŋ.
 neighbour- DAT
 He is drawing out water with the scoop to (his) neighbour. [a=b=c]
- b. ə-nannə *tumγə-tum* *in.emə-tkə-ni-n*
 he-ERG neighbour-NOM ANTI. draw.out-IPF-3sg.A+3P-3sg.P
miml-a *eminaŋ-a.*
 water- ERG scoop-ERG
- c. ə-nannə *eminaŋ* *in.emə-tkə-ni-n*
 he-ERG scoop+NOM ANTI. draw.out-3sg.A+3P -IPF-3sg.P
miml-a *tumγə-ŋ.*
 water-ERG neighbour-DAT

3.1.3.2. Semantics of the antipassive

In a number of cases the use of the antipassive is motivated by the communicative structure of an utterance, namely by the need of the speaker to focus attention on an argument occupying a non-central position in the verbal government pattern or, conversely, to remove an argument from a pragmatically salient position. Thus in the following examples the use of the antipassive is motivated by the need to remove the patient from the utterance:

- (12) a. ...*ina*-tʃ.atə-tkən tatulj-pilj sasusanjawət.
ANTI-dig-IPF fox-DIMIN+NOM+SG Sasusangawet
 {LC: Later she saw, not far away} a vixen (named) Sasusangawet {="fox-woman"}(who) *was digging*. [11:2]
- b. ənɲin ənpəɲav qiwwa.ŋ *ina*-ləʔu-tkən.
 this old.woman.NOM badly *ANTI*-see-IPF
 This old woman sees badly.

At the same time, it is important to note that in Alutor there are syntactic contexts favoring the antipassive. Thus in a relative clause the deleted coreferential NP should be marked with the nominative. If in a primary diathesis this NP is marked with an oblique case, antipassivization is necessary:

- (13) ...to ikav ɲan.in t.ilu-lʔatə-tkə-ni-n
 and also that+3sg shake.up-ITER-IPF-3sg.A+3P-3sg.P
 tanɲə-ɲaɲu ʕal-a *ina*-n.pənkət.al...
 enemy-AUGM+NOM+SG axe-ERG *ANTI*-thrust.in
 {LC: And thus he attacked the enemy,} swinging the warrior [=enemy], *in (whom) he had got* (his) axe stuck, {RC: because it was impossible to take it out} [21:19]
- (14) to naqam ɣəm.nina tumɣ-uwwi qənut maɲ.ina
 and only my+3sg friend-NOM+PL that
 which+3pl
 ɲətʊ.ɣəɲə-k *ina*-ɲɲju-lʔ-u...
 entrance-LOC *ANTI*-watch-ATR-NOM+PL
 Only my friends, those *who were watching* over the exit, {RC: they ended up spearing each other.} [21:108]

In (13) the verb *t/n.pənkət.at-* is the causative from the verb *pənkət-* ‘get stuck’, it has the government pattern <smb.: *E*; smth.: *N*; in smth.: *L*>. In the primary structure of the relative clause the coreferential NP ‘enemy’ takes the locative form, therefore antipassivization takes place. In (14) the relativized NP ‘friends’ is marked in its primary diathesis with the ergative, so the antipassive is used.

The usage of the antipassive has not been exhaustively investigated. It is relatively rare in the texts, however the tendency for the syntactic usage of the nominative is attested, i.e. the tendency towards syntactic ergativity in Alutor; see [Kibrik 1979].

3.1.4. Incorporation

3.1.4.1. Syntax of incorporation

Syntactically incorporation can be described as a process resulting in some constituent (*target of incorporation*) being deprived of its independent syntactic position and being included in the stem of a word that immediately governs it (*goal of incorporation*). Incorporation does not obligatorily entail the change of the argument structure, its functions are more general, therefore in this section it is reasonable to consider this process from the point of view of its syntactic potential in general.

The goal of incorporation can be the head of a VP (the verb) or of a NP (the noun). As a result verbal and nominal compounds¹²³ appear. Any modifiers of VPs and NPs can be the targets of incorporation. They can belong to different word classes.

The types of targets will be considered separately for VPs and NPs.

3.1.4.1.1. VP incorporation

Incorporation of the P-argument is most widespread. In this case the verb usually becomes intransitive, while its initial A-argument becomes the S-argument:

- (15)a. am-misʔa-sʔə-n itʔə-n
SUPERL-beautiful-SUPERL-NOM+SG fur.coat-NOM+SG
γ-εpə-lin to ru=kamlil-la-tkə-t.
RES-put.on-RES+3sg.P and house=go.around-PLUR-IPF-3nsg.S+IPF
They were dressed in the most beautiful fur coats and were going around *the house*.
[6:9]

- b. keŋə-n γα-təllə=n.waŋtal-lin ŋan.in=ʕujamtawilʔə-ŋ.
bear-NOM+SG RES-door=open-RES+3sg.S that=man-DAT
The bear opened *the door* of the person's (house) [= to that person]. [12:1]

In (15a) the transitive verb ‘go around’ becomes intransitive and agrees in non-singular with the contextually retrievable S-argument ‘dogs’. In (15b) there is an overt S-argument *keŋən* ‘bear’ of the intransitivized verb ‘open’. The benefactive preserves its marking as a peripheral argument. However, it is not obligatory. In the context of patient incorporation a benefactive can be promoted to the nominative position, transitivity of the verb being preserved:

¹²³ Such insight on incorporation is widely presented in the works on Chukotko-Kamchatkan languages, cf. [Skorik 1948; 1977; Zhukova 1953; 1972; Muravyova 1989b; 1990b].

- (16) mitē, qə-*milyʃ*=nna-γə-na ηavə.sq.e.
 Miti+NOM+SG 2.A+OPT-fire=carry.out-2.A+3.P-3pl.P girl+NOM+PL
 Miti, carry out *the fire* for the girls. [8:62]

The S-argument can be incorporated as well. In this case a peripheral argument fills the vacated position:

- (17) ʕoro γa-*wim*=ir-lin...
 after.that RES-path=come.across-RES+3sg.S
 {LC: ... once there lived their great grandfather, he went to the tundra to take a walk.}
 After that he came across *a path* ... [24:2]

The verb *ir-* ‘hit accidentally; come across’ is a two-place intransitive predicate: <smb./smth.: *N*, smth.: *L*>. Under incorporation of the initial S-argument the vacated position is filled by a contextually retrieved locative argument (‘great-grandfather’).

Incorporation is a widespread process in the case when an S/P-argument is a possessive NP. In this case the head of such a NP is incorporated, the possessor being raised:

- (18) a. ...na-*nanqʃ*=rra-tkə-na ηav.ʔan-u qəlavul-ə(tək) ...
 LOW.A-belly=cut.open-IPF-3pl.P wife-NOM+PL husband-(ERG+NSG)
 {LC: They prepared to give birth to a child, and when labour pain occurred,} (here) the husbands cut open (their) wife's *bellies*... [15:2]
- b. to ʕoro γa-*qmi*=tku-lan...
 and after.that RES-arrow=finish-RES+3pl.S
 But then they ran out of (their) *arrows* [=they arrow-finished], {RC: and then they began to fight with spears.} [21:13]

In (18a) an initially transitive (with the P-target), while in (18b) an initially intransitive verb (with the S-target) is presented.

Peripheral arguments, as well as core arguments can be incorporated:

- (19)a. to vitya əmqa-wwi γa-*wəjwʃ*=ηtu-lan...
 and at.once Emqa-NOM+PL RES-fortress=go.out-RES+3pl.S
 And then and there the Emqas went out *from the fortress* {RC: and went to the local tundra, ...} [21:11]

- b. ... *ya-laʔu-lin* *səʔe=pitqə-ljʔə-n*.
RES-see-RES+3sg.P *sand=hide-ATR-NOM+SG*
{LC: In the morning people woke up, and} found (the man) hidden in the *sands*.
[18:19]

A verb can incorporate an adverb as well as a verb (one-word subordinate clause):

- (20) a. ...to *inmə=viʔ-i*.
and *falsely=die-3sg.S+PF*
{LC: Qutkinnaqu saw his wife} and pretended (that) he was dead [=and *falsely* died].
[2:31]
- b. *aməs* *qun*, *qə-vʔə=tawarjə-nat...*
well-then well 2.S+OPT-*die*=try-3du.P
And well then, test them (to see *if they are*) *dead*, {RC: cut the lip of one, begin from the elder.} [20:39]

In (20a) the adverb ‘falsely’ is incorporated, in (20b) it is a one-word subordinate clause ‘test them to see s[if they are dead]s’.

3.1.4.1.2. NP incorporation

The head noun of a NP as the goal of incorporation can be marked with the nominative or an oblique case. In case of a head noun in the nominative incorporation is optional, while in case of a head noun in an oblique case incorporation is obligatory (in other words, noun phrases marked with an oblique case cannot have free modifiers).

Different head noun modifiers can be the targets of NP incorporation. First, adjectives, determiners, and numerals can be the targets of incorporation.

- (21) a. *ŋan* *meŋə=kuka-k* *q-iwʔisi-γi*.
over.there *big=pot-LOC* 2.S+OPT-drink.water-2sg.S+PF+OPT
Drink from the *big* pot over there. [3:3]
- b. *qutkinŋaqa* *ŋan=ʔətʔəjula-k* *pətq.at-i*.
Qutkinnaqu+NOM+SG *that=remote.place-LOC* fall-3sg.S+PF
Qutkinnaqu fell (into the sea) in *that* remote place. [4:18]
- c. *ŋər.u.n=nəm.jərʔə-ŋ* *mən-ʔə-juʔə-na*
three=village-ADV 1nsg.A+CONJ-CONJ-reach-3pl.P
ʔətʔə.mətə.lʔ-u...

Karaga.person-NOM+PL

If only (our) *three* villages could overtake the Karaga people... [19:6]

Second, nouns modifying the head noun can be incorporated, irrespective of a semantic relation joining the head noun with its modifier.

- (22)a. *qutkin;ŋa*qu *ŋə*və-j *ɣə*ral;ja.mjatə-k
Qutkinnaqu+NOM+SG begin-3sg.S+PF vomit-INF
*mi*ljuʔ=təry-a, *rə*ʔ=təry-a to *as*ʔʔ=tilq-a.
hare=meat-ERG *ptarmigan*=meat-ERG and *fat*=mash-ERG
Qutkinnaqu began to vomit *hare's* meat, *ptarmigan's* meat and *greasy* mash. [2:33]
- b. to *tu*-ni-n *miti*-nak *rə*ʔʔ=kuka-ŋa.
and eat-3sg.A+3P-3sg.P Miti-ERG+SG *cloudberry*=pot-NOM+SG
And Miti ate the pot of *cloudberries*. [7:3]
- c. ... *ɣa*-juʔə-lqiv-lin *vʔ*ʔʔ=rara-ŋa.
RES-reach-LQIV-RES+3sg.P *grass*=house-NOM+SG
...they arrived at a *grass* house. [6:16]

In (22a) the first two incorporated compounds include the meaning of unalienable possession, the third includes the meaning of associatedness ('mash with fat'); in (22b) the meaning of measure is represented ('the pot of cloudberries'), (22c) exemplifies the meaning of material ('grass house').

Third, a sentential modifier can be incorporated:

- (23) □ *tol*ʔ=pujɣə-n *ɣənəkə*-ŋ *qə*-prə-sqiv-ɣə-n.
roast=stick-NOM+SG you-DAT 2.A+OPT-tear.off-go-2.A+3.P-3sg.P
...tear off for yourself a stick *for roasting*. [9:15]

In (23) the verb representing a one-word subordinate clause indicating function ('stick for roasting') is incorporated. A relative clause reduced with the help of incorporation is shown in (24):

- (24) *ŋan*(.ina) *ul*jaʔu.tkuʔ=ʔuttə-k *na*-n.illitə-tkə-ni-na...
that+NOM+PL walk.in.a.mask=stick-LOC LOW.A-hang-IPF-3sg.A+3P-3pl.P
They hang those (things) on the sticks *that they walk in masks with* ... [28:7]

3.1.4.2. Semantics of incorporation

Incorporation is a device that simplifies the syntactic structure of a clause. It

decreases the syntactic rank of constituents that are out of the scope of assertion and, more generally, beyond the focus of attention¹²⁴. If incorporation affects the constituent that occupies a prestigious position in a clause, it opens the possibility of raising the status of another constituent occupying a peripheral position in the initial structure.

Along with this, it is possible to confirm the usage of incorporation for the purpose of overcoming syntactic restrictions over syntactic structure. For example, *-lʔ-* participles form reduced relative clauses whose nominative argument is coreferential with the head NP. With respect to this restriction it is sometimes necessary to free the nominative position, incorporating the P-argument of a transitive verb:

- (25) ə.ninnə un;unju qur=etata-lʔ-u itə-tkən.
 his/her+3sg child+NOM+SG reindeer=drive-ATR-EQUAT be-IPF
 {LC: Patat used him as a worker, and} his son was a *reindeer* drover. [16:11]

To illustrate the functions of incorporation, consider the following example:

- (26) γ-akmi.l-lin rənnə=ʕal to
 RES-take-RES+3sg.P horn=axe+NOM+SG and
 γa-lʕin;njə=svi-l(in) ənki naqam mil;γə=ttu-lʔata-lʔə-n.
 RES-neck=cut-RES+3sg.S here at.once fire=blow-ITER-ATR-NOM+SG

(The man) took a *horn* axe and instantly cut off the *head* [=cut the *neck*] of the one (who was) blowing *fire*. [18:11]

In (26) there are three incorporation compounds. The expression *rənnə=ʕal* ‘horn axe’ is idiomatic, it refers to an artifact. The compound *γalʕin;njə=svil(in)* ‘cut the neck’ allows to heighten the status of the possessor, expressed by the substantivized participle *mil;γə=ttulʔatəlʔən* ‘the one who was blowing fire’. Note that incorporated P-argument of the verb ‘blow’ allows to form this type of participle referring to the performer of the action.

3.1.5. Causativization

Causativization is a standard means of adding an agentive argument to a verb's semantic valence. In this case an intransitive verb becomes transitive. In Alutor this

¹²⁴ For details see [Muravyova 1990b].

type of causative derivation is a very productive means of increasing transitivity. Besides this, a causative derivate can heighten the status of a peripheral argument without adding a new argument. For example, the intransitive verb ‘walk around’ <smb.: *N*, smth.: *L*> becomes transitive under causativization, cf.:

- (27) a. $\gamma\text{əmm}\text{ə}$ $t\text{ə-kamlil}\text{ə-k}$ $rara-k$.
 I+NOM 1sg.S-walk.around-1sg.S house-LOC
 I walked around the house. [a=b]
- b. $\gamma\text{əm-nan}$ $t\text{ə-n.kamlil.}\mathbf{av}\text{ə-n}$ $rara-\eta a$.
 I-ERG 1sg.A-walk.around-3sg.P house-NOM+SG

In (27b) the causative verb re-interprets the initial peripheral argument ‘house’ as the Absolutive. Initial S-argument receives an iconic agentive marking in the ergative case.

3.1.6. Dative agreement

Transitive verbs usually agree with A- and P-arguments. However a personal recipient/addressee of a three-place verb can “usurp” control over the P-marker:

- (28) $akt\text{əka}$ $m\text{ə-jəl-}\gamma\text{ət}$ $java-l^?uwwi \dots$
 impossible 1sg.A+OPT-give-2sg.P use-ATR-NOM+PL
 I can't give *you* (my) clothes [=those I'm using]. {RC: Later my husband will come, and I will give you the clothes on the sledge.} [7:34]

The P-argument *java/ʔuwwi* ‘used’ preserves its nominative marking, however the verb agrees with the recipient ‘to you’. In such clauses the properties of a P-argument are distributed between the patient (case) and recipient (agreement).

3.2. Word order

Alutor has free word order. It is often difficult to claim which order is basic. Discontinuous constituents are also possible.

3.2.1. Word order in a predicate-argument structure

In verbal clauses the most frequent word order structures are SVO and VSO:

- (29) a. $tita\cdot qa$ $qutkin\eta\eta aqu-nak$ $ma\eta.ki\cdot\text{ʔana}$
 one.day Qutkinnaqu-ERG+SG somewhere

- (32) a. $\gamma\text{a-jun.at}\bar{\text{a}}\text{-lqiv}$ $\text{kuut}\bar{\text{a}}\text{-k}$ $n\bar{\text{a}}\text{-kat}\gamma\text{u-qin}$ **ʕujamtawilʔ\bar{\text{a}}\text{-n.}**
 RES-live-LQIV Kuut-LOC ADJ-strong-ADJ+3sg person-NOM+SG
 (There was) a *strong person* {i.e. Emqa} (who) lived on (the island) Kuut. [21:1]
- b. **$\eta\text{av}\bar{\text{a}}.\text{sq}\bar{\text{a}}\text{-n}$** $n\bar{\text{a}}\text{-tur-qin}\dots$
 woman-NOM+SG ADJ-young-ADJ+3sg
 A *young woman* {RC: prepared to give birth to a child and cried in the tundra.} [15:3]

Moreover, discontinuous NPs are also permissible:

- (33) a. $\bar{\text{a}}\text{-nann}\bar{\text{a}}$ $\eta\text{ita.q}$ mata-ni-nat $\eta\text{av.}ʔ\text{an-ti}\dots$
 (s)he-ERG two marry-3sg.A+3P-3du.P wife-NOM+DU
 He married *two wives*... [8:70]
- b. $\text{ilir}=\text{wajam}\bar{\text{a}}\text{-k}$ **$\bar{\text{a}}.\text{ninn}\bar{\text{a}}$** $\gamma\text{-it}\bar{\text{a}}\text{-lqiv-lin}$
 Ilir=river-LOC his/her+3sg RES-be-LQIV-RES+3sg.S
 $n\bar{\text{a}}\text{-mal-qin}$ **$\bar{\text{a}}\text{nn}\bar{\text{a}}\text{qlak}$** $\text{qura.ra.mk}\bar{\text{a}}\text{-n.}$
 ADJ-good-ADJ+3sg acquaintance+NOM+SG Lamut.person-NOM+SG
 On the Ilir river **he** had a good *Lamut acquaintance*. [22:91]
- c. $\dots\bar{\text{a}}.\text{ninn}\bar{\text{a}}$ $\text{ma}\eta.\text{ki}$ $\bar{\text{a}}\text{p}\bar{\text{a}}\text{-tk}\bar{\text{a}}\text{n}$ ujisv.at-kin
 his/her+3sg where be.attached-IPF play-REL+3sg
 $n\text{-iwl}\bar{\text{a}}\text{-qin}$ $\text{para-l}\eta\bar{\text{a}}\text{n}\dots$
 ADJ-long-ADJ+3sg pole-NOM+SG
 {LC: Pinginang came home and} *his playing high pole* was there... [21:92]

An appositive construction can also be discontinuous:

- (34) a. $\text{t}\bar{\text{e}}\eta\text{akjav-}\bar{\text{a}}\text{nak}$ $\bar{\text{a}}\text{llanji}$
 Tengakyav-ERG+SG younger.brother+NOM+SG
 $\gamma\text{a-n}\eta\text{iv-lin}$, $\text{mulj}\bar{\text{it}}\text{kan}\dots$
 RES-send-RES+3sg.P Mullitkang+NOM+SG
 Tengakyav sent *his younger brother, Mullitkang*... [22:54]
- b. to $\text{am}\bar{\text{a}}\text{n.}\eta\text{a}$ $\bar{\text{a}}\text{np}\bar{\text{a}}.\text{qlavul}$ $\gamma\text{-awwav-lin}$
 and also old.man+NOM+SG RES-leave-RES+3sg.S
 $\text{ju}\eta\text{ju-}\eta$ $\eta\bar{\text{a}}\text{r}ʔ\bar{\text{a}}\gamma\bar{\text{a}}\eta\bar{\text{a}}\text{-n.}$
 whale-DAT Ngeregerngen-NOM+SG
 And the *old man Ngeregerngen* also came for the whale. [23:10]

3.2.3. The Sentence

The order of the main and subordinate clauses is not fixed. Besides, the embedding of parts of the subordinate clause into the main clause is possible:

- (35) numal.nim allə *maŋ.ki* itɣəp.at-ka
 again not where be.known-PRED`
ɣ-itə-lqiv-lin *ŋan.in* *qura.ra.mkə-n*.
 RES-be-LQIV-RES+3sg.S that+3sg Lamut.person-NOM+SG

(And) later nothing was known about the Lamut [=where the Lamut was]. [22:93]

3.3. Clauses with nominal predicates

Usually there is a distinction between existential, taxonomic, characterizing, and identificational nominal clauses. In Alutor existential clauses are opposed to all other types of nominal clauses.

3.3.1. Status of existential clauses

Alutor existential clauses are not in the strict sense nominal. They have the verb *it-* ‘be, be found’ governing the nominative S-argument.

- (36) a. to əmqa-nin *jilʔalŋə.tumɣə-n*
 and Emqa-POSS.SG+3sg male.cousin-NOM+SG

ɣ-itə-lqiv-lin...

RES-be-LQIV-RES+3sg.S

...And Emqa had a *male cousin* ... [21:3]

- b. wajən sətuljə-ljqə-k *kus.inaŋ* **itə-tkən.**
 here table-SUPER-LOC spoon+NOM+SG be-IPF

There **is** a *spoon* on the table. [35:17]

Since in nominal clauses this type of verb is not used as an auxiliary (see below), there are grounds to consider existential clauses verbal.

3.3.2. Taxonomic clauses

Taxonomic clauses indicating the membership of a nominal argument in a class of objects have two main patterns. *The first*, most natural pattern is a combination of two adjacent NPs, one of them being the S-argument, and the other the predicate:

- (37) a. qutawwəjŋə-nin qetakalŋə-n ʕaqaniŋvit
 [Qutawweyngen-POSS.SG+3sg brother-NOM+SG Aqaningvit+NOM+SG]

qajəlfʰinnə-kin.

[Qayelinne-REL+3sg]

{LC: Once there lived an old man from Alut {the village Alutorka} called Qutawweyngen and his wife Kemlingawet.} (And) Qutawweyngen's brother Aqaningvit, (was) from Qayelinnen {the village Khayilino}. [30:2]

b. tur.γin sinin.kin qetakalḡə-n ʕaqaniḡvit.

[your+3sg one's.own+3sg brother-NOM+SG] [Aqaningvit+NOM+SG]

Aqaningvit is your own brother. [30:16]

In (37a) the order of NPs is SV, in (37b) it is inverted: VS. The nominal argument can be expressed as a demonstrative/deictic pronoun *wuttin* ‘this’:

(38) wutt.in kəsīm=ʔujpə-lḡən, wutt.in ləla=ʔujpə-lḡən,
[[this+3sg] [kidney=stick-NOM+SG]] [[this+3sg] [eye=stick-NOM+SG]]

wutt.in punta=ʔujpə-lḡən.
[[this+3sg] [liver=stick-NOM+SG]]

{LC: She went out for a stick for roasting;} This is a stick for the kidney. This is a stick for the eyes. This is a stick for the liver. [14:13]

The head of a predicate NP is marked with the predicative form of a noun (see 2.3.2), namely the overt personal markers controlled by 1st/2nd person S-arguments:

(39) *tita-kin-eyəm* γəmmə(ḡ) γə.nin-eyəm ḡav.akk-eyəm.
when-REL-1sg I+NOM your+1sg daughter-1sg

Once I was your daughter. [6:33]

In the predicate NP *titakin-eyəm γə.nin-eyəm ḡavakk-eyəm* ‘your once upon a time daughter’ its head *ḡavakk-eyəm*, as well as modifiers agree in person-number with the S-argument.

The second pattern uses the verb *it-* that has in this context the meaning ‘be, serve as’ <smb.: *N*, as smb.: *Eq*>. This verb is compatible with the values of all verbal categories in accordance with the semantics of the clause. In the predicate position the noun is marked with the equative:

(40) a. jaqqə ənnu a-ləḡa-ki-nu n-it-qin.
well (s)he+NOM A-eye-CARIT-EQUAT ADJ'-be-ADJ'+3sg

Actually she was *blind*. [35:10]

- b. ə.ninnə unjuŋu qur=etata-lʔ-u itə-tkən.
 his/her+3sg child+NOM+SG reindeer=drive-ATR-EQUAT be-IPF
 ...his son was a *reindeer* drover. [16:11]
- c. ...aŋaŋə.lʔ-u t-itə-lqi.
 shaman-EQUAT POT-be-LQIV+PF
 {LC: If you step over me along the waist,} you will become a *shaman*. [24:12]

In (40a) the predicate position is occupied by a substantivized caritive adjective, in (40b) by a substantivized participle, and in (40c) by a noun¹²⁶.

3.3.3. Characterizing clauses

Characterizing clauses add individual properties to the noun's referent. In the predicate position the use of adjectives is the most natural.

- (41) a. kali.lʔə=kulta-lŋən nə-ʕumrə-qin, allə a-sim.av-kəlʔin.
 eared.seal=skin-NOM+SG ADJ-strong-ADJ+3sg not A-tear.out-NEG+3sg
 Eared-seal skins *are strong*. They don't tear out. [27:8]
- b. tərup=təryə-tər n-aljjo-qin,
 Teruppe=meat-NOM+SG ADJ-sweet-ADJ+3sg
 num kiwəl n-aljjo-qin.
 again blood+NOM+SG ADJ-sweet-ADJ+3sg
 Teruppe's meat (was) *sweet*. (Its) blood (was) also *sweet*. [10:3]

However, in the predicate position a noun modified by an adjective bearing the main characterization function is also possible:

- (42) patat=γətγə-n — nə-mejə-qin γətγə-n.
 Patat=lake-NOM+SG ADJ-big-ADJ+3sg lake-NOM+SG
 Lake Patat is a *big lake*. [16:1]

Such clauses confirm that if a generic noun is missing (see examples (41a-b)), the adjective is substantivized.

In the predicate position an adjective can be complicated by the degree marker or marked as the caritive or predicative:

- (43) a. tinməla-lʔə-n qutawwəjŋə-n...
 deceive-MAGN-NOM+SG Qutawweyngen-NOM+SG

¹²⁶ This noun historically goes back to a participle as well.

Qutawweyngen *is a deceiver*... [30:35]

- b. to ənn.ina-wwi kəs=sul.atə-lʔ-uwwi aŋe
and this-3pl strong=salt-ATR-NOM+PL very

a-ktə-ka-wwi ...

A-strong-PRED-3pl

And these abundantly-salted (fish) *are* very *strong*... [33:30]

- c. *allə* mur-u *a-kujjə-kəlʔə-muru*.
not we-NOM+PL A-mug-CARIT-1pl

We don't have a mug.. [4:21]

Pronominal S-arguments can be absent since personal markers on the predicate are present:

- (44) *nə-mraj-iyət* ʕujamtawilʔ-**iyət**, mal=jun.at.γəŋə-lʔ-**iyət** ...
ADJ-successful-2sg person-2sg good=life-ATR-2sg
You are a successful person, your life is good... [24:7]

Analytical forms can be used if a qualitative description of the S-argument refers to the past or future only:

- (45) a. *ŋanə.k* γəmmə *nə-mq-iyəm* ***n-it-iyəm*** ...
then I+NOM ADJ-small-1sg ADJ -be-1sg
Then I was (still) a child... [29:5]
- b. *mitiv* ojiv *nə-mal-qin* γəγəŋ.in
tomorrow you.know ADJ-good-ADJ+3sg weather+NOM+SG
t-itə-ŋ..
POT-be-POT
Tomorrow will be good weather. ... [29:52]

Habitual processes can be expressed as a nominal clause:

- (46) *allə* tita *a-ʕanqa.v-kəlʔin* *jajarə.tku-k*
not when A-stop-NEG+3sg play.the.drum-INF
kəlʔəjəqitγənaqu.
Kellelqitgenaqu
Kellelqitgenaqu was always playing the drum [=never stopped playing the drum]. [8:2]

3.3.4. Identification clauses

Identification clauses have the same structure as other nominal clauses: they consist of two adjacent NPs being in a relation of referential identity. The auxiliary verb *it-* ‘be, be found’ marked with the resultative can also be used:

- (47) a. waj-ʔənnul-eyəm qun ɣəmmə ...
 here-the.same-1sg well I+NOM
 Look, I am the very one... [8:52]
- b. to ɲan.inə-n nənni ɣ-itə-lqiv-lin
 and that-POSS.SG+3sg name+NOM+SG RES-be-LQIV-RES+3sg.S
 ənpə.qlavul-in tanutaŋ.
 old.man-POSS+3sg Tanutang+NOM+SG
 And the name of that old man was Tanutang. [24:14]

In (47b) the first NP is discontinued by the verb *ɣitəlvlin*.

3.4. Relative clause

In Alutor there are two main means of a relative clause formation — with the help of the participle construction or the finite subordinate clause.

3.4.1. Participle strategy

The *-lʔ-* participle marks the head of a relative clause if both coreferential NPs are marked with the nominative. The dependent NP can be omitted or reduced to a relative pronoun *maŋin/maŋki* ‘which/where’ often combined with the correlative pronoun *qəmut* ‘as/such/there’¹²⁷.

- (48) a. ...ɣa-ŋvu-lin akin-ʔat qənavə-k piŋinaŋ,
 RES-begin-RES+3sg.P already shoot-INF Pinginang+NOM+SG
 para-lqə-k ***itə-lʔə-n.***
 [pole-SUPER-LOC be-ATR-NOM+SG]¹²⁸
 {LC: And the enemies came and} at once began to shoot at Pinginang *standing* on the top of the pole. [21:100]
- b. to naqam ɣəm.nina tumɣ-uwwi
 and only my+3sg friend-NOM+PL

¹²⁷ This word is also used in comparative constructions.

¹²⁸ Square brackets in the interlinear translation line mark the boundaries of a relative clause.

qənutmaŋ.ina ɲətu.ɣəŋə-k **ina-ŋŋju-lʔ-u ...**
 [that which+3pl entrance-LOC ANTI-watch-ATR-NOM+PL]
 Only my friends, *those who* were watching over the exit, {RC: they ended up spearing each other.} [21:108]

In (48b) the relative clause has a transitive verb, so antipassivization is necessary to promote the coreferential A-argument into the nominative position.

In the main clause a full NP can be expanded by the demonstrative pronoun *ŋanin* ‘that’:

(49) to vitya *qənut maŋ.ina* **ina-nŋju-lʔ-uwwi**
 and at.once [how which+3sg ANTI-watch-ATR-NOM+PL
 tənu.ɣəŋə-k to *ŋan.ina* ʕoptə.lj.u
 chimney-LOC] and that+NOM+SG all
 ɣa-wa.lqiv-laŋin ...
 RES-run.away-RES+3pl.S
 {LC: After that Saseveng jumped out} and at once *those who were watching* at the chimney, (also) all ran out... [22:84]

When the relative clause is in preposition, the following main clause often has the conjunction *to* ‘and’; see (49).

The full coreferential NP can be found in the subordinate clause, the main clause containing the correlative pronoun *ŋanin* :

(50) ...ɣaryən rətil-ləʔ-uwwi **ʕujamtawilʔ-uwwi**
 outside lie-ATR-NOM+PL person-NOM+PL
 təmə-tku-lʔ-uwwi **ŋan.ina-wwi** ɣa-ŋvu-laŋ
 kill-DISTR-ATR-NOM+PL that-3pl RES-begin-RES+3pl.S
 mimlə-ŋ ɣətɣə-ŋ s.iŋsə-tku-k ɲənvə.n=ʕəlwəti.ŋ.
 water-DAT lake-DAT throw.away-DISTR-INF for.many=days
 ...for many days threw [**those**] the exterminated **people** lying outside into the water, into the lake. [19:72]

This type of participial construction has the target of relativization in the main clause; compare the similar structure of the finite relative clause (3.4.2.2).

3.4.2. Finite strategy

In this case the predicate position of a relative clause is filled by a finite verb. Various strategies are possible for marking the coreferential NPs in the main and subordinate

clauses. The main as well as the dependent NP can be the target of relativization.

3.4.2.1. The target of relativization in subordinate clauses

Replacement of a dependent NP by the relative pronoun ‘which, where’, often accompanied by the word *qənut*, is most common.¹²⁹

- (51) a. ...ə.ninnə semə.kina-w qe.tumγ-u, *qənut* *maŋ.ina*
his/her+3sg close-3pl relative-NOM+PL [such which+3pl
ə.nina γ-itə-lqiv-laŋ jilʔalŋə.tumγ-u to
his/her+3pl RES-be-LQIV-RES+3pl.S male.cousin-EQUAT and
əlləvju.tumγ-u.
nephew-EQUAT]
{LC: And at once Rennengalpelen began to gather} his own close relatives, *those who*
were his cousins and nephews. [20:55]
- b. ...jaqqə:sʔam *maja* *qənut* ət.γin nə-meŋə-qin
there.and.then where how their+3sg ADJ-big-ADJ+3sg
jərrə.lju-n piŋpiŋ-a γa-mal;-ljərʔ.al-lin
copper.pot-NOM+SG ashes-ERG RES-completely-fill-RES+3sg.P
milγə-k semə.k γa-n.təva.l-lin ŋan.in
fire-LOC close RES-put-RES+3sg.P that+3sg
piŋpiŋ-in kuka-jərʔə-ŋjaq...
gunpowder-POSS+3sg pot-contents-AUGM+NOM+SG
{LC: Aqarelen finished making a rescue hole for himself, and at once} put the
gunpowder pot (*there*) *where* they (usually) fill their big copper pot with ashes, closer to
the fire... [22:86]

Comment: This word has two meanings: ashes and gunpowder, by this reason this sentence was wrongly translated in Russian edition! Check this sentence in TEXTS.

If the main NP does not have autonomous reference, i.e. is unspecified, it is usually expressed by a (correlative) demonstrative pronoun such as ‘that/there’.

- (52) a. *qənut* tur.γina jəlʔalŋə.tumγ-u *mik-ətək*
[how your+3pl male.cousin-NOM+PL who-ERG+NSG
na-nmə-tku-na, ima **ŋan.in** a-ta.n.vityə.ŋ-ka
LOW.A-kill-DISTR-3pl.P] (part.) that+NOM+SG A-investigate-PRED`

¹²⁹ The main NP can be accompanied by the correlative pronoun ‘that/there’.

t-il-la-tkəni-tki turyə-nan.
 POT-be-PLUR-IPF-2nsg.A+3.P you-ERG
 {LC: and you have another big concern;} you should sort things out **with those** *who*
 killed your cousins. [22:73]

b. ...ipa qənut maŋ.in ra.p.julyə-n ət.γin,
 [(part.) that which+3sg site.of.a.house-NOM+SG their+3sg]
 to **ŋan.in** allə tinγa a-pasus.at-ka
 and that+NOM+SG not what A-remain-PRED'
 γ-il-lin.

RES-be-RES+3sg.S
 {LC: And their house was blown up; it was scattered far away all in pieces,} and nothing
 was left in place of their house [= and that what was in place of their house didn't
 remain]. [22:89]

c. maqəm ʕit-e **ŋan.tiŋ** maŋ.ki
 arrow+NOM+SG run.after-3sg.S+PF there [where
 əlla γ-ulyəv-lin.
 mother+NOM+SG RES-bury-RES+3sg.P]
 The arrow flew **to** *where* Mother was buried. [7:51]

It is also possible to have a headless relative clause without a correlative
 pronoun in the main clause:

(53) a. *maŋ.in* qutə-tkən, akmi.tə-tkə-n wil.lawət ...
 [which+NOM+SG stand.up-IPF] take-IPF-3sg.P sour.head+NOM+SG
 Any (Karaga person) *who* stands up, takes a sour head {RC: and pulls its lower jaw to
 full length.} [17:18]

b. γ-awwaw-lin kəŋav.sitə-nvəŋ, qənut maŋ.ki
 RES-leave-RES+3sg.S fight-SUP [there where
 uʔal-la-tkə-t ləγəŋ-uwwi ŋəru.rγara
 wait-PLUR-IPF-3nsg.S+IPF Legerngen-NOM+PL three.together
 qe.takalŋə-jərʔ-u.
 brother-NOM+PL]

{LC: And then Saseveng began to prepare and hanged a big knife with a sheath on his
 side and;} set out to fight *where* Legerngen's three brothers were waiting (for him).
 [22:34]

Full reduction of a dependent NP is also possible. In this case there are no

material markers of a relative clause¹³⁰:

- (54) n-ulj.ljaʔu.tku-lqivə-tkə-na ənŋ.ina
 LOW.A-walk.in.a.mask-LQIV-IPF-3pl.P this+NOM+PL
 na-waŋla-lqivə-tkə-na.
 [LOW.A-beg-LQIV-IPF-3pl.P]
 {LC: When\ they come to some nomad camp, they hang these toys, or guns, and} walk
 in masks (around) those (who) beg (for them). [28:5]

In (54) the head NP *ənŋ.ina* ‘these’ is marked with the nominative and is governed by the transitive verb ‘walk in wooden masks around smb.’, whereas a deleted coreferential dependent NP would be expected to bear the ergative.

3.4.2.2. Target of relativization in the main clause

Reduction of the main NP is indicated by the correlative pronoun *ŋanin* ‘that’, the dependent NP being full and accompanied by a relative pronoun (often with the word *qənut*):

- (55) *qənut maŋ.ina-wwi tumɣ-a ɣa-n.iŋlə-lqiv-laŋ*
 [how which-NOM+PL friend-ERG RES-throw-LQIV-RES+3pl.P
am-əŋam-uwwi juŋju-tʔul-uwwi, to
 only-worm-NOM+PL whale-piece-NOM+PL] and
ŋan.ina-wwi ʕatav walat ɣa-ŋvu-laŋin ətɣə-nan
 that-NOM+PL just at.least RES-begin-RES+3pl.P they-ERG
ta.ŋ. amkumʔə.ŋ-ki.
 pick.up-INF
 ...they began to pick up **those** pieces of worm-eaten whale, which the others had thrown
 away. [23:49]

Full reduction of the head NP is also possible. It is remarkable that in the following example the coreferential dependent NP is in the double embedded subordinate clause:

- (56) wəjin.ʔak q-awwaw-la-tək *maŋ.in*
 for.the.time.being 2.S+OPT-leave-PLUR-2nsg.S [which+3sg

¹³⁰ This case is similar to clause union (see 4.5).

turyə-nan	liyi	ləŋ-la-tkəni-tki	nuta.lqə-n
you-ERG	know	know-PLUR-IPF-2nsg.A+3.P	[land-NOM+SG
nə-mal-qin		kəŋav.sitə.nv-u	java-k,
ADJ-good-ADJ+3sg		place.for.wrestling-EQUAT	use-INF]]
to	ŋanə.k	q-uʔal-la-tək	ɣəməkə-ŋ.
and	there	2.S+OPT-wait-PLUR-2nsg.S	I-DAT

...(and) for the moment go to **the place**, *which* you know (as) a good place for fighting, and there wait for me. [22:33]

Initially inside the relative clause there is a sentential complement (‘[you know [which place is a good one for fighting]]’) with the NP ‘which place’ coreferential with the main NP.

The finite technique of relative clause formation favors variation of the target of relativization: it is easy to see the similarity between the two opposed targets of relativization (main vs. dependent NPs) in case of unspecified main NPs, cf. (56) and (53).

3.5. Clause union

In Alutor the rarely observed phenomenon of *clause union* may be seen when two clauses have an argument in common.

- (57) a. to təŋakjav ɣa-ŋtu-lin, to awən
and Tengakyav+NOM+SG RES-go.out-RES+3sg.S [and already
ət.ɣin *səkəyit* ɣa-ɣita-lin ɣa-t.ina.ŋa.ŋ-lin
their+3sg sister+NOM+SG RES-look-RES+3sg.P RES-load-RES+3sg.P
ujatiki-k.
sledge-LOC]
...and Tengakyav came out, and had seen their *sister* loaded on the sledge. [22:66]
- b. ten awwav-la-t, na-pila-lqivə-n
then go.out-PLUR-3pl.S+PF [LOW.A-leave-LQIV-3sg.P
ənki *sisis ʔə-n* ɣa-kəljtə.tku-lin.
here Sisisen-NOM+SG RES-tie-RES+3sg.P]
Then they went away and left *Sisisen* there tied up. [10:55]
- c. tɪŋɣō-tɪŋɣa, məlyə-tʔul-a taq-a wut
what-what turf-piece-ERG what-ERG (part.)

γα-jərʔ.al-lin jəpa-ni-n.
 RES-fill-RES+3sg.P take.off-3sg.A+3P-3sg.P
 In any case, (she) took off (*these trousers*), filled with pieces of turf. [14:41]

In (57a) two clauses are united: ‘he had seen their sister’ and ‘they had loaded their sister on the sledge’ sharing the common argument ‘sister’, also in (57b) — ‘they left Sisisen there’ and ‘they tied up Sisisen’ share the common argument ‘Sisisen’, and in (57c) the common argument ‘trousers’ is presupposed: ‘she took off (these trousers)’ and ‘somebody filled the trousers with pieces of turf’. It is clear that in all cases at least one predicate is marked with the marker *γα-...-lin*.

(58) ənnan γətu.ril sinin.kin γα-prə-lin
 one rib+NOM+SG one's.own+3sg RES-take.off-RES+3sg.P
 inu-nu γα-jəl-lin keŋ-a.
 food.for.a.trip-EQUAT RES-give-RES+3sg.P bear-ERG
 The bear gave [=took off and gave] his own rib for food. [12:16]

In (58) clause union is most likely motivated by the inability of the situation to be semantically divisible (take off and give).

3.6. Clausal coordination

Clausal coordination is not accompanied by any strict rules of coreferential NP marking. Practically all strategies (repetition of full nominations, replacement of full nomination by a pronoun or its deletion) are realized. Let us consider these strategies.

1) In both clauses full NPs are present without reduction:

(59) ...γα-meŋə-teŋal-lin unjunju to
 RES-big-lay.up.dried.fish-RES+3sg.S child+NOM+SG and
 naqat unjunju ... əllaʔə-ŋ iv-i
 on.purpose child+NOM+SG mother-DAT say-3sg.S+PF
 ...the son prepared a lot of fish (for winter) and on purpose [the son], well, how to say, said to (his) mother... [9:2]

2) Pronominalization of one of the NPs:

(60) qutkinjyaqu-nak ləʔu-ni-nat unjunju-t to
 Qutkinnaqu-ERG+SG see-3sg.A+3P-3du.P child-NOM+DU and
 əmmo misyə-tenə-k tinmə=viʔ-i.
 (s)he+NOM fire-APUD-LOC falsely=die-3sg.S+PF
 Qutkinnaqu saw (his) sons and (fell down) by the fire, as if he were dead [=and he

falsely died by the fire]. [2:24]

3) Deletion of one of the NPs:

- (61) a. $\gamma\alpha$ -kjav(-lin) $q\partial l\text{avul}, pilj$ ra.lku(- $\gamma i\eta$ -ki) to
 RES-wake.up(-RES+3sg.S) man+NOM+SG house(-IN-LOC) and
 $\gamma\alpha$ -rrinan η (-lin) ajak.ju-kin ...
 RES-peep(-RES+3sg.S) sleeping.tent-REL+3sg
A man woke up in the yurt and peeped from the sleeping tent... [18:7]
- b. $\partial n\acute{a}kka$ -ten ∂ - η t ∂ la-la-t, ten,
 he-APUD-DAT come-PLUR-3pl.S+PF well
 $\text{ʕopt}\partial.lj?u$ vi $\text{ʕ}\partial$ -tku-la-t.
 all die-DISTR-PLUR-3pl.S+PF
 (They) came to him and suddenly [=well] *they all* died. [8:24]

In (61a) the second NP is deleted (anaphoric reduction), while in (61b) the first one is deleted (cataphoric reduction).

In case of pronominalization or deletion a specific situation can arise if the clause holding the controlling NP is transitive: what argument of the clause controls pronominalization/deletion of the reduced NP in the other clause? Statistically the A-argument prevails, however it is far from being an obligatory rule:

- (62) a. pila-lqiv-ni-n, ten vi ʕ -i $\partial n\eta.in$.
 leave-LQIV-3sg.A+3P-3sg.P then die-3sg.S+PF this+NOM+SG
 (Sasusangawet) left *her* {=the evil old woman} there, and *she* {=evil old woman} died.
 [14:60]
- b. to vitya tan η -a $\gamma\alpha$ -qatv ∂ -lin pu η y-a
 and at.once stranger-ERG RES-cut-RES+3sg.P spear-ERG
 $\partial ssa\eta\eta u.s? \partial$ -n, to $\gamma\alpha$ -vi $\text{ʕ}\partial$ -lin jaqq ∂ s $\text{ʕ}am$.
 younger-NOM+SG and RES-die-RES+3sg.S there.and.then
 And at once the stranger killed *the younger brother* with the spear, and *he* {the brother} there and then died. [20:44]

In (62a) pronominalization, and in (62b) deletion is used. In both cases the P-argument of the first clause is the controller of these processes.
 Even the possessor can control reduction:

Comment: process or processes ?

- (63) to *ʎan.in-ən* *ʎa-prə-lin* *waməlkə-lʎən*, to
 and that-POSS.SG+3sg RES-take.off-RES+3sg.P lip-NOM+SG and
allə tinʎa a-n.ilu-ka ʎa-ntə-lin.
 not what A-move-PRED' RES-do-RES+3sg.P
 And (he) cut [=took away] *his* lip and (*he*) did not move at all. [20:40]

In discourse, overt antecedents are often absent, and coreference is resolved through pragmatic means without the use of any grammatical means:

- (64) *na-qamitva-tkə-n*, *na-n.awəj.atə-tkə-n*,
 LOW.A-lay.the.table-IPF-3sg.P LOW.A-feed-IPF-3sg.P
a-p^ʕa-ka oji=^ʕanqa.və-tkən.
 A-feel.thirsty-PRED' eat=stop-IPF
 They gave *him* dinner (and) fed *him*. Feeling thirsty, *he* stopped eating. [4:20]

3.7. Reflexivization

In Alutor argument reflexivization (affecting the argument position) is expressed with the help of the reflexive pronoun *uvik* ‘oneself’ (lit. ‘body’), and possessive reflexivization (affecting the possessive position) uses the pronoun *sininkin/sinin* ‘one's own’ (the second variant is used in case of incorporation).

The question of control of reflexivization is of special interest. According to the field report by F.A.Antsiferov (1978), the A/S-argument is the controller of reflexivization:

- (65) a. *vasq.in=meŋə=kuka-ta uvik ʎ-epə-lin*
 another=big=pot-ERG oneself+NOM RES-put.on-RES+3sg.P
aqarəʎʔ-ənək ...
 Aqarelen-ERG+SG
 ...Aqarelen covered *himself* with another big pot... [22:86]
- b. to *ʎa-ŋvu-lin uvik ʕiŋə=tkəplə-k ...*
 and RES-begin-RES+3sg.P oneself+NOM nose=beat-INF
 And (he) began to hit *himself* on the nose [=nose-beat]... [10:18]
- c. *ʎəmmə uviki-ŋ nə-malj-ʔa t-itə-tkən.*
 I.NOM myself-DAT ADJ-good-ADV 1sg.S-be-IPF
 I am pleased with myself. [lit. I am good for myself.]

In (65b) there is no overt controller of reflexivization, however it is clear that it

is the A-argument marked with the ergative, because in the context of incorporation of the P-argument ‘nose’ its possessor is raised into the opened P-position. In (65c) S-argument controls reflexivization of the dative argument.

Possessive reflexivization allows the A- and P-controllers:

- (66) tumγə-nak jəvəklə-ni-n ələγən
 friend_i-ERG hit-3sg.A+3.P-3sg.P father_j+NOM+SG
sinin=wala-ta (~*ənək=wala-ta*)
 his_{i/j}=knife-ERG (~his_{i/j}=knife-ERG)
 The friend hit the father with *his/father's* knife.

According to (66), reflexivization is possible using the reflexive as well as personal pronouns¹³¹. In both cases the A- and P-arguments can be the controllers of reflexivization.

¹³¹ Such a technique is used in case of argument reflexivization as well:

- (i) ...ηanə.k aqan ta.laʔu.η-ni-n ənəkə-η qələvulə.lqəl ...
 there even.if look.for-3sg.A+3P-3sg.P she-DAT
 fiancй+NOM+SG

{LC: Then if she wants to live her own way,} and even if finds *herself* a fiancй there {RC: then let her; it's all right ...} [21:65]

